

Pharasiot Greek

Word order and clause structure

ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ

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Declaration of property certified to Konstantinos Konstantinidis from Pharasa by
the Hellenic Republic, Directorate-General for the Population Exchange (January 4,
1925).
Courtesy of Andreas Konstantinidis

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to those who were forced from their
μελμεκέτι to their *πατρίδα*. . .

Μεμλεκέτ!
Νέ κιουζέλ κελιμέ!
Νέ άζιζ σόζ! Νέ μουπαρέκ λογάτ.
Χέλε μεμλεκετέ μονγαππέτ!
Ίστέ πουνδάν πογιούκ φαζηλέτ,
πουνδάν ούλοῦ μεράμ
βέ μαζάτ όλάμαζ. . .

Κάλφογλους, Ι.Η. 1899. *Μικρά Ασία*
κητασηνήν ταριχιέ δζαγραφιασή, 5.

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List of Abbreviations

Abbreviations used in the glosses

1	First person
2	Second person
3	Third person
ACC	Accusative
ADJ	Adjective
ADV	Adverb
AOR	Aorist
AUG	Augment
AUX	Auxiliary
CL	Clitic
CM	Compound marker
COMP	Complementizer
DAT	Dative
DER	Derivational suffix
DIM	Diminutive
ERG	Ergative
EXPL	Expletive
F	Feminine
FUT.CF	Future (counterfactual)
FUT.DEF	Future (definite)
FUT.INDF	Future (indefinite)
GEN	Genitive
HORT	Hortative
IMP	Imperative
IND	Indicative
INF	Infinitive

INTRJ	Interjection
IPFV	Imperfective
M	Masculine
N	Neuter
NACT	Non-active
NOM	Nominative
NPST	Non-past
OBJ	(In)direct object clitic
OPT	Optative
PFV	Perfective
PL	Plural
PRT	Particle
PST	Past
PTCP	Participle
REDC	Reduplicative consonant
REFL	Reflexive
SG	Singular
SUBJ	Subjunctive
VOC	Vocative

Abbreviations used in the main text

A&A	Alexiadou and Anagnostopoulou (1998)
ADV	Adverb
AdvP	Adverb Phrase
AMG	Asia Minor Greek
AP	Adjective Phrase
Arm	Armenian
asrt.	Assertive
BNQ	Bare Negative Quantifier
BP	Brazilian Portuguese
C	Complementizer
CILD	Clitic Left Dislocation
C_MP	Modal Complementizer Phrase

C_{Op}P	Operator Complementizer Phrase
CP	Complementizer Phrase
CSC	Coordinate Structure Constraint
DEM.	Demonstrative
DM	Discourse Marker
DO	Direct Object
DP	Determiner Phrase
EMPH. POSS.	Emphatic Possessive Pronoun
EP	European Portuguese
epist.	Epistemic
EPP	Extended Projection Principle
EvalP	Evaluative Phrase
evid.	Evidential
EvidP	Evidential Phrase
F&H	Frascarelli and Hinterhölzl (2007)
FinP	Finiteness Phrase
FocP	Focus Phrase
ForceP	Force Phrase
HMC	Head Movement Constraint
HT	Hanging Topic
HTLD	Hanging Topic Left Dislocation
IFP	Illocutionary Force Phrase
IFVP	Illocutionary Force Verb Phrase
INFL	Inflection
int.	Intended reading
intr.	Intransitive verb
IO	Indirect Object
LCA	Linear Correspondence Axiom
LF	Logical Form
lit.	Literal translation
LP	Left Periphery
MCP	Main Clause Phenomenon
MG	Modern Greek
MOD	Modifier
MP	Modal Phrase
N	Noun
NegP	Negation Phrase
NIC	Nominal Inflectional Class
NP	Noun Phrase
NSL	Null Subject Language

NUM	Numeral
NumP	Numeral Phrase
O	Object
P-role	Pragmatic role
PCC	Predicate complement construction
PF	Phonological Form
PhG	Pharasiot Greek
POSS. GEN.	Possessive-genitive
PP	Prepositional Phrase
RAH	Rich Agreement Hypothesis
REL. CL	Relative Clause
Rep. Cl.	Reporting Clause
RM	Relativized Minimality
S	Subject
S&T	Speas and Tenny (2003)
SAP	Speech Act Phrase
saP	Light Speech Act Phrase
SentienceP	Sentience Phrase
SMG	Standard Modern Greek
Spec	Specifier
SubjP	Subject Phrase
T	Turkish
TopP	Topic Phrase
TP	Tense Phrase
UNI. Q	Universal Quantifier
V	Verb
vic	Verbal Inflectional Class
VP	Verb Phrase
vP	Light Verb Phrase
WCO	Weak Crossover
θ-role	Thematic role
ϕ	Phi (person, number, gender)

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Summary in English

This dissertation is a study of the Phrasiot Greek dialect, an endangered Asia Minor variety of Greek spoken until 1923 in what is today Turkey and which is currently spoken in Northern Greece by about 25 heritage speakers. This dissertation has a descriptive and a theoretical aim, offering both a descriptive grammar of Phrasiot Greek based on data gathered from native speakers and an in-depth study of the basic structure of declarative main clauses in Phrasiot Greek, with particular emphasis on the functional sequence in the left periphery of the clause. It is divided into four chapters, with an additional chapter summarizing the conclusions.

After an overview of the phylogenetic, geographic and historical context of the dialect in chapter 1, a concise descriptive grammar of the dialect follows in chapter 2, based on linguistic material gathered through interactions with native speakers.

In chapter 3, a description of all six possible word orders (SVO, SOV, OVS, OSV, VSO, VOS) in declarative main clauses with nominal arguments and mono-transitive verbs is presented. The notion of pragmatic (non-)neutrality, which concerns the presence or absence of topic or focus material in a given clause, is crucial to the provided analysis. In addition to making generalizations regarding pragmatically neutral and non-neutral word orders in Phrasiot Greek, a syntactic analysis of the structure and derivation of these word orders is also given. The theoretical discussions are couched in the framework of generative grammar of Chomskyan tradition, further enriched with the cartographic approach to the clausal left periphery. Based on data from an oral corpus, I first claim that all clauses with the order VSO and a sub-set of clauses with SVO order qualify as pragmatically neutral, whereas the remaining patterns—including a different sub-set of SVO clauses—have at least one constituent functioning as a topic or focus expression, and therefore qualify as non-neutral. Second, it is argued that all declarative main clauses involve V^0 -to- T^0 movement; subjects may appear either in their first-merge position, Spec,VP, or in a number of positions in the left periphery: in Spec,TopP as topic expressions, in Spec,FocP as foci or in Spec,SubjP as subjects of predication. Neutral VSO and SVO clauses are derived when the subject is in Spec,VP and Spec,SubjP respectively. A derivation in which the subject winds up in Spec,TopP and Spec,FocP corresponds to non-neutral SVO clauses. Third, it is argued that O-initial, SOV and VOS orders involve movement

of at least one constituent to a focus or topic position, either in the left periphery of the clause or in a dedicated discourse field at the periphery of the VP. Finally, it is shown that the class of left peripheral topic expressions can further be subdivided into shifting topics and familiar topics, hosted in different locations in the left periphery of the clause.

In chapter 4, a detailed analysis of the interpretive and structural properties of the morpheme *ki*, a particle borrowed into Pharasiot Greek from Turkish, is provided. *Ki* may be employed in five configurations that seem different from one another at first sight; however, closer inspection reveals that these *ki*-environments are all declarative main clauses, in which *ki* fulfills a single general function. Specifically, *ki* can be qualified as a discourse marker geared toward influencing the epistemic vigilance mechanism of the hearer. Following Speas and Tenny (2003), according to whom the pragmatic roles “speaker” and “hearer” and the relation between the two are encoded in a Speech Act Phrase (SAP), a predicative structure above ForceP, *ki* is identified as the overt exponent of SA⁰. It is further proposed that *ki* is endowed with a [+sentience] feature indexing the speaker as the “sentient mind”. I conclude that the apparently unrelated configurations featuring the particle *ki* can be derived from one and the same underlying structure, namely [_{SAP} *ki* [_{ForceP}]]. The surface differences between the *ki* environments are argued to stem from, among other things, whether Spec,SAP is filled by an internally or externally merging category that checks the [+sentience] feature on *ki*. This chapter also provides evidence for the existence of two recursive topic positions, one above SAP and one between SAP and ForceP. The difference between topic expressions hosted in these two positions and *bona fide* clitic left-dislocated topics is argued to be the fact that both of these additional topic positions can only host hanging topics, which are first-merged in the left periphery rather than moved there.

This dissertation supports the central tenet of the cartographic approach to clause structure, i.e., that syntactic representations are complex objects consisting of a sequence of hierarchically organized functional elements. This dissertation also provides empirical evidence from Pharasiot Greek for a number of ordering restrictions in the left periphery, for which independent evidence had been proposed in the literature.

Samenvatting in het Nederlands

Dit proefschrift is een studie van het Griekse Farasiotische dialect, een bedreigde variant van het Grieks uit Klein-Azië dat tot 1923 gesproken werd in het huidige Turkije. Vandaag wordt dit dialect nog door een 25-tal erfgoedsprekers in Noord-Griekenland gesproken. Dit proefschrift heeft een descriptieve en theoretische doelstelling. Enerzijds biedt het proefschrift een descriptieve grammatica van het Farasiotisch Grieks gebaseerd op data verzameld bij moedertaalsprekers. Anderzijds biedt het een diepte-analyse van declaratieve hoofdzinnen in het Farasiotisch Grieks, met bijzondere aandacht voor de functionele structuur in de linkerperiferie van de zin. De dissertatie is onderverdeeld in vier hoofdstukken. De voornaamste bevindingen worden nog eens samengevat in een extra hoofdstuk aan het einde van het werk.

Na een bespreking van de fylogenetische, geografische en historische context van het dialect in hoofdstuk 1 volgt een beknopte descriptieve grammatica in hoofdstuk 2. Deze grammatica is gebaseerd op taalkundig materiaal dat verzameld werd door interacties met moedertaalsprekers.

In hoofdstuk 3 volgt een beschrijving en syntactische analyse van alle 6 mogelijke woordvolgordes (SVO, SOV, OVS, OSV, VSO, VOS) in declaratieve hoofdzinnen met nominale argumenten en mono-transitieve werkwoorden. De notie pragmatische neutraliteit die met de afwezigheid van topicale of focale elementen in een zin samenhangt, is cruciaal voor de voorgestelde analyse. Bovenop de generalisaties over de pragmatisch neutrale en niet-neutrale woordvolgordes in het Farasiotisch Grieks, levert dit hoofdstuk ook een syntactische analyse van hoe de structuur van deze woordvolgordes afgeleid kan worden.

De theoretische discussies worden gekaderd binnen de Chomskyaanse traditie van de generatieve grammatica en worden verrijkt met een cartografische benadering van de linkerperiferie van de zin. Op basis van gesproken corpusdata wordt eerst geargumenteed dat alle zinnen met VSO-orde en een subset van de zinnen met SVO-orde als pragmatisch neutraal gekwalificeerd kunnen worden. Voor de andere patronen—inclusief de andere groep SVO-zinnen—wordt aangetoond dat ze tenminste één zinsdeel hebben dat als een topicaal of focaal element dienst doet, waardoor deze zinnen als niet-neutraal gekwalificeerd worden. Ten tweede wordt er beargumenteerd waarom alle declaratieve hoofdzinnen verplaatsing van V^0 naar T^0 hebben; onder-

werpen kunnen namelijk zowel in hun basispositie, Spec, VP, als in een aantal andere posities in de linkerperiferie opduiken. Zo belanden topicale zinsdelen in Spec, TopP, focale uitdrukkingen in Spec, FocP en het predikaatsonderwerp in Spec, SubjP. Een derivatie waarbij het onderwerp in Spec, TopP and Spec, FocP belandt, is dus een niet-neutrale SVO zin. Ten derde wordt er geargumenteed dat voorwerpsinitiële SOV- en VOS-woordvolgordes ontstaan als een gevolg van verplaatsing van ten minste één zinsdeel naar een focus of topic positie in de linkerperiferie van de zin of in een daartoe bestemde ‘discourse’ positie in de periferie van de VP. Ten slotte wordt er aangetoond dat de klasse van linkerperifere topicale uitdrukking kan opgesplitst worden in ‘shifting’ en ‘familiar’ topicale elementen die in verschillende posities in de linkerperiferie hun plek vinden.

In hoofdstuk 4 wordt er een gedetailleerde analyse gemaakt van de semantische en structurele eigenschappen van het morfeem *ki*, een partikel dat via het Turks in het Farasiotisch Grieks kwam. *Ki* kan gebruikt worden in vijf configuraties die op het eerste zicht van elkaar lijken te verschillen. Nader onderzoek toont echter aan dat *ki* alleen in declaratieve hoofdzinnen gebruikt wordt waarbinnen *ki* één enkele algemene functie vervult. Specifiek kunnen we zeggen dat *ki* gekwalificeerd kan worden als een gespreksmarkeerder die er op gericht is de epistemische waakzaamheid van de luisteraar te beïnvloeden. In overeenstemming met het voorstel van Speas en Tenny (2003) om de pragmatische rollen “spreker” en “luisteraar” en de relatie tussen die twee te verankeren in een Speech Act Phrase (SAP), die zich als predicatieve structuur boven ForceP bevindt, wordt *ki* geïdentificeerd als een veruitwendiging van het hoofd van deze SAP. Verder wordt er voorgesteld dat *ki* een kenmerk [+waarnemingsvermogen] ([+sentience]) heeft waarmee de spreker als “waarnemer” wordt aangewezen. Ik besluit dat de op het eerste zicht met elkaar ongerelateerde configuraties waarin het partikel *ki* voorkomt eigenlijk van één en dezelfde structuur kunnen afgeleid worden, namelijk [_{SAP} *ki* [_{ForceP}]]. Het oppervlakteverschil tussen de *ki*-omgevingen is onder deze analyse een gevolg van het feit of Spec, SAP gevuld wordt door een intern of extern toegevoegde categorie die het kenmerk [+waarnemingsvermogen] checkt op *ki*. Dit hoofdstuk biedt ook evidentie voor het bestaan van twee recursieve topicale uitdrukkingen, één boven SAP en één tussen SAP en ForceP. Het verschil tussen de topicale uitdrukkingen die in deze twee posities zitten en een gewoon links-verplaatst topicaal cliticum volgt uit het feit dat die twee extra posities alleen topicale elementen kunnen herbergen die geen grammaticale connectie vertonen met de hoofdzin, de zogenaamde “hanging topics”, waarvan we weten dat die alleen in de linkerperiferie toegevoegd worden (extern) en dus niet verplaatst worden.

Dit proefschrift ondersteunt de centrale leerstelling van de cartografische traditie ten aanzien van de zinsstructuur, namelijk dat syntactische representaties complexe voorwerpen zijn die uit een aaneenschakeling van hiërarchisch gestructureerde functionele elementen bestaat. Deze dissertatie levert bovendien ook empirische eviden-

tie aan uit het Farasiotisch voor een aantal woordvolgordebeperingen in de linkerperiferie, waarvoor reeds onafhankelijke evidentie bestond in de literatuur.

1

Introduction

1.1 Aims and scope of the dissertation

This dissertation is an end-product of a research project on the documentation of the Phrasiot Greek dialect (hereafter PhG). Along with Cappadocian, Pontic and Silliot, PhG is an Asia Minor Greek (hereafter AMG) dialect, which is heavily influenced by Turkish. Until 1923, PhG was spoken in modern-day Turkey; today it is spoken in a few villages in Northern Greece by about 25 heritage speakers (full details on the history and present-day situation of PhG will be provided in section 1.3.4).

The present dissertation has both a descriptive and a theoretical goal. First, at a descriptive level, it aims at offering a concise reference grammar of PhG, based on original language data gathered through fieldwork in Greece. As will be elaborated on in section 1.5.3, these data were extracted from oral recordings of native-speaking consultants, and further supplemented with data gathered through elicitation tasks. Second, at a theoretical level, it offers an analysis of the basic structure of the clause in PhG, focusing particularly on the syntax of different word orders in declarative main clauses. The theoretical framework assumed is the one of generative syntax, and more specifically the cartographic approach to clause structure. I will postpone a detailed introduction to this framework until chapter 3, where it becomes directly relevant.

This dissertation is important because it is very likely to offer the last grammatical overview of PhG before its extinction by making use of modern linguistic concepts and by offering naturally occurring data. From a purely scholarly point of view, the dissertation is of interest because it constitutes an in-depth study of certain syntactic aspects of the grammar of PhG, using a modern linguistic framework and using primary language data gathered from native speakers. As such, it simultaneously addresses the main goal of traditional studies in dialectology, which is providing a detailed description of language variants, as well as that of generative syntactic theory, which is to offer a formal characterization of the linguistic knowledge that is available to the human species by analyzing the formal properties of specific languages, in as much detail as possible. In addition, with this study I hope to spark further syntactic research on individual members of the AMG dialect group, which may ultimately help to elucidate the long-standing issue of the genetic classification of the various AMG varieties (see section 1.2.2), and which may add to our understanding of how and why these dialects differ from one another.

In the remainder of this chapter, I first provide background information about the AMG dialect group and the genetic relationship between its members (section 1.2). In section 1.3 I give a concise overview of the past and current situations of the individual members of the AMG dialect, with particular emphasis on PhG (section 1.3.4). In section 1.4 I provide background information about the speakers of PhG today. In section 1.5 I describe the data used in this dissertation, and how these data have been collected. In section 1.6, I introduce the orthographic conventions which will be employed to represent the PhG examples. Finally, in section 1.7 I provide the layout of the dissertation.

1.2 PhG in the dialectological context of Asia Minor

1.2.1 AMG

According to Dawkins (1916, 1940) AMG is “[...] divided at least into the dialects of S[i]lli [...], that of Cappadocia and that of Pontus, with the Ph[a]rasa dialect as a kind of subspecies” (Dawkins 1940:23).¹ Since Dawkins (1916), the term “AMG” was adopted in various important works to refer to Cappadocian, Phrasiot, Silliot and Pontic dialects (Triandaphyllidis 1993[1938]:273–295; Kontossopoulos 1981; Andriotis 1995:100–107; Janse 1998b et seq.; Christidis et al. 1999; Drettas 1999:15; Arapopoulou 2001:175; Horrocks 2010[1997]:398–404; Karatsareas 2011b; Sitariidou 2013b; Manolessou forthcoming). These dialects were spoken in Asia Minor

¹ To be precise, Dawkins (1910a,b, 1916, 1937b, 1940) uses the term “Modern Greek in Asia Minor”, rather than AMG.

(i.e., modern-day Asian Turkey) until 1923, when the population exchange between Greece and Turkey was enacted as a supplementary protocol to the Treaty of Lausanne. After 1923, the speakers of these dialects were relocated mostly to Greece. Each dialect is named after the historical region in which it was spoken before 1923. The location of these regions is shown on Figure 1.1.



Figure 1.1: The location of AMG dialects in modern-day Turkey before 1923

This classification is not only geographical, but is also based on the genetic affiliation of these four dialects, which has been repeatedly noted by various scholars (on this point, see section 1.2.2). To be precise, other dialects were also spoken in different parts of Asia Minor before the population exchange. However, whether (and if yes, in what way) these should be classified together with Cappadocian, Silliot, PhG and Pontic is a matter of debate (on this point, see Manolesou forthcoming).

1.2.2 The genetic classification of AMG dialects

Dawkins (1916, 1940) recognizes a partition of Modern Greek (hereafter MG) dialects between East and West Greek, based on Thumb's (1910, 1914) and Trandaphyllidis' (1993[1938]) works. According to Dawkins, there was an Eastern Greek Koiné already in Hellenistic times, but a number of varieties, including the ones spoken in Pontus, Cappadocia, Silli and Pharasa, became entirely isolated from the rest as a result of the Turkic influx into Asia Minor as early as the 12th century. When exactly the formation of AMG took place is not exactly known; however, Dawkins suggests the time interval "beginning of the Early Medieval period (500-1100) and before the end of the Late Medieval period (1100-1500)" (see also Karatsareas 2011b:47; Manolesou forthcoming).

According to Dawkins (1916), the AMG branch "may be divided into Cappado-

cian on the one hand and on the other the dialects of Pontos and Ph[a]rasa” (Dawkins 1916:206), while the dialect of Silli occupies a more peripheral position in this classification (see also Dawkins 1937b:16–17). This classification is based on a number of grammatical archaisms and a large set of linguistic innovations shared by all the dialects mentioned, with the exception of some which are not observed in the dialect of Silli (Karatsareas 2011b:40). Among the grammatical archaisms, we could mention the retention of the archaic emphatic possessive pronouns (see section 2.4.1.4 for PhG emphatic possessive pronouns), absence of periphrastic tenses with inflected auxiliaries (see section 2.3.2.2 for the lack of periphrastic tenses with inflected auxiliaries in PhG), and the retention of the use of definite articles as relative pronouns (see Bağrıaçık 2016 for a diachronic account of AMG relative clauses; for relative clauses in PhG, see section 2.4.10.2). Among the common linguistic innovations are the deletion of the word final unstressed high vowels (see section 2.2.2.4 for the deletion of final [i] in PhG), heteroclisia (on which see section 2.3.2.1) and the development of obligatory definiteness spread (see section 2.4.1.4). I refer the interested reader to Karatsareas (2011b:29–30, 41–45) for an exhaustive list of the grammatical archaisms and linguistic innovations common to the members of the AMG dialect group. According to this classification, the internal differences between the members of Asia Minor dialect group is generally taken to be the result of the advancement of linguistic Turkicization in Asia Minor that was particularly intensified after the foundation of the Ottoman Empire in the late 13th century (Dawkins 1931:398–399).

Dawkins’ (1916) classification, which is further adopted by a.o., Triandaphyllidis (1993[1938]:277–278), Andriotis (1948:10); Mirambel (1965); Anastasiadis (1976:16, 1995a:111–119); Janse (2008a,b, forthcoming), is shown in Figure 1.2 (after Janse 2008a:191, Janse forthcoming:section 4).

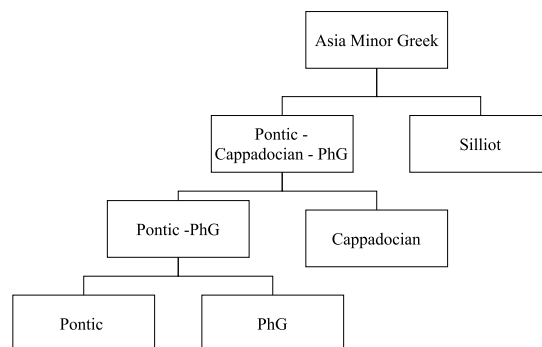


Figure 1.2: The genetic classification of AMG dialects proposed by Dawkins (1916)

The assumed relatedness between Pontic and PhG dialects in Figure 1.2 is based on the “striking resemblances” (Dawkins 1916:206) which “have to do with the absence of developments that the other AMG [...] dialects are known to have undergone and with the preservation of features tracing their origin to earlier stages in the history of Greek” (Karatsareas 2011b:50; see also Dawkins 1916:206–207, §391). According to Dawkins, the similarities between PhG and Pontic are so remarkable that “[t]he dialect of Ph[a]rasa, apart from its own newer features, cannot be very far off what Pontic was in some earlier stage” (Dawkins 1937b:37; see also Anastasiadis 1995a, 2015). In his subsequent work, Dawkins even defines PhG as a “kind of subspecies” of the dialect of Pontus (Dawkins 1940:23). He justifies his position by hypothesizing that the dwellers of Pharasa might have been an early colony from Pontus: “[T]he dialects [of Pontus and of Pharasa] resemble one another so much that Pharasa may almost be suspected to have been some very old colony from a Pontic-speaking region” (Dawkins 1937b:17). This idea has been defended in some more recent work as well (e.g., Karachristos 2005). There is, however, no historical evidence, at least to this day, which can support this colonization hypothesis, although it is true that miners from Pontus had migrated to Pharasa (Iordanis Papadopoulos, p.c.).

Although PhG and Pontic were classified together in Dawkins (1916), PhG has also often been considered a variant of Cappadocian, usually due to the geographical proximity of the two (Andriotis 1948:10; Janse 1998a,b,c, 2003; Anastasiadis 2015). Andriotis (1948) and Anastasiadis (2015), for example, take PhG as a variety of Cappadocian, even though they admit that “[t]he term Cappadocian dialect refers to a geographical entity, rather than a linguistic one” (Andriotis 1948:10; Anastasiadis 2015:23). This view has also been maintained in a number of recent papers on Cappadocian which classify PhG as a variant of Cappadocian and provide data from PhG for support or refutation of certain claims (see section 1.5.2.1.5 for some of these papers).

In a more recent account, Karatsareas (2011b, 2013:202–210) takes the restructuring of the noun inflection system as a basic diagnostic to assess genetic relatedness, and he places Silliot as the “outermost” relative in the family. According to this proposal, which is shown on Figure 1.3, Pontic and Cappadocian are classified as a subgroup, to the exclusion of PhG (see also Sitaridou 2013a,b).

Further support for the classification in Figure 1.3 is provided in Bağrıaçık (2016) from data on relative clauses across the AMG dialects. However, given our current state of knowledge, we can only conclude that further micro-comparative research on the relevant dialects (and especially on their syntax) is required to tell which classification is correct. In addition, as noted by Tzitzilis (2000), a thorough and systematic study of Medieval Greek can be expected to shed further light on the issue (see also Manolessou forthcoming).

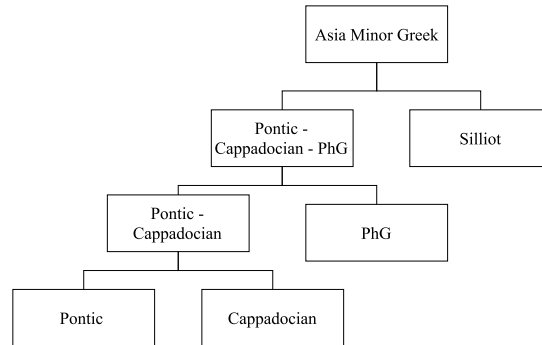


Figure 1.3: The genetic classification of AMG dialects proposed by Karatsareas (2011a)

1.3 The members of the AMG dialect group

In this section, I briefly describe the status of each AMG dialect before and after the population exchange. Since the empirical focus of the current dissertation is PhG as it is spoken today, information about the current status of PhG is provided in detail in section 1.3.4.

1.3.1 Cappadocian

Before the population exchange, Cappadocian Greek (ISO: cpg, also referred to by the speakers as *Kappadhokika*, *Karamanlidhika*, *Mišiotika* and other terms derived from the names of the Cappadocian villages) was spoken in the historical region of Cappadocia which covers today the southern villages of the province of Nevşehir and the northern villages of the province of Niğde. It is a dialect chain (Dawkins 1910a,b, 1916; Janse 1994, and especially Janse forthcoming) which can further be partitioned into south-eastern, south-western, central, north-eastern and north-western Cappadocian dialects. This classification is based on the existence of some minor linguistic features, such as retention of interdental sounds /ð/, /θ/, presence of agglutinative inflection, gender marking on the nouns etc., and lack thereof, as well as on the degree of influence of Turkish and Standard MG (hereafter SMG) on the dialects.

After the population exchange, the speakers of Cappadocian were relocated to Northern Greece (but also to numerous other parts of mainland Greece and Crete). Excluding a few hundreds of speakers of *Mišiotika* (Janse and Papazachariou 2005; Janse forthcoming), the majority of whom live in Northern Greece now, there are no

more speakers of Cappadocian, not at least known to the linguistic community as of 2017.

1.3.2 Silliot

Before the population exchange, Silliot was spoken in the village of Silli, which lies to the north-east of Konya in central Asia Minor, by at least 2,000 speakers. The village is known today as Sille. Since Kostakis (1968), there have not been any extensive studies on the dialect; therefore, it is not clear whether there are still speakers of the dialect or not.

1.3.3 Pontic

Prior to the population exchange, Pontic (ISO:pnt, also referred to by the speakers as *Pontiaka*, *Lazika* or *Romeika*) was spoken in a wide area in the historical region of Pontus, which now corresponds to the central and eastern Black Sea regions of Turkey, from Sinop up to Rize, and towards the inland in and around modern day Gümüşhane and Şebinkarahisar (Triandaphyllidis 1866; Dawkins 1940:15–16). It was also spoken in a number of villages outside Pontus, in central Asia Minor, by mining colonies (for a comprehensive list of Pontic speaking mine colonies see Dawkins 1916:6–9). The whole Pontic speaking area is divided into Western and Eastern parts, Sürmene and the Of valley in Çaykara being at the heart of the Eastern dialects. Mackridge (1990:206, fn. 31) labels the former as “Langue de *ki*” and the latter as “Langue d’*ou*”, after the form of the indicative negation marker used in the respective areas (see also Dawkins 1937b:26).

Today, Pontic is the most successful of all four AMG dialects: based on estimates from around 1999, there are about 300,000 speakers of the dialect in Greece alone (Drettas 1999:15). Furthermore, an archaic and a conservative variety of Eastern Pontic, namely *Romeyka*, is still spoken in the Of valley (Çaykara), in Sürmene and around Tonya by around 5,000 Muslims (see Sitaridou 2013a,b, 2014, 2016; Schreiber and Sitaridou 2017), although according to Özkan (2013) the number of speakers today is in fact considerably higher.²

² Pontic is also spoken in Georgia, in Mauripol in Crimea, and in Rostov-on-Don in the Russian Federation. The latter two cities are located on the shores of the Sea of Azov, and it has been proposed that the speakers were settled there as colonies from Asia Minor, more specifically from what is now the province of Gümüşhane (Dawkins 1940).

1.3.4 PhG

1.3.4.1 PhG before 1923

PhG (referred to by the speakers as *Varašotika* and *Adhanalitika*) is the name currently employed to refer to the Greek dialect which was spoken in a region which comprises today the south, south-eastern part of the province of Kayseri, around the towns of Develi and Yahyalı, and the northern part of Adana, close to the borders with Kayseri.³ The dialect is probably named after the Turkish version of a Greek village in the region, which is found in the area since antiquity (Anagnostopoulou 1998:185).⁴ Before the population exchange, it was spoken in this region mainly in the village of Pharasa, called by the speakers *Varašos* (Modern day, Çamlıca, Yahyalı, Kayseri), and in the smaller villages of Afşari (Avşar mezarası, Şihli, Develi, Kayseri⁵), Kiska (Yaylacık, Develi, Kayseri), Sati (Sati, Develi, Kayseri), Çuxuri (Çukuryurt, Develi, Kayseri) and Garsanti, also known as Fkosi (Mansurlu, Aladağ, Adana).^{6,7} The village of *Varašos* is known as the “central” village while the

³ The term “Adhanalitika” is used by the speakers who would call themselves *Adhanaludhes*: ‘Οι τῶν Ἀποικῶν Φαράσων ἀποκαλοῦσαν εαυτοὺς ἔτσι ἐπειδὴ ἀνήκαν διοικητικὰ στὰ Adana [sic., the colonists from *Varašos* would call themselves such [Adhanaludhes, MB] because administratively they were dependent on Adana]” (The archive of the Center of Asia Minor Studies, Dossier no: KII 27, Τασοί 238, fn. 1. See also Anastasiadis 2015:25).

⁴ On Kiepert’s map (1855) entitled *General Karte des Türkischen Reiches in Europa und Asien nebst Ungarn, Südrussland, den kaukasischen Ländern und West-Persien*, this village is referred to as “Farash”. The map can be found at <https://www.lib.uchicago.edu/e/collections/maps/kiepert/G7430-1855-K5-sheet1.html>, last accessed: July 25, 2017. Moustakidis (1893:373) refers to the village as *Φάρασα* [Fárasa].

⁵ This is the location of the village tentatively proposed by Sevan Nişanyan. The relevant information can be found at <http://www.nisanyanmap.com/?yer=19965&z=13&mt=Karma>, last accessed: July 1, 2017.

⁶ The dialect was also spoken in the village of Ksurčaidhi (also known as Gara-köi, cf. Theodoridis 1967:209), which was located to the south-west of *Varašos* (close to Büyükçakır, Yahyalı). This village was entirely abandoned in 1876 (Jordanis Papadopoulos, p.c.).

Dawkins (1916:35) mentions another village in Pharasa, *Giaur-köi*, which according to him is “[...] one and a half days S[outh]S[outh]W[est] from [Varašos]” (ibid.). Since he does not mention Garsanti in his book, one may think that what he refers to as *Giaur-köi* is in fact Garsanti (which was then known as Pos-Gara-köy or Postugaraköy). However, Garsanti is to the south-east of *Varašos*, which is not in line with Dawkins’ geographical description. Another possibility is that this is the village Ksurčaidhi, which was to the south-west of *Varašos*. This is more credible since Dawkins did not visit this village but only saw it from a distance (see Dawkins 1916:35); therefore, it is not sure if there was anyone living in it then.

⁷ Note that there were more Greek Orthodox villages in the region, which were, however, Turkophone: Tašči (Taşçı, Develi, Kayseri), Xošča (Hoşça, Develi), Kurumca (Gürümze, Feke, Adana), Karatzoren (Karacaviran, Develi, Kayseri), Paxčačux (Bahçecik, Feke, Adana; abandoned around 1876), Peš-kardaš (Beşkardeş, Develi, Kayseri) are the ones I can detect (cf. Anastasiadis 1975, 2015:25; Papadopoulos 1998).

other villages are referred to as the “peripheral” ones (Anastasiadis 1976). This divide is mainly based on two facts: (i) Varašos was the village with the greatest number of speakers and, and (ii) the peripheral villages are believed to have been established by people from Varašos sometime after 1720 and before 1880 (Papadopoulos 1998, 2009; Anastasiadis 2015). The location of these villages is shown on Figure 1.4.

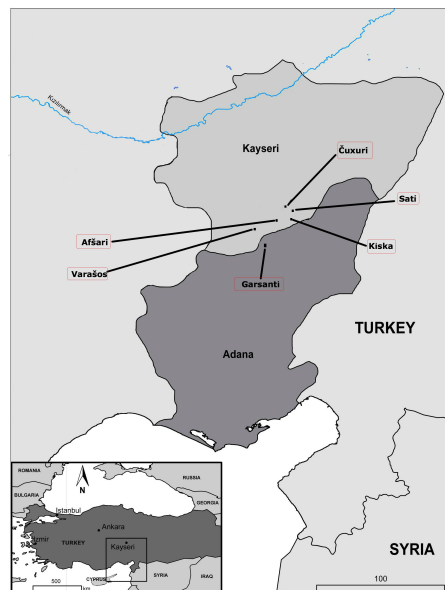


Figure 1.4: PhG speaking villages in Asia Minor (immediately before 1923)

Due to lack of census data, providing exact numbers of speakers before 1923 is impossible; however, some fragmental information (e.g., Kyrillos 1815; Archelaos 1899; Xenofanis 1896, 1905–1910; Dawkins 1916) suggests that the population of PhG speakers numbered about 2,600 in the late 19th and early 20th century. Anastasiadis (1975:183, 2015:24) similarly claims that there were about 3,000 speakers of the dialect immediately before the population exchange (see also Kitromilidis and Mourellos 2004:307 for the same conclusion). According to the Center of Asia Minor Studies in Athens, however, during the population exchange 1,848 people were relocated to Greece from the region of Pharasa, 583 of which were from Varašos (Papadopoulos 1998). It is not clear whether this number also includes Turkophone refugees as well.

1.3.4.2 PhG today

As far as I could detect, the PhG dialect is spoken today by at least one second-generation refugee in the following villages in West and Central Macedonia in Greece: Vathylakkos and Anthotopos (Kozani), Platy (Imathia), Agrosikia and Neos Milotopos (Pella), Choristi (Drama), and Felli and Doksaros (Grevena). The location of these villages is shown on Figure 1.5.



Figure 1.5: Villages in Greece with at least one PhG speaker (as of 2016)

Among other settlements where refugees from Pharasa were relocated are Konitsa (Ioannina), Mirsina (Grevena), Moschato (Attica), Paliochori (Kavala), Paranesti (Drama) and Petrana (Kozani) (see also Anastasiadis 1975, 2015:28; Kekelidis 2005; Papadopoulos 1998; Papadopoulos 2009). I could not find any speakers of PhG in these places, though some of the local residents stated that they have at least some command of the language. The total number of speakers today does not exceed 25. At the time when data collection for this dissertation was initiated, there were two first-generation speakers of the dialect as well. These speakers unfortunately passed away recently.

The rapid decline of the number of speakers since the time of the population exchange can be comprehended if we take into consideration a number of social factors in the years following the population exchange. First, except in Platy and Vathylakkos, PhG refugees never formed the majority of the population of the place in which they settled. In most places, they shared the settlement with refugees who spoke other dialects of Asia Minor such as Pontic, and who formed the majority (see especially Papadopoulos 1998 on this issue). Therefore, in order to ensure communication with other communities, learning a common variety, i.e., SMG, was inevitable.

Second, according to the consultants, the general negative attitude by the locals in Greece towards the refugees from Asia Minor and their language in the years following the population exchange also acted as an important trigger for this rapid decline. Speakers invariably told me that they were initially not welcomed by the local population, and that their dialect was regarded as Turkified and hence inferior—an idea which they also seem to have believed themselves eventually. Therefore, they started learning SMG, and PhG was demoted and only preserved as a language spoken at home.⁸ Finally, many PhG refugees who left Platy and settled in other places in large numbers after the population exchange either died or had to leave these places, and they were dispersed over different locations during the Axis occupation of Greece (1941-1943) and the Greek civil war (1946-1949) (Papadopoulos 1998).

1.4 PhG speakers today

For those who speak the dialect today, PhG is a heritage language, i.e., a language that they learned at home as a child, but which is crucially not the dominant language of the society (Valdés 2000; Polinsky and Kagan 2007; Alexiadou and Lohndal 2015; Scontras et al. 2016; Montrul 2016:13–40). The second-generation speakers began learning PhG before or concurrently with SMG (or northern MG dialects) and they can best be characterized as heritage speakers and imbalanced bilinguals whose competence in the dominant language (SMG) is better than in the heritage language (PhG). Especially after their early childhood, constant exposure to the dominant language of the society, i.e., SMG, through formal education and mass media resulted in the fact that speakers of PhG feel more comfortable using SMG in more formal settings, and typically switch back and forth between SMG and PhG on other occasions. Nevertheless, especially in the village of Vathylakkos I noted that when female speakers come together, they often speak PhG among themselves.

In 2013, when data collection was initiated, the age of the speakers ranged between 98 and 65. One of the first-generation speakers, and three of the second-generation refugees have never been enrolled in any formal education. The other first-generation speaker went to primary school for three years. All other second-generation refugees completed (at least) primary school, but none of them continued in higher education.

Impressionistically, no correlation between gender and competence/performance could be detected; there are speakers from both genders of similar numbers (as far as I could detect, 10 male and 12 female). Due to the growing awareness of the dialect

⁸ Illustrative of this point is an anecdote told to me by a second-generation refugee, Despina K. (69), who recalls how happy she felt when, as a little child, she saw that her mother managed to ask for an ice-cream in SMG from the ice-cream seller visiting the village of Vathylakkos.

among the speakers, there are such attempts as writing a dictionary of the dialect by the speakers. Despite such attempts, however, the dialect is about to become extinct, as foretold by Anastasiadis (1976:19).

1.5 Data and data collection methods

The claims and discussions in this dissertation are primarily based on PhG data collected from the heritage speakers in Greece (section 1.4). However, written sources dating from before and after the population exchange have also frequently been consulted in order to detect possible diachronic changes or differences. In sections 1.5.1 and 1.5.2, I will introduce the spoken and written corpora respectively. In section 1.5.3, I will provide information about the methodology adopted when extracting data from these corpora.

1.5.1 Oral corpus

Between October 2013 and June 2015, 11 recordings were made with 14 speakers (5 male and 9 female) who (are descendants of people who) are originally from the villages of Varašos, Čuxuri, Kiska and Afšari. The recording sessions took place in the villages of Platý and Vathylakkos in Greece. Each recording lasts approximately one hour. Except for three, at every recording session there are at least two speakers of the dialect present. On every occasion, along with myself at least one other person who knows the informants very well was also present. This is a choice made to eliminate any hindrance of communicative flow and thus to sustain qualitative speech transfer. During the recordings, the principles of the Ethnography of Communication (EOC; Hymes 1962, 1964, 1972) were followed. EOC regards speech as a practical event rather than an abstract code and presupposes that (a) community speech can be analyzed as a system of rule-guided practices, (b) the researcher should examine significant cross-cultural differences, and (c) the researcher should not have expectations beyond the communal meaning structures (Stewart and Philipsen 1984). To this end, I tried to record spontaneous and unforced everyday conversation, with particular emphasis on casual speech and other communicative events, including historical narratives, folktales, recipes etc., without forcing the speakers to talk about topics with which they do not feel at ease. The information about the participants in these recordings are provided in Table 1.1. The information in the columns “Participant 1/2/3” is as follows: name, age and gender of the informant, information about her/his place of birth, information about the place of birth of her/his parents:

#	Rec. date	Participant 1	Participant 2	Participant 3
1	Oct. 2013	Sofia K. [†] 98, ♀, born in Čuxuri, raised in Vathylakkos. Parents from Čuxuri.		
2	Oct. 2013	Eirini P. 65, ♀, born & raised in Vathylakkos. Parents from Čuxuri.		
3	Oct. 2013	Polyxeni. 69, ♀, born & raised in Vathylakkos. Parents from Čuxuri.	Despina K. [†] 69, ♀, born & raised in Vathylakkos. Father from Kiska, mother from Čuxuri.	
4	June 2014	Theodorakis K. 76, ♂, born & raised in Vathylakkos. Parents from Čuxuri.		
5	June 2014	Evlambia Ch. 80, ♀, born & raised in Vathylakkos. Parents from Čuxuri.	Kathina P. 74, ♀, born & raised in Vathylakkos. Father from Čuxuri, mother from Afšari.	Eirini P.
6	June 2014	Androniki V. 65, ♀, born & raised in Platy. Parents from Varašos.	Miranda M. 66, ♀, born & raised in Platy. Father from Varašos, mother from Čuxuri.	
7	June 2014	Leftheris K. 77, ♂, born & raised in Drama. Parents from Varašos.	Giorgos K. 90, ♂, born & raised in Grevena. Parents from Čuxuri.	Prodromos K. 81, ♂, born & raised in Drama. Parents from Varašos.
8	June 2014	Nikos Ts. 73, ♂, born & raised in Drama. Parents from Varašos.	Leftheris K.	Prodromos K.
9	Dec. 2014	Maria M. 86, ♀, born & raised in Vathylakkos. Parents from Čuxuri.	Eirini P.	
10	July 2015	Eirini P.	Evlambia Ch.	
11	July 2015	Theodorakis K.	Eirini P.	

Table 1.1: Information about the participants recorded

1.5.2 Written sources

1.5.2.1 Previous work on the grammar of PhG

There are four substantial earlier studies of the grammar of PhG, which are discussed in chronological order in sections 1.5.2.1.1–1.5.2.1.4.

1.5.2.1.1 Dawkins (1916) In this 1916 monograph, Dawkins provides a brief overview of the grammar of PhG based on the oral data he collected during his field work in the villages of Varašos, Kiska, Afšari and Čuxuri in 1911 (for the oral data used in this monograph, see section 1.5.2.2). This grammar covers the areas of phonetics/phonology (pp. 149–162) and morphology (pp. 163–192). The syntax of PhG is largely neglected; however, one can find some information about the syntax of adjectives, relative clauses and interrogatives in the morphology section. Dawkins justifies his lack of attention for syntax on the grounds that “[...syntax] is a field in which the foreigner, with his absence of that deep feeling for the language which can hardly be reached by anyone except a born speaker, must always be at a disadvantage” (Dawkins 1950:362). Further in his monograph, Dawkins provides a short list of words of Turkish, Armenian and Latin origin in PhG, as well as some general conclusions on the influence of Turkish on PhG and the relation of PhG to the other AMG dialects (Dawkins 1916:192–213, § E). At the end of the book a comparative glossary of Cappadocian, Pharasiot and Silliot can be found.

1.5.2.1.2 Andriotis (1948) This is the first work on the grammar of PhG after the population exchange. Most of the data which constitute the basis for this monograph were collected by Dimitris Loukopoulos before 1937 (currently preserved at the Center of Asia Minor Studies in Athens). This sketch grammar provides information about the phonetics/phonology (pp. 16–34), nominal and verbal morphology (pp. 35–45) and the syntax (pp. 46–53) of PhG. Especially the syntax section is rather sketchy and most information provided here is pertinent to the morphology of pronouns, nouns and adjectives. Andriotis (1948) also provides a glossary of PhG words (pp. 54–79) and a brief note about some common characteristics of PhG and Pontic (pp. 80–88). This book was reviewed by Favis (1948); Papadopoulos (1948); Dawkins (1950) and Kyriakidis (1951). Of these, Favis (1948) is of special importance for the current dissertation because the author only reviews the section pertinent to PhG syntax (Andriotis 1948:46–53) and provides further information about the syntax of, among other things, relative clauses, conditional clauses and negation markers in PhG.

1.5.2.1.3 Anastasiadis (1976 et seq.) Vasilios Anastasiadis is a native speaker of PhG and his 1976 dissertation is the most extensive study conducted on the syntax of PhG so far. The data discussed in his dissertation were either collected from earlier texts (see section 1.5.2.2) or provided by himself. Without following any specific theory of syntax, Anastasiadis (1976) provides valuable information on, among others, agreement phenomena, adverbial clauses, complementation and coordination in PhG. Furthermore, at various points he provides insightful information about the diachronic evolution of the phenomena he discusses, comparing his own data with those of Dawkins (1916) and Andriotis (1948). At all stages of writing this dissertation, I consulted Anastasiadis (1976). Whenever the relevant information was absent in this dissertation, I contacted Dr. Anastasiadis via letters and phone calls. In Anastasiadis (1975, 1987, 1994, 1995a, 2015) we find further information about the grammar of PhG, and in Anastasiadis (1980a,b, 2003, 2015) short glossaries of the dialect.

1.5.2.1.4 Papastefanou (2009) This is a dictionary of PhG comprising words collected by Georgios Papastefanou, a second-generation refugee born in 1938. It provides valuable words which were not noted before, but more importantly, it provides the declension of 75 verbs in PhG.

1.5.2.1.5 Studies on isolated phenomena in PhG Due to a growing interest in MG dialectal research, there have appeared a number of papers which deal with a number of topics in PhG grammar. Almost all these studies can be considered to adopt a micro-comparative perspective, as data from PhG are presented alongside and compared with data from Cappadocian, Silliot and Pontic. Some of these studies maintain the assumption that PhG is a variant of Cappadocian (see section 1.2.2). Except for Bağrıaçık et al. (2017), the data in these work were drawn from earlier texts (see sections 1.5.2.1.1–1.5.2.1.4, 1.5.2.2). Rather than listing all these studies here, which is not necessary for current purposes, I will only present a number of representative examples below.

Concerning phonetics and phonology, Revithiadou et al. (2006), for instance, discuss partial vowel harmony in Cappadocian and they provide some examples from PhG as well (for additional discussion of vowel harmony in Cappadocian see Janse 2002, 2009a, forthcoming). Manolessou and Basea-Bezantakou (2012) provide a survey of geminate consonants in MG dialects. Their discussion of Cappadocian may be relevant for PhG as well. Finally, Manolessou and Pantelidis (2013) discuss velar fronting, i.e., the change in the place of articulation of the velar consonants /k/, /g/, /x/, /ɣ/ to more front regions of the oral cavity under the influence of a following front vowel, across MG dialects, whereby PhG (which is subsumed there under Cappadocian Greek) is one of the varieties mentioned.

In studies on morphology, the focus is typically on nominal declension (see, a.o., Janse 2001a,b, 2002, 2009a,b; Ralli 2009; Karatsareas 2009, 2011b, 2013), expression of definiteness (Janse 2004, 2009a,b; Karatsareas 2011b), compound formation (Bağrıaçık et al. 2017) and loan word integration (Janse 2001a,b, 2009a; Bağrıaçık et al. 2015; Melissaropoulou 2010, 2016; Ralli 2016, a.o.).

As to syntax, the phenomena of clitic placement and clitic doubling have received special attention (e.g., Janse 1993, 1994, 1997, 1998a,b, 2006, 2008a; Condoravdi and Kiparsky 2002). Nicholas (1998); Janse (1998c, 1999); Bağrıaçık (2016); Bağrıaçık and Danckaert (2016) discuss the syntax of relative clauses, and Nicholas (1998, 2001) and Roussou (2009) are concerned with some complementation patterns.

1.5.2.2 Texts written in PhG

For the purposes of this dissertation, beside works which were written on (certain aspects) of PhG, texts written in or translated into PhG, both before and after the population exchange, have also been consulted. In what follows, I will provide a brief account about the authorship and contents of these texts in chronological order.

As for the texts before the population exchange, we should first mention de Lagarde (1886), which contains the earliest continuous texts in PhG which survive to this day.⁹ de Lagarde's collection consists of an anecdote and a fable (de Lagarde 1886:7), a sample of the translation of the Gospels into PhG (de Lagarde 1886:8–14) and 2 songs (de Lagarde 1886:14–15). Second, Levidis' (1892) manuscript (which is about 50 pages long) includes a story, idioms, songs and a hymn. The contents of this manuscript were discussed in detail in Dawkins (1930). Except for the proverbs which were published in Dawkins (1937a) and the story which was published in Dawkins (1955), the manuscript has never been edited, but it can be consulted online.¹⁰ It should be noted that a comparison between the original text and Dawkins' editions reveals a number of discrepancies between the two. Third, Archelaos (1899:137–138) and Grégoire (1909:158–159) provide one story each, both written in PhG. Finally, Dawkins (1916:464–579) gives 41 tales in PhG along with their English translations. These tales were told to him by native speakers in the villages of Varašos, Čuxuri, Kiska and Afšari.¹¹ Theodoros Theodoridis, a na-

⁹ Otherwise, the earliest reference to PhG is found in Karolidis (1874, 1885), where a number of PhG words, for which the author provides wrong etymologies (on this point see Dawkins 1916:30; Andriotis 1948:8), are listed.

¹⁰ <http://amigredb.philology.upatras.gr/wsource/anastasios-levidis-synagogi-glossikoy-kappadokikoy-ylikoy>, last accessed: July 1, 2017.

¹¹ I was informed by Iordanis Papadopoulos (p.c.) that Dawkins had great difficulty in gathering data in the beginning and he turned to a Muslim boy in the village of Varašos for data. This Muslim boy,

tive speaker of PhG, criticizes Dawkins' texts in his 1939 work entitled *Corrections and comments on the Pharasiot texts in Dawkins (1916)*, on the grounds that what Dawkins transcribed is in fact at various points incorrect. Theodoridis (1939) rewrote all the texts provided in Dawkins (1916:464–579) and further translated them into SMG.¹² However, even though Theodoridis considers his manuscript to be a collection of “corrections” on Dawkins' texts, it is not entirely clear whether every change proposed by him can indeed be qualified as a real correction rather than a mere paraphrase of the original version.

As for the texts written in PhG after the population exchange, we should mention first the work by Loukopoulos and Loukatos (1951), which lists a number of PhG proverbs, including those which were originally provided in Levidis (1892) and later published in Dawkins (1937a). Second, Theodoridis (1960, 1964) provides a number of stories which he wrote in PhG and translated into SMG. Third, Thodoris Zurnatzis, a native speaker of PhG born in 1910 in Varašos, wrote his autobiography in the late 1950s in PhG and translated it into SMG. The document is valuable not only because it provides a continuous text of around 100 pages in PhG, but also for the fact that it contains information about the social life in and around Pharasa shortly before the population exchange.¹³ Fourth, Theodoridis (1966) is a manuscript of 120 pages and includes a novel in PhG along with its translation into SMG.¹⁴ In Theodoridis (1972) we further find a song and a short paragraph in PhG. Fifth, Anastasiadis (1995b) provides 8 stories from the village of Čuxuri along with their translation into SMG. Finally, Papadopoulos (2011) provides 12 stories written in PhG and translated into SMG.

Beside these texts, some second-generation speakers from the villages of Vathy-lakkos and Platy also gave me a number of short stories written in PhG.

1.5.3 Data collection methods

1.5.3.1 Data from the oral corpus

The data in the oral corpus have not been systematically annotated. The main reason for this is that the annotation of *ca.* 11 hours of recordings is a very labour-intensive

Yusuf Mollahasanoğlu, spoke the language but was originally a native speaker of Turkish. See also Anastasiadis (1976), who criticizes Dawkins' texts for providing examples which are not correct.

¹² This manuscript can be consulted online at http://amigredb.philology.upatras.gr/w-sources?dialektos=All&title=&author=36&swritten_type=All, last accessed: July 1, 2017.

¹³ This manuscript can be found at <http://amigredb.philology.upatras.gr/wsource/zoynaxi-perigrifi-tis-viografias-moy-sti-farasiotiki-me-tin-elliniki-exigisi-0>, last accessed: July 1, 2017.

¹⁴ This manuscript can be found at <http://amigredb.philology.upatras.gr/wsource/papathodoros-theodoridis-farasiotikos-istorikos-dialogos>, last accessed: July 1, 2017.

(and thus time-consuming) task, which could not be undertaken in the context of the present PhD project. Furthermore, since the main emphasis of the theoretical part of this dissertation is on a limited number of rather specific syntactic phenomena, annotation of data that are not directly relevant to these phenomena would not be beneficial for the current purposes.

Examples relevant to the phenomena to be discussed in this dissertation were collected in Excel spread sheets. A total of 15 such files were created, which bring together examples of for example the expression of definiteness inside the noun phrase (section 2.4.1), complement (section 2.4.9), nominalized (section 2.4.10.1), relative (section 2.4.10.2) and adverbial (section 2.4.10.3) clauses; topicalization, focalization, contrastive fronting (2.4.7, chapter 3), and the particle *ki* (chapter 4).

1.5.3.2 Questionnaires

As of some phenomena that I was interested in there were very few or no examples in the spoken corpus, the elicitation of additional data was required. For this purpose, I frequently made use of questionnaires to enlarge my database. Between 2013 and 2017, about 50 questionnaires were distributed to PhG speakers. Each questionnaire was distributed to a minimum of 3 and a maximum of 16 speakers, depending on the nature of the phenomenon under discussion. Because there is no standardized orthographic convention to write PhG (on this issue, see section 1.6), and because not every speaker has the same reading skills/capability, all questionnaires were administered orally, with the items being read out aloud either by a native speaker or by me. Questionnaires mostly involve translation tasks from SMG to PhG and vice-versa, open-ended questions and grammaticality judgment tasks in the format of 7-point Likert scale. Beside questionnaires, I also occasionally contacted native speakers via phone calls for further data elicitation.

1.5.3.3 Data from the written corpus

Although the data presented and discussed in this dissertation are synchronic, in order to detect possible changes or differences, data from written corpora (section 1.5.2) were frequently consulted. On par with what I did with the oral corpus, data from the textual records relevant to phenomena presented and/or discussed in chapters 2–4 were collected in Excel files similar to the data collected from the oral corpus, in order to facilitate the comparison of both types of data. Furthermore, most data in these Excel sheets have also been presented to speakers in order to see whether they are still recognized or not.

1.6 A note on orthographic and glossing conventions

In the texts presented in section 1.5.2, a number of different orthographic conventions were adopted by the authors for writing in PhG. In particular, scholars used the Greek alphabet either with additional Latin graphemes (e.g., ⟨j⟩, ⟨b⟩, ⟨g⟩, ⟨č⟩, ⟨š⟩, cf. de Lagarde 1886; Grégoire 1909; Dawkins 1916; Papastefanou 2009) or with diacritics on Greek graphemes, e.g., ⟨ô⟩, ⟨τ̂⟩, ⟨κ̂⟩, to indicate sounds that do not have any graphemic correspondent in the Greek alphabet (e.g., Andriotis 1948, Anastasiadis 1975 et seq., Theodoridis 1939 et seq.). In this dissertation, I use Latin graphemes with a few additional IPA symbols to represent each sound in PhG so that the examples can be accessible to those who are not familiar with the Greek alphabet. For the sake of simplicity, I represent different sounds whose place or manner of articulation are nearly identical (or at least very similar) with a single grapheme (for the phonemic inventory of PhG see section 2.2.1). Because this dissertation focuses mainly on syntactic phenomena, and the presence or absence of precise phonetic transcriptions in the examples does not have any influence on the discussion of the examples, I believe that adopting this type of orthographical convention is justified and allows the reader to follow the examples more easily.

In Table 1.2 below I give the full inventory of graphemes that will be used to represent PhG sounds (given here as IPA symbols) throughout this dissertation:

Sound	Grapheme	Sound	Grapheme	Sound	Grapheme
[e̞]/[a]	⟨a⟩	[m]	⟨m⟩	[l]	⟨l⟩
[e]	⟨e⟩	[f]	⟨f⟩	[ʃ]	⟨š⟩
[i]	⟨i⟩	[v]	⟨v⟩	[tʃ], [tʃ̥]	⟨č⟩
[o]	⟨o⟩	[θ]	⟨θ⟩	[tʃ̥], [tʃ̥̥]	
[u]	⟨u⟩	[ð]	⟨ð⟩	[k] ~ [c]	⟨k⟩
[œ]	⟨ö⟩	[t]	⟨t⟩	[j]	⟨j⟩
[y]	⟨ü⟩	[d]	⟨d⟩	[g]	⟨g⟩
[u̯]/[i̯]	⟨u̯⟩	[s]	⟨s⟩	[x]	⟨x⟩
[æ]	⟨æ⟩	[z]	⟨z⟩	[ɣ]	⟨ɣ⟩
[b]	⟨b⟩	[n] ~ [ɲ] ~	⟨n⟩	[w]	⟨w⟩
[p]	⟨p⟩	[ŋ]		[r]	⟨r⟩

Table 1.2: The orthographic conventions employed in this dissertation

Throughout the dissertation, word stress in PhG examples is indicated with an

acute accent (e.g., ⟨é⟩, ⟨ú⟩, etc.). Other suprasegmental features or processes, such as aspiration of plosives in borrowed words (see section 2.2.1.2) or possible secondary stress, are not indicated to keep examples easy to parse.

PhG examples are glossed following the “Leipzig Glossing Rules”, to which I added a limited number of additional conventions (see ‘list of abbreviations’).¹⁵ For the examples from other languages (except English) taken from other sources, I kept the glosses given in the original source, and provided the abbreviations in a footnote if they are not specified by the Leipzig Rules. For examples not glossed in the original source, I followed the Leipzig rules as well. As is customary in linguistic studies, an asterisk (*) before an example indicates that the example is ungrammatical/unacceptable. Question marks ((?)) before an example indicate that the example is marginally acceptable. The hash sign (#) in examples is used to indicate pragmatically inappropriate sentences. In the running text, and in the examples, the hash sign immediately followed by a number indicates the number of the recording (see Table 1.1).

1.7 Outline of the dissertation

The present dissertation consists of three core chapters (chapters 2–4), and a final chapter (chapter 5) which summarizes the discussion and lists a number of questions for further research.

Chapter 2 provides a sketch grammar of modern-day PhG. The empirical focus is on the phonological, morphological, syntactic and lexical properties of PhG as spoken today. The data are presented without making any theoretical assumptions, and the discussion is meant to be accessible to both linguists who may read the rest of this dissertation, and to non-linguists who are interested in the basic grammatical properties of PhG and who have a basic knowledge of (traditional) grammatical concepts.

Chapter 3 deals with the issue of word order in declarative main clauses with overt nominal arguments and with mono-transitive verbs. This chapter can be separated into two parts. In the first part (up to section 3.3), I provide a survey of word orders. Here, I aim at discovering pragmatically neutral and non-neutral word orders, where “pragmatic neutrality” (and “pragmatic markedness”) is to be understood as pertaining to notions of information structure (old and new information, emphatic and non-emphatic constituents, etc.). The survey shows that in PhG, both V(erb) S(ubject) O(bject) (i.e., VSO) and SVO orders are employed in pragmatically neutral environments. All other word orders are shown to be pragmatically marked in various ways. Furthermore, a sub-class of SVO clauses is also identified as non-neutral.

¹⁵ <https://www.eva.mpg.de/lingua/pdf/Glossing-Rules.pdf>, last accessed: July 18, 2017.

In the second part (from section 3.3 on), I focus on the syntactic structure of clauses with different word orders. After introducing the framework that I adopt in the rest of the dissertation (section 3.3.1), I first focus on the structure of the neutral VSO and SVO orders. Here I specifically investigate the position of the verb and the subject in neutral VSO and SVO orders in the hierarchical structure of the clause. I conclude that while in neutral VSO clauses no element moves out of the inflectional domain, neutral SVO clauses correspond to a derivation in which the subject is moved to a dedicated subject position in the left periphery of the clause. In contrast, non-neutral SVO clauses are argued to involve movement of the subject to a focus or a topic position in the left periphery. Finally, I focus on the structure of the O-initial word orders which correspond to clauses associated with pragmatic markedness. Based on their interpretive properties, I identify two different types of topic expressions that are hosted at distinct positions at the left periphery. A further category of expressions which receive an array of contrastive readings is discussed.

Chapter 4 focuses on a discourse particle borrowed from Turkish, namely *ki*. This particle is employed in five configurations which, at first sight, are distinct from one another. However, closer inspection reveals that all these configurations are asserted root clauses, suggesting that *ki* can be characterized as a “Main Clause Phenomenon”. I start by offering a full description of the environments in which *ki* can occur, paying special attention to the interpretive nuances that *ki* contributes. I conclude that in all its uses, *ki* is a discourse marker which is employed by the speaker to display to the hearer their competence and authority regarding the content of their assertion, and to show the hearer their benevolence and trustworthiness. In other words, the occurrence of *ki* is bound to the existence of the notions of “hearer” and, more importantly, “speaker”: more precisely, *ki* singles out the speaker as the “sentient mind”, i.e., the person whose point of view is reflected in a given sentence. Based on existing claims that the notions of “speaker” and “hearer” are also represented syntactically, I argue that configurations involving *ki* derive from a single underlying structure which involves *ki* as a functional head high in the left periphery. Superficial differences between various *ki*-environments stem from the fact the relevant formations have slightly different syntactic derivations.

2

Overview of PhG grammar

2.1 Introduction

In this chapter, I provide a sketch grammar of present-day PhG. The data are presented in such a way as to make them accessible both to linguists who may read the rest of this thesis and to non-linguists who are interested in the basic grammatical properties of PhG and who have a basic knowledge of (traditional) grammatical concepts. In order to ensure that the chapter is accessible to both types of readers, no specific theoretical assumptions will be made at this point, and the discussion of the data will be kept at a fairly atheoretical and a fairly general level. For a further detailed discussion of some specific aspects of PhG I refer to the relevant chapters of the thesis. It should hence be clear from the outset that the overview I provide here is by no means exhaustive. Indeed, an exhaustive description of all the grammatical properties of PhG would go well beyond the customary limits of a dissertation and in particular, beyond the aims of this thesis, which were set out in section 1.1. The interested reader is referred to Platania et al. (in preparation) for a more exhaustive overview of the grammar of this dialect. In the chapters following this one, frequent references are made to the data that are presented in the present chapter. As such, I consider the current chapter a user manual, which may assist readers throughout the rest of this thesis.

The empirical focus of this chapter is on the phonological, morphological, syntactic and lexical properties of modern-day PhG. The data and the presentation of these data are based on my own fieldwork (see section 1.5 for the data and the data collection methods). In this respect, this chapter also constitutes a (partial) update of previous seminal studies on PhG (listed in section 1.5.2.1). Since the last (extensive) description of the grammar of the dialect was written by Vasilis Anastasiadis in a doctoral dissertation in 1976—now over 40 years ago—I consider this update appropriate and timely. My updated grammar reveals certain disparities between what was acknowledged by Anastasiadis and what is observed today in the grammar of PhG. Throughout the chapter, I will note these differences without attempting to account for them. Some of the differences will then be analyzed in subsequent chapters.

As noted by previous scholars, there are certain differences between the PhG variety that is spoken by (the descendants of) the refugees from the village Varašos and the variety spoken by (the descendants of) the refugees from the peripheral villages of Čuxuri, Afšari and Kiska (section 1.3.4.1). The differences are most saliently observed in the respective lexical stocks, but at certain points this micro-variation of the lexical stock has potential repercussions for the syntax of the respective varieties. Where relevant, I note these salient differences. However, I refer to both varieties as PhG, following the conventions of previous works.

The organization of the chapter is as follows: section 2.2 provides an overview of PhG phonology, section 2.3 of the morphology/lexicon, and section 2.4 of the morpho-syntax. More specifically, section 2.2 is an overview of the phonemic inventory of PhG, and certain phonological processes (the most remarkable of which is “velar palatalization”). Section 2.3 provides an overview of the nominal and verbal inflection, and of certain morphological processes such as derivation and compounding. The section also contains a brief overview of the lexical stock of the dialect. Section 2.4 first discusses the structure of the noun phrase: in section 2.4.1 I describe the distribution and interpretation of bare nouns, the expression of definiteness and indefiniteness as well as agreement and word order in the noun phrase. Next, in section 2.4.2, I present the core arguments and adjuncts which must or can occur in a simple clause. Section 2.4.3 provides an inventory of simple clause types, and sections 2.4.4 and 2.4.5 describe the modal particles and negation markers, respectively. Section 2.4.6 is devoted to negative polarity items and constituent negation and section 2.4.7 briefly discusses how discourse-oriented dislocation is achieved. Section 2.4.8 presents the possible positions of clitic object pronouns in a clause. Sections 2.4.9–2.4.10 are devoted to subordinate clauses: in section 2.4.9, I provide an inventory of complement clauses, and in section 2.4.10, I describe how nominalized, relative, adverbial and conditional clauses are expressed. Finally, section 2.4.11 describes two residual syntactic phenomena: coordination and comparison.

2.2 Phonology

2.2.1 Phonemic inventory

2.2.1.1 Vowels

PhG has nine vowels. These are presented following the IPA convention in the vowel quadrilateral below:

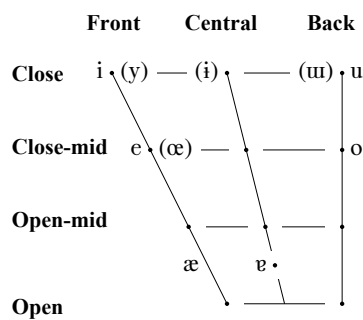


Figure 2.1: PhG vowel inventory

In Figure 2.1, paired vowels at the same location differ with respect to roundedness (i.e., lip posture): symbols to the left of the dots are unrounded, symbols to the right are rounded.

While a full discussion of the phonology of PhG is beyond the purpose of this chapter, a number of considerations are worth noting. Articulatorily, /i/ and /y/ are close (i.e., high) front unrounded and rounded vowels respectively. /y/ occurs very rarely, only in a few words borrowed from Turkish. Therefore, the extent to which it constitutes a phonemic element of the PhG vowel inventory is open to debate. The close back unrounded vowel /ɨ/ also occurs in numerous PhG words that are borrowed from Turkish. At least impressionistically, it seems that this sound in PhG is somewhat centralized to /ɨ/. The exact position of this vowel, however, awaits further scrutiny with an experimental study. In any event, since it occurs only in words borrowed from Turkish, the representation of /ɨ/ (or /i/) as an element in the PhG vowel inventory is moot, similar to the case of /y/. This is also true of the close-mid front rounded vowel /ɛ/, which also occurs only in Turkish borrowings. The near-open front unrounded vowel /æ/ occurs both in inherited words and Turkish borrowings. In the former case, it corresponds to the Greek combination of /e/ + /a/; for example the SMG word *κρέας* ['kreas] 'meat' is realized as *kræs* [kræs] in PhG, and the

SMG *εννέα* [e'nea] 'nine' is realized as *enê* [e'næ].¹ As for the latter case, i.e., /æ/ in words borrowed from Turkish, I cannot determine with precision every environment in which the vowel is observed, and thus I can only provide certain tendencies. The Turkish /e/ is the primary source of /æ/ in borrowings in PhG, e.g., Turkish *elbette* 'certainly' > PhG *êlpætta* ['ælpætta], Turkish *madem* 'seeing (that)' > PhG *matêem* [ma'tæem] 'evidently', Turkish *göre* 'according to' > PhG *korê* [koræ], Turkish *kendi kendine* 'by oneself' > PhG *kendî kendinê* [ken'di kendi'næ]. However, Turkish /a/ also seems to be realized sporadically as /æ/ in PhG. To illustrate this point, the (standard) Turkish word *merhamet* 'mercy' is realized as *mærxæmêti* [mærxæ'mæti] in PhG, with the Turkish instances of /e/ and /a/ realized as /æ/ in PhG.² The low vowel /a/ seems to be a central one in PhG, similar to the /a/ of SMG (see Arvaniti 2007:118), hence the chosen IPA symbol [ɐ]. Its precise height, however, can be defined only after a careful phonetic study. For convenience, I have used the symbol [a] in all transcriptions in this section.

2.2.1.2 Consonants

PhG has various consonants which I have classified in the chart below following the IPA convention:

	Bi-labial	Labio-dental	Inter-dental	Alveolar	Palato-alveolar	Alveolo-palatal	Palatal	Velar
Plosive	p b			t d			c	k g
Fricative		f v	θ ð	s z	ʃ			x ɣ
Affricate					tʃ dʒ	t͡ʃ d͡ʒ		
Nasal	m			n			ɲ	ŋ
Tap				r				
Lateral approximant				l				
Non-lateral approximant							j	w

Figure 2.2: PhG consonant inventory

¹ For the orthographic convention adopted in this dissertation for writing PhG examples, see section 1.6. Unless details such as aspiration or syllable boundaries are directly relevant, they are not given in the PhG phonetic transcriptions.

² In these cases, one should also consider two possible explanations: first, the role of assimilation. It is possible that one of the Turkish phonemes (either /e/ or /a/) was realized as /æ/, while the other vowel(s) assimilated to this outcome. Second, there is the possibility that the standard Turkish /a/ and /e/ may be realized differently in the Turkish dialect of Central Anatolia with which PhG was in contact. These points require further research.

In Figure 2.2, paired consonants differ only with respect to voicing, i.e. whether or not the vocal folds vibrate in the production of the consonant. Symbols on the left within each cell are voiceless, i.e., produced without vibration of the vocal folds, while symbols to the right are voiced, i.e., produced with vibration of the vocal folds.

Some of the consonants shown in Figure 2.2 are non-phonemic, i.e., some of them are in complementary distribution, with one variant appearing in a specific set of phonetic environments, and the other being excluded from these contexts. In what follows, I list the distribution of these consonants as well as certain peculiarities of the remaining consonants. This inventory reveals that whether a word is borrowed from another language (e.g., Turkish, Armenian, etc.) or inherited from Ancient Greek (hereafter AG)/Medieval Greek has certain effects on the sounds it contains and the patterns of allophony (for further information on the notions of borrowed and inherited, see section 2.3.4).

- (i) [c] and [k] are allophones in borrowed words, in the sense that in the environments where [c] occurs [k] does not occur: [c] occurs only before [+front] vowels (1a), [k] occurs elsewhere (1b).

- (1) a. kirpíti [ci'rpiti] 'matchstick' (< T(urkish) *kibrit*)
 b. karakóli [kara'koli] 'police station' (< T. *karakol*)

In inherited words, [k] occurs before [–front] vowels (2a) and in the consonant clusters where it is the first sound (2b); however, in contrast to borrowed words, [k] in inherited words undergoes a sound change before [+front] vowels, the details of which are given in section 2.2.2.2.

- (2) a. kardía [ka'rdia] 'heart' b. krúu ['kruu] '(I) hit'

- (ii) [x] occurs before [–front] vowels in inherited words (3a) and in consonant clusters where it is the first sound (3b).

- (3) a. xartía [xa'rtia] 'cards' b. xráði ['xraði] 'wild pear'

When /x/ occurs before [+front] vowels in inherited words, it undergoes a sound change that is explained in section 2.2.2.2.

In borrowed words, irrespective of the frontness or backness of the following vowel, /x/ is always /x/ (this point was also noted by Dawkins 1916:154, §264 and Andriotis 1948:28):

- (4) a. xanúta [xa'nuta] 'tools' (< Arm(enian) *խանութ* [xanut] 'shop')
 b. pejsáxi [pej'saxi] 'spleen' (< Arm. *ψευδωνη* [pa:jt's'æ] 'spleen')

- (5) a. xastaxanés [xastaxa'nes] 'hospital' (< T. *hasta(ha)ne*)
 b. xer [xer] 'every' (< T. *her*)
- (iii) [k] in both inherited and borrowed words becomes [g] when it follows the nasal [n]:
- (6) a. o koškéř [oko'ʃcer] 'the shoe maker', but
 b. an koškéř [aŋgo'ʃcer] 'a shoe maker'

[g] otherwise occurs phonemically only in a few words, one of which is *gáθi* [ˈgaθi] 'thorn'. It also represents ⟨γ⟩ [ɣ] in the Greek ⟨βγ⟩ [vɣ] clusters, e.g., *vgénu* [ˈvgenu] '(I) go out' (cf. SMG *βγαίνω* [vjeno] '(I) go out'; see Dawkins 1916:154, §266). In borrowed words with [g] (or its allophone [j]) in the donor language, [g] is realized as [k], [c] or [ɣ] in PhG:

- (7) a. kúli [ˈkuli] 'rose' (< T. *gül*)
 b. kečiktiéu [ceʃikti'eu] '(I) am delayed' (< T. *gecikmek*)
 c. ɣapáxi [ɣa'paxi] 'pumpkin, zucchini' (< T. *kabak*)
- (iv) [n] ~ [ɲ] ~ [ɲ] also occur in well-defined contexts. [ɲ] occurs in the [nk] cluster if the preceding vowel is [+front], which is most saliently observed in the imperfective suffix {-(i)n}k, e.g., *tavrínkam* [ta'vriŋkam] 'we were pulling', or before the [+front] vowels in words recently borrowed from SMG (Anastasiadis 1976:λδ').³ [ɲ] occurs when the nasal is in word-final position and followed by a word with an initial velar [k]:

- (8) a. an n koškér [aŋgo'ʃcer] 'a shoe maker'
 b. tin n kóri [tiŋ'gori] 'the daughter (accusative)'

[ɲ] also occurs in the intervocalic positions in certain words borrowed from Turkish. Note however, that this is not systematic (cf. (9a–b)).⁴

- (9) a. tenízi [teŋ'izi] 'sea' (< T. *deniz*), siníri [siŋ'iri] 'anger' (< T. *sinir*)
 b. tenés [te'nes] 'grain' (< T. *tane*), činári [tʃi'nari] 'sycamore' (< T. *çınar*)

³ As noted by Andriotis (1948:25), if the preceding vowel is [–front], it is realized as [ɲ], e.g., *muxtánka* [mu'xtaŋkam] 'we were hiding'.

⁴ Impressionistically, this reflects the [ɲ]/[n] difference in the local Turkish dialects of Central Anatolia. While the Old Turkic [ɲ] is replaced by [n] in intervocalic positions in Standard Turkish, in such dialects, this archaic [ɲ] is still retained. Thus, the standard Turkish *deniz* [deniz] 'sea' is pronounced as [deŋiz]/[teŋiz] in these dialects, similar to its pronunciation in Old Turkic, i.e., [teŋiz].

[n] is the elsewhere allophone and occurs in any environment except for those which are exclusively reserved for [ɲ] and [ŋ].

- (v) It is very difficult to define the precise environments in which the voiceless affricates, [tʃ] and [tʃ̥], and the voiced affricates, [dʒ] and [dʒ̥], occur, since they are rather close to one another with respect to place of articulation, and since they seem to often alternate in the recordings (this difficulty was already noted in Dawkins 1916:153, §263). Therefore, my inventory below should be taken as a preliminary description to be tested in future work. To my ear, the sounds [tʃ] and [dʒ] occur in words borrowed from Turkish in which they correspond to the original [tʃ] and [dʒ] (10a–b). However, there is no perfect equivalence; [tʃ] seems to be found also in PhG environments where [dʒ] would occur in the corresponding word in the donor language (10c–d).

- (10) a. *čifčilíki* [tʃiftʃiˈlici] ‘husbandry, farming’ (< T. *çiftçilik* [tʃiftʃilik])
 b. *ačemís* [aɕeˈmis] ‘novice’ (< T. *acemi* [aɕemi])
 c. *čočúxi* [tʃoˈtʃuxi] ‘child’ (< T. *çocuk* [tʃoɕuk])
 d. *ačapá* [atʃaˈpa] ‘I wonder, perhaps’ (< T. *acaba* [aɕaba])

[tʃ̥] and [dʒ̥] seem to be confined to inherited words, such as in *čip* [tʃ̥ip] ‘all’ and *korčóku* [korˈtʃ̥oku] ‘little girl’. [tʃ̥] is also saliently observed as the outcome of the phonological process “tsitakism”, a type of palatalization (see section 2.2.2.2 for the exact definition and relevant examples). However, this [tʃ̥] is voiced and becomes [dʒ̥] when it follows [n] of the definite article, (cf. (11a–b)).

- (11) a. *Čerečí* [tʃ̥ereˈtʃ̥i] ‘Sunday’
 b. *tin Čerečí* [tinˈdʒ̥ereˈtʃ̥i] ‘on Sunday’

- (vi) In inherited words, [ʃ] occurs as a result of a palatalization process that [x] undergoes before [+front] vowels (see section 2.2.2.2). It also occurs in words borrowed from Turkish in which it corresponds to the original [ʃ]:

- (12) *šexéri* [ʃeˈxeri] ‘city’, *šej* [ʃej] (< T. *şehir, şey*)

- (vii) Unlike the case in SMG, [l] does not seem to have the palatal allophone [ɭ]. Independent of its position inside a word, it is always [l] (see also Andriotis 1948:26 and Anastasiadis 1976:λδ’).

From the above inventory ((i)–(vii)) we can already deduce that inherited and borrowed words may differ in their consonant inventories. There is one more phonological difference between inherited and borrowed words which should be mentioned here. Plosives are aspirated only in borrowed words (13a–b). In inherited words, on the other hand, they are unaspirated (13c–d), similar to the case in SMG (Arvaniti 2007:103 and references cited therein for SMG plosives).

- (13) a. mextúpi [mex't^hup^hi] 'letter' (< T. *mektup* [mect^hup^h])
 b. pejsáxi [p^hej'saxi] 'spleen' (< Arm. *ψυιδυη* [p^hajts'aɪ] 'spleen')
 c. tis [tis] 'who' (< AG *τίς* [tis]),
 d. pánu ['panu] 'above' (cf. SMG *πάνω* [pano])

Despite the phonemic differences between inherited and borrowed words, every word has a unique stress pattern in PhG, irrespective of whether it is inherited or borrowed, simplex or derived. Whether there is a difference between inherited and borrowed words in terms of their respective syllable structures remains to be seen.

2.2.2 Phonological processes

There are four notable phonological processes in PhG, which I briefly describe in the following subsections. Three of these processes depend on whether a word is borrowed or inherited.

2.2.2.1 Degemination

One sandhi process (partially) observed in PhG is degemination, i.e., reduction of two adjacent identical sounds (geminate) into one.

Inherited and borrowed words differ with respect to whether they undergo consonant degemination or not. Geminate consonants are permissible in borrowed words (14a). In inherited words, on the other hand, no geminate consonants are allowed within the word or across word boundaries, and thus consonant degemination applies (14b).⁵

- (14) a. saxallús [saxal'lus], *[saxa'lus] 'bearded' (< T. *sakallu* [sakallu])
 b. o γαργásu [oγar'γasu], *[oγar'γassu] 'your raven'

Geminate vowels in words are allowed when the first of the two identical vowels is stressed.⁶

⁵ This is a point often cited for SMG as well. See Arvaniti (2007:162) and references cited there. Anastasiadis (2015:30, §II.1), however, states that geminates are observed in a few inherited words today; e.g., *téssera* 'four'. This point requires further investigation as I could not verify this myself. It should also be mentioned that in older written texts in PhG, one can find two identical consonants adjacent to each other, which cannot be attributed to orthographic conventions of Greek. An indicative case is the phrase *afforá* < *an forá* 'one time, i.e., once upon a time'. This is probably due to the assimilation of the final [n] of the indefinite article *an*. I am not sure if in this case the [f] was indeed long then. Today, this phrase is uttered with only one [f].

⁶ I have no instance where the second one of the two identical vowels are stressed inside a word; therefore, it is unclear if these cases would undergo degemination.

(17) Inherited words

- a. čerí [tʃe'ri] 'candle' (cf. SMG *κερί* [ceri])
 b. pantičí [pandi'tʃi] 'mice' (cf. SMG *ποντίκι* [podiki])
 c. isčáiđi [i'stʃaiði] 'shade' (< Medieval Greek *σκιάδι(ν)* [skiaði(n)])

(18) Borrowed words

- a. kipár [ci'par], *[tʃi'par] 'gentle, kind' (< T. *kibar* [cibar])
 b. čičáki [tʃi'tʃaci], *[tʃi'tʃa'tʃi] 'flower' (< T. *çiçek* [tʃitʃek])
 c. véki ['veci], *['vetʃi] 'knuckle dice' (< Arm. *վեզ* [veg])

Another type of velar palatalization is fronting of [g] to alveolo-palatal [dʒ] (surpassing in frontness a hypothetical palatal [j]) before the [+front] vowels /e/ and /i/ (or the approximant /j/). To my knowledge, unlike tsitakism, this phenomenon does not have its own name (but see Trudgill 2003:54 who uses the term “palatalization of velars” to refer to both cases). It should be noted that [g]>[dʒ] fronting is not common, as [g] occurs in only a few words (see section 2.2.1.2; (19a)). Moreover, the [g] which replaces ⟨γ⟩ [ɣ] in the Greek ⟨βγ⟩ [vɣ] clusters (see section 2.2.1.2) is not fronted to [dʒ] even when it is followed by a front vowel (19b).

- (19) a. mermčí [mer'midʒi] 'ant' (cf. SMG *μερμήγκι* [mermigi])
 b. vgénu ['vɣenu], *['vdʒenu] '(I) go out' (cf. SMG *βγαίνω* [vjeno])

The final type of velar palatalization process is fronting of the velar [x] to palato-alveolar [ʃ] (through a hypothetical palatal [ç]) before the [+front] vowels /e/ and /i/ (or the approximant /j/). Similar to the other two changes described above, only inherited words are subject to this process (20). Borrowed words do not undergo this phonological change (21).

(20) Inherited words

- a. šíríđi [ʃi'riði] 'pig' (cf. SMG *χοιρίδιο* [çiriðjo] 'shoat')
 b. šéri [ʃeri] 'hand' (cf. SMG *χέρι* [çeri])

(21) Borrowed words

- a. xer [xer], *[ʃer] 'every' (< T. *her* [her])
 b. purčúxi [pur'tʃuxi], *[pur'tʃuʃi] 'badgers'
 (< Arm. *փոքունի* [porsuɛ] ; cf. T. *porsuk*)

Dawkins (1916:154, §264) cites some inherited words which, exceptionally, do not undergo /x/-palatalization. His examples are *xítáu* [xi'tau] '(I) run', *čáxin* [tʃaxin] 'almost', *ifláxi* [i'flaxi] 'knife' and *purčúxi* [pur'tʃuxi] 'badgers' (phonetic transcriptions are mine). The words are also in use today, and there is some reason to doubt

Dawkins' conclusion. *Čáxin* 'almost' and *ifláxi* 'knife' have been borrowed from Turkish dialects (cf. Turkish *çak* 'almost', *iflah* 'power'), and *purčúxos* 'badger' has been borrowed either from Armenian or from Turkish (21b). I am not entirely sure of the etymology of *xitáú*, but even if it turns out to be an inherited word, it would constitute the only exception where /x/ is not palatalized before a [+front] vowel in an inherited word.

2.2.2.3 The raising of unstressed vowels

The vowels [o] and [e] are raised to [u] and [i] respectively when they are in word-final position and unstressed. However, this does not hold for speakers from every village, nor for words borrowed from Turkish. As it was noted by Dawkins (1916:149), this raising is not observed in Varašos, for example. In peripheral villages, on the other hand, it is more or less systematic (22a–b). Monomorphemic words can also undergo this process, albeit non-systematically (22c).

- (22) a. *íxamĭ* ['ixami] 'we had' (cf. SMG *είχαμε* [ixame])
 b. *paénu* [pa'enu] 'I go' (cf. SMG *πηγαίνω* [pijeno])
 c. *si* [si] 'in/on/to/at/from' (cf. SMG *σε* [se]), but *to* [to], *[tu] 'the'

Unstressed [e] is also sometimes raised to [i] inside the word; yet this is by no means systematic:

- (22) d. *pársipsa* ['parsipsa] '(I) cleaned', but
 e. *parsevúmin* [parse'vumin] '(I) was being cleaned', *[parsi'vumin]

2.2.2.4 Deletion of unstressed [i]

Unstressed final [i] when occurring in certain nominative nouns, adjectives, and certain verb forms is frequently deleted (23a–b) (see also Andriotis 1948:23 for an earlier observation). In an [i]-[s] sequence of certain nouns in the nominative case or verbs that are inflected in the second singular, the [i] undergoes syncope, and the following [s] is dropped as well (23c–d).

- (23) a. *kór* < *kóri* 'daughter'
 b. *krú* < *krúi* 's/he/it hits'
 c. *pién* < *piéns* < *piénis* 'you catch'
 d. *nomát* < *nomáts* < *nomátis* 'man'

2.3 Lexicon/morphology

2.3.1 Words, stems, allomorphy and suppletion

Similar to the situation in SMG, PhG words can be morphologically simplex or complex (for SMG, see Ralli 2000, 2013:8–9). The difference between morphologically simplex and morphologically complex words lies in the fact that while the former cannot be separated (synchronically) into smaller meaningful morphological units, the latter can be so.⁹

PhG simplex words are mostly closed-class items, such as prepositions (e.g., *pánu* ‘above’, *si* ‘in/on/at/from’ etc.), cardinal numbers (e.g., *ína* ‘one’, *jetmíše* ‘seventy’ etc.), most adverbs (*aďě* ‘here’, *xáre* ‘now’, *dáma* ‘together’, *pellé/paú* ‘obviously’, *táima* ‘always’), quantifiers (e.g., *xer* ‘every’, *čip* ‘all’), most interrogative pronouns (e.g., *pos* ‘what?’, *tus* ‘how?’, *náatar(a)* ‘how much/how many?’), some relative pronouns (e.g., *čápu* ‘where(ver)’), other functional elements, such as modal particles (e.g., *a* ‘definite future particle’, *na* ‘subjunctive particle’), subordinating conjunctions (e.g., *tu* ‘that’, *ær* ‘if/whether’, *čas* ‘when’) and vocative particles (e.g., *éu* ‘hey!’ etc.).¹⁰

PhG complex words, on the other hand, are mostly open-class items. Every noun (non-derived or derived via affixation or compounding), adjective and verb (as well as certain interrogative pronouns such as *tis* ‘who?’, the relative pronoun *ótis* ‘who(ever)’, certain adverbs, e.g., *pséa* ‘high’, *skotiná* ‘darkly’) can be further decomposed (synchronically) into smaller meaningful morphological units. In the simplest case, a complex word is composed of two units: a stem (glossed below in small capitals), the minimal morphological unit with a lexical content; and an inflectional suffix, i.e., a suffix which signals grammatical relationships, such as plural, accusative case, tense, and does not change the grammatical class of the stem to which it is attached. Most inflectional suffixes are fusional; i.e., they express more than one function at the same time, rendering PhG a synthetic language. The stems and the inflectional suffixes are exemplified with a noun in (24a) and a verb in (24b).

- | | | | |
|---------|--------------------------------------|----|---|
| (24) a. | šaryatá-s
NOISE-NOM.SG
‘noise’ | b. | pén-u
DRINK.IPFV-NPST.1SG
‘I drink’ |
|---------|--------------------------------------|----|---|

⁹ I present PhG lexicon/morphology assuming a morpheme-based approach to morphology in which word forms are analyzed as arrangements of smallest, meaningful units, i.e., morphemes (e.g., Hockett 1947). These units can be overt (i.e., audible/visible) or covert (zero or phonologically null).

¹⁰ It is not clear whether the class of adverbs should be taken as a closed one or an open one. See, however, Anastasiadis (1980b:114), who states that, contrary to the case in SMG, derivation of adverbs from adjectives is rather limited in PhG.

In (24a), the noun ‘noise’ is composed of the stem *šaryata-* and the fusional inflectional suffix appropriate for this specific stem, *-s*, which encodes the nominative case and the singular number. In (24b), the finite verb ‘I drink’ is composed of the verbal stem *pen-* and the first singular person inflectional suffix *-u* in the non-past.

There is a principled reason for separating words into stems and inflectional suffixes. A stem form cannot occur in any syntactic position. For example, a noun stem cannot be the subject or the object of a clause. To be licit in these positions, it has to bear a suitable inflectional suffix. These inflectional suffixes attach to the stem form (see section 2.3.2.1 for the nominal inflectional suffixes). Similarly, a verb stem cannot occur as the verb of a clause unless an inflectional suffix is attached (see section 2.3.2.2 for the verbal inflectional endings).

On the other hand, a stem form—and only a stem form—can be affixed with derivational suffixes, i.e., suffixes that create new words. The amalgam ‘stem + derivational suffix’ creates a complex stem, which can undergo further derivation. As is the case for the simplex stems, complex stems composed of a stem and one or more derivational affixes also require an inflectional suffix to occupy a syntactic position. This means that derivational morphemes always linearly precede inflectional ones. An example of this is given in (25), where the noun stem in (24a) undergoes derivation via the adjectival derivational suffix *-lú*. To occur in a syntactic position, however, this combination of stem + derivational affix requires an appropriate inflectional suffix; in this specific case, the nominative singular *-s*.

- (25) *šaryata-lú-s*
 NOISE-DER-NOM.SG
 ‘noisy’

That a ‘stem + inflection’ combination cannot undergo derivation becomes clear when we compare (25) with the ungrammatical example in (26).

- (26) **šaryata-s-lú-s*
 NOISE-NOM.SG-DER-NOM.SG
 int.: ‘noisy’

In certain cases, there is more than one stem form to express the same lexeme, i.e., the abstract lexical unit (à la Booij 2010:169). In the case of nominals, this is always observed as stem allomorphy: one stem form admits certain inflectional suffixes and/or is used in derivation (as well as in compounding), the other stem admits other inflectional suffixes. Consider the word *asmás* ‘grapevine’ in (27a). The abstract lexeme GRAPEVINE (lexemes will be written with capital letters) is realized by the stem *asma-* ‘GRAPEVINE’ which takes the nominative singular inflectional suffix *-s* and thus becomes a word that can occur in a syntactic position where nominative case is required, for example in the subject position. In (27b), we see that the same

stem takes the accusative singular inflectional suffix, which, in this specific case, is not overt and again the combination is a word that stands in a syntactic position where nouns in the accusative form are allowed, for example in the direct object position. In (28a), however, we see that the nominative plural suffix *-a* does not attach to the stem *asma-* but to another stem *asmaǰ-* which expresses the same lexeme GRAPEVINE. Interestingly, the stem of the lexeme that admits a derivational suffix is also not *asma-* but *asmaǰ-*. This latter point is illustrated with the contrast in (28b–c). The diminutive derivational suffix *-ók* attaches grammatically only to the stem *asmaǰ-* (28b) and not to the stem *asma* (28c).

- | | | |
|------|--|---|
| (27) | a. <i>asmá-s</i>
GRAPEVINE-NOM.SG
'grapevine' (nom.) | b. <i>asmá-Ø</i>
GRAPEVINE-ACC.SG
'grapevine' (acc.) |
| (28) | a. <i>asmaǰ-a</i>
GRAPEVINE-NOM.PL
'grapevines' (nom.) | b. <i>asmaǰ-ók-u</i>
GRAPEVINE-DIM-NOM.SG
'little grapevine' (nom.) |
| | c. * <i>asma-ók-u</i>
GRAPEVINE-DIM-NOM.SG
int.: 'little grapevine' (nom.) | |

The examples in (27–28) reveal the “stem allomorphy” of *asma-* ~ *asmaǰ-* for the lexeme GRAPEVINE. We return back to stem allomorphy of nouns in section 2.3.2.1.

In verbs too the same lexeme can be expressed by more than one stem. This is either realized as stem allomorphy or as “suppletion”, i.e., the replacement of one stem by another which does not formally resemble the former.¹¹

Stem allomorphy is almost always in the form of *Xa* ~ *Xi*. Consider the verb form *kontámi* ‘we throw’ in (29a) in the imperfective non-past form (these forms will be discussed in detail in section 2.3.2.2). It is composed of the stem *konta-* ‘THROW’ and the non-past inflectional suffix for the first plural person *-mi*.

- | | |
|------|---|
| (29) | a. <i>kontá-mi</i>
THROW.IPFV-NPST.1PL
'we throw' / 'we are throwing' |
|------|---|

While there is no overt exponent of the imperfective aspect in the non-past form, (29a), the perfective aspect is expressed by the suffix *-s*. However, this suffix does not attach to the stem *konta-* ‘THROW’ but to another stem *konti-* ‘THROW’ of the

¹¹ Unlike verbs, suppletion is not available for nouns.

same lexeme, as shown in (29b), where the verb has the feature specification [+past, +perfective].¹²

- (29) b. kontí-s-ami
 THROW-PFV-PST.1PL
 ‘we threw’

Based on (29a–b), we can conclude that there are two allomorphic stems to express the lexeme THROW, one which is employed in the imperfective context (*konta-*) and one which is employed in the perfective context (*konti-*). I indicate this allomorphy as *konta-* ~ *konti-*, from which the Xa ~ Xi template I presented above is also evident (see also section 2.3.2.2 for more details on the verbal inflection and verbal stem allomorphy).

Of the two allomorphs *konta-* ~ *konti-*, the one that can undergo derivation is *konta-*, as the contrast in (30a–b) shows.

- | | |
|---------------------|------------------|
| (30) a. kontá-mat-a | b. *kontí-mat-a |
| THROW-DER-NOM.PL | THROW-DER-NOM.PL |
| ‘throws’ (nom.) | ‘throws’ (nom.) |

Similar to the case in stem allomorphy, in suppletion too two different but related stems express the same lexeme. However, unlike the case in stem allomorphy, the stems are not cognate, i.e., no immediate formal relation can be established between the two stems. Moreover, the suppletive stem expresses the ‘stem + perfective suffix’ combination. To illustrate this, the imperfective non-past form of the lexeme SEE with first plural person inflection (i.e., ‘we see’) is given in (31a). It is composed of the imperfective stem *θor-* and the non-past inflectional suffix for the first plural person *-úmi*. Yet, the stem that is employed in the past perfective form, i.e., *ið-*, does not resemble the stem *θor-* phonologically (31b). Moreover, in (31b) there is no overt marking of the perfective aspect, i.e., *-s*. This contrasts with the case in (29b) where the perfective aspectual suffix *-s* is present. Therefore, we can conclude that the stem *ið-* replaces both the stem *θor-* and the perfective aspectual suffix, *-s*. In other words, *ið-* is the suppletive form of *θor-* in the perfective aspect.¹³

¹² The inflectional suffix that expresses person, number and tense also changes, cf. *-mi* (29a) and *-ami* (29b). This variation has no effect on the current discussion; I return to it in section 2.3.2.2.

¹³ Similar to the case in (29a–b) (cf. fn 12), the inflectional suffix that expresses person, number and tense differs between (31a) and (31b). I return to this in section 2.3.2.2.

-*os* in singular, the respective set for *kartuša-* ‘LIZARD’ is nominative -*s*, accusative - \emptyset , genitive - \emptyset , and vocative -*s*. Such differences in the inflectional suffixes are also observed for words that belong to other genders.

	Singular	Plural
Nominative	ap-ós	ap-í
Accusative	ap-ó	ap-í
Genitive	ap-ú	ap-í/ap-iún
Vocative	ap-ós	ap-í

Table 2.1: Declension of the masculine word *após* ‘fox’

	Singular	Plural
Nominative	kartušá-s	kartušáđi-a
Accusative	kartušá- \emptyset	kartušáđi-a
Genitive	kartušá- \emptyset	kartušáđi-a/ kartušáđi-ún
Vocative	kartušá-s	kartušáđi-a

Table 2.2: Declension of the masculine word *kartušás* ‘lizard’¹⁵

The same phenomenon is observed in SMG; consider for example the two masculine SMG nouns *pónos* ‘pain’ and *tamias* ‘cashier’, whose respective declensions are given in Tables 2.3–2.4 (from Ralli 2013:281, app. 3):

	Singular	Plural
Nominative	pón-os	pón-i
Accusative	pón-o	pón-us
Genitive	pón-u	pón-on
Vocative	pón-e	pón-i

Table 2.3: Declension of the SMG masculine word *pónos* ‘pain’

¹⁵ As the reader may have already observed, there is stem allomorphy (*kartuša-* ~ *kartušáđi-*) for the lexeme LIZARD (see section 2.3.1 on stem allomorphy).

	Singular	Plural
Nominative	tamía-s	tamí-es
Accusative	tamía-Ø	tamí-es
Genitive	tamí-es	tami-ón
Vocative	tamía-Ø	tamí-es

Table 2.4: Declension of the SMG masculine word *tamías* ‘cashier’,¹⁶

As in PhG, such differences in inflectional suffixes occur for SMG words that belong to other genders as well. Based on the fact that there is no one-to-one match between the grammatical gender of a given word and the inflectional suffix(es) it takes, Ralli (2000) rejects the traditional gender-based classification of nouns in SMG.¹⁷ She argues that a better classification should take into consideration two facts: first, there is no one-to-one match between the gender of the words and the inflectional suffix(es) they take; second, there are a number of sets of inflectional suffixes, i.e., “nominal inflectional classes” (hereafter *nic*s), and every stem is assigned to one of them independent of its gender. Following this reasoning she asserts that there are eight active *nic*s in SMG. For her classification, rather than the morphological form of only the nominative singular form which is taken as a key criterion for traditional, gender-based classifications, Ralli relies on two criteria: (a) the presence or absence of systematic stem allomorphy and (b) the morphological form of the whole set of inflectional suffixes that attach to the stems. An outcome of this new classification is the idea that *nic*s only express case and number, but not gender. Rather, the latter is part of the encyclopedic information that a specific stem possesses (Ralli 2002). The reader is referred to Ralli (2000, 2002) for a fuller discussion of *nic*s in SMG.

In this thesis, following Ralli’s (2002) work on SMG, I assume that every nominal stem in PhG is assigned to one *nic*, which is defined based on the presence or absence of systematic stem allomorphy and the morphological form of the whole set of the inflectional affixes that attach to the stem (precisely as in Ralli 2000). Synchronically, there are seven active nominal *nic*s in PhG, which will be presented momentarily; however, before that, an issue relevant to the *nic*s should be presented. This issue is “heteroclisis”. Certain [–human] stems—mostly the borrowed ones—act as mas-

¹⁶ Observe here the SMG stem allomorphy *tamia-* ~ *tami-*.

¹⁷ There is one more reason for Ralli (2000) to reject the gender-based classifications: some nouns in SMG can belong to one gender even though they receive the inflectional endings of another gender, e.g., *ám-os* ‘sand’ which is feminine but receives the inflectional endings that prototypically attach to masculine nouns (cf. Table 2.3). I have not observed this in PhG except in a few place names, e.g., *Kíprus* ‘Cyprus’ which is feminine but receives prototypically masculine inflectional endings. It is highly likely that these place names are learned by the speakers after they moved to Greece.

culine stems in the singular inflection and as neuter stems in the plural inflection (Dawkins 1916:166–167; Karatsareas 2011a, 2011b:242). Take, for example, the word *prakanás* ‘beetle’. It shows stem allomorphy: *prakana-* ~ *prkanađi-*. In Table 2.5 below, the stem *prakana-* in the singular inflection receives the suffixes of a NIC which contains only masculine nouns; they are the same endings found for the masculine stem *axillu-* of the [+human] word *axillús* ‘clever’ in Table 2.6. However, the stem *prkanađi-* in the plural declines according to another NIC which contains only neuter nouns; compare the inflection of the neuter *pejkíri* ‘horse’ in Table 2.7.¹⁸

	Singular	Plural
Nominative	prakaná-s	prakanáđi-a
Accusative	prakaná-Ø	prakanáđi-a
Genitive	prakaná-Ø	prakanáđi-a / prkanađi-ún
Vocative	prakaná-s	prakanáđi-a

Table 2.5: Declension of the word *prakanás* ‘beetle’

	Singular	Plural
Nominative	axillú-s	axillúđ-es/i
Accusative	axillú-Ø	axillúđ-es/i
Genitive	axillú-Ø	axillúđ-es/i/ axilluđ-íun
Vocative	axillú-s	axillúđ-es/i

Table 2.6: Declension of the masculine word *axillús* ‘clever’

	Singular	Plural
Nominative	pejkíri-Ø	pejkíri-a
Accusative	pejkíri-Ø	pejkíri-a
Genitive	pejkíri-ú	pejkíri-a / pejkíri-ún
Vocative	pejkíri-Ø	pejkíri-a

Table 2.7: Declension of the neuter word *pejkíri* ‘horse’

¹⁸ In Tables 2.5–2.7, to keep the examples easy to parse, I do not present the outcomes of certain phonological processes that take place during the inflection. These will be given momentarily.

In section 2.4.1.2 I show that heteroclisis has repercussions on the expression of definiteness for these nouns.

The complete list of the seven NICs is presented below and illustrated with examples. Notice that the heteroclisis of certain [–human] nouns, which is presented above, occurs between NIC 3 and NIC 6.

NIC 1: It contains only masculine stems which show no stem allomorphy, e.g., *ap-* ‘FOX’ : *após* ‘fox’, *pon-* ‘PAIN’ : *pónus* ‘pain’.

	Singular	Plural
Nominative	<i>ap-ós</i>	<i>ap-í</i>
Accusative	<i>ap-ó</i>	<i>ap-í</i>
Genitive	<i>ap-ú</i>	<i>ap-í/ap-iún</i>
Vocative	<i>ap-ós</i>	<i>ap-í</i>

Table 2.8: Declension in NIC 1

NIC 2: It contains only masculine stems which show no stem allomorphy, e.g., *xorot-* ‘PEASANT’ : *xorótis* ‘peasant’, *nomat-* ‘MAN’ : *nomátis* ‘man’.

	Singular	Plural
Nominative	<i>nomát-is</i> ¹⁹	<i>nomát-i</i>
Accusative	<i>nomát-i</i>	<i>nomát-i</i>
Genitive	<i>nomat-ú</i>	<i>nomát-i/ nomat-íun</i>
Vocative	<i>nomát-is</i>	<i>nomát-i</i>

Table 2.9: Declension in NIC 2

NIC 3: It contains only masculine stems which show systematic stem allomorphy, e.g., [+human]: *fovæ-* ~ *fovæð-* ‘COWARD’ : *fovés* ‘coward’, *papuk-* ~ *papukt-* ‘GRANDFATHER’ : *papúkas* ‘grandfather’, *avči-* ~ *avčið-* ‘HUNTER’ : *avčís* ‘hunter’; [–human]: *prakana-* ~ *prakanāði-* ‘INSECT’ : *prakanás* ‘insect’. [–human] nouns receive only the singular inflectional endings of this class. When they are plural, they receive the inflectional endings of NIC 6.

¹⁹ In the nominative singular, the inflectional affix of this word is dropped (see section 2.2.2.4)

	[+human]	
	Singular	Plural
Nominative	fovǣ-s	fovǣð-es/-i ²⁰
Accusative	fovǣ-∅	fovǣð-es/-i
Genitive	fovǣ-∅	fovǣð-es/-i/ fovǣð -íun
Vocative	fovǣ-s	fovǣð-es

Table 2.10: Declension of [+human] stems in NIC 3

	[-human]	
	Singular	Plural
Nominative	prakaná-s	see NIC 6
Accusative	prakaná-∅	
Genitive	prakaná-∅	
Vocative	prakaná-s	

Table 2.11: The singular declension of [-human] stems in NIC 3

NIC 4: It contains only feminine stems which show systematic stem allomorphy; e.g., *neka-* ~ *nek-* ‘WOMAN’: *néka* ‘woman’, *kori-* ~ *kor-* ‘DAUGHTER’: *kóri* ‘daughter’, *γræ-* ~ *γræð-* ‘OLD WOMAN’: *γræ* ‘old woman’.

	Singular	Plural
Nominative	néka-∅	néč-es/-is ²¹
Accusative	néka-∅	néč-es/-is
Genitive	néka-s	néč-es/-is/ neč-íun
Vocative	néka-∅	néč-es/-is

Table 2.12: Declension of the stems *neka-* ~ *nek-* ‘WOMAN’ in NIC 4

²⁰ *-es* is witnessed in *Varašos*, whereas in the peripheral villages, the ending is *-i*, most possibly due to the deletion of the final [s] and the raising of the final unstressed [e] (see section 2.2.2.3 for the latter).

²¹ The stem form *néč-* is not due to the existence of a stem allomorphy between *nek-* and *neč-*. Rather, the final [k] of the stem *nek-* undergoes tsitakism before the [+front] vowels of the plural inflectional suffixes (see section 2.2.2.2 for tsitakism).

	Singular	Plural
Nominative	γræ-∅	γræð-es/-i ²²
Accusative	γræ-∅	γræð-es/-i
Genitive	γræ-s	γræð-es/-i/ γræð-íun
Vocative	γræ-∅	γræð-es/-i

Table 2.13: Declension of the stems γræ- ~ γræð- ‘OLD WOMAN’ in NIC 4

NIC 5: It contains only neuter stems which show no stem allomorphy, e.g., v- ‘EGG’ : vo ‘egg’, avγ- ‘HORSE’ : άvγu ‘horse’.

	Singular	Plural
Nominative	v-o	v-a
Accusative	v-o	v-a
Genitive	v-u	v-a/ v-un
Vocative	v-o	v-a

Table 2.14: Declension in NIC 5

NIC 6: It contains only neuter stems which show no stem allomorphy, e.g., práði- ‘FOOT’ : práði ‘foot’, ruši- ‘MOUNTAIN’ : ruši ‘mountain’. [-human] stems which receive the singular inflectional endings of NIC 3 are inflected in NIC 6 in plural: prakana- ~ prakanaði- ‘INSECT’ : prakanáś ‘insect’.

	Singular	Plural
Nominative	práði-∅	práði-a > práðe/ práða ²³
Accusative	práði-∅	práði-a > práðe/ práða
Genitive	práði-ú > práđu ²⁴	práði-a > práðe/ práða/ práði-ún
Vocative	práði-∅	práði-a > práðe/ práða

Table 2.15: Declension in NIC 6

²² -es is witnessed in Varašos, whereas in Čuxuri and Afšari, the ending is -i, most possibly due to the deletion of the final [s] and the raising of the final unstressed [e].

²³ The amalgam ‘unstressed [i] + unstressed [a]’ is realized as /e/ in Varašos or /a/ in other villages (see also Dawkins 1916:152 §259).

²⁴ The amalgam ‘unstressed [i] + stressed [u]’ is realized as /ú/ (see also Dawkins 1916:152, §259).

		[–human]	
		Singular	Plural
Nominative	see NIC 3		prakanáđi-a > prakanáđe/ prakanáđa
Accusative			prakanáđi-a > prakanáđe/ prakanáđa
Genitive			prakanáđi-a > prakanáđe/prakanáđa, prakanáđi-ún
Vocative			prakanáđi-a > prakanáđe/prakanáđa

Table 2.16: The plural declension of [–human] stems in NIC 6

NIC 7: It contains only neuter stems which show systematic stem allomorphy, e.g., *koma-* ~ *komat-* ‘PIECE’ : *kóma* ‘piece’.

	Singular	Plural
Nominative	kóma-Ø	kómat-a
Accusative	kóma-Ø	kómat-a
Genitive	komat-ú	kómat-a/ komat-ún
Vocative	kóma-Ø	kómat-a

Table 2.17: Declension in NIC 7

Even though the noun stems in PhG and in SMG pattern alike, in the sense that in both languages (i) they have gender and inflect for case and number, and (ii) they are assigned to specific NICs, the two systems differ in the expression of gender and case on adjectives.²⁵ It is well-known that in SMG adjectives, both attributive and predicative, agree with the noun they modify in gender, case and number (Ralli 2002), and thus, their stems are assigned to NICs by virtue of the noun they modify (e.g., *kal-ós ánthrop-os* ‘GOOD.M-NOM.SG MAN.M-NOM.SG’ = ‘good man’, but *kalí-Ø méra-Ø* ‘GOOD.F-NOM.SG DAY.F-NOM.SG’ = ‘good day’, and *kal-ú anθróp-u* ‘GOOD.M-GEN.SG MAN.M-GEN.SG’ = ‘of (the) good man’ but *kalí-s méra-s* ‘GOOD.F-GEN.SG DAY.F-GEN.SG’ = ‘of (the) good day’ etc.). In PhG, on the other hand, there is no overt realization of agreement on adjectives with the nouns they modify in gender and case. Because, unlike SMG, there is no overt realization of agreement, it is plausible to assume that there is no gender assignment to adjectives at all and that case is expressed only on the noun. The only agreement between the adjectives and the nouns they modify is number agreement, which is defined by the number specification of the noun. This is true for both attribu-

²⁵ I use the term “adjective” as a shorthand to refer to all types of nominal modifiers in PhG. In section 2.4.1.3, I provide a detailed picture of these modifiers.

tive and predicative adjectives. Therefore, an adjective such as *kaó* ‘GOOD.SG’ modifies singular nouns of all genders and cases (e.g., *kaó nomát-Ø* ‘GOOD.SG MAN.M-NOM.SG’ = ‘good man’, *kaó nomat-ú* ‘GOOD.SG MAN.M.GEN.SG’ = ‘of (the) good man’, *kaó néka-Ø* ‘GOOD.SG WOMAN.F-NOM.SG’ = ‘good woman’, *kaó néka-s* ‘GOOD.SG WOMAN.F-GEN.SG’ = ‘of (the) good woman’, etc.). When it modifies a plural noun, however, it bears the plural marker (*ká nomát-i* ‘GOOD.PL MAN.M-NOM.PL’ = ‘good men’, *ká nomat-íun* ‘GOOD.PL MAN.M.GEN.PL’ = ‘of (the) good men’, *ká neč-is* ‘GOOD.PL WOMAN.F-NOM.PL’ = ‘good women’, *ká neč-íun* ‘GOOD.PL WOMAN.F-GEN.PL’ = ‘of (the) good women’, etc.). I conclude from this reduced agreement that adjectives in PhG cannot be assigned to distinct NICS, unlike what is the case in SMG. I return to the phenomenon of agreement between adjectives and nouns in section 2.4.1.3.

2.3.2.2 Verbal inflection

Similar to the case in the nominal domain, in the verbal domain too verb stems combine with (mostly) fusional affixes that express more than one function at a time. These fusional affixes may bear the tense, aspect, voice features, and/or the person and number features of the subject.

In PhG there are two morphologically distinct temporal dimensions: past ([+past]) and non-past ([–past]), exactly as in SMG (cf. a.o., Mackridge 1987; Holton et al. 1997; Giannakidou 2009). Past forms of verbs denote anteriority, they refer to a time prior to the utterance time. Non-past forms, on the other hand, typically refer to actions, states or events which occur in the present, or which occur in the future. In the latter, distinct modal particles also accompany [–past] forms (this point will be dealt with in section 2.4.4). There are two aspects: perfective ([+perfective]) and imperfective ([–perfective]). Combinations of different aspects and temporal dimensions give rise to the following tenses: (i) imperfective non-past, corresponding to what is traditionally known as present indicative, (ii) perfective past, corresponding to aorist indicative, (iii) imperfective past, corresponding to imperfect, and (iv) perfective non-past, which has no English equivalent and should be taken as “dependent” form (see below). Unlike SMG or other MG dialects (Ralli 2005), PhG does not deploy the inflected auxiliaries *be* and *have* for the formation of periphrastic tenses. As a result, the periphrastic perfect tenses of SMG or other MG dialects (present perfect or pluperfect), which require inflected auxiliaries, do not exist in PhG. There are two voices in PhG; active ([+active]) and non-active ([–active]). Subject is also expressed on the verb via distinct person agreement suffixes. Person has three feature values (first, second and third) and number has two (singular and plural). There are three mood paradigms: indicative, imperative and subjunctive. The last one is expressed by a subjunctive particle that accompany verbs (on the subjunctive particle see section 2.4.4.2). Similar to SMG, PhG does not have infinitives; therefore, in this

thesis, the citation forms of the verbs will be their imperfective non-past first singular forms.

Consider (32a–b) for two simple illustrations of PhG verbal inflection. In (32a–b), the suffixes *-umi* and *-iti*, which express [–past, 1st person, +plural] and [–past, 2nd person, +plural] attach to the same verb stem *pašarev-* ‘SUCCEED’, respectively.

- (32) a. *pašarév-umi*
 SUCCEED.IPFV-NPST.1PL
 ‘(we) succeed’/ ‘(we) are succeeding’
- b. *pašarév-iti*
 SUCCEED.IPFV-NPST.2PL
 ‘(you.pl) succeeded’/ ‘(you.pl) are succeeding’

As the translations in (32) also indicate, [–perfective] aspect does not have an overt marker in the [–past].²⁶

The feature [+perfective] aspect has an overt exponent; *-s*. This suffix attaches immediately to the verbal stem. In the [+past], for instance, it occurs inside the fusional suffix that expresses [+past], person and number (33a–b) (this operation may entail further phonological rearrangements, as seen in the [vs] > [ps] change in the examples below):

- (33) a. *pašarév-s-ami* (> *pašarépsami*)
 SUCCEED-PFV-PST.1PL
 ‘(we) succeeded’
- b. *pašarév-s-ati* (> *pašarépsati*)
 SUCCEED-PFV-PST.2PL
 ‘(you.pl) succeeded’

However, as noted in section 2.3.1, in certain cases a suppletive verb stem can replace the concatenation ‘verbal stem + [+perfective] aspectual suffix’.²⁷ For example, in (34b–c) the suppletive form *ið-* of the stem *θor-* ‘SEE’ (34a) replaces not only the verb stem, but also the [+perfective] aspectual marker *-s*. This is verified by the fact that the attachment of the [+perfective] *-s* to the suppletive *ið-* is ungrammatical (34d):

²⁶ Therefore, I gloss the imperfective aspect as part of the verb stem in [–past] context; however, one could also argue for the existence of a zero suffix ($-\emptyset$) which expresses this function, based on the analogy with the overt perfective suffix in [±past], and the overt imperfective aspectual suffix in the [–past] context. These suffixes will be discussed in the running text below.

²⁷ In a few verb forms, the grammatical aspect [+perfective] can also be marked by changes on the thematic vowel of the stem; e.g., *péru* ‘(I) take’/ ‘I am taking’ > *píra* ‘(I) took’.

- | | |
|--|---|
| (34) a. θορ-úmi
SEE.IPFV-NPST.1PL
'(we) see'/'we are seeing' | c. ἴδ-ati
SEE.PFV-PST.2PL
'(you.pl) saw' |
| b. ἴδ-ami
SEE.PFV-PST.1PL
'(we) saw' | d. *ἴδ-s-ati
SEE.PFV-PFV-PST.2PL
'(you.pl) saw' |

Similarly, in the [+past], the [−perfective] aspect has an overt exponent: $-(\acute{i}n)k$.^{28,29}

- | | |
|---|--|
| (35) a. πασάρév-k-ami
SUCCEED-IPFV-PST.1PL
'we were succeeding' | b. θορ-ἴnk-ami
SEE-IPFV-PST.1PL
'we were seeing' |
|---|--|

In a few cases, an augment, [e] or [i], can be prefixed to bi-syllabic verbal forms in the context of [+past], [+perfective] specifications. In AG, such augments marked the past tense (Smyth 1956[1920]:145–146, §428–434); e.g., *λύω* [lýo:] 'I wash' > *ἔλυσα* [é-ly:sa] 'I washed', *ἔλυον* [é-ly:ɔn] 'I was washing'; but in PhG, it is retained in certain bi-syllabic [+past, +perfective] verb forms, where it hosts the stress when the stress is shifted as far as the antepenultimate syllable (36a–b). However, this pattern is not systematic at all; most bi-syllabic verbal forms—especially those which involve suppletive stems—do not receive the augment (cf. (36c–d)).

- | | |
|--|-------------|
| (36) a. ἐ-ναp-s-a
AUG-LIGHT-PFV-PST.1SG
'I lit (e.g., the fire)' | [e.na.psa] |
| b. ἰ-γρίp-s-a
AUG-LOOK-PFV-PST.1SG
'I looked' | [i.γri.psa] |

²⁸ It is not entirely clear to me what (phonological) conditions regulate the overt occurrence of the segments in parentheses.

²⁹ There are very few cases in which the [+perfective] aspectual suffix does not appear in the past tense (cf. the grammatical (ic) with the ungrammatical (id)).

- | | |
|--|--|
| (i) a. δέven-umi [−past]
PASS.IPFV-NPST.1PL
'we pass/we are passing' | c. δέv-ami [+past, +perfective]
PASS.PFV-PST.1PL
'we passed' |
| b. δέven-k-ami [+past, −perfective]
PASS-IPFV-PST.1PL
'we were passing' | d. *δέven-s-ami [+past, +perfective]
PASS-PFV-PST.1PL
int.: 'we passed' |

Even though *δév-* and *δeven-* are formally similar to each other, in such cases it is plausible to assume that a suppletive stem, in this case *δév-*, replaces the 'verb stem + [+perfective] aspect' amalgam.

- (41) a. kontí-s-umi [–past, +perfective] (dependent form)
 THROW-PFV-NPST.1PL
- b. kontí-s-ami [+past, +perfective]
 THROW-PFV-PST.1PL
 ‘we threw’

From (40–41), I conclude that there are two allomorphic stems to express the lexeme THROW, one which is employed in the imperfective context, *konta-*, and another one which is employed in the perfective context, *konti-*. Note in (42) that the latter stem, *konti-*, is also the one which is employed in all [–active] contexts.

- (42) a. konti-émi [–past, –perfective]
 THROW.IPFV-NACT.NPST.1SG
 ‘I am (being) thrown’
- b. konti-θ-ó [–past, +perfective]
 THROW-PFV.NACT-NPST.1SG
 (dependent form)
- c. kontí-θ-a [+past, +perfective]
 THROW-NACT.PFV-PST.1SG
 ‘I was thrown’
- d. konti-émun [+past, –perfective]
 THROW-NACT.IPFV.PST.1SG
 ‘I was being thrown’

There are numerous verb forms that show the same type of allomorphic variation between two stems (Xa ~ Xi). Other verbs do not show this systematic allomorphy. Following the convention that Ralli (2005) developed for SMG, I assume that there are two verbal inflectional classes (hereafter vics) in PhG. The members of one vic show the systematic allomorphy of Xa ~ Xi, and the members of the other do not (but suppletion, as described above, can sometimes be observed with these verb stems). I call the former class vic 2, the latter vic 1. Complete paradigms of vics 1 and 2 are illustrated in Tables 2.18–2.19 with the verb forms *parsévu* ‘(I) clean’ and *γapáu* ‘(I) love’ (forms to the right of the greater-than symbol show the final output of the application of certain phonological rules).

One final word is in order for the expression of the imperative mood. Imperative forms exist for both second person singular and second person plural forms for all verbs, and they are expressed by distinct suffixes for the two persons (see also Anastasiadis 1994:23, §9). These suffixes do not occur if the imperative is a negative one (for positive imperative clauses, see section 2.4.3.3; on prohibitions (and the lack of negative imperatives), see section 2.4.5.3).

		[-past] [-perfective]	[-past +perfective]	[+past] [-perfective]	[+past +perfective]	
[+active]	SG	1	parsév-u	parsév-s-u > parsépsu	parsév-k-a > parséfka	pársev-s-a > pársipsa
		2	parsév-is	parsév-s-is > parsép(sis)	parsév-k-is > parséfkis	pársev-s-is > pársipsis
		3	parsév-i	parsév-s-i > parsépsi	parsév-k-in > parséfkín	pársev-s-in > pársipsin
	PL	1	parsév-umi	parsév-s-umi > parsépsumi	parsév-k-ami > parséfkami	pársev-s-ami > parsépsami
		2	parsév-iti	parsév-s-iti > parsépsiti	parsév-k-ati > parséfkati	pársev-s-ati > parsépsati
		3	parsév-un	parsév-s-un > parsépsun	parsév-k-ani > parséfkani	pársev-s-ani > parsépsani
[-active]	SG	1	parsév-umi	parsev-t-ó > parseftó	parsev-úmin	parsév-t-a > parséfta
		2	parsév-isi	parsev-t-ís > parseftís	parsev-úsun	parsév-t-is > parséftis
		3	parsév-iti	parsev-t-í > parseftí	parsév-utan	parsév-t-in > parséftin
	PL	1	parsév-umisti	parsev-t-úmi > parseftúmi	parsev-ómisti	parsév-t-ami > parséftami
		2	parsév-isti	parsev-t-íti > parseftíti	parsév-kisti > parséfkisti	parsév-t-ati > parséftati
		3	parsév-unti	parsev-t-ún > parseftún	parsév-kanti > parséfkanti	parsév-t-ani > parséftani

Table 2.18: Declension of the stem *parsev*- ‘CLEAN’ in VIC 1

	[-past] [-perfective]	[-past +perfective]	[+past] [-perfective]	[+past +perfective]
	1 yapá-u	yapí-s-u	yapá-nk-a	yapí-s-a > yápsa
SG	2 yapá-s	yapí-s-is > yapís	yapá-nk-is	yapí-s-is > yápsis
[+active]	3 yapá-Ø	yapí-s-i	yapá-nk-in	yapí-s-in > yápsin
	1 yapá-mi	yapí-s-umi	yapá-nk-ami	yapí-s-ami > yápsami
PL	2 yapá-ti	yapí-s-iti	yapá-nk-iti	yapí-s-iti > yápsiti
	3 yapá-ni	yapí-s-un	yapá-nk-ani	yapí-s-an > yápsan
	1 yapí-émi	yapí-θ-ó	yapí-émun	yapí-θ-a
SG	2 yapí-ési	yapí-θ-ís	yapí-ésun	yapí-θ-is
[−active]	3 yapí-éti	yapí-θ-í	yapí-étun	yapí-θ-in
	1 yapí-émisti	yapí-θ-úmi	yapí-émisti	yapí-θ-ami
PL	2 yapí-ésti	yapí-θ-íti	yapí-énkisti	yapí-θ-íkati
	3 yapí-énti	yapí-θ-ún	yapí-ésanti	yapí-θ-an

Table 2.19: Declension of the stems *yapa-* ~ *yapi-* ‘love’ in vtc 2

For the [+active] forms of verbs belonging to vic 1, the imperative suffixes are *-i* for the second person singular and *-iti* for the second person plural. These imperative suffixes always attach to the right of the [+perfective] suffix (but see also (44a) below, where the imperative virtually attaches to [–perfective] stem). Hence, there are only perfective imperatives in PhG.³¹ This is exemplified in (43) below, where the imperative suffixes follow the [+perfective] suffix *-s* which attaches to the stem *patie-* ‘sink’ (*patiéu* ‘(I) sink’).³²

- | | |
|--|---|
| (43) a. <i>Patié-s-i!</i>
SINK-PFV-IMP.2SG
‘(You.sg), sink!’ | b. <i>Patié-s-iti!</i> ³³
SINK-PFV-IMP.2PL
‘(You.pl), sink!’ |
|--|---|

Concerning the [+active] forms of verbs belonging to vic 2, there seems to be no overt suffix that encodes the second person singular imperative form; rather, the [–perfective] stem alone appears to be used in this context. However, based on the analogy with the plural form (cf. (44b)), I will assume that a zero morpheme (i.e., a phonologically null suffix) encodes the second person singular imperative (44a). The second person plural imperative suffix is *-iti*, which attaches after the [+perfective] suffix, similar to verbs of vic 1:

- | | |
|---|--|
| (44) a. <i>γάπα-Ø!</i>
LOVE-IMP.2SG
‘(You.sg), love!’ | b. <i>γapí-s-iti!</i>
LOVE-PFV-IMP.2PL
‘(You.pl), love!’ |
|---|--|

For the [–active] form of all verbs of both vics, the imperative suffixes attach outside the [+perfective] suffix (see (45) for an example for vic 1 and (46) for an example for vic 2). The second person singular form of the imperative suffix that attaches to the [–active] stems is *-u* and the second person plural form is *-iti*:

³¹ This contrasts with SMG, where imperfective imperatives also exist (cf. Holton et al. 1997:507, §5.1.3). Anastasiadis (1976:206, ε’) argues that “the syntax of the imperative in PhG does not show differences from the one in SMG [MB]”. This could be interpreted as an indication of the existence of imperfective imperatives in this dialect as well. Even if this is indeed the case, I was unable to elicit it from the speakers. Note also that all of the examples Anastasiadis (ibid.) provides are perfective imperatives.

³² The final [v] of stems that end in *-ev*, as in *parsev-* ‘clean’ in Table 2.18, assimilates to the [+perfective] suffix *-s* yielding the sequence [ps], cf. [parsips-]. The imperative suffix for the second person singular which attaches to these words is dropped (cf. section 2.2.2.4). Following this deletion, the imperfective suffix is also deleted. This yields the imperative form *pársip!* ‘(you.sg), clean!’. This phonological change is not observed in the context of second person plural imperative, cf. *pársépsit(i)!* ‘(you.pl), clean!’.

³³ Final [i] is dropped in natural speech (cf. section 2.2.2.4).

- | | |
|---|---|
| (45) a. Parsév-t-u!
CLEAN-PFV.NACT-IMP.2SG
‘Clean yourself!’
b. Parsev-t-ítí!
CLEAN-PFV.NACT-IMP.2PL
‘Clean yourselves!’ | (46) a. yapí-θ-u!
LOVE-PFV.NACT-IMP.2SG
‘Love yourself!’
b. yapí-θ-ítí!
LOVE-PFV.NACT-IMP.2PL
‘Love yourselves!’ |
|---|---|

In cases where a suppletive form replaces the combination of the active stem and the [+perfective] suffix, the imperative suffixes attach to this suppletive form; the second singular suffix is *-e* and the plural suffix is *-eti*:³⁴

- | | |
|---|---|
| (47) a. Ið-é
SEE.PFV-IMP.2SG
‘(You.sg), see!’ | b. Ið-éti!
SEE.PFV-IMP.2PL
‘(You.pl), see!’
(< θoró ‘(I) see’) |
|---|---|

Before closing this section, it should be noted that the copular verb *ími* ‘be’ and the verb of possession *éxu* ‘have’ are only non-perfective and active. The copula does not have an imperative form either, while the imperative forms of the possessive verb are *na!* ‘(you.sg) have!’ and *náti!* ‘(you.pl) have!’. Their paradigms are given in Table 2.20.

2.3.3 Word formation

2.3.3.1 Derivation by affixation

Word derivation almost exclusively relies on the attachment of derivational suffixes to stems. PhG does not have productive derivational prefixes today, unlike in SMG, which has a considerable number, such as *kse-* (*kse-díno* ‘(I) un-dress’), *iper-* (*iper-metros* ‘im-moderate, excessive’), *an-* (*an-órimos* ‘im-mature’), *anti-* (*anti-γramatikó* ‘un-grammatical’), *sin-* (*sinipárxo* ‘(I) co-exist’) etc. (cf. Ralli 2005:42–47). The only prefix I could record with virtual productivity is *po-* < *apo-*, as in *po-pnónu* ‘(I) un-sleep, i.e., wake up’ or *po-pésu* ‘from-inside’ (see also Anastasiadis 2003:61). Certain suffixes that derive adjectives are as follows:³⁵

³⁴ There are two suppletive imperative forms in PhG: that of the verb *paénu* ‘(I) go’ and that of the deponent verb *érxumi* ‘(I) come’. The imperative forms of the former are *ámi!* ‘(you.sg) go!’ and *amét(i)!* ‘(you.pl) go!’, and the imperative forms of the latter are *eðó!* ‘(you.sg) come!’ and *eðót(i)!* ‘(you.pl) come!’. Notice that the [+perfective] stem of the former is *pi-* and the [+perfective] stem of the latter is *irt-*, which are themselves suppletive.

³⁵ In these examples, I give the inflectional ending in parentheses. The capitals in the Turkish forms of the suffixes denote archophonemes which can be realized as [i], [u], [u], [y] as a result of vowel harmony.

		<i>ími</i> ‘(I) am’		<i>éxu</i> ‘(I) have’	
		[-past]	[+past]	[-past]	[+past]
SG	1	<i>ími</i>	<i>ímun</i>	<i>éxu</i>	<i>íxa</i>
	2	<i>ísi</i>	<i>ísun</i>	<i>éšis</i>	<i>íšis</i>
	3	<i>íni</i>	<i>ítan</i>	<i>éši</i>	<i>íšin</i>
PL	1	<i>ímisti</i>	<i>ímastan</i>	<i>éxumi</i>	<i>íxami</i>
	2	<i>ísti</i>	<i>ísastan</i>	<i>éšiti</i>	<i>íšiti</i>
	3	<i>ínti</i>	<i>ísanti</i>	<i>éxun</i>	<i>íxani</i>

Table 2.20: Declension of the copular verb and the verb of possession

-iér(i): denominal, *rip-iér(i)* ‘dirty’ < *ríp(us)* ‘dirt’

-lú(s): denominal, relational suffix (< T. *-lI*): *šarḡata-lú(s)* ‘noisy’ < *šarḡatá(s)* ‘noise’

-súz(i): denominal, privative suffix (< T. *-sIz*): *alima-súz(i)* ‘without oil/ointment’ < *álima* ‘oil/ointment’

-mén(us): passive participle, *semaḏe-mén(us)* ‘engaged’ < *semaḏé(vumi)* ‘(I) get engaged’

Certain suffixes that derive nouns are as follows:

-lúxi: denominal (< T. *-lIk*): *paxčivan-lúxi* ‘gardening’ < *paxčiván(us)* ‘gardener’

-ma: deverbal: *čanáxema* ‘mockery’ < *čanaxé(vu)* ‘(I) mock’

-ók(u): diminutive 1: *ap-ók(u)* ‘little fox’ < *ap(ós)* ‘fox’

-ítsi: diminutive 2: *lik-ítsi* ‘little wolf’ < *lík(us)* ‘wolf’

Certain suffixes that derive verbs are as follows:

-íz: denominal: *tukan-íz(u)* ‘I thresh’ < *tukáni* ‘thresher’

-év: denominal: *kač-év(u)* ‘I speak’ < *kačí* ‘word’

-ón: deadjectival/denominal: *pez-ón(u)* ‘(I) empty’ < *pez(ó)* ‘empty’

Two other word formation strategies, which we can consider to involve derivation by affixation, albeit with limited productivity, are “partial” and “prespecified reduplication” (terminology due to Steriade 1988). In partial reduplication, the first syllable of an adjective or an adverb is copied and is prefixed to the stem/word. Additionally, a consonant that is distinct from the initial consonant of the second syllable of the

stem/word, usually /m/ or /p/, interpolates between the copied syllable and the word. This reduplication gives rise to an intensification of the meaning of the adjective or adverb (48a). In pre-specified reduplication, an adverb or a noun is copied but the initial consonant of the copy is replaced with [m] if it is consonant-initial (48b), or [m] is added to the initial position of the copy if it is vowel initial (48c). This reduplication gives rise to a reading ‘*x* and/or the like’. These processes are not productive today (Anastasiadis 1976:75, 289, §IV, 1.α’; see also Bağrıaçık and Janse 2016).

- (48) a. kó-m-kovi
COPY-REDC-GREEN
‘lush’
- b. kočía m-očía
wheat REDC-COPY
‘wheat and the like’
- c. afríku m-afríku
gently REDC-COPY
‘gently or the like’

2.3.3.2 Compounding

Compounding is a productive word-formation process in PhG. In one type of compounding, an adjective and an inflected noun are concatenated. In terms of interpretation this concatenation is not always compositional in the sense that the meaning of this concatenation is not always transparent:

- (49) a. mičíku pásxa
small Easter
‘Christmas’
- b. traxariéris nomát
hairly man
‘ogre’

In another type of compounding, two inflected word forms are concatenated. The first constituent in this case always bears a compound marker that are identical to but do not have the same distribution with certain genitive suffixes (see Bağrıaçık et al. 2017 for details, see section 2.4.1.5 on the word order in noun phrases):

- (50) a. pejkir-ú mamúči
horse-CM fly
‘horse fly’
- b. matráka-s práďa
frog-CM legs
‘frog legs’

Unlike SMG (Ralli 2013), PhG does not have compounds of two verbs (e.g., *anav-o-zvino* [turn.on-CM-turn.off] ‘(I) turn on and off’).

2.3.4 Lexical stock

One of the most remarkable aspects of PhG is the substantial number of lexical items that are borrowed from Turkish (see also Andriotis 1948:54–59 and Anastasiadis 1980b). There is also a considerable number of words—mostly nouns—that were borrowed from Armenian (Karolidis 1885:62–102; Dawkins 1916:196), e.g., *várti* ‘rose’ < Arm. *վարդ* [vard], *xaníta* ‘shop’ < Arm. *խանութ* [xanut] ‘shop’, *kurí* ‘foal’ < ?Arm. *գնմուկ* [kurak]. Some of the words which Karolidis (1885) argues to be originally Armenian are not known to present-day speakers. Borrowed nouns and verbs are always incorporated into the system of *nics* and *vics* respectively. As discussed in detail in sections 2.2.1.2 and 2.2.2, borrowed words and words inherited from AG show certain differences in their phonological properties.

Borrowed nouns are accommodated into PhG morphology as stems, and thus they are assigned to certain *nics*, mostly to those which contain neuter nouns, e.g., *čičáki-Ø* ‘flower’ (*nic* 6, see Table 2.15 < T. *çiçek* ‘flower’). There are also cases where such borrowed stems are assigned to *nics* which contain masculine stems, e.g., *pičxi-s* ‘pruner’ (*nic* 3, see Table 2.10 < T. *bıçkı* ‘pruner’).³⁶ According to Dawkins (1916:166, §294), Turkish words that end in a vowel are those which are assigned to the *nic*(s) for masculine stems; however, certain words ending in a vowel in Turkish can be assigned to the *nics* that host feminine stems as well (e.g., *aplá-Ø* ‘elder sister’ (*nic* 4, see Table 2.12 < T. *abla* ‘elder sister’).

Turkish verb stems behave as verbs in PhG but with the affixation of the denominal verbal suffixes (see section 2.3.3.1), e.g., *pašla-év(u)* ‘(I) start’ (< T. *başla-* ‘to start’). It is interesting to note that most Turkish verb stems are borrowed into PhG along with the Turkish past tense suffix (Bağrıaçık et al. 2015). For example the PhG verb *tašlatízu* ‘(I) stone’ is composed of the Turkish verb stem and the past tense suffix, *tašla-di* ‘stone-PST’, the native denominal verbalizer *-íz* (see section 2.3.3.1) and the inflectional ending *-u* (for an analysis of how these verbs are integrated into PhG morphology, see Janse 2001a:82ff, 2001b, 2009a:106–107).

It is also noteworthy that a number of functional words and particles are borrowed into PhG from Turkish, e.g., *ær* ‘if’ (< T. *eğer*), *ki* ‘see sections 2.4.3.4, 2.4.9.1, 2.4.11.1 and chapter 4’ (< T. *ki*), *tejí* ‘that’ (< T. *diye*), *jáni* ‘namely’ (< T. *yani*), *maššallá* ‘praise be!’ (< T. *maşallah*), *kibí* ‘like’ (< T. *gibi*), etc.

There are also numerous words of unclear origin (see also Anastasiadis 1980b:119–120 and Vrachionidou 2003); however, judging by their phonological structure, it is legitimate to assume that these words are not inherited (see sections 2.2.1.2 and 2.2.2 for the phonological differences between inherited and borrowed words).³⁷

³⁶ Such nouns, if [–human], are neuter in the plural; yielding a heteroclitic paradigm. See section 2.3.2.1.

³⁷ A few words can safely be argued to have Latin origin (Dawkins 1916:195, §372).

2.4 Morpho-syntax

2.4.1 The structure of the noun phrase

2.4.1.1 The distribution and interpretation of bare nouns

PhG singular, plural or mass bare nouns, i.e., inflected noun stems which are not accompanied by (in)definite articles (for these cases see section 2.4.1.2), such as *kléftes* ‘burglars’, *táli* ‘branch’ or *neró* ‘water’, may occur as arguments. In other words, they can be subjects (51) or direct objects (52) of a clause, or they can occur after a preposition (53).³⁸

- (51) a. *Piðévin táli.*
 fall.down.PFV.PST.3SG branch.N.NOM.SG
 ‘A branch fell down.’
- b. *Émban kléftes so monastíri.*
 enter.PFV.PST.3PL burglar.M.NOM.PL to.the.N.ACC.SG monastery.N.ACC.SG
 ‘Burglars entered into the monastery.’
- c. *Xitánkin neró so tami.*
 run.IPFV.PST.3SG water.N.NOM.SG from.the.N.ACC.SG roof.N.ACC.SG
 ‘Water was dripping through the roof.’
- (52) a. *Kópsin táli.*
 cut.PFV.PST.3SG branch.N.NOM.SG
 ‘He cut a branch.’
- b. *Piésan kléftes.*
 catch.PFV.PST.3PL burglar.M.NOM.PL
 ‘They caught burglars.’
- c. *Épa neró.*
 drink.PFV.PST.1SG water.N.NOM.SG
 ‘I drank water.’
- (53) a. *yatiésin tin pséka mo táli.*
 kick.out.PFV.PST.3SG the.F.ACC.SG cat.F.ACC.SG with branch.N.NOM.SG
 ‘He kicked out the cat with a branch.’
- b. *Píčin ta mo kléftes.*
 do.PFV.PST.3SG 3OBJ with burglar.M.NOM.PL
 ‘He did it with burglars.’

³⁸ Hereafter, for ease of exposition, I will not separate the morphemes of individual lexemes in PhG examples unless it is required for the relevant discussion (for nominal and verbal inflections, the reader is referred to section 2.3.2). Nevertheless, I will provide complete glosses for every lexeme (unless otherwise stated).

- c. Pársipsin ta mo *neró*.
 clean.PFV.PST.3SG 3OBJ with water.N.NOM.SG
 ‘He cleaned it with (some) water.’

Such bare nouns, as the translations illustrate, do not refer to entities whose identity is known to the speaker. Yet this does not mean that these bare nouns receive a generic reading either. They do not refer to kinds of ‘branches’, ‘water’ or ‘burglars’, unlike the English bare noun *tomatoes* in the example *tomatoes were first grown in America* (for kind-referring nouns in PhG, see section 2.4.1.2). Rather, in these clauses, some reference is made to the existence or presence of the entities expressed by the bare nouns, i.e., some burglars, some water or some branch. In other words, these bare nouns are interpreted existentially, similar to the interpretation that the bare noun *tomatoes* in *tomatoes fell from the above shelf* receives. As far as I can tell, this existential reading is the only systematic interpretation bare nouns receive in PhG. Beside this interpretation, they can also occur in certain ‘verb + object’ idioms (which may be referred to as collocations too):

- (54) a. Tro pušmáni.
 eat.IPFV.NPST.1SG regret.N.NOM.SG
 ‘(I) regret.’
 b. ěítu émri.
 give.IPFV.NPST.1SG order.N.NOM.SG
 ‘(I) order.’

Bare nouns whose stems are masculine (in the singular at least) and which belong to NICS 1–3 do not bear the singular accusative case in environments where accusative is assigned; for example, when they have the grammatical function of direct object or when they are selected by prepositions that take an accusative complement (see section 2.4.2.3 for illustrations for the latter). Rather, in these environments they are in the nominative (see also Dawkins 1916:164–168, §291–299; Andriotis 1948:47; Anastasiadis 1976:89–102, 1995a:93–94; Janse 2004:13–14, 2009a:41, fn. 15; Karatsareas 2011b:89–91). This point is illustrated with the contrast between (55) and (56). If these nouns are definite, i.e., when they are accompanied by a definite article, they bear the singular accusative case (57) (for more on definite nouns, see section 2.4.1.2).

- (55) a. Píkan *ǵámu-s*.
 make.PFV.PST.3PL wedding.M-NOM.SG
 ‘They held (a) wedding.’
 b. To jáďi píčin *taná-s*.
 the.N.NOM.SG cow.N.NOM.SG make.PFV.PST.3SG calf.M-NOM.SG
 ‘The cow made, i.e., gave birth to, a calf.’

- c. Aratízu *temirčí-s*.
look.for.IPFV.NPST.1SG ironmonger.M-NOM.SG
'I look for (an) ironmonger.'
- (56) a. * Píkan *γámu-∅*.
make.PFV.PST.3PL wedding.M-ACC.SG
int.: 'They held (a) wedding.'
- b. * To jáđi píčin *taná-∅*.
the.N.NOM.SG cow.N.NOM.SG make.PFV.PST.3SG calf.M-ACC.SG
int.: 'The cow made, i.e., gave birth to, a calf.'
- c. * Aratízu *temirčí-∅*.
look.for.IPFV.NPST.1SG ironmonger.M-ACC.SG
int.: 'I look for (an) ironmonger.'
- (57) a. Píkan ton *γámu-∅*.
make.PFV.PST.3PL the.M.ACC.SG wedding.M-ACC.SG
'They held the wedding.'
- b. To jáđi píčin ton *taná-∅*.
the.N.NOM.SG cow.N.NOM.SG make.PFV.PST.3SG the.M.ACC.SG calf.M-ACC.SG
'The cow made, i.e., gave birth to, the calf.'
- c. Aratízu ton *temirčí-∅*.
look.for.IPFV.NPST.1SG the.M.ACC.SG ironmonger.M-ACC.SG
'I look for the ironmonger.'

The plural nominative and accusative case markers are syncretic in the NICS to which such stems belong; therefore, it is not immediately visible whether bare plural masculine objects are morphologically marked as accusative or nominative. However, based on the fact that there is at least one overt distinction, i.e., in singular masculine nouns, which provides basis for analogy, it is legitimate to assume that in (52b) and (53b) too, the plural forms are also nominative (in line with Anastasiadis 1976; Karatsareas 2011b). Similarly, in all other NICS to which neuter and feminine nouns belong, both singular and plural accusative and nominative case markers are syncretic (see Tables 2.12–2.17). Therefore, it is also not immediately visible whether bare neuter or feminine objects are marked with the accusative or the nominative case marker. For these nouns too, I gloss the respective markers as nominative (see (52a,c, 53a,c, 54); see section 2.4.2.2 for further information).

2.4.1.2 Definiteness and indefiniteness

Definite nouns refer to entities that are already familiar to the participants at the speech time. A referential indefinite noun, on the other hand, is used to introduce

- c. Aratízu an *temirčí-s*.
look.for.IPFV.NPST.1sg an ironmonger.M-NOM.SG
'I look for an ironmonger (a specific one).'
- (61) a. * Íðin an *teleyannú-Ø*.
see.PFV.PST.3SG a lad.M-ACC.SG
- b. * yórasa an *taná-Ø*.
buy.PFV.PST.1SG a calf.M-ACC.SG
- c. * Aratízu an *temirčí-Ø*.
look.for.IPFV.NPST.1sg an ironmonger.M-ACC.SG

As detailed in the previous section, the plural nominative and accusative case markers are syncretic in the NICS to which masculine stems belong. Similarly, in the rest of the NICS that contain neuter and feminine nouns, the accusative and nominative case markers are syncretic in both the singular and plural numbers (see Tables 2.12–2.17). Based on the analogy with singular masculine nouns, however, we can assume that nouns of all genders and numbers are nominative if they are indefinite objects (see section 2.4.2.2 for further information).

We have seen so far that both bare nouns, which yield indefinite non-specific (existential) readings, and nouns introduced by the indefinite article, which yield indefinite (mostly specific) readings, are marked with nominative case in positions where the accusative case would be expected. Therefore, it is reasonable to assume that the nominative case for these nouns is not based on whether the noun is specific or not, but instead on the indefinite nature of the noun. In other words, all indefinite nouns are marked with nominative case in positions where the accusative is required (see also Karatsareas 2011b:89 for the same conclusion; see section 2.4.2.2 for further information).⁴⁰

Nouns that receive a definite (and specific) interpretation are obligatorily introduced by a definite article which agrees with the noun it introduces in gender, number and case, with the exception of the vocative case, which does not have a corresponding definite article. The plural genitive is rather rare and is most often substituted by the singular genitive or by the accusative plural (see Dawkins 1916:163 and Anastasiadis 1976:56 for similar observations; but see also Andriotis 1948:39–41 for a differing opinion). Under controlled elicitation tasks, however, speakers agree that *tu(n)* is the definite genitive article for all genders.⁴¹ Nouns which are masculine in

⁴⁰ There is currently a consensus on the argument that the nominative marking of indefinite object nouns in PhG is the outcome of pattern replication from Turkish (cf. Dawkins 1916; Janse 2004, 2008a, 2009a; Karatsareas 2011b; see however Andriotis 1948:47 and Anastasiadis 1976:94–96 for differing opinions).

⁴¹ The final [n] is retained only when the following word starts with a vowel.

singular but neuter in plural (see section 2.3.2.1) take a masculine article in the singular but a neuter one in the plural when they are definite. The definite articles in PhG are presented in Table 2.21.

		Masculine	Feminine	Neuter
SG	Nom.	o	i	to
	Acc.	ton	tin	to
	Gen.	tu	s	tu
PL	Nom.	i	i	ta
	Acc.	tis	tis	ta
	Gen.	(tu(n))	(tu(n))	(tu(n))

Table 2.21: PhG definite articles

Unlike indefinite nouns, definite nouns always appear as accusative when they occur in positions that require that case, such as the direct object position (cf. (62–63)).

- (62) a. *Íðin ton telexannú-Ø.*
 see.PFV.PST.3sg the.M.ACC.SG lad.M-ACC.SG
 ‘He saw the lad.’
- b. *γόρασα ton taná-Ø.*
 buy.PFV.PST.1SG the.M.ACC.SG calf.M-ACC.SG
 ‘I bought the calf.’
- c. *Aratízu ton temirčí-Ø.*
 look.for.IPFV.NPST.1SG the.M.ACC.SG ironmonger.M-ACC.SG
 ‘I look for the ironmonger.’
- (63) a. **Íðin ton telexannú-s.*
 see.PFV.PST.3sg the.M.ACC.SG lad.M-NOM.SG
- b. **γόρασα ton taná-s.*
 buy.PFV.PST.1SG the.M.ACC.SG calf.M-NOM.SG
- c. **Aratízu ton temirčí-s.*
 look.for.IPFV.NPST.1SG the.M.ACC.SG ironmonger.M-NOM.SG

Definite articles are also obligatory with inherently definite nouns, such as proper nouns or place names:

- (64) a. *(o) *Andriás*
 the.M.NOM.SG Andrew.M.NOM.SG
 ‘Andrew’

- b. *(to) Junáni
 the.N.NOM.SG Greece.N.NOM.SG
 ‘Greece’

Singular, plural or mass nouns referring to (established) kinds are also obligatorily marked with the definite articles even though these nouns are not definite interpretively:

- (65) a. *(Ta) rkúđa ínti rušú xajvána.
 the.N.NOM.PL bear.N.NOM.PL be.NPST.3PL mountain.N.GEN.SG animal.N.NOM.PL
 ‘Bears (*Ursidae*) are wild animals.’
- b. En to kaó to šěj íni *(to)
 most the.SG good.SG the.N.NOM.SG thing.N.NOM.SG be.NPST.3SG the.N.NOM.SG
 neró.
 water.N.NOM.SG
 ‘The best thing is water (H₂O).’
- c. *(To) kasofí enótun kaípi.
 the.N.NOM.SG kasofí.N.NOM.SG become.PFV.PST.3SG extinct.SG
 ‘Kasofí⁴² has gone extinct.’

2.4.1.3 Agreement within the noun phrase

As already mentioned in section 2.3.2.1, adjectives do not agree with the noun they modify in gender and case. The only agreement between a noun and its adjective is in number. This is true for both attributive and predicative adjectives. Here, only attributive adjectives are illustrated (for word order in the noun phrase, see section 2.4.1.5). The examples in (66) illustrate the absence of gender agreement between a simple (i.e., non-derived) adjective and a masculine (66a), feminine (66b) and neuter noun (66c). The agreement in number between a simple adjective and nouns of all genders can be seen by comparing the examples in (66) to those in (67). The morphological ending of the adjective is *-a* in (67) when the modified noun is plural. In (68–70), the lack of case agreement between the adjective and nouns of all genders/numbers are illustrated.⁴³

⁴² As far as I can tell, *kasofí* was a type of seed which, if crushed and soaked in water, produced a type of milky substance which was consumed mostly during the Great Lent. It is not cultivated anymore (Eirini Platani, p.c.; see also Papastefanou 2009:59).

⁴³ In (68–70), the illustrations involve nouns which are marked only in the nominative and in the genitive. I chose not to illustrate the accusative case since in the case of feminine and neuter nouns, and of plural masculine nouns, there is syncretism between the nominative and accusative. Moreover, indefinite masculine singular nouns are overtly marked with the nominative instead of accusative. Therefore, the accusative for all instances in (68–70) would be the same as in examples (68a,c, 69a,c, 70a,c).

- (66) a. an kámi nomát
a bad.SG man.M.NOM.SG
'a bad man'
b. an kámi néka
a bad.SG woman.F.NOM.SG
'a bad woman'
c. an kámi čočúxi
a bad.SG child.N.NOM.SG
'a bad child'
- (67) a. káma nomáti
bad.PL man.M.NOM.PL
'bad men'
b. káma néčis
bad.PL woman.F.NOM.PL
'bad women'
c. káma čočúxa
bad.PL child.N.NOM.PL
'bad children'
- (68) a. an kámi nomát
a bad.SG man.M.NOM.SG
'a bad man'
b. an kámi nomatú
a bad.SG man.M.GEN.SG
'a bad man's'
c. káma nomáti
bad.PL man.M.NOM.PL
'bad men'
d. káma nomatíun
bad.PL man.M.GEN.PL
'bad men's'
- (69) a. an kámi néka
a bad.SG woman.F.NOM.SG
'a bad woman'
b. an kámi nékas
a bad.SG woman.F.GEN.SG
'a bad woman's'
c. káma néčis
bad.PL woman.F.NOM.PL
'bad women'
d. káma nečíun
bad.PL woman.F.GEN.PL
'bad women's'
- (70) a. an kámi čočúxi
a bad.SG child.N.NOM.SG
'a bad child'
b. an kámi čočuxú
a bad.SG child.N.GEN.SG
'a bad child's'
- c. káma čočúxa
bad.PL child.N.NOM.PL
'bad children'
d. káma čočuxíun
bad.PL child.N.GEN.PL
'bad children's'

The agreement pattern sketched above is not unique to adjectives.⁴⁴ Certain other modifiers also agree—to the extent that they can—with the head noun in number, but crucially not in case and gender. The modifiers which show overt morphological number agreement with the noun are, apart from adjectives, emphatic possessive pronouns and demonstratives. Yet, unlike adjectives, these modifiers cannot modify an

⁴⁴ Derived adjectives, such as *meraxlús* 'curious.sg' (< *meráxi* 'curiosity'), behave the same way as simple adjectives, such as *kámi* 'bad.sg', in terms of agreement with the noun they modify; they agree in number but not in gender and case (i-ii):

indefinite/bare noun.⁴⁵ In other words, when there is modification with emphatic possessives and demonstratives, the noun they modify is always definite. When the noun modified is definite, however, a phenomenon referred to as “obligatory definiteness spread” is observed, as described in the next section. The morphological agreement between definite nouns and the emphatic pronouns and demonstratives that modify the nouns is described in parallel to the phenomenon of obligatory definiteness spread.

2.4.1.4 Obligatory definiteness spread

In the previous section agreement between adjectives and indefinite/bare nouns was discussed: adjectives agree in number—but not in gender or case—with the noun they modify. Agreement is precisely the same when the head is definite, i.e., when it is preceded by the definite article; adjectives agree with the definite noun in number only. However, the definiteness of the noun triggers obligatory insertion of a formally neuter article before the adjective, regardless of the gender of the noun. This is exemplified in (71) below. The definiteness of the nouns in (71) is evidenced by the definite

- | | | |
|------|---|---|
| (i) | a. an meraxlús nomát
a curious.sg man.M.NOM.SG
'a curious man' | d. meraxlúđi nomáti
curious.PL man.M.NOM.PL
'curious men' |
| | b. an meraxlús néka
a curious.sg woman.F.NOM.SG
a curious woman' | e. meraxlúđi nečis
curious.PL woman.F.NOM.PL
'curious women' |
| | c. an meraxlús čočúxi
a curious.sg child.N.NOM.SG
'a curious child' | f. meraxlúđi čočúxa
curious.PL child.N.NOM.PL
curious children' |
| (ii) | a. an meraxlús nomatú
a curious.sg man.M.GEN.SG
'a curious man's' | d. meraxlúđi nomatfun
curious.PL man.M.GEN.PL
'curious men's' |
| | b. an meraxlús nékas
a curious.sg woman.F.GEN.SG
a curious woman's' | e. meraxlúđi nečifun
curious.PL woman.F.GEN.PL
'curious women's' |
| | c. an meraxlús čočuxú
a curious.sg child.N.GEN.SG
'a curious child's' | f. meraxlúđi čočuxfun
curious.PL child.N.GEN.PL
curious children's' |

⁴⁵ Cardinal numerals, however, have a unique morphological form, which does not differentiate between singular and plural; therefore there is no indication of number agreement between these numerals and the nouns they modify. Similarly, if we take relative clauses as a type of adjective, as Benveniste (1971[1966]:192) does by proposing the term “syntactic adjective”, then we have to state here that the relative clauses also do not agree with the nouns they modify, not even in number. See section 2.4.10.2 for an introduction to relative clauses and Bağrıaçık and Danckaert (2016) for an elaborate treatment of them.

articles that immediately precede them. In (71a) the noun is masculine, in (71b) feminine and in (71c) neuter. In all cases, the adjective *kámi* ‘bad’ is obligatorily preceded by the formally neuter article *to*.

- (71) a. *(to) kámi o nomát
 the.SG bad.SG the.M.NOM.SG man.M.NOM.SG
 ‘the bad man’
 b. *(to) kámi i néka
 the.SG bad.SG the.F.NOM.SG woman.F.NOM.SG
 ‘the bad woman’
 c. *(to) kámi to čočúxi
 the.SG bad.SG the.N.NOM.SG child.N.NOM.SG
 ‘the bad child’

That this additional article is always neuter, i.e., lacking gender agreement, is further illustrated by the ungrammatical cases in (72), where the ungrammaticality is due to the masculine (72a) and feminine (72b) article preceding the adjective.

- (72) a. * o kámi o nomát
 the.M.NOM.SG bad.SG the.M.NOM.SG man.M.NOM.SG
 b. * i kámi i néka
 the.F.NOM.SG bad.SG the.F.NOM.SG woman.F.NOM.SG

This phenomenon, which is referred to here as “obligatory definiteness spread” (see also Lekakou and Karatsareas 2016 for a similar term), is observed for plural nouns as well. However, the additional neuter article is also plural, similar to the adjective that it immediately precedes:

- (73) a. *(ta) káma i nomáti
 the.PL bad.PL the.M.NOM.PL man.M.NOM.PL
 ‘the bad men’
 b. *(ta) káma i néčis
 the.PL bad.PL the.F.NOM.PL woman.F.NOM.PL
 ‘the bad women’
 c. *(ta) káma ta čočúxa
 the.PL bad.PL the.N.NOM.PL child.N.NOM.PL
 ‘the bad children’

This additional article does not agree with the head noun in case either (see the declension of the neuter article in Table 2.21). This is exemplified in (74–76), where the head and its definite article are in the genitive, but the modifying adjective and the obligatory additional article preceding it are not.

- (74) a. *(to) kámi tu nomatú
 the.SG bad.SG the.M.GEN.SG man.M.GEN.SG
 ‘the bad man’s’
 b. *(ta) káma tun nomatún
 the.PL bad.PL the.M.GEN.PL man.M.GEN.PL
 ‘the bad men’s’
- (75) a. *(to) kámi s nékas
 the.SG bad.SG the.F.GEN.SG woman.F.GEN.SG
 ‘the bad woman’s’
 b. *(ta) káma tun nečfún
 the.PL bad.PL the.F.GEN.PL woman.F.GEN.PL
 ‘the bad women’s’
- (76) a. *(to) kámi tu čočuxú
 the.SG bad.SG the.N.GEN.SG child.N.GEN.SG
 ‘the bad child’s’
 b. *(ta) káma tun čočuxún
 the.SG bad.SG the.N.GEN.SG child.N.GEN.SG
 ‘the bad children’s’

Nouns can be modified by more than one adjective, in which case every adjective appears with a separate additional article if the head noun is definite. Both the adjective and the additional article agree with the noun in number only:

- (77) a. *(to) meraxlús *(to) kámi o nomát
 the.SG curious.SG the.SG bad.SG the.M.NOM.SG man.M.NOM.SG
 ‘the curious, bad man’
 b. *(to) meraxlús *(to) kámi i néka
 the.SG curious.SG the.SG bad.SG the.F.NOM.SG woman.F.NOM.SG
 ‘the curious, bad woman’
 c. *(to) meraxlús *(to) kámi to čočúxi
 the.SG curious.SG the.SG bad.SG the.N.NOM.SG child.N.NOM.SG
 ‘the curious, bad child’
- (78) a. *(ta) meraxlúđi *(ta) káma i nomáti
 the.PL curious.PL the.PL bad.PL the.M.NOM.PL man.M.NOM.PL
 ‘the curious, bad men’
 b. *(ta) meraxlúđi *(ta) káma i néčis
 the.PL curious.PL the.PL bad.PL the.F.NOM.PL woman.F.NOM.PL
 ‘the curious, bad women’

- c. *(ta) meraxlúđi *(ta) káma ta čočúxa
 the.PL curious.PL the.PL bad.PL the.N.NOM.PL child.N.NOM.PL
 ‘the curious, bad children’

The obligatory definiteness spread is not confined to adjectival modification. If the modifier of a definite noun is a cardinal (79) or ordinal numeral (80), the obligatory additional article is inserted before these numerals as well.

- (79) *(ta) đú i nomáti / i nečis
 the.PL two the.M.NOM.PL man.M.NOM.PL the.F.NOM.PL woman.F.NOM.PL
 ‘the two men/women’

- (80) *(to) đéfturu o nomát / i néka
 the.SG second.SG the.M.NOM.SG man.M.NOM.SG the.F.NOM.SG woman.F.NOM.SG
 ‘the second man/woman’

Another type of modifier that triggers obligatory definiteness spread is the emphatic possessive pronoun. There are two sets of possessive pronouns in PhG: clitic ones, corresponding to *my*, *your* etc. and emphatic ones, corresponding to *my own*, *your own* etc. Clitic possessive pronouns follow, i.e., are encliticized to, the possessed noun (81) (but see section 2.4.1.5 for a refinement), and there is no agreement between the possessed noun and these clitic pronouns. Notice that the third person singular forms show overt agreement with the gender of the possessor (cf. (81c)); Table 2.22).

- (81) a. o pšákas mu
 the.M.NOM.SG brother.M.NOM.SG my
 ‘my brother’
 b. o pšákas su
 the.M.NOM.SG brother.M.NOM.SG your
 ‘your brother’
 c. o pšákas tu/s/tu
 the.M.NOM.SG brother.M.NOM.SG his/her/its
 ‘his/her/its brother’

Unlike clitic possessive pronouns, emphatic possessive pronouns precede the possessed noun (see section 2.4.5.1 for word order in nominal phrases). The set of the emphatic possessive pronouns are given in Table 2.23. Emphatic pronouns agree with the possessed noun in number but not in gender or case, similar to adjective agreement, and they also display obligatory definiteness spread: the additional articles *to* or *ta* obligatorily precede the pronouns in this context:

Clitic possessive pronouns		
	1	mu
SG	2	su
	3	tu (masc.)/ s (fem.)/ tu (neut.)
	1	mas
PL	2	sas
	3	tun

Table 2.22: Clitic possessive pronouns in PhG

	Singular possessed noun	Plural possessed noun
SG	1 mon	mána
	2 son	sána
	3 tu ⁴⁶	tu
PL	1 métru	métra
	2 sétru	sétra
	3 tiu	tiu

Table 2.23: Emphatic possessive pronouns in PhG

- (82) a. *(to) mon o pšákas
 the.SG my.SG the.M.NOM.SG brother.M.NOM.SG
 ‘my own brother’
- b. *(to) métru o pšákas
 the.SG our.SG the.M.NOM.SG brother.M.NOM.SG
 ‘our own brother’

Demonstratives, which in PhG occur only as proximal (*ató* ‘this’ and *até* ‘these’) and distal (*čino* ‘that’ and *čina* ‘those’), also agree with the head noun in number but not in case or gender. However, unlike adjectives, (cardinal and ordinal) numerals and emphatic possessive pronouns, the obligatory definiteness spread for demonstratives is ungrammatical. This means that demonstratives cannot be accompanied by the

⁴⁶ The emphatic possessive pronoun *tu* is used for masculine and neuter possessors. I could not retrieve an emphatic possessive pronoun for the third person feminine possessor (see, however, Anastasiadis 1976:147-148 for various periphrastic forms). The third person plural emphatic possessive pronoun *tiu* is used for all genders. The first and second possessor plural emphatic pronouns have the form *métron* and *sétron* in Varašos.

neuter articles *to* or *ta* (or any other article, for that matter). This is shown with both proximal and distal demonstratives in (83–84).

- (83) a. (*to) ató o nomát /i néka
 the.SG this.SG the.M.NOM.SG man.M.NOM.SG the.F.NOM.SG woman.F.NOM.SG
 ‘this man/woman’
 b. (*ta) atě i nomáti /i něcis
 the.PL this.PL the.M.NOM.PL man.M.NOM.PL the.F.NOM.PL woman.F.NOM.PL
 ‘these men/women’
- (84) a. (*to) číno o nomát /i néka
 the.SG that.SG the.M.NOM.SG man.M.NOM.SG the.F.NOM.SG woman.F.NOM.SG
 ‘that man/woman’
 b. (*ta) čína i nomáti /i něcis
 the.PL that.PL the.M.NOM.PL man.M.NOM.PL the.F.NOM.PL woman.F.NOM.PL
 ‘those men/women’

Obligatory definiteness does not spread to universal quantifiers either, such as *čip* ‘all’ or *xer* ‘every/each’. Moreover, these quantifiers are formally invariant, i.e., they do not show any morphological agreement with the noun they modify:

- (85) a. (*to) xer o nomát /i néka
 the.SG every the.M.NOM.SG man.M.NOM.SG the.F.NOM.SG woman.F.NOM.SG
 ‘every man/woman’
 b. (*ta) čip i nomáti /i něcis
 the.SG all the.M.NOM.PL man.M.NOM.PL the.F.NOM.PL woman.F.NOM.PL
 ‘all men/women’

We have seen so far that the number specification of a noun affects the number specification on certain modifiers. Adjectives can be morphologically singular or plural depending on the number of the noun they modify. Cardinal numerals do not show number agreement, since, except for *ína* ‘one’, the numerals modify plural nouns only. Ordinal numerals, however, agree with the noun in number. This agreement is observed in emphatic possessives and demonstratives as well. Universal quantifiers, on the other hand, do not encode singular or plural number morphologically. As a lexical feature, the universal quantifier *xer* ‘every’ can only modify a singular noun but the universal quantifier *čip* ‘all’ can only modify a plural noun.

The obligatory definiteness spread can be schematically shown as in (86).

- (86) a. to MOD.SG the.NOM/GEN/ACC/SG N.NOM/GEN/ACC/SG,
 b. ta MOD.PL the.NOM/GEN/ACC/PL N.NOM/GEN/ACC/PL,
 where MOD(ifier) stands for adjectives, numerals and emphatic possessive pronouns.

Obligatory definiteness spread does not target demonstratives and universal quantifiers. Neither the former nor the latter can be preceded by the additional neuter article, independent of the possibility of agreement in number between the modifier and the noun. Demonstratives show overt agreement in number with the noun, but they cannot be preceded by the additional neuter articles *to* or *ta*. This is schematically shown in (87).

- (87) a. (*to) DEM.SG the.NOM/GEN/ACC/SG N.NOM/GEN/ACC/SG,
 b. (*ta) DEM.PL the.NOM/GEN/ACC/PL N.NOM/GEN/ACC/PL.
 (DEM: demonstrative)

Universal quantifiers on the other hand have unique morphological structure where number distinction is not visible. Yet they too cannot be preceded by the neuter articles *to* or *ta*:

- (88) (*to) UNI.Q the.NOM/GEN/ACC/SG N.NOM/GEN/ACC/SG.
 (UNI.Q: universal quantifier)

It should be noted at this point that even though definiteness spread is obligatory with certain pronominal modifiers, i.e., adjectives, emphatic pronouns and numerals, there is no such thing as obligatory indefiniteness spread in PhG. Recall from section 2.4.1.2 that PhG has a specific indefinite article *a(n)* ‘a/an’. The modifiers of indefinite nouns introduced by this indefinite article cannot be preceded by the overt articles *to* or *ta*, which we saw in the case of obligatory definiteness spread. This is illustrated in (89) below.

- (89) * to kámi a nomát
 the.SG bad.SG a man.M.NOM.SG
 int.: ‘a bad man’

Neither can the indefinite article itself be duplicated:

- (90) * an kámi a nomát
 a bad.SG a man.M.NOM.SG
 int.: ‘a bad man’

We can deduce from (90) that the indefinite article can occur only once in a noun phrase. As shown in (91), the position of the indefinite article in a noun phrase is the initial position preceding the modifier(s).

- (91) a meraxlús kámi nomát
 a curious.SG bad.SG man.M.NOM.SG
 ‘a curious, bad man’

The types of modifiers illustrated in the current and previous sections can also co-occur within the same noun phrase, modifying the same noun. If there are multiple modifiers of different types (e.g., adjectives, emphatic pronouns, quantifiers etc.), they must occur in a strict sequence, both in indefinite and in definite noun phrases. The ordering of the constituents inside the noun phrase and its repercussions on the obligatory definiteness spread are dealt with in the next section.

2.4.1.5 Word order within the noun phrase

With the exception of clausal, i.e., relative, modifiers and (enclitic) possessive genitives, and marginally of emphatic possessives, all types of modifiers of a noun—(simplex, complex) adjectives, numerals, demonstratives and quantifiers—obligatorily precede the noun. This is true for both definite and indefinite noun phrases modulo the fact that the latter can never be modified by demonstratives, emphatic possessive pronouns and quantifiers and modulo the obligatory definiteness spread in the former to adjectives, numerals and emphatic possessive pronouns. These modifiers in a post-nominal position are either ungrammatical or quite marginal, as examples (92b, 93b, 94b, 95b, 96b, 97b, 98b) reveal.

(92) adjectival modification, indefinite noun phrase

- | | | | |
|----|-----------------------|----|-----------------------|
| a. | a kámi nomát | b. | * a nomát kámi |
| | a bad.SG man.M.NOM.SG | | a man.M.NOM.SG bad.SG |
| | ‘a bad man’ | | |

(93) adjectival modification, definite noun phrase

- | | |
|----|---|
| a. | to kámi o nomát |
| | the.SG bad.SG the.M.NOM.SG man.M.NOM.SG |
| | ‘the bad man’ |
| b. | * o nomát to kámi |
| | the.M.NOM.SG man.M.NOM.SG the.SG bad.SG |

(94) modification with a (cardinal) numeral, indefinite noun phrase

- | | | | |
|----|--------------------|----|--------------------|
| a. | ďíu pejkíra | b. | * pejkíra ďíu |
| | two horse.N.NOM.PL | | horse.N.NOM.PL two |
| | ‘two horses’ | | |

(95) modification with a (cardinal) numeral, definite noun phrase

- | | |
|----|--|
| a. | ta ďíu ta pejkíra |
| | the.PL two the.N.NOM.PL horse.N.NOM.PL |
| | ‘the two horses’ |
| b. | * ta pejkíra ta ďíu |
| | the.N.NOM.PL horse.N.NOM.PL the.PL two |

- (96) modification with an emphatic possessive pronoun, definite noun phrase⁴⁷
- a. to mon o pšákas
the.SG my.SG the.M.NOM.SG brother.M.NOM.SG
'my own brother'
- b. ?? o pšákas to mon
the.M.NOM.SG brother.M.NOM.SG the.SG my.SG
- (97) modification with a demonstrative, definite noun phrase
- a. até i nomáti
this.PL the.M.NOM.PL man.M.NOM.PL
'these men'
- b. * i nomáti até
the.M.NOM.PL man.M.NOM.PL this.PL
- (98) modification with a (universal) quantifier, definite noun phrase
- a. xer o nomát
every the.M.NOM.SG man.M.NOM.SG
'every man'
- b. * o nomát xer
the.M.NOM.SG man.M.NOM.SG every

Possessive modifiers, i.e., possessive noun phrases that are marked in the genitive, most often precede the noun they modify (99a); however, unlike other modifiers, this order is not obligatory. The possessee can occur before the possessive modifier, i.e., the possessive genitive, for emphasis (99b) (Anastasiadis 1976:54, 1, α'). Notice in (99a) that possessive genitives do not show obligatory definiteness spread:

- (99) a. (*to) tu Andriá to pejkíri
the.SG the.M.GEN.SG Andrew.M.GEN.SG the.N.NOM.SG horse.N.NOM.SG
'Andrew's horse'
- b. to pejkíri tu Andriá
the.N.NOM.SG horse.N.NOM.SG the.M.GEN.SG Andrew.M.GEN.SG
'Andrew's horse(, not something else)'

Relative clauses, i.e., clausal modifiers of a noun, can both precede and follow the noun they modify (for more information on relative clauses see section 2.4.10.2):⁴⁸

⁴⁷ (96b) is judged as marginal unanimously by speakers. If it is allowed, then the possessee is emphasized.

⁴⁸ Dawkins (1916:201), Andriotis (1948:48) and Favis (1948:185, based on Andriotis 1948) argue that all relative clauses are obligatorily prenominal in PhG. The initial observation that relative clauses can be both prenominal and postnominal was made by Anastasiadis (1976:174, 1994:26, §3) some thirty years after Andriotis (1948). According to Anastasiadis, the relative clause can follow the noun it modifies

- (100) a. tu þorís to pejkíri
 that see.IPFV.NPST.2SG the.N.NOM.SG horse.N.NOM.SG
 ‘the horse that/which you see’
- b. to pejkíri tu þorís
 the.N.NOM.SG horse.N.NOM.SG that see.IPFV.NPST.2SG
 ‘the horse that/which you see’

To recapitulate so far, adjectives, numerals, demonstratives and quantifiers must precede the noun they modify. On the other hand, possessive genitives and to a certain extent emphatic possessive pronouns can follow the modified noun, but only if the noun is emphasized. Finally, relative clauses can occur both prenominal and postnominal with no detectable difference between the two meanings. This information is schematized in Table 2.24.

Modifier type	Position
Adjective	prenominal
(cardinal/ordinal) numeral	prenominal
demonstrative	prenominal
(Universal)Quantifier	prenominal
emphatic possessive pronoun	prenominal & postnominal (only if N is emphasized)
possessive genitive	prenominal & postnominal (only if N is emphasized)
relative clause	prenominal & postnominal

Table 2.24: Modifiers and their position in the noun phrase

Multiple adjectives can modify the same noun. As illustrated in section 2.4.1.3 and especially in examples (77–78), if the noun is definite, the phenomenon of obligatory definiteness spread targets all of the modifying adjectives, as the occurrence of additional obligatory neuter articles preceding all adjectives reveals (example (101) is reproduced from (77a)):

- (101) *(to) meraxlús *(to) kámi o nomát
 the.SG curious.SG the.SG bad.SG the.M.NOM.SG man.M.NOM.SG
 ‘the curious, bad man’

The occurrence of multiple emphatic possessive pronouns, numerals, demonstratives and/or quantifiers are ungrammatical on semantic grounds, similar to the ungrammaticality of **this that book*, or **two five books*, **the book of mine yours*, **some all books*

only if the noun is emphasized (ibid.). This is not valid today. Both prenominal and postnominal relative clauses are produced equally with no detectable pragmatic difference between the two. See Bağrıçık and Danckaert (2016) for a detailed discussion of relative clauses.

etc. Multiple genitive possessives modifying the same noun are also ungrammatical, whether in prenominal (102a), or postnominal (102b) position, or whether one genitive possessive is in prenominal and the other in postnominal position (102c).⁴⁹

- (102) a. * tu Leonárdú s Panaías to
 the.M.GEN.SG Leonardo.M.GEN.SG the.F.GEN.SG Mary.F.GEN.SG the.N.NOM.SG
 tafsíri
 portait.N.NOM.SG
 int.: ‘Leonardo(da Vinci)’s portrait of Mary’
- b. * to tafsíri tu Leonárdú s
 the.N.NOM.SG portait.N.NOM.SG the.M.GEN.SG Leonardo.M.GEN.SG the.F.GEN.SG
 Panaías
 Mary.F.GEN.SG
- c. * tu Leonárdú to tafsíri s
 the.M.GEN.SG Leonardo.M.GEN.SG the.N.NOM.SG portait.N.NOM.SG the.F.GEN.SG
 Panaías
 Mary.F.GEN.SG

Otherwise multiple genitive possessives where one genitive possessive embeds another one is grammatical if all genitive possessives are prenominal (103) (Dawkins 1916:201).

- (103) tu tærmənčí s nékas to
 the.M.GEN.SG miller.M.GEN.SG the.F.GEN.SG wife.F.GEN.SG the.N.NOM.SG
 yerdannúxi
 necklace.N.NOM.SG
 ‘the necklace of the miller’s wife’

Relative clauses can also co-occur within the same noun phrase—a phenomenon often referred to as “stacking” in the literature: the first relative clause modifies a noun, and the second relative clause modifies the noun which is already modified by the previous relative clause (definition due to Stockwell et al. 1973:442). If there is more than one relative clause, they are all prenominal (104a). Relative clauses do not stack in postnominal position (104b), nor do they wrap around a noun (104c).

⁴⁹ Similarly, multiple possessive pronouns (emphatic and/or clitic) are also ungrammatical:

- (i) a. * to món to tafsíri su
 the.SG my.SG the.N.NOM.SG picture.N.NOM.SG your
 int.: ‘my picture of yours’
- b. * to tafsíri su mu
 the.N.NOM.SG picture.N.NOM.SG your my

- (104) a. tu čo pukántsá tu ýórasa to tomoflí
 that not like.PFV.PST.1SG that buy.PFV.PST.1SG the.N.NOM.SG car.N.NOM.SG
 ‘the car that I bought that I did not like’
- b. *to tomoflí tu čo pukántsá tu ýórasa
 the.N.NOM.SG car.N.NOM.SG that not like.PFV.PST.1SG that buy.PFV.PST.1SG
- c. *tu ýórasa to tomoflí tu čo pukántsá
 that buy.PFV.PST.1SG the.N.NOM.SG car.N.NOM.SG that not like.PFV.PST.1SG

Leaving aside postnominal modifiers for the moment, different types of prenominal modifiers which modify the same noun can co-occur in the prenominal position, but there is a rigid ordering restriction for these modifiers, given in (105).⁵⁰

- (105) UNI. Q. > DEM. > REL. CL. > EMPH. POSS. / POSS. GEN. > NUM. > ADJ. > N.

The template in (105) should be read as follows: a noun phrase in PhG is strictly head-final. Adjectives occur in the immediate pre-nominal position and can be preceded by numerals, emphatic possessive pronouns/genitive possessives, relative clauses, demonstratives and quantifiers, strictly in this order. This is illustrated in (106) (glosses are simplified):

- (106) a. UNI. Q. > DEM. > REL. CL. > EMPH. POSS. > ADJ. > N.
 číp até tu θorís ta mána ta zóræ ta pejkíra
 all these that see.2SG the my the powerful the horses
 ‘all these powerful horses of mine that you see’
- b. DEM. > REL. CL. > NUM. > ADJ. > N.
 até tu θorís ta đíu ta zóræ ta pejkíra
 these that see.2SG the two the powerful the horses
 ‘these two powerful horses that you see’

Any other order which deviates from (105) is judged as ungrammatical. For example in (107a), the modified noun is shown in multiple positions; before a quantifier, between a quantifier and a demonstrative, between a demonstrative and a relative clause, between a relative clause and an emphatic possessive pronoun, between an emphatic possessive pronoun and an adjective, and after an adjective in final position. But the noun can only occur in final position, all other orders being ungrammatical (glosses are simplified):

⁵⁰ Whether there is a restriction on the order of different types of adjectives (as, for example, discussed for other languages in Cinque 2010) remains to be seen. I take here NUM. only referring to cardinals. Whether there is an ordering restriction between cardinals and ordinals is not addressed here.

- (107) a. (*N.) > UNI. Q. > (*N.) > DEM. > (*N.) > REL. CL.
 (*ta pejkíra) čip (*ta pejkíra) até (*ta pejkíra) tu θorís
 all these that see.2SG
 > (*N.) > EMPH. POSS. > (*N.) > ADJ. > N.
 (*ta pejkíra) ta mána (*ta pejkíra) ta zóræ ta pejkíra
 the my the powerful the horses
 ‘all these powerful horses of mine that you see’

The examples in (107b–g) reveal that a modifier causes ungrammaticality if it occupies any other position than the one defined for it in (105). If there are multiple modifiers, adjectives must occur between the noun and the numeral (107b); numerals are grammatical only between an emphatic possessive pronoun and adjectives (107c); an emphatic possessive pronoun is grammatical only between a relative clause and a numeral (107d); a relative clause can occur only between a demonstrative and an emphatic possessive pronoun (107e); a demonstrative is grammatical only between a quantifier and a relative clause (107f); and a quantifier is grammatical only in initial position, before a demonstrative (107g):

- (107) b. (*ADJ.) > DEM. > (*ADJ.) > REL. CL. > (*ADJ.) > EMPH. POSS.
 (*ta zóræ) até (*ta zóræ) tu θorís (*ta zóræ) ta mána
 these that see.2SG the my
 > (*ADJ.) > NUM. > ADJ. > N.
 (*ta zóræ) ta ěíu ta zóræ ta pejkíra
 the two the powerful the horses
 ‘these two powerful horses that you see’
- c. (*NUM.) > DEM. > (*NUM.) > REL. CL. > (*NUM.) > EMPH. POSS. >
 (*ta ěíu) até (*ta ěíu) tu θorís (*ta ěíu) ta mána
 these that see.2SG the my
 NUM. > ADJ. > (*NUM.) > N.
 ta ěíu ta zóræ (*ta ěíu) ta pejkíra
 the two the powerful the horses
 ‘these two powerful horses that you see’
- d. (*EMPH. POSS.) > DEM. > (*EMPH. POSS.) > REL. CL. > EMPH. POSS. >
 (*ta mána) até (*ta mána) tu θorís ta mána
 these that see.2SG the my
 NUM. > (*EMPH. POSS.) > ADJ. > (*EMPH. POSS.) > N.
 ta ěíu (*ta mána) ta zóræ (*ta mána) ta pejkíra
 the two the powerful the horses
 ‘these two powerful horses that you see’

- e. (*REL. CL.) > DEM. > REL. CL. > EMPH. POSS. > (*REL. CL.) > NUM.
 (*tu θorís) atáé tu θorís ta mána (*tu θorís) ta ḏíu
 these that see.2SG the my the two
 > (*REL. CL.) > ADJ. > (*REL. CL.) > N.
 (*tu θorís) ta zóræ (*tu θorís) ta pejkíra
 the powerful the horses
 ‘these two powerful horses that you see’
- f. (*DEM.) > UNI. Q. > DEM. > REL. CL. > (*DEM.) > EMPH. POSS. > (*DEM.)
 (*atáé) číp atáé tu θorís (*atáé) ta mána (*atáé)
 all these that see.2SG the my
 > ADJ. > (*DEM.) > N.
 ta zóræ (*atáé) ta pejkíra
 the powerful the horses
 ‘all these powerful horses of mine that you see’
- g. UNI. Q. > DEM. > (*UNI. Q.) > REL. CL. > (*UNI. Q.) > EMPH. POSS. >
 číp atáé (*číp) tu θorís (*číp) ta mána
 all these that see.2SG the my
 (*UNI. Q.) > ADJ. > (*UNI. Q.) > N.
 (*číp) ta zóræ (*číp) ta pejkíra
 the powerful the horses
 ‘all these powerful horses of mine that you see’

The examples given so far in (106–107) involve definite noun phrases, which display obligatory definiteness spread, i.e., the obligatory insertion of a neuter article that agrees with the head noun in number—but not in case or gender—before certain modifiers (see section 2.4.1.4). These articles are inserted before every adjective, numeral and emphatic possessive pronoun, but they are ungrammatical with demonstratives and quantifiers. They also do not occur with relative clauses (cf. (100a)). Therefore, we can conclude that the obligatory definiteness spread targets only a portion of the noun phrase, as schematized in (108).^{51,52}

⁵¹ Possessive genitives do not show this phenomenon (cf. (99a)), although they occur in the same position as emphatic pronouns, which do.

⁵² Clitic possessive pronouns (see Table 2.22) follow the noun in neutral word order if there are pronominal modifiers—excluding emphatic possessive pronouns or genitive possessors, which are incompatible with clitic possessive pronouns, e.g., (i). They can also occur after numerals or adjectives, but not after relative clauses, demonstrative or quantifiers (ii) (glosses are simplified):

- (i) atáé tu θorís ta ḏíu ta zóræ ta pejkíra mu
 these that see.2SG the.PL two the.PL powerful.PL the.N.NOM.PL horse.N.NOM.PL my
 ‘my these two powerful horses that you see’

(108) The range of the obligatory definiteness spread

UNI. Q > DEM. > REL. CL. > GEN. POSS. / EMPH. POSS. > NUM. > ADJ. > N.
 [—————no def. spreading—————] [—————def. spreading—————]

The strict ordering among the modifiers given in (105), and exemplified with definite noun phrases in (106–107), is also valid for indefinite noun phrases. However, as mentioned previously, emphatic possessive pronouns, demonstratives or quantifiers do not occur as modifiers in indefinite noun phrases. Relative clauses, numerals and adjectives, however, can modify an indefinite noun, as long as the ordering restrictions in (105) are respected. The indefinite article *a(n)* precedes the adjectives (109a). It is incompatible with numerals (109b). Prenominal relative clauses must precede the indefinite article (cf. (110–110b); see also section 2.4.10.2.1 for headed relative clauses).⁵³

(109) a. a meraxlús kámi (*a) nomát
 a curious.SG bad.SG (*a) man.M.NOM.SG
 ‘a curious, bad man’

b. (*a) ěíu (*a) pejkíra
 (*a) two (*a) horse.N.NOM.PL
 ‘two horses’

(110) a. tu čo kačěf a čočúxi
 that not speak.IPFV.NPST.3SG a child.N.NOM.SG
 ‘a child who does not speak’

- (ii) a. atě (*mu) tu θorís (*mu) ta ěíu (mu) ta zóræ (mu) ta
 these that see.2SG the.PL two (my) the.PL powerful.PL (my) the.N.NOM.PL
 pejkíra
 horse.N.NOM.PL
 ‘these two powerful horses of mine that you see’
- b. číp(*mu)atě (*mu)tu θorís (*mu)ta zóræ (mu)ta pejkíra
 all these that see.2SG the.PL powerful.PL (my) the.N.NOM.PL horse.N.NOM.PL
 ‘all these powerful horses of mine that you see’

⁵³ Genitive possessors can occur in an indefinite noun phrase too, as long as they precede the indefinite article (cf. (i.a–b)).

- (i) a. s nékas a yerdannúxi
 the.F.GEN.SG woman.F.GEN.SG a necklace.N.NOM.SG
 ‘a necklace of the woman’
- b. * a s nékas yerdannúxi
 a the.F.GEN.SG woman.F.GEN.SG necklace.N.NOM.SG

- b. * a tu čo kačéf čočúxi
that not speak.IPFV.NPST.3SG child.N.NOM.SG

2.4.2 Clauses and their constitutive elements

Clauses in PhG can be simple, i.e., independent clauses with a finite verb and obligatory and optional constituents, such as a subject, direct and indirect objects and/or adverbs etc. Clauses can also be complex with two finite verbs in two clauses that are joined together via subordination, either as a complement of the verb of the main clause or as an adverbial clause (see sections 2.4.9, 2.4.10.3 for these complex clauses), or as the subject of the main clause (on which, see section 2.4.10.1). Finally, two finite clauses can also be coordinated by means of coordinators (see section 2.4.11.1.1 for clausal coordination). Clauses are classified according to their discourse function as declaratives, which chiefly make statements, interrogatives, which request information, exclamatory clauses, which are emphatic forms of making statements, and imperatives, which make a demand or a request (for these clause types, see section 2.4.3).

2.4.2.1 Subject

Subject noun phrases in PhG bear nominative case, and they agree with the verb in number and person, as the examples with an intransitive verb *xítáu* '(I) run' in (111) illustrate.

- (111) a. O nomát xítsin.
the.M.NOM.SG man.M.NOM.SG run.PFV.PST.3SG
'The man ran.'
- b. I nomáti xítsani.
the.M.NOM.PL man.M.NOM.PL run.PFV.PST.3PL
'The men ran.'

In (111a) above, the subject *o nomát* is singular, whereas in (111b) the subject *i nomáti* is plural. Both are third person. This information is encoded in the fusional suffixes *-in* and *-ani* respectively (see Table 2.19). The overt subjects do not have to precede the verb, they can also follow the latter. In both orders, the verb agrees with the subject:

- (111) c. Xítsin o nomát.
run.PFV.PST.3SG the.M.NOM.SG man.M.NOM.SG
'The man ran.'

1916:163–170, 1950:357; Andriotis 1948:47; Favis 1948:184) assumed that neuter and feminine indefinite nouns bear accusative case if they have the grammatical function of object; however, based on the fact that there is at least one instance where the indefinite objects are marked in nominative (i.e. masculine singular nouns), it is reasonable to assume, in line with Anastasiadis (1976) and Karatsareas (2011b), that nouns of all genders and numbers are nominative if they are indefinite objects.⁵⁵ Definite objects, on the other hand, appear as accusatives. The accusative marking on definite masculine and feminine nouns is visible either on the inflectional ending or on the definite article, or on both. Although there is syncretism between the nominative and accusative inflectional endings of neuter nouns, as well as between the neuter definite article in the nominative case and the same article in the accusative case, I assume that, analogous to definite masculine and feminine nouns, definite neuter nouns are also marked in the accusative when they are in the direct object position.

A direct object, whether definite or indefinite, usually follows the verb (113a–b). Yet, note that this is by no means obligatory. These objects can also occur before the verb. In this case there is a slight change in the interpretation, preverbal objects being more prominent in the discourse. In (113c–d), for example, the direct object receives a specific interpretation and it is emphasized such that it is contrasted to another entity in the discourse, e.g., ‘a/the motorbike’. The speaker mentions that s/he bought a/the car, as opposed to the another presupposed object, e.g., a/the motorcycle. Such discourse-related readings will be touched upon in section 2.4.7 and will be discussed extensively in chapter 3.

- (113) a. *γώρασα* *α* *τομόφιλι*.
 buy.PFV.PST.1SG a car.N.NOM.SG
 ‘I bought a car.’
- b. *γώρασα* *το* *τομόφιλι*.
 buy.PFV.PST.1SG the.N.ACC.SG car.N.ACC.SG
 ‘I bought the car’
- c. *Α* *τομόφιλι* *γώρασα*.
 a car.NOM.SG buy.PFV.PST.1SG
 ‘I bought a car(, not a motorcycle).’
- d. *Το* *τομόφιλι* *γώρασα*.
 the.N.ACC.SG car.M.ACC.SG buy.PFV.PST.1SG
 ‘I bought the car(, not the motorcycle).’

Direct objects can appear as object pronouns (i.e., personal pronouns in accusative

⁵⁵ See Anastasiadis (1976:90): “R. Dawkins[footnote omitted] [...] says that [nominative case instead of accusative on indefinite nouns, MB] is observed only in nouns ending in *-os*, but we see this not only in those [masculine *-os* nouns, MB] but in all of them [MB].”

case) as well. In PhG, there are two sets of object pronouns: strong and clitic ones (see Table 2.26–2.27 respectively).⁵⁶

Strong object pronouns		
	1	(e)mén(a)
SG	2	(e)sén(a)
	3	atóna ‘him’/ atína ‘her’/ ató ‘it’
	1	(e)más
PL	2	(e)sás
	3	atã ⁵⁷

Table 2.26: Strong object pronouns in PhG

Clitic object pronouns		
	1	mi
SG	2	si
	3	ta
	1	mis
PL	2	sis
	3	ta

Table 2.27: Clitic object pronouns in PhG⁵⁸

⁵⁶ It should be noted in passim that strong object pronouns also function as reflexives, for which there is no distinct set of pronouns in PhG (see also Anastasiadis 1976:158):

- (i) a. (γo) íða ména son ainá.
 I see.PFV.PST.1SG me in.the.M.ACC.SG mirror.M.ACC.SG
 ‘I saw me, i.e., myself, on the mirror.’
 b. (Si) íðis eséna son ainá.
 you.NOM see.PFV.PST.1SG you.ACC in.the.M.ACC.SG mirror.M.ACC.SG
 ‘You saw you, i.e., yourself, on the mirror.’

⁵⁷ Outside the village of Varašos, *atúta* ‘them’ is observed.

⁵⁸ In Varašos, the forms are *me, se, ta, mes, ses, ta*, with no raising of [e] to [i] (cf. section 2.2.2.3). The third person clitic object pronoun can also be [ʰda] after (overt/hidden) nasals (see also section 2.4.4.1.1 on this issue, and Anastasiadis 1976:144–146, 2α-γ for the lack of distinction between third person singular and third person plural clitic object pronouns).

- (116) a. To tomořli, řórasa ta.
 the.N.ACC.SG car.N.ACC.SG buy.PFV.PST.3SG 3OBJ
 ‘As for the car, I bought it.’
- b. řórasa ta to tomořli.
 buy.PFV.PST.3SG 3OBJ the.N.ACC.SG car.N.ACC.SG
 ‘I bought the car.’
- c. řórasa to tomořli.
 buy.PFV.PST.3SG the.N.ACC.SG car.N.ACC.SG
 ‘I bought the car.’

In the recordings, there are abundant cases like (116b), where the object clitic accompanies a post-verbal direct object with which it is co-referential. There are even cases where the object noun with which the object clitic is co-referential is indefinite:

- (117) Trónkan ta an kóma řěj.
 eat.IPFV.PST.3PL 3OBJ a piece.N.NOM.SG thing.N.NOM.SG
 ‘They used to eat a little bit of something.’ [9:13.43–13.44]

The frequent occurrence of the third person object clitic with a postverbal direct object in PhG has repeatedly been noted in the literature (Dawkins 1916:172; Favis 1948:178–180, Δ; Janse 1998b:539–540) and is observed in the written texts as well. Due to the high frequency of this co-occurrence, Janse (1998b:540) defines the invariant third person object clitic in cases such as (116b, 117) as a “quasi-obligatory object marker”, an idea which I adopt here.

2.4.2.3 Indirect object

Ditransitive verbs such as *řitu* ‘(I) give’, *řeu* ‘(I) say’ have two objects, one direct and the other indirect. The indirect object is usually the recipient or the benefactor of the action expressed by the verb. Although various MG dialects, including SMG, make a morpho-syntactic distinction between a direct object and an indirect one, e.g., marking the latter in the genitive or expressing it as a prepositional phrase (Holton et al. 1997:250–256; Manoleßou and Beis 2006), PhG marks both the direct and the indirect objects with the accusative if they are both definite (see a.o., Andriotis 1948:50; Favis 1948:190–191, IB; Anastasiadis 1976:89.§VI, 1,α; Manoleßou and Beis 2006:222). The indirect definite object nouns can both precede (118a) and follow (118b) the direct object.

- (118) a. řóřin to nomáti ta parářa.
 give.PFV.PST.3SG the.M.ACC.SG man.M.ACC.SG the.N.ACC.PL money.N.ACC.PL
 ‘She gave the money to the man.’

- b. *ďóčín ta paráďa to nomáti.*
 give.PFV.PST.3SG the.N.ACC.PL money.N.ACC.PL the.M.ACC.SG man.M.ACC.SG
 ‘She gave the money to the man.’

Indirect definite objects can also be expressed by the strong and the clitic object pronouns given in Tables 2.26–2.27. Clitic indirect objects immediately follow the verb (if there are no preverbal constituents that can influence their position; see section 2.4.8); cf. (119a) with (119b–c).

- (119) a. *ďóčín mi ta paráďa.*
 give.PFV.PST.3SG 1SG.OBJ the.N.ACC.PL money.N.ACC.PL
 ‘She gave me the money.’
 b. **ďóčín ta paráďa mi.*
 give.PFV.PST.3SG the.N.ACC.PL money.N.ACC.PL 1SG.OBJ
 c. **Mi ďóčín ta paráďa.*
 1SG.OBJ give.PFV.PST.3SG the.N.ACC.PL money.N.ACC.PL

Strong personal pronouns functioning as indirect objects, however, can both precede (120a,b) and follow (120c) the direct object.

- (120) a. *ďóčín eména ta paráďa.*
 give.PFV.PST.3SG me the.N.ACC.PL money.N.ACC.PL
 ‘She gave the money to me.’
 b. *Eména ďóčín ta paráďa.*
 me give.PFV.PST.3SG the.N.ACC.PL money.N.ACC.PL
 ‘It is me whom she gave the money(, not my brother).’
 c. *ďóčín ta paráďa eména.*
 give.PFV.PST.3SG the.N.ACC.PL money.N.ACC.PL me
 ‘She gave the money to me.’

Both strong pronouns and noun phrases that function as the indirect object of a clause can occur in the pre-verbal position. In this case there are two possibilities. Either the nominal is used as such (120b,121), or it is doubled by a coreferential clitic (122). In the absence of a clitic co-referential with the indirect object, the preverbal indirect object receives a contrastive reading (120b,121); on the other hand, if a clitic does co-occur with the pre-verbal indirect object, this object receives a prominent role in the discourse (122). For further information on these issues, see section 2.4.7 and chapter 3).

- (121) *To nomáti ďóčín ta paráďa.*
 the.M.ACC.SG man.M.ACC.SG give.PFV.PST.3SG the.N.ACC.PL money.N.ACC.PL
 ‘It is the man whom she gave the money to(, not the woman).’

- (122) a. To nomáti, đóčin ta ta paráđa.
 the.M.ACC.SG man.M.ACC.SG give.PFV.PST.3SG 3OBJ the.N.ACC.PL money.N.ACC.PL
 ‘As for the man, she gave the money to him.’
- b. Ména, đóčin mi ta paráđa.
 me give.PFV.PST.3SG 1SG.OBJ the.N.ACC.PL money.N.ACC.PL
 ‘As for me, she gave the money to me.’

Both direct and indirect objects can be expressed by strong and clitic pronouns in the same clause. Strong personal pronouns act as noun phrases in the sense that they have the same (positional) distribution as noun phrases. Both can appear in either order. For clitic pronouns, however, the indirect object precedes the direct object. The fact that the order between the two is “IO > DO” is shown by the contrast between the grammatical cases in (123a, 124a) and the ungrammatical cases in (123b, 124b) (see also section 2.4.8 for the fact that this order is retained when the two clitics are in the preverbal position as well):⁶⁰

- (123) a. Pe mi ta!
 tell.PFV.IMP.2SG 1SG.OBJ 3OBJ
 ‘Tell it/them to me!’
- b. *Pe ta mi!
 tell.PFV.IMP.2SG 3OBJ 1SG.OBJ

⁶⁰ Apparent counterexamples cited in Janse (1998a:268. ex. (31a,32b), originally from Dawkins 1916:474.28, 518.30), which show the reverse order, i.e., “DO > IO”, should be treated with care. The examples are reproduced in (i) with slight adaptations in glosses.

- (i) a. Ifarés ta mas.
 bring.PFV.PST.2SG 3OBJ us
 ‘You brought it to us.’
- b. Čo puás ta mas?
 not sell.IPFV.NPST.2SG 3OBJ us
 ‘Will you not sell it to us?’

Note that in both examples, the indirect object is *mas*, which is presumably the strong object pronoun (*e)más* (hence my translations in (i), and not the clitic object pronoun *mis/mes* (see Tables 2.26–2.27 and fn. 58). This is supported by the corrections in Theodoridis (1939). In these corrections the examples in (i) are rewritten as in (ii) where the clitic order is IO < DO. Observe also the fact that the morphological shape of the IO clitics in (ii) are distinct from IO strong pronouns in (i).

- (i) a. Ifarés mes ta.
 bring.PFV.PST.2SG 1PL.OBJ 3OBJ
 ‘You brought it to us.’
 (Theodoridis 1939:A.28)
- b. Čo puás mes ta?
 not sell.IPFV.NPST.2SG 1PL.OBJ 3OBJ
 ‘Will you not sell it to us?’
 (Theodoridis 1939:B.223)

- (124) a. *ďóka si ta.*
 give.PFV.PST.1SG 2SG.OBJ 3OBJ
 ‘I gave it to you.’
- b. **ďóka ta si.*
 give.PFV.PST.1SG 3OBJ 2SG.OBJ

A strong direct object personal pronoun and a strong indirect object personal pronoun do not co-occur if both have the same person and number features, e.g., **eména eména* ‘me to me’. First and second person strong object pronouns do not co-occur either, e.g., **eména eséna* ‘you to me’, **esás emás* ‘us to you’, etc. Similarly a clitic pronoun with the grammatical function of direct object and a clitic pronoun with the grammatical function of indirect object do not co-occur if both have the identical person and number features, e.g., **mi mi* ‘me to me’ or they are first and second person clitic pronouns, e.g., **mi si* ‘me to you’, **si mi* ‘me to you’. Even when the referents of the third person direct object clitic and the third person indirect object clitic are distinct, they still cannot co-occur, i.e., **ta ta* ‘him/it/her/them to him/it/her/them’.

Indirect objects can only be expressed as prepositional phrases if they are indefinite. The object is marked in the nominative (Anastasiadis 1976:120,3.α’) (which is overtly visible only in singular masculine nouns, see section 2.3.2.1). The preposition that is employed is *s* ‘to/at/in/on/from’ (Karatsareas 2016:62), which combines with the indefinite article *a(n)*. An indefinite indirect object may follow (125a) or precede the direct object (125b).

- (125) a. *ďóčin ta paráďa sa nomát.*
 give.PFV.PST.3SG the.N.ACC.PL money.N.ACC.PL to.a man.M.NOM.SG
 ‘She gave the money to a man.’
- b. *ďóčin sa nomát ta paráďa.*
 give.PFV.PST.3SG to.a man.M.NOM.SG the.N.ACC.PL money.N.ACC.PL
 ‘She gave the money to a man.’

2.4.2.4 Obliques and prepositional adjuncts

Apart from the core arguments such as the subject, direct object and/or indirect object, a clause in PhG can also contain oblique arguments, which are dependent on the valency of the verb, or oblique adjuncts, which are not dependent on the valency of the verb. Oblique constituents are expressed as prepositional phrases, mostly with the multifunctional *s* ‘to/at/in/on/from’. This preposition combines with the accusative form of the definite article and causes the elision of the initial *t*- of the article:

- c. [ðexús t eséna] čo paénu.
 without you.ACC.SG not go.IPFV.NPST.1SG
 ‘I am not going without you.’

The preposition *s* often accompanies adverbs which follow the complement noun of the preposition and which express more precise spatial relations, yielding circumpositions of the type [*s* + N + ADV] (Karatsareas 2016; Karatsareas and Georgakopoulos 2016). Some of these adverbs are *pánu* ‘above’, *pokátu* ‘under’, *bro* ‘before/in front of’, *pésu* ‘inside’, *óksu* ‘outside’, *námesa* ‘between’, *dáma* ‘together’ and *písu* ‘behind’:⁶²

- (130) a. Émbin so spíti pésu.
 enter.PFV.PST.3SG in.the.N.ACC.SG house.N.ACC.SG inside
 ‘She entered (inside) the house.’
 b. MUYUÉNKANTI san káči písu.
 hide.NACT.IPFV.PST.3PL in.a rock.N.ACC.SG behind
 ‘They were hiding behind a rock.’

2.4.3 Simple clause types: a semantico-pragmatic classification

2.4.3.1 Declarative clauses

A declarative clause typically conveys a statement.⁶³ Declarative clauses can be affirmative or negative (see section 2.4.5 on clausal negation). In most declarative clauses with an overt subject, the subject either precedes the verb, yielding the order S(ubject)-V(erb)-((DO)-(P(repositional)P(hrase)/IO)), or it directly follows the verb, yielding the order V-S-((DO)-(PP/IO)). In declarative clauses without the marking of discourse prominence either through special emphasis on a constituent or putting a constituent other than the subject in preverbal position (see section 2.4.7, and chapter 3), the clause is also not associated with a particularly marked intonation contour except for a falling intonation towards the end, and the nuclear stress falls on the final stressed word of the clause (in (131a–131b) the stress is indicated with italics). Evidence for these intonation patterns is provided in section 3.2.2.4).

⁶² There are also monolectic adverbs such as *ačí* ‘there’, *tineví* ‘tomorrow’, *tarná* ‘fast/immediately’ etc. Adverbial adjuncts can also be expressed by subordinate clauses. See section 2.4.10.3 for discussion of the latter.

⁶³ Declarative clauses can also have non-default directive readings, analogous to the English example in (i):

- (i) You finish your lunch and go to bed.

- (131) a. S-V-DO-PP
 O nomát piésin to rkúďi
 the.M.NOM.SG man.M.NOM.SG catch.PFV.PST.3SG the.N.ACC.SG bear.N.ACC.SG
 so *rmáni.*
 in.the.N.ACC.SG forest.N.ACC.SG
 ‘The man caught the bear in the forest.’
- b. V-S-DO-PP
 Piésin o nomát to rkúďi
 catch.PFV.PST.3SG the.M.NOM.SG man.M.NOM.SG the.N.ACC.SG bear.N.ACC.SG
 so *rmáni.*
 in.the.N.ACC.SG forest.N.ACC.SG
 ‘The man caught the bear in the forest.’

PhG allows all possible word order permutations in a declarative clause. Below, only a few permutations with the constituents S, V, DO and PP are illustrated (glosses in the examples in (132) are simplified):⁶⁴

- (132) a. O nomát piésin so *rmáni* to rkúďi. (S-V-PP-DO)
 the man caught in.the forest the bear
 ‘The man caught the bear in the forest.’
- b. O nomát so *rmáni* piésin to rkúďi. (S-PP-V-DO)
 the man in.the forest caught the bear
- c. Piésin to rkúďi o nomát so *rmáni.* (V-DO-S-PP)
 caught the bear the man in.the forest
- d. Piésin so *rmáni* o nomát to rkúďi. (V-PP-S-DO)
 caught in.the forest the man the bear
- e. So *rmáni* o nomát to rkúďi piésin. (PP-S-DO-V)
 in.the forest the man the bear caught
- f. So *rmáni* to rkúďi o nomát piésin ta. (PP-DO-S-V)
 in.the forest the bear the man caught 3OBJ
- g. To rkúďi o nomát so *rmáni* piésin ta (DO-S-PP-V)
 the bear the man in.the forest caught 3OBJ
- h. To rkúďi o nomát piésin ta so *rmáni.* (DO-S-V-PP)
 the bear the man caught 3OBJ in.the forest

⁶⁴ Without a clitic object pronoun that is co-referential with the direct object, the clauses in (132f–i) are ungrammatical. See section 2.4.7 for an initial description of these clauses and chapter 3 for an exhaustive discussion of them.

- i. To rkúđi so rmáni o nomát piésin ta. (DO-PP-S-V)
 the bear in.the forest the man caught 3OBJ
 ∴ ∴ ∴

It should be noted that the examples in (131–132) do not have precisely the same interpretation in all cases. The differences in word order reflect different discourse readings of certain constituents. I return to this point briefly in section 2.4.7 and discuss it in detail in chapter 3.

2.4.3.2 Interrogative clauses

Similar to various other languages—particularly SMG—PhG distinguishes interrogative clauses, i.e., clauses which express questions and are employed to request information, from declarative clauses either by means of intonation (in yes/no, or polar, questions) or by means of a marked word order and through the employment of *wh*-words (in *wh*-, or content, questions).⁶⁵ I present these two types of interrogative clauses in turn.

2.4.3.2.1 Yes/No questions A yes/no question minimally requires either a ‘yes’ or ‘no’ answer. These questions have a typical rise-fall intonation; that is to say, an initial pitch rise is immediately followed by a deep fall at the end of the clause. In Figure 2.3, below, which is the pitch track of (133), the characteristic rise-fall intonation contour is at the end of the clause, on the PP *so rmáni* ‘in the forest’.

- (133) O nomát piésin to rkúđi
 the.M.NOM.SG man.M.NOM.SG catch.PFV.PST.3SG the.N.ACC.SG bear.N.ACC.SG
 so rmáni?
 in.the.N.ACC.SG forest.N.ACC.SG
 ‘Did the man catch the bear in the forest?’

The information sought as an answer can be related to the whole question, as is the case in (133), or each constituent or even a sub-constituent of a phrase can be questioned. In such cases in one type of question, the main stress falls on the (sub-)constituent in question with rising intonation. In (134a), for example, the intonational stress (indicated with italics) is on the direct object *to rkúđi* ‘the bear’.

- (134) a. O nomát piésin (ta) to *rkúđi*?
 the.M.NOM.SG man.M.NOM.SG catch.PFV.PST.3SG 3OBJ the.N.ACC.SG bear.N.ACC.SG
 ‘Did the man catch the bear?’

⁶⁵ Questions can also be rhetorical, in that they do not request information or the answer is obvious.

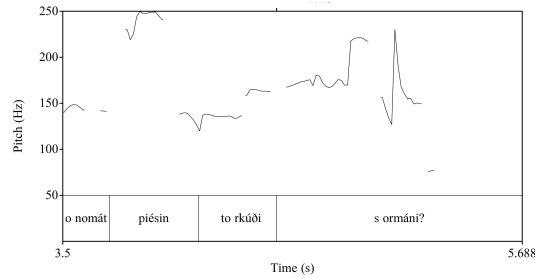


Figure 2.3: Pitch track of (133)

The answer to (134b) can be a ‘yes’ or a ‘no’; if the answer is ‘no’, then this can be followed by ‘...he caught the wolf’. Notice that the same constituent can also be made discourse prominent if it occurs in preverbal position (section 2.4.7, and chapter 3):

- (134) b. To rkúði, piésin ta o nomát?
 the.N.ACC.SG bear.N.ACC.SG catch.PFV.PST.3SG 3OBJ the.M.NOM.SG man.M.NOM.SG
 ‘As for the bear, did the man catch it?’

In texts written by Theodoros Theodoridis—but not in Dawkins 1916, or in other texts—the particle *ma* occurs infrequently at the end of a yes/no-question (for more examples, see Theodoridis 1960:228.24, 232.13, 232.20, 1964:278.7, 278.33, 286.22, 1966:66.35, 92.3, 100.21, 128.18):

- (135) Aðé ta meiváðe éftasan ma?
 here the.N.NOM.PL fruit.N.NOM.PL ripen.PFV.PST.3PL PRT
 ‘Has the fruit ripened here?’ (Theodoridis 1960:246.31)

Anastasiadis (1976:256, 2.α’) further documents the existence of the particle *ma* in yes/no questions by stating that “the question particle *ma* (=I wonder, by any chance) is often put at the end of questions for emphasis [MB]”, and he further argues that “the particle is originally the Turkish enclitic particle *ml* which is employed at the end of the question, immediately after the word that is under the question [MB]” (Anastasiadis 1976:256, 2.β’). The Turkish question marker *ml* is employed in Cappadocian dialects (Bağrıaçık 2013); however, unlike in Cappadocian, the so-called question particle *ma* in PhG is formally identical with the emphatic negation particle *ma* ‘not’ (see section 2.4.5.2 for emphatic negation). Moreover, at least today, if *ma* is employed at the end of a yes/no-question, there is always a minor prosodic break

between the question and the particle, and the question does not bear the characteristic intonation contour of rise-fall. Rather, the intonational stress is found on *ma* as a rising accent. When all these facts are taken into consideration, it is safe to assume that *ma* functions instead as a question tag. Therefore, (135) is translated better as follows ‘Here the fruit has ripened, hasn’t it?’.

An alternative yes/no-question is formed by conjoining a positive interrogative clause with a negative interrogative clause (see section 2.4.5 for negation) with the disjunctive coordinators *jóyusa* or *jóxsa(m)* ‘or, otherwise’ (< T. *yoksa*; see section 2.4.11.1.1 for clausal coordination):

- (136) Liéyusis jóyusa čo liéyusis?
 get.tired.PFV.PST.2SG or not get.tired.PFV.PST.2SG
 ‘Did you get tired or not?’

Typical answers to a yes/no question are *úna/xe* ‘yes’ or *ána/jóx* ‘no’.

2.4.3.2.2 Wh-questions A *wh*-question seeks information about a specific constituent of the clause that is replaced by an appropriate *wh*-word. In a given clause, constituents with various functions and of different categories can be replaced with a *wh*-word, which may also be combined with prepositions. The *wh*-words in PhG are given in Table 2.28. Notice in Table 2.28 that the *wh*-word for *tis* ‘who’ has two forms: *tis* (‘who’ in the nominative) and *tína* (‘whom’ in the accusative).⁶⁶

<i>Wh</i> -word	Function
<i>tis/tína</i> ‘who/whom’	subject/object (person)
<i>pos</i> ‘what’	subject/object (thing)
<i>to píu</i> ‘which’	quality
<i>náatar(a)</i> ‘how much/how many’	quantity
<i>póti</i> ‘when’	time
<i>tus</i> ‘how’	manner/means
<i>pu/kánde</i> ‘(to) where’	location/direction
<i>túnus</i> ‘whose’	possession
<i>títi/sotípos</i> ‘why’	reason

Table 2.28: *Wh*-words in PhG

The *wh*-word replacing a specific constituent of the clause also receives the prominent stress of that clause. Unlike declarative clauses or yes/no questions, there are two

⁶⁶ The *wh*-word *sotípos* ‘why’ is given only by one speaker whose parents are both from Varašos.

obligatory changes in the word order in *wh*-questions. First, a *wh*-word must occur to the left of the verb, never to the right, cf. (137a–b).

- (137) a. Pos *γρέvis*?
 what want.IPFV.NPST.2SG
 ‘What do you want?’
- b. * *γρέvis* pos?
 want.IPFV.NPST.2SG what

Second, with one exception (see example (140) below), the *wh*-word and the verb of the question must be contiguous in this order. In other words, arguments or adjuncts of a clause cannot break the sequence *wh*-word – verb. This is illustrated by the examples in (138). The overt pronominal subject is ungrammatical if it occurs between the *wh*-word *pos* ‘what’ and the verb *γρέvis* ‘you want’ (138a), whereas it is grammatical if it follows the verb (138b) or precedes the *wh*-word (138a) (the latter word order yields a slight interpretational difference, as the translation illustrates; see also section 2.4.7).

- (138) a. * Pos *si* *γρέvis*?
 what YOU.NOM.SG want.IPFV.NPST.2SG
 int.: ‘What do you want?’
- b. Pos *γρέvis* *si*?
 what want.IPFV.NPST.2SG YOU.NOM.SG
 ‘What do you want?’
- c. Si *pos* *γρέvis*?
 YOU.NOM.SG what want.IPFV.NPST.2SG
 ‘You, what do you want?’

Phonetically weak elements, such as clitic pronouns, the subjunctive particle, future particles; or negation markers (either just one of the elements, or some or all of them combined) are exempt from this rule: they can occur between the *wh*-word and the verb. This point is illustrated below with the clitic object pronoun *ta*. For the rest of the weak elements, see sections 2.4.4–2.4.5.

- (139) Pos *ta* *ḡócis*?
 what 3OBJ give.PFV.PST.2SG
 ‘What did you give him?’

There is one instance where the occurrence of arguments or adjuncts between a *wh*-word and the verb is rather free. If the *wh*-word is *sotípus/tití* ‘why’, then some phonologically non-deficient constituent can interpolate between the two, as the grammatical placement of the subject *o nomát* ‘the man’ between *tití* ‘why’ and the verb *piésin* ‘he caught’ in (140) illustrates.

- (140) Tití o nomát piésin to rkúđi?
 why the.M.NOM.SG man.M.NOM.SG catch.PFV.PST.3SG the.N.ACC.SG bear.N.ACC.SG
 ‘Why did the man catch the bear?’

More than one constituent within the same clause can be questioned at the same time, in which case all *wh*-words are placed to the left of the verb. It is ungrammatical for a *wh*-word to occur to the right of the verb; see the contrasts between the minimal pairs in (141–143).⁶⁷

- (141) a. Tis tína pítaksin?
 who.NOM whom.ACC send.PFV.PST.3SG
 ‘Who sent whom?’
 b. *Tis pítaksin tína?
 who.NOM send.PFV.PST.3SG whom.ACC
- (142) a. Tína pos pítaksin?
 who.ACC what send.PFV.PST.3SG
 ‘What did she send to whom?’
 b. *Tína pítaksin pos?
 who.ACC send.PFV.PST.3SG what
- (143) a. Tis mo tína (dáma) írtin?
 who.NOM with who.ACC together come.PST.PFV.3SG
 ‘Who came together with whom?’
 b. *Tis írtin mo tína (dáma)?
 who.NOM come.PST.PFV.3SG with who.ACC together

The *wh*-words that occur to the left of the verb form a rigid sequence which cannot be interrupted by any constituent, as the ungrammaticality of the follow example illustrates: the subject *si* ‘you’ cannot intervene between the two *wh*-words:

- (144) (Si) tína (*si) pos pítaksis?
 you.NOM.SG who.ACC what send.PST.PFV.2SG
 ‘What did you send to whom?’

Multiple *wh*-words also must be immediately adjacent to the verb, as the ungrammaticality of the subject *si* ‘you’ before the verb in (145a) illustrates. However, phonologically weak elements such as the future particle can be placed between the *wh*-word-cluster and the verb (145b), and moreover, if the last *wh*-word of the cluster is *sotípus/tití* ‘why’, then a constituent can also occur immediately after it

⁶⁷ Admittedly, two speakers allow *wh*-phrases *tína* ‘whom?’ in (141) and *mo tína (dáma)* ‘with whom’ in (143) in postverbal position. This might be attributed to influence of SMG, which does allow these orders.

(145c). These constraints are identical to those for contexts with only one *wh*-word (see (138a, 139–140)).

- (145) a. *Tína pos (*si) pítaksis (si)?*
 who.ACC what send.PST.PFV.2SG you.NOM.SG
 ‘What did you send to whom?’
- b. *Tína pos a piták?*
 who.ACC what FUT.DEF send.PFV.NPST.2SG
 ‘What are you going to send to whom?’
- c. *Tína tití o nomát krúi?*
 who.ACC why the.M.NOM.SG man.M.NOM.SG hit.IPFV.NPST.3SG
 ‘Why is the man hitting whom?’

In a cluster of *wh*-words, the order is as shown in (146) and illustrated in (147a). Any deviation from this order is judged ungrammatical (147b).

- (146) SUBJ IO DO ADJUNCT⁶⁸
tis > tína > pos/tína > tití/póti/ pu/tus, etc.

- (147) a. *Tis tína pos póti pítaksin?*
 who.NOM who.NOM what when send.PFV.PST.3SG
 ‘Who sent what to whom when?’

$$b. * \left\{ \begin{array}{cccc} \text{Tis} & \text{tína} & \text{póti} & \text{pos} \\ \text{Tína} & \text{tis} & \text{póti} & \text{pos} \\ \text{Pos} & \text{tis} & \text{póti} & \text{tína} \\ \text{Póti} & \text{pos} & \text{tína} & \text{tis} \\ \vdots & \vdots & \vdots & \vdots \end{array} \right\} \text{pítaksin?}$$

Phrases that are formed with the *wh*-words *túnus* ‘whose’ and *to píu* ‘which’ precede all the other *wh*-words, even if this leads to a violation of the ordering restriction given in (146):^{69,70}

⁶⁸ Whether there are any (rigid) ordering restrictions between various types of adjuncts remains to be seen.

⁶⁹ The *wh*-word *to píu* ‘which’ is composed of the neuter definite singular article *to* and the interrogative *píu* ‘which’. The interrogative is an inherited *wh*-word (cf. SMG ποιος [pjos] ‘who/which.M.NOM.SG’). Anastasiadis (1976:162, Z1) states that *píu* alone exists in PhG, attributing this to Andriotis (1948:50). I was not able to elicit *píu* from speakers without a definite article. Moreover, Andriotis (1948:50) also gives this interrogative with the plural neuter definite article *ta*, i.e., *ta píu*. I could not verify this with the speakers either.

⁷⁰ The clitic object pronoun *ta* in (148a) seems to be required in order for this clause to be grammatical. This is also true for the examples in (149a–150) below.

- (148) a. Túnus to pejkíri tis tína ðóčin ta?
 whose the.N.ACC.SG horse.N.ACC.SG who.NOM who.ACC give.PFV.PST.3SG 3OBJ
 ‘Who gave whose horse to whom?’
- b. So píu to nomáti tis pos ðóčin?
 to.which the.M.ACC.SG man.M.ACC.SG who.NOM what give.PFV.PST.3SG
 ‘Who gave what to which man?’

The occurrence of these *wh*-phrases in any other position, i.e., between other *wh*-phrases, between the *wh*-word-cluster and the verb, and following the verb, is ungrammatical:

- (149) a. Tis (*túnus to pejkíri) tína (*túnus to pejkíri) ðóčin ta (*túnus to pejkíri)?
 b. Tis (*so píu to nomáti) pos (*so píu to nomáti) ðóčin (*so píu to nomáti)?

If both *wh*-words *túnus* ‘whose’ and *to píu* ‘which’ co-occur in the same clause with other *wh*-words, they both must precede the other *wh*-words. Between the two, however, there is no rigid ordering. One can precede or follow the other:

- (150) a. So píu to nomáti túnus to pejkíri
 to.which the.M.ACC.SG man.M.ACC.SG whose the.N.ACC.SG horse.N.ACC.SG
 tis ðóčin ta?
 who.NOM give.PFV.PST.3SG 3OBJ
 ‘Who gave whose horse to which man?’
- b. Túnus to pejkíri so píu to nomáti
 whose the.N.ACC.SG horse.N.ACC.SG to.which the.M.ACC.SG man.M.ACC.SG
 tis ðóčin ta?
 who.NOM give.PFV.PST.3SG 3OBJ

If a *wh*-phrase is a complement of a preposition, the *wh*-phrase and the preposition both precedes the verb (151a); in other words, “preposition stranding” is ungrammatical (151b).

- (151) a. Mo tína írtis?
 with who.ACC come.PFV.PST.2SG
 ‘With whom did you come?’
- b. *Tína írtis mo?
 who.ACC come.PFV.PST.2SG with
 ‘With whom did you come?’

2.4.3.3 Imperative clauses

An imperative clause is typically used to express commands, orders, instructions, wishes and requests. It is characterized by the use of a verb in the imperative mood,

which was discussed in section 2.3.2.2. However, it should be noted that verbs in the imperative mood are used only in clauses with positive polarity. Moreover, these imperative verbs cannot occur in complement clauses (see also section 2.4.9.1.3) For prohibitives, i.e., negative imperative clauses, see section 2.4.5.3.

The grammatical subject of an imperative clause is implicit in the imperative form of the verb. Occasionally, it can be stated by means of the second singular or plural personal pronouns or by the use of a vocative, which can either be placed before the verb or after the verb (152–153).

- (152) a. Si pársip ta!
 YOU.NOM.SG clean.PFV.IMP.2SG 3OBJ
 ‘You (sg.) clean it!’
 b. Pársip ta si!
 clean.PFV.IMP.2SG 3OBJ YOU.NOM.SG
- (153) a. Éu Nerkíza, pársip ta!
 INTRJ Nerkiza.VOC clean.PFV.IMP.2SG 3OBJ
 ‘Hey Nerkiza, clean it!’
 b. Pársip ta éu Nerkíza!
 clean.PFV.IMP.2SG 3OBJ INTRJ Nerkiza.VOC

A periphrastic way of expressing orders is to use the preverbal subjunctive particle *na* or the hortative particle *s*. The use of these two particles is illustrated in sections 2.4.4.2–2.4.4.3 respectively. Here, I simply state for the time being that periphrastic imperatives with *na* and *s* are not confined to second singular and plural persons but can be used with all persons of both numbers. See, for example, (154–155).

- (154) a. Na ipás tarná!
 SUBJ GO.PFV.NPST.2SG quickly
 ‘Go fast!’ / ‘You should go fast!’
 b. S ipás tarná!
 HORT GO.PFV.NPST.2SG quickly
 ‘You should go fast!’
- (155) a. Na nárti!
 SUBJ COME.PFV.NPST.3SG
 ‘Let her come!’ / ‘She should come!’
 b. S nárti!
 HORT COME.PFV.NPST.3SG
 ‘Let her come!’ / ‘She should come!’

For more information on the modal readings *na* and *s* give rise to, see sections 2.4.4.2–2.4.4.3.

2.4.3.4 Exclamatory clauses

One type of exclamation, emphatic clauses, is formed by the employment of the clause-final particle *ki*. When *ki* is used, the speaker aims to raise the credibility of the proposition in the clause:

- (156) Típus čo ípa ki!
 nothing not say.PFV.PST.1SG PRT
 ‘I did not (really) say anything!’

This *ki* particle is discussed in detail in chapter 4.

In another type of exclamation, a declarative clause is followed by the disjunction *ja* ‘but’ and an exclamative with obligatory ellipsis of the presupposed part:

- (157) Piésin an pulpúli ja tus íni!
 catch.PFV.PST.3SG a nightingale.N.NOM.SG but how be.NPST.3SG
 ‘She caught a nightingale, but what a nightingale!’

2.4.4 Modal particles

In this section, I provide an overview of certain particles that combine with (a form) of the finite verb and which give rise to a variety of modal readings, such as future, subjunctive, hortative etc. These particles combine only with verb forms in the non-imperative mood, they are phonologically weak, and they do not inflect. All of these particles occur immediately before the verb and are thus phonologically proclitics (see however sections 2.4.4.1 and 2.4.8 for the placement relative to clitic object pronouns).

2.4.4.1 Future particles

Future in PhG is expressed periphrastically with certain particles. There are no verbal inflections to specifically express future. These particles in general give rise to a variety of modal readings—except for expressing future—hence I include these future particles within the set of modal particles (see Tsangalidis 1999 for a similar approach to the future particle in SMG).

The future particles in PhG are *a*, *éna* and *xa*. All of these must immediately precede the verb; i.e., no argument or adjunct constituent can be placed between them and the verb. The only exception to this is the clitic object pronouns which can, and in fact must, occur in between the particle(s) and the verb, yielding the order in (158).

- (158) *a/éna/xa* – clitic pronouns – verb

This point is undertaken again in section 2.4.8. In the next three sections, I provide the functions of the three particles in turn.

2.4.4.1.1 *a* The particle *a* prototypically expresses the realis future. It has probably grammaticalized from the Medieval periphrastic future *θέλο* ‘I want’ + *na* ‘subjunctive’ (Horrocks 2010[1997]:302; Pappas and Joseph 2001; Joseph and Pappas 2002; Markopoulos 2009:164–208, §5.4), with further morpho-phonological reductions in the form of *θα na* > *a na* > *a*. The stages of this grammaticalization can be observed in other MG dialects today (see especially Markopoulos 2006 for an overview of the future particles in MG dialects and Anastasiadis 1976:184 specifically for PhG). Even though today the subjunctive particle *na* (on which see section 2.4.4.2) is ungrammatical with *a* (159a), there is a reason to believe that at an earlier stage *a-na* coexisted to express the future: when the particle *a* precedes a verb which is vowel initial, the verb is heard as /n/-initial (159b). Similarly, when the third person clitic pronoun *ta* occurs between *a* and the verb, it is heard as [ʰda] with an apparent initial nasal /n/ (159c).

- (159) a. A (*na) kačévu.
 FUT.DEF SUBJ speak.IPFV.NPST.1SG
 ‘I will be speaking.’ (Varašos)
- b. A nérxumi. (cf. *érxumi* ‘(I) come’)
 FUT.DEF COME.IPFV.NPST.1SG
 ‘I will be coming.’ (Varašos)
- c. A ta kuventízu.
 A [ʰda] kuventízu.
 FUT.DEF 3OBJ rely.ON.IPFV.NPST.1SG
 ‘I will be relying on it/him/her/them.’ (Varašos)

Speakers from Varašos use only this particle, i.e., *a*, to express the realis future, whereas people from the peripheral villages (see section 1.3.4.1) use two distinct particles which assume this function, *a* and *éna*, which are distinguished according to the “definiteness” of the future event. Future constructions with *a* in these varieties prototypically denote an event which the speaker is confident will happen in the immediate future—I will call this “definite” future. On the other hand, *éna* represents a future event which is indefinite with respect to everything else but futurity (for *éna* see section 2.4.4.1.2). Leaving aside *éna* for now, the difference between the use of *a* in Varašos and other villages is shown in (160a–b) respectively:

- (160) a. A nártu.
 FUT.DEF COME.PFV.NPST.1SG
 ‘I’m going to come.’/ ‘I’m coming.’/ ‘I will/may come.’ (Varašos)

- b. A nártu.
 FUT.DEF COME.PFV.NPST.1SG
 ‘I’m going to come.’/ ‘I’m coming.’/ ‘* I will/may come.’
 (peripheral villages)

As is obvious from the translations in (160a–b), *a* in Varašos is ambiguous between a definite future reading and an indefinite future reading. The coming event may be definite, i.e., it may be one that is going to take place in the future for sure, or the event might be “indefinite”, i.e., it may or may not happen. In other villages, on the other hand, a future event expressed by *a* is only definite, hence in (160b), the speaker is (almost) certain that she is coming (immediately). Throughout the rest of the dissertation, I gloss *a* as definite future (FUT.DEF) which is the appropriate glossing for the particle as it is used in peripheral villages (section 1.3.4.1), and I provide English translations of the constructions with *a* based on their use in the peripheral villages. The future particle *a* can combine with two verb forms (i) [–past, –perfective] (161), and (ii) [–past, +perfective] (162), which is presented as a dependent form in section 2.3.2.2. The imperfective non-past form corresponds to the future continuous (161a), which may express habitual and eternal truths (161b), or it can give rise to an epistemic interpretation (161c). The perfective non-past form, on the other hand, gives rise to a simple future (yet definite) reading (162a), which may also express orders, promises, threats or intentions (162b).

(161) *a* + [–past, –perfective] verb forms

- a. A tro psomí.
 FUT.DEF eat.IPFV.NPST.1SG bread.N.NOM.SG
 ‘I am going to be eating bread.’
- b. A paénu sin eklesía xer sin
 FUT.DEF go.IPFV.NPST.1SG to.the.F.ACC.SG church.F.ACC.SG every in.the.F.ACC.SG
 Čerečí.
 Sunday.F.ACC.SG
 ‘I am going to the church every Sunday.’
- c. Até xáre a ni so Čuxúri.
 she.NOM NOW FUT.DEF be.NPST.3SG in.the.N.ACC.SG Čuxuri.N.ACC.SG
 ‘She must be in Čuxuri now.’

(162) *a* + [–past, +perfective] verb forms

- a. A fáu psomí.
 FUT.DEF eat.PFV.NPST.1SG bread.N.NOM.SG
 ‘I am going to eat bread.’

- b. A si kupanísu!
 FUT.DEF 2SG.OBJ beat.PFV.NPST.1SG
 ‘I am going to beat you!’ (as a threat)

It should be noted that although speakers indicate that both forms exist, in casual speech it is often observed that the [–past, +perfective] form of the verbs substitutes the [–past, –perfective] when future continuous is expressed. This point is already noted by Anastasiadis (1976:184).

2.4.4.1.2 éna As stated in section 2.4.4.1.1, this particle does not exist in Varašos (see also Anastasiadis 1976:184) and is observed only in the peripheral villages (section 1.3.4.1). According to Anastasiadis (1976:184), *éna* has also grammaticalized from *thélo* ‘I want’ + *na* ‘subjunctive’, with reduction of the verb *thélo* to *the* and deletion of the initial [θ]. The *na* part is originally the subjunctive particle *na*, but it is not recognizable as a separate unit today; in other words, *e* alone does not express anything.

In the peripheral villages in which *éna* is used, it expresses an indefinite future event, i.e., an event which will happen in the (remote) future, yet the speaker does not make any commitment to whether the event will indeed happen or not. Accordingly, I gloss *éna* as indefinite future (FUT.INDF). Events that are definite, such as generic or eternal truths, cannot be expressed with this particle.⁷¹

Similar to *a*, *éna* also combines with both [–past, +perfective] (163a), and [–past, –perfective] (163b) forms of a verb; however, unlike *a*, the range of expressions that future forms with *éna* give rise to seem to be restricted. *Éna* only expresses simple or continuous indefinite future:

- (163) a. *éna* + [–past, +perfective] verb forms
 Éna nártu.
 FUT.INDF COME.PFV.NPST.1SG
 ‘I will come.’
- b. *éna* + [–past, –perfective] verb forms
 Páli éna zirlatízi.
 again FUT.INDF grumble.IPFV.NPST.3SG
 ‘She will be grumbling again.’

⁷¹ Anastasiadis (1976:189), argues that “[i]n Čuxuri and Afšari while *a* expresses a possibility, *éna* expresses necessity”. I was not able to verify this with my informants. The distinction between *a* and *éna* has to do not with the type of the modality expressed but rather depends on the definiteness or indefiniteness of the future event expressed.

2.4.4.1.3 *xa* *Xa* exists in all villages, and it combines only with [–past, +perfective] forms, hence dependent forms of the verb (see section 2.3.2.2).⁷² It has been analyzed as a borrowed element from Turkish (i.e., from *ha* ‘interjection’; Papadopoulos 1948:40–41), as a particle which emerged from the future particle *θa* having undergone [θ]-to-[x] change (Andriotis 1948:29) or as an element which is originally the periphrastic perfect conditional composed of *íxa* ‘(I) had’ and the subjunctive *na* (Favis 1948:173, A’). In this last case, the subjunctive *na* would have been dropped and the verb *íxa* reduced to *xa*, i.e., *íxa na* > *xa na* > *xa*.⁷³

Xa gives rise to a number of modal readings, all of which can be related to the expression of counterfactuality; therefore, I gloss it as counterfactual future (FUT.CF). Consider the examples in (164).

- (164) a. *Ípin ta xa násun ton tópu.*
 say.PFV.PST.3SG 3OBJ FUT.CF plow.PFV.NPST.3PL the.M.ACC.SG field.M.ACC.SG
 ‘She said (that) they were going to plow the field.’
- b. *Xáre ær na ítun ađé, xa mis yrépsi.*
 now if SUBJ be.PST.2SG here FUT.CF 1PL.OBJ look.after.PFV.NPST.3SG
 ‘If she were here now, she would look after us.’
- c. *Ær na íšis θεύ fóvos, čo xa pik*
 if SUBJ have.PST.2SG God.CM fear.M.NOM.SG not FUT.CF do.PFV.NPST.2SG
até ta ryata.
 this.PL the.N.ACC.PL deed.N.ACC.PL
 ‘If you feared God, you would not have done these deeds.’
- d. *Mo o θεός katéši náatara*
 only the.M.NOM.SG God.M.NOM.SG know.IPFV.NPST.3SG how much
paráđa xa xarčépsin.
 money.N.ACC.PL FUT.CF spend.PFV.NPST.3SG
 ‘Only God knows how much money she must have spent.’

Xa in (164a) gives rise to a future in the past reading, in (164b) a present conditional, in (164c) to a perfect conditional and in (164d) to a past epistemic reading.

2.4.4.2 The subjunctive particle *na*

The particle *na* (cf. SMG *na*), which is referred to as the subjunctive particle in previous work on PhG (see Andriotis 1948:44 and Anastasiadis 1976:200, δ’, a.o.),

⁷² Note that verbs that do not make a morphological distinction between [+perfective] and [–perfective], e.g., the copula *ími* ‘(I) am’ or the verb of possession *éxu* ‘have’, can also combine with *xa* as long as they are in their [–past] forms.

⁷³ Similar to the case of *a* (see section 2.4.4.1.1), when the third person clitic object pronoun *ta* occurs between *xa* and the verb, it is heard as [ʰda] with an apparent initial nasal /n/.

gives rise to a number of modal readings in simple clauses, such as the expression of commands, requests, wishes, curses or consents:⁷⁴

- (165) a. Na parsép to spíti!
 SUBJ clean.PFV.NPST.2SG the.N.ACC.SG house.N.ACC.SG
 ‘Clean the house!’/ ‘You should clean the house!’
- b. Na fáu to psomí?
 SUBJ eat.PFV.NPST.1SG the.N.ACC.SG bread.N.ACC.SG
 ‘Shall I eat the bread?’/ ‘Can I eat the bread?’
- c. Na inís tu ðevóvu!
 SUBJ become.PFV.NPST.2SG the.M.GEN.SG devil.M.GEN.SG
 ‘Bugger off!’
- d. (Aití) na fámi!
 INTRJ SUBJ eat.PFV.NPST.1PL
 ‘(Come on) let’s eat!’

Na in main clauses can combine with both [–past, –perfective] (166a) and [–past, +perfective] (166b), i.e., dependent, forms of the verbs, although it is mostly the latter which is observed in spoken language. The difference between the two is based on the continuity or the repetition of the action expressed by the verb:

- (166) a. *na* + [–past, –perfective] verb forms
 Na muyuésis aǰǰé!
 SUBJ hide.NACT.IPFV.NPST.2SG here
 ‘You should hide here!’ (e.g., every time when there is a danger)
- b. *na* + [–past, +perfective] verb forms
 Na muyoθís aǰǰé!
 SUBJ hide.NACT.PFV.NPST.2SG here
 ‘You should hide here!’ (now)

Na can further introduce subordinate clauses which are complements to certain types of verbs, such as volitional, aspectual, modal and future-referring verbs. In these cases it acts as a subordinating conjunction. Some representative examples are found in (167a–c) (see section 2.4.9.1.3 for more examples). *Na* can also occur in adjunct clauses (such as conditional or purpose clauses), combining with other subordinating conjunctions (168a–b).

⁷⁴ In this sense there is no difference between SMG and PhG in terms of the functions of *na* in simple clauses. For a discussion of the SMG situation, see especially Joseph and Philippaki-Warburton (1987:180–181). PhG typologically aligns with SMG and various other Balkan languages in which no specific verbal morphology is employed for the expression of subjunctive but the subjunctive category is identified with uninflected particles which look like subordinating conjunctions (cf. Rivero 1994; Roussou 2000 for overviews).

- (167) a. *Préfti na ipáu.*
 have.to.IPFV.NPST.3SG SUBJ go.PFV.NPST.1SG
 ‘I have to go.’
- b. *γρέvu na ipáu.*
 want.IPFV.NPST.1SG SUBJ go.PFV.NPST.1SG
 ‘I want to go.’
- c. *Pašlátsini na kamnóni.*
 start.PFV.PST.3SG SUBJ work.IPFV.NPST.3SG
 ‘She started to work.’
- (168) a. [*Ær na íšis θεού φόvos], čo xa pik*
 if SUBJ have.PST.2SG God.CM fear.M.NOM.SG not FUT.CF do.PFV.NPST.2SG
até ta ryata.
 this.PL the.N.ACC.PL deed.N.ACC.PL
 ‘If you feared God, you would not have done these deeds.’
- b. *Írtin [na mi iđí tejí].*
 come.PFV.PST.3SG SUBJ 1SG.OBJ see.PFV.NPST.3SG COMP
 ‘She came (in order) to see me.’

The uses of *na* in complement clauses are discussed in section 2.4.9.1.3. For adverbial clauses in which *na* occurs, see section 2.4.10.3.

2.4.4.3 The hortative particle *s*

The particle *s* in PhG (cf. SMG *as*) prototypically, but not exclusively, expresses (ex)hortation (169a). Besides (ex)hortation, it can also express permission (169b), a wish that may be fulfilled in the future (169c) or is already unfulfilled (169d), or a curse (169e).

- (169) a. *S púmi leikú neró!*
 HORT drink.PFV.NPST.1PL little.SG water.N.NOM.SG
 ‘Let us drink some water!’
- b. *S ipá so spíti tu!*
 HORT go.pfv.NPST.3SG to.the.N.ACC.SG house.N.ACC.SG his
 ‘Let him go to his house!’
- c. *O θεός s si fiáksi!*
 the.M.NOM.SG the.M.NOM.SG HORT 2SG.OBJ protect.PFV.NPST.3SG
 ‘May God protect you!’
- d. *Fótes xa nártis, s írtis tinevíča.*
 since FUT.CF come.PFV.NPST.2SG HORT come.PFV.PST.3SG today.in.the.morning
 ‘Since you were going to come, you should have come in the morning.’

- e. S si pári o ěíeus!
 HORT 2SG.OBJ take.PFV.NPST.3SG the.M.NOM.SG devil.M.NOM.SG
 ‘May the devil take you!’

It is mostly verbs forms in [–past, +perfective], hence the dependent verb forms, which combine with *s* (cf. (169a–c,e)). For expression of an unfulfilled wish in the past, *s* combines with the verb forms in [+past, +perfective] (169d).

Similar to the case in SMG (Roussou and Tsangalidis 2010:52), the hortative *s* cannot occur in embedded clauses in PhG. In this respect *s* contrasts with the future particles and the subjunctive particle which are tolerated (or required) in embedded clauses (for complement clauses, see section 2.4.9).

2.4.5 Clausal negation and the negation markers

Clausal negation can be expressed by three distinct monomorphemic and uninflected negation markers. All of these markers occur preverbally. The choice of the marker primarily depends on the mood of the clause; while indicative clauses allow for two of these markers, non-indicative, i.e., subjunctive (and hortative), clauses use the third. Among the two negation markers that are used in indicative clauses, one expresses emphatic negation and is used only when the verb has specific tense/aspect forms; the other negation marker is the elsewhere form, without indicating any emphasis. In the next three sections, I present these negation markers in turn.

2.4.5.1 *ěo*

The negation marker *ěo* is used in all types of indicative clauses (simple or embedded) with all tense/aspect specifications. It derives from the AG (Ionic) negation marker *ouk(i)*, which underwent tsitakism in PhG (see section 2.2.2.2 for tsitakism; Anastasiadis 1976:262). Two representative examples are given in (170).

- (170) a. ěo tro psomí.
 not eat.IPFV.NPST.1SG bread.N.NOM.SG
 ‘I do not eat bread.’/ ‘I am not eating bread.’
 b. ěo ífara to psomí.
 not bring.PFV.PST.1sg the.N.ACC.SG bread.N.ACC.SG
 ‘I did not bring the bread.’

ěo also negates clauses that include any of the three future particles, immediately preceding these future particles:

- (170) c. ěo a/éna/xa fáu psomí.
 not FUT.DEF/FUT.INDF/FUT.CF eat.PFV.NPST.1SG bread.N.NOM.SG
 ‘I am not going to/will not/would not (have) eat(en) bread.’

Verbs in the imperative mood cannot be negated with *čo*, or for that matter, with any other negation marker (171). Prohibitives, i.e., negative commands, are expressed periphrastically, which I will illustrate in see section 2.4.5.3.

- (171) * *Čo pársip to spíti!*
 not clean.PFV.IMP.2SG the.N.ACC.SG house.N.ACC.SG
 int.: ‘Do not clean the house!’

Subjunctive (embedded or otherwise) or hortative clauses cannot be negated with *čo* either (172a–b).

- (172) a. * *Čo na ipás!*
 not SUBJ go.PFV.NPST.2SG
 int: ‘You should not go!’
 b. * *Čo s ipámi!*
 not HORT go.PFV.NPST.1PL
 int.: ‘Let us not go!’

Verb forms accompanied by the subjunctive or the hortative particle can be negated only with the negation marker *mi*. For this marker see section 2.4.5.3.

2.4.5.2 *ma*

The negation marker *ma* is used in indicative clauses and is used only by the speakers originally from Varašos. Similar to *čo*, it cannot negate imperatives, subjunctives or hortatives. However, unlike *čo*, *ma* is excluded from embedded contexts. Moreover, even when the clause to be negated is not an embedded one, the verb of the clause cannot be preceded by the future particles for *ma* to be employed as a negation marker (see also Anastasiadis 1976:263 for an earlier observation; cf. (173a–b)).⁷⁵

- (173) a. *Ma éfaya to psomí.*
 not eat.PFV.PST.1SG the.N.ACC.SG bread.N.ACC.SG
 ‘I did not eat the bread.’
 b. * *Ma a fáu to psomí.*
 not FUT.DEF eat.PFV.NPST.1sg the.N.ACC.SG bread.N.ACC.SG
 int: ‘I am not going to eat the bread.’

⁷⁵ Note however that, there is a marker *ma* that can combine with the future particles with the meaning ‘soon’:

- (i) *Ma éna xaθó.*
 PRT FUT.INDF die.PFV.NPST.1SG
 ‘I will/am going to die soon.’

It might very well be that this *ma* and the negator *ma* are related. However, this requires further investigation.

The negation that is expressed by *ma* is different from the negation expressed by *čo*. *Ma* expresses strong rejection, which can be in the form of contradiction to an assertion or denial of a presupposition, whereas *čo* simply negates a clause. This point was already hinted by Anastasiadis (1976:236): “*ma*, which is used as the negation particle in indicative root clauses is more emphatic than *čo* [MB]”.

2.4.5.3 *mi*

The negation marker *mi* (cf. SMG *mi(n)*), and its variant *mu* in the peripheral villages, is the non-indicative negation marker in PhG, both in root and embedded clauses (to the extent that a non-indicative clause is tolerated as an embedded clause). *Mi* is not used to negate indicative clauses, as the ungrammatical examples in (174) show.

- (174) a. * *Mi* tro psomí.
 not eat.IPFV.NPST.1SG bread.N.NOM.SG
 int.: ‘I do not eat bread.’/ ‘I am not eating bread.’
- b. * *Mi* a/éna/xa fáu psomí.
 not FUT.DEF/FUT.INDF/FUT.CF eat.PFV.NPST.1SG bread.N.NOM.SG
 int.: ‘I am not going to/will not/would not (have) eat(en) bread.’

Mi can negate subjunctive clauses, which are marked with the subjunctive particle *na*, in which case it occurs after the subjunctive particle (cf. (175a–b)).

- (175) a. *Na* mi parsép to spíti!
 SUBJ not clean.PFV.NPST.2SG the.N.ACC.SG house.N.ACC.SG
 ‘Do not clean the house!’/ ‘You should not clean the house!’
- b. * *Mi* na parsép to spíti!
 not SUBJ clean.PFV.NPST.2SG the.N.ACC.SG house.N.ACC.SG

In a negated subjunctive clause, *na* optionally occurs. The grammatical example in (175a) can also be expressed as in (175c), where *na* is omitted. If *na* is absent, *mi* can be argued to assume the function of the subjunctive particle as well.

- (175) c. *Mi* parsép to spíti!
 not clean.PFV.NPST.2SG the.N.ACC.SG house.N.ACC.SG
 ‘Do not clean the house!’/ ‘You should not clean the house!’

As the examples in (175a,c) indicate, (*na*) *mi* can express prohibitions, i.e., the negative imperatives. This periphrastic strategy is the only way to express prohibitions, as imperative verbs cannot be negated (with *mi*, or with any other clausal negator).

- (176) * *Mi* pársip to spíti!
 not clean.PFV.IMP.2SG the.N.ACC.SG house.N.ACC.SG
 int.: ‘Do not clean the house!’

Mi is also the negation marker for clauses with the hortative particle *s*. Similar to *na*, *mi* is placed after *s*:

- (177) S mi iđí ména!
 HORT not see.PFV.NPST.3SG me
 ‘Let her not see me!’

The negation marker *mi* can also occur in adverbial *before*-clauses as an expletive negation; i.e., it does not express negation (178) (see also section 2.4.10.3.1).

- (178) γρέvi na si iđí [pir mi xaθí].
 want.IPFV.NPST.3SG SUBJ 2SG.OBJ see.PFV.NPST.3SG before NOT die.NPST.PFV.3SG
 ‘She wants to see you before she dies.’

2.4.6 Negative polarity items and constituent negation

2.4.6.1 Negative polarity items

PhG has the negative polarity items (NPIs) given in Table 2.29.

NPI	Function
kanís ‘nobody/anybody.NOM’	subject (person)
kanína ‘nobody/anybody.ACC’	direct/indirect object (person)
típus ‘nothing/anything’	subject/direct/indirect object (thing)
kamía/xéč ⁷⁶ ‘never’	time adverb

Table 2.29: NPIs in PhG

These NPIs must co-occur with a clause-mate negation marker (section 2.4.5), the shape of which depends on the mood of the host clause. Although they can occur postverbally (179a), they tend to occur in a preverbal position—preceding the negation marker as well—with prominent stress (179b) (prominent stress in indicated with small capitals).

- (179) a. *(Čo) iđa kanína.
 not see.PFV.PST.1SG no.one.ACC
 ‘I did not see anybody.’

⁷⁶ *Xeč* (< T. *hiç*) can also mean ‘at all’:

- (i) Xeč čo pukantízu si.
 at.all not like.IPFV.NPST.1SG 2SG.OBJ
 ‘I do not like you at all.’

- b. KANÍNA *(čo) íďa.
 no.one.ACC not see.PFV.PST.1SG
 ‘I saw nobody.’

Two further representative examples for other NPIs are given in (180).⁷⁷

- (180) a. Típus (na) mi pčís!
 nothing SUBJ not do.PFV.NPST.2SG
 ‘Do not do anything!’/ ‘You should not do anything!’
- b. Kamía/xěč čo pnóni.
 never not sleep.IPFV.NPST.3SG
 ‘She never sleeps.’

2.4.6.2 Constituent negation

Constituent negation is achieved in two ways. In the first type of constituent negation, a constituent is negated with the particle *jóx* ‘no’. This negated constituent is contrasted with a constituent with an identical function (or case, if applicable) in the clause:

- (181) Íďa to nomáti, jóx ti néka.
 see.PFV.PST.1SG the.M.ACC.SG man.M.ACC.SG no the.F.ACC.SG woman.F.ACC.SG
 ‘I saw the man, not the woman.’

In the second type of constituent negation, the expression *næ ... næ* ‘neither ... nor’ (< T. *ne ... ne*) is used to negate any type of constituent of a clause (see also Anastasiadis 1976:263–264, 2. α' , β'):

- (182) Íďa næ ti néka næ to nomáti.
 see.PFV.PST.1SG neither the.F.ACC.SG woman.F.ACC.SG nor the.M.ACC.SG man.M.ACC.SG
 ‘I saw neither the woman nor the man.’

⁷⁷ These NPIs can also occur in yes/no questions. In this case, they can (ia), but do not have to (ib), co-occur with a negation marker:

- (i) a. Íďis kanína?
 see.PFV.PST.2SG no.one.ACC
 ‘Did you see anyone?’
- b. Čo íďis kanína?
 not see.PFV.PST.2SG no.one.ACC
 ‘Did you not see anyone?’

not separated from the rest of the clause with a prosodic break. Moreover, a direct or indirect object focus in the preverbal position is not resumed by a clitic object pronoun.⁷⁹

- (185) a. FOCUS TA PARÁÐA pírín PRESUPPOSITION (*ta)o nomát.
 the.N.ACC.PL money.N.ACC.PL take.PFV.PST.3SG 3OBJ the.M.NOM.SG man.M.NOM.SG
 ‘THE MONEY the man took(, not something else).’
- b. FOCUS MÉNA PRESUPPOSITION ěóĉin (*mí) ta paráĉa.
 me give.PFV.PST.3SG 1SG.OBJ the.N.ACC.PL money.N.ACC.PL
 ‘To ME she gave the money(, not to someone else).’

2.4.7.3 The particle *páli* and the contrastive/non-exhaustive constituents

In the previous section, it was established that the preverbal focus in PhG is associated with exhaustiveness and contrast at the same time. However, these two functions are separate when a preverbal constituent is specifically followed by the discourse marker *páli* (< cf. Medieval Greek *πάλιν* [pálin] ‘again’; Anastasiadis 1976:17, 265, β’I). A constituent followed by this particle receives a contrastive reading, but it is by no means exhaustive, thereby discarding all other focal alternatives. Let us consider the example in (186).

- (186) Ta paráĉa páli ěóĉin o nomát.
 the.N.ACC.PL money.N.ACC.PL PRT give.PFV.PST.3SG the.M.NOM.SG man.M.NOM.SG
 ‘The man gave the money.’

(186) is felicitous in a context where the man gave the money, but not necessarily only the money. He may have given the gold, the silver etc., as well. However, the specific direct object ‘the money’ is contrasted with these alternatives. Another representative example is given in (187).

- (187) Eséna páli ģapá, eména páli ģapá.
 you PRT love.IPFV.NPST.3SG me PRT love.IPFV.NPST.3SG
 ‘She loves you and (she loves) me.’

In (187), the contrastive function of *páli* becomes more salient since in this example, the two alternatives which are contrasted to each other, *eséna* ‘you’ and *eména* ‘me’, co-occur in the same stretch of discourse. On the basis of examples such as

⁷⁹ However, if it is the indirect object that is focalized in the preverbal position in a clause where there is also a postverbal direct object, a clitic object pronoun can occur as a quasi-obligatory object marker (see section 2.3.2.2).

(186–187), we can hypothesize that a constituent followed by the particle *páli* has properties of both topics and foci (see section 3.4.2.3 for a full treatment of phrases marked by *páli*).

The constituents followed by *páli* are not obligatorily resumed by a clitic pronoun. Notice, though, that such resumption is also grammatical, even if it is not common:

- (188) Ta paráďa páli ěóćin (ta).
 the.N.ACC.PL money.N.ACC.PL PRT give.PFV.PST.3SG 3OBJ
 ‘She gave the money.’

Topicalized and focalized constituents, as well as constituents which receive contrastive, non-exhaustive readings are discussed in detail in chapter 3.

2.4.8 The position of clitic pronouns

Clitic object pronouns (see sections 2.4.2.2–2.4.2.3) are always attached directly to a verb; no other element can occur between a clitic pronoun and the verb (cf. 189a–b):

- (189) a. ěóćin ta o nomát.
 give.PFV.PST.3SG 3OBJ the.M.NOM.SG man.M.NOM.SG
 ‘The man gave it.’
 b. * ěóćin o nomát ta.
 give.PFV.PST.3SG the.M.NOM.SG man.M.NOM.SG 3OBJ
 ‘The man gave it.’

As stated in section 2.4.2.3, if both a clitic pronoun assuming indirect object function and a clitic pronoun assuming direct object function are required in a clause and there is no constraint that operates on their co-occurrence (see section 2.4.2.3 for constraints on the co-occurrence of morphologically identical clitics), the order of their occurrence is fixed: IO < DO (190a–b).

- (190) a. ěóćin mi ta.
 give.PFV.PST.3SG 1SG.OBJ 3OBJ
 ‘The man gave it to me.’
 b. * ěóćin ta mi.
 give.PFV.PST.3SG 3OBJ 1SG.OBJ
 ‘The man gave it to me.’

The position of clitic pronouns with respect to the verb to which they attach is defined by the presence or absence of a preverbal constituent and, if there is a preverbal constituent, its precise category. Depending on the presence and the category of the preverbal constituent, clitic pronouns are either left or right attached to the verb. If

both a clitic indirect object and a clitic direct object are present, the order IO < DO is fixed regardless of whether they are attached to the beginning or to the end of the verb. The type of the preverbal constituent and the position of the clitic with respect to the verb are summarized in Table 2.30. Table 2.30 is further detailed below.

Preverbal constituent	Clitic position
none	postverbal
modal particle (§2.4.4)	preverbal
negation marker: <i>čo</i> (§2.4.5.1)	postverbal
negation marker: <i>ma</i> (§2.4.5.2)	preverbal
negation marker: <i>mi</i> (§2.4.5.3)	preverbal
<i>wh</i> -words other than <i>titi/sotípus</i> (§2.4.3.2.2)	preverbal
<i>wh</i> -word <i>titi/sotípus</i> (§2.4.3.2.2)	preverbal/postverbal
topic (§2.4.7.1)	postverbal
<i>páli</i> -phrase (§2.4.7.3)	postverbal
focus (§2.4.7.2)	preverbal
subordinating conjunctions other than <i>čunki</i> ‘because’ (§§2.4.9.1.2, 2.4.10.3)	preverbal

Table 2.30: Preverbal constituents and the position of object clitics

In a clause with no preverbal constituent, clitic pronouns are enclitic to the verb (cf. (191a–b)) (see also Janse 1993, 1994, 1997, 1998a,b, 2008a; Condoravdi and Kiparsky 2002).

- (191) a. *ďóčin mi ta o nomát.*
 give.PFV.PST.3SG 1SG.OBJ 3OBJ the.M.NOM.SG man.M.NOM.SG
 ‘The man gave it to me.’
- b. **Mi ta ďóčin o nomát.*
 1SG.OBJ 3OBJ give.PFV.PST.3SG the.M.NOM.SG man.M.NOM.SG

In the presence of a non-focal preverbal subject occurring immediately before the verb, the clitic object pronouns again occur postverbally (cf. (192a–b); see section 3.3.3.2.6 for preverbal focal subjects).

- (192) a. *O nomát ďóčin mi ta.*
 the.M.NOM.SG man.M.NOM.SG give.PFV.PST.3SG 1SG.OBJ 3OBJ
 ‘The man gave it to me.’

- b. * O nomát mi ta ěóčín.
 the.M.NOM.SG man.M.NOM.SG 1SG.OBJ 3OBJ give.PFV.PST.3SG

If the immediately preverbal constituent is a topic constituent or a contrasted constituent followed by *páli* (sections 2.4.7.1, 2.4.7.3), the clitic pronouns are again postverbal (cf. (193–194)).

- (193) a. Ta paráďa, ěóčín ta ti
 the.N.ACC.PL money.N.ACC.PL give.PFV.PST.3SG 3OBJ the.F.ACC.SG
 néka.
 woman.F.ACC.SG
 ‘As for the money, she gave it to the woman.’
- b. Ta paráďa páli ěóčín ta ti
 the.N.ACC.PL money.N.ACC.PL PRT give.PFV.PST.3SG 3OBJ the.F.ACC.SG
 néka.
 woman.F.ACC.SG
 ‘She gave the money to the woman.’
- (194) a. * Ta paráďa, ta ěóčín ti
 the.N.ACC.PL money.N.ACC.PL 3OBJ give.PFV.PST.3SG the.F.ACC.SG
 néka.
 woman.F.ACC.SG
 ‘As for the money, she gave it to the woman.’
- b. * Ta paráďa páli ta ěóčín ti
 the.N.ACC.PL money.N.ACC.PL PRT 3OBJ give.PFV.PST.3SG the.F.ACC.SG
 néka.
 woman.F.ACC.SG
 ‘She gave the money to the woman.’

If the immediately preverbal element is a focus expression bearing the focal stress (section 2.4.7.2), the clitics are placed immediately before the verb (cf. (195a–b)).

- (195) a. MÉNA ta pítaksin.
 me 3OBJ send.PFV.PST.3SG
 ‘To ME she sent it(, not to someone else)’
- b. * MÉNA pítaksin ta.
 me send.PFV.PST.3SG 3OBJ

If the verb is preceded by a modal particle (i.e., a future, subjunctive or hortative particle), the clitic pronouns are always placed immediately before the verb, following the modal particles. This is true independent of the presence or absence of any other constituent, e.g., a subject, occurring before these modal particles (cf. (196a–b)).

- (199) a. (yo) čo pítaksa sis ta.
 I.NOM not send.PFV.PST.1SG 2PL.OBJ 3OBJ
 ‘I didn’t send it to you’
 b. *(yo) čo sis ta pítaksa.
 I.NOM not 2PL.OBJ 3OBJ send.PFV.PST.1SG

Recall from section 2.4.5.1 that if a future particle is present, the negation marker *čo* precedes the future particle. In this context, clitic pronouns are placed immediately before the verb if they occur (200a–b)). The position of clitic pronouns is the same as their position when the future particle is not preceded by *čo* (see the examples in (196)). Any additional preverbal constituent, such as a subject, does not affect this.

- (200) a. (yo) čo a/éna/xa sis ta pítaksu.
 I.NOM not FUT.DEF/FUT.INDF/FUT.CF 2PL.OBJ 3OBJ send.PFV.NPST.1SG
 ‘I am not going to/will not/ would not (have) send (sent) it to you.’
 b. (yo) čo a/éna/xa pítaksu sis ta.
 I.NOM not FUT.DEF/FUT.INDF/FUT.CF send.PFV.NPST.1SG 2PL.OBJ 3OBJ

All bare *wh*-words (section 2.4.3.2.2) in a *wh*-question, except for *tití/sotípus* ‘why’, also cause clitics to occur immediately preverbally. A representative minimal pair is given in (201). If the *wh*-word is *tití/sotípus* ‘why’, however, the clitic object pronouns can be placed before or after the verb (202a–b), but the general tendency among the speakers is to place these object pronouns after the verb, as in (202b).

- (201) a. Tis mi ta pítaksin?
 who.NOM 1SG.OBJ 3OBJ send.PFV.PST.3SG
 ‘Who sent it to me?’
 b. *Tis pítaksin mi ta?
 who.NOM send.PFV.PST.3SG 1SG.OBJ 3OBJ
- (202) a. Tití mi ta pítaksin?
 why 1SG.OBJ 3OBJ send.PFV.PST.3SG
 ‘Why did she send it to me?’
 b. Tití pítaksin mi ta?
 why send.PFV.PST.3SG 1SG.OBJ 3OBJ

Unless the last *wh*-word in a sequence of *wh*-words is *tití/sotípus* ‘why’, the number of the *wh*-words or their relevant ordering does not affect the immediately preverbal position of the clitic object pronouns. This is exemplified in (203a–b) where three *wh*-words precede the verb, and the question is grammatical only when the clitic object pronouns are placed immediately before the verb.

- (203) a. Tis tína póti ta pítaksin?
 who.NOM who.ACC when 3OBJ send.PFV.PST.3SG
 ‘Who sent it to whom when?’
 b. *Tis tína póti pítaksin ta?
 who.NOM who.ACC when send.PFV.PST.3SG 3OBJ

On the other hand, if the final *wh*-word in a sequence is *títí/sotípus* ‘why’, the clitic object pronouns may precede (204a) or follow the verb (204b), although speakers show a preference for the latter position, i.e., for (204b).

- (204) a. Tis tína títí ta pítaksin?
 who.NOM who.ACC why 3OBJ send.PFV.PST.3SG
 ‘Who sent it to whom why?’
 b. Tis tína títí pítaksin ta?
 who.NOM who.ACC why send.PFV.PST.3SG 3OBJ

The subordinating conjunction *tu* ‘that’ (see section 2.4.9.1.2) and certain adverbial conjunctions, such as *samú* ‘when’, *čas* ‘when/as’, *fótes* ‘since/while’ but not *čunkí* ‘because’ (see section 2.4.10.3), also attract clitic object pronouns to the preverbal position. Representative examples are given in (205–206).

- (205) a. Pušmanépsin tu mi ta pítaksin.
 regret.PFV.PST.3SG that 1SG.OBJ 3OBJ send.PFV.PST.3SG
 ‘She regretted that she sent it to me.’
 b. *Pušmanépsin tu pítaksin mi ta.
 regret.PFV.PST.3SG that send.PFV.PST.3SG 1SG.OBJ 3OBJ
- (206) a. Fótes ta le aúča, mis pos a píkumi?⁸⁰
 since 3OBJ say.IPFV.NPST.3SG such we.NOM what FUT.DEF do.PFV.NPST.1PL
 ‘Since she speaks so, what shall we do?’
 b. *Fótes le ta ...
 since say.IPFV.NPST.3SG 3OBJ ...

The position of clitics with respect to the verb is summarized once again as follows (see also Janse 1998a,b and Condoravdi and Kiparsky 2002:5–6):

- (i) The clitic pronouns are immediately preverbal if the preverbal constituent is
 (a) a modal particle,
 (b) a negation marker other than *čo*,
 (c) a (cluster of) *wh*-word(s) except (when the last one is) *títí/sotípus* ‘why’,

⁸⁰ When the *wh*-word *pos* ‘what’ is followed by the definite future particle *a*, the [os] sequence is dropped in casual speech, giving rise to [pa].

- (d) a focus expression, or
 - (e) the subordinating conjunction *tu* ‘that’ or the adverbial conjunctions other than *čunki* ‘because’.
- (ii) Elsewhere, they are immediately postverbal.

2.4.9 Complex clauses and the inventory of complement clauses

In section 2.4.2, I distinguished between simplex and complex clause types. Simple clauses are independent clauses with a finite verb and obligatory and/or optional constituents, such as subject, direct, indirect object, adverbs etc. An inventory of simple clauses based on their semanto-pragmatic features is given in section 2.4.3. On the other hand, complex clauses are composed of (at least) two finite clauses, one main and the other subordinate. When a subordinate clause acts as a complement of the verb of the main clause, it is also referred to as a “complement clause”. In this section, I provide a brief overview of complement clause types. The classification I propose is based on the semanto-pragmatic functions of these complement clauses. Notice that a complement clause may also function as a subject of another clause, as a complement of a preposition, as a modifier of a noun or as an adverbial clause. The discussion of these cases will be delayed until section 2.4.10.

2.4.9.1 Declarative complement clauses

There are two types of declarative complement clauses in PhG: one type which is in the indicative mood and the other which is in the subjunctive mood. It is possible to classify indicative complement clauses into clauses which are not introduced by any overt subordinating conjunction and clauses which are introduced by the subordinating conjunction *tu* ‘that’. Which type of complement clause is used depends on the selecting predicate.

2.4.9.1.1 Indicative complement clauses without a subordinating conjunction

In general, complement clauses for verbs of saying such as *léu* ‘(I) say’, verbs of cognition such as *léu ta kézi* ‘(I) assume’, *pandéxu* ‘(I) suppose’, *nanúmi* ‘(I) think’, *pistéu* ‘(I) believe’ are not introduced by a subordinating conjunction (207) (see section 4.3.2.1.2 for a detailed classification of verbs in PhG and the subordinating conjunctions that introduce complement clauses of these verbs).⁸¹

⁸¹ It is perhaps due to the lack of such a subordinating conjunction that Andriotis (1948:51) argues that “[the] embedded clause which connects to the main clause with the special conjunction *óti* [‘that’, MB] in SMG, often remains unconnected [in PhG, MB]”. See, however, Anastasiadis (1976:259–260) for an argument against the view that in these cases the complement clauses remain unconnected.

Nerkíza a ta ěóči to mextúpi
 Nerkíza.F.ACC.SG FUT.DEF 3OBJ give.PFV.NPST.3SG the.N.ACC.SG letter.N.ACC.SG
 ačí.
 there
 ‘Andrew told to Nerkíza (that) he would give her the letter there.’

Although personal (clitic) pronouns, locative adverbs and the person agreement marker on the verb are obligatorily changed when a simple clause is embedded as a complement to another clause, the tense that is expressed in the simple clause often remains unchanged. In other words, in PhG complex clauses, there is no obligatory “sequence of tense”. Therefore, the future tense in the simple clause in (210a) remains unchanged when used in a complement clause (210b). However, it is also possible for the tense to change in the complement clause according to the tense of the main verb, as the change from simple future expressed by the modal particle *a* in (210a) to past future expressed by the modal particle *xa* in (210c) illustrates. Although this possibility exists, speakers typically keep the tense of the corresponding simple clause unchanged when used in a complement clause.

(210) c. Me:
 O Andriás ípin (ta) ti
 the.M.NOM.SG Andrew.M.NOM.SG say.PFV.PST.3SG 3OBJ the.F.ACC.SG
 Nerkíza xa ta ěóči to mextúpi
 Nerkíza.F.ACC.SG FUT.CF 3OBJ give.PFV.NPST.3SG the.N.ACC.SG letter.N.ACC.SG
 ačí.
 there
 ‘Andrew told to Nerkíza (that) he would give her the letter there.’

Such changes also take place in other types of complement clause, as presented in the following sections.

2.4.9.1.2 Indicative complement clauses with the subordinating conjunction *tu*

Certain verbs that presuppose the truth of the proposition in their complement clause obligatorily introduce the complement clauses with the subordinating conjunction *tu* ‘that’. These verbs are often referred to as “factive verbs” in the literature (after Kiparsky and Kiparsky 1970) and include verbs such as *pušmaněvu/tro pušmání* ‘(I) regret’, *xárumi* ‘I am glad’, *zalmónu* ‘(I) forget’, *sixiltiévu* ‘(I) am sorry’ etc. (for further information about factive verbs, see sections 4.3.2.1.1–4.3.2.1.2):

(211) O nomát pušmánepsin tu piésin to
 the.M.NOM.SG man.M.NOM.SG regret.PFV.PST.3SG that catch.PFV.PST.3SG the.N.ACC.SG
 pulpúli.
 nightingale.N.ACC.SG

- c. $\gamma\acute{r}\acute{e}\nu\acute{\iota}$ na fa suizyúta.
 want.IPFV.NPST.3SG SUBJ eat.PFV.NPST.3SG roasted.MEAT.N.NOM.PL
 ‘She wants to eat roasted meat.’
- d. Nietléntsin na ipá sa Áđana.
 intend.PFV.PST.3SG SUBJ go.PFV.NPST.3SG to.the.N.ACC.PL Adana.N.ACC.PL
 ‘She intended to go to Adana.’
- e. Pukantízu na istámi so isčáiđi.
 like.IPFV.NPST.1SG SUBJ stand.IPFV.NPST.1SG in.the.N.ACC.SG shade.N.ACC.SG
 ‘I like standing in the shade.’

As noted in sections 2.4.3.3 and 2.4.4.3, neither the imperative nor the hortative can occur in embedded clauses (see (215)).

- (215) a. *đóka émri parséftu!
 give.IPFV.PST.1SG order.N.NOM.SG clean.NACT.PFV.IMP.2SG
 int.: ‘I ordered (that) you clean yourself!’
- b. *đóka émri s ipámi!
 give.IPFV.PST.1SG order.N.NOM.SG HORT go.PFV.NPST.1PL
 int.: ‘I ordered (that) we leave!’

The modal readings that the imperative and the hortative give rise to can be expressed in a complement clause, but only if this complement clause is subjunctive. Compare (215–216).

- (216) a. $\acute{\delta}\acute{o}ka$ émri na parseftís.
 give.IPFV.PST.1SG order.N.NOM.SG SUBJ clean.NACT.PFV.NPST.2SG
 ‘I ordered (that) you clean yourself.’
- b. $\acute{\delta}\acute{o}ka$ émri na ipámi.
 give.IPFV.PST.1SG order.N.NOM.SG SUBJ go.PFV.NPST.1PL
 ‘I ordered (that) we leave.’

When the complement of the main verb is a clause in the subjunctive, the third person clitic pronoun which functions as quasi-obligatory object marker with other types of complement clauses cannot be attached to the verb, generally speaking. The discourse marker *ki* is also generally ungrammatical (see, however, section 4.3.2.1.3 for a refinement of these constraints):

- (217) * $\gamma\acute{r}\acute{e}\nu\acute{\iota}$ (*ta) (*ki) na fa suizyúta.
 want.IPFV.NPST.3SG 3OBJ PRT SUBJ eat.PFV.NPST.3SG roasted.MEAT.N.NOM.PL
 int.: ‘She wants to eat roasted meat.’ (cf. (214c))

2.4.9.2 Interrogative complement clauses

An interrogative complement clause is mainly the direct object of verbs of asking, such as *rotáu* ‘(I) ask’, verbs of cognition such as *ɣrikáu* ‘(I) realize/find out’, *katéxu* ‘(I) know’, or verbs of saying, such as *léu* ‘(I) say’. As is the case for simple clauses, in complement clauses too a distinction can be made between a yes/no-question and a *wh*-question.

2.4.9.2.1 Yes/No questions A yes/no-question, if it is a complement clause, is introduced by the subordinator *ær* ‘if’ (< T. *eđer* ‘if’) and the modal particle *na*, in this order (see also Anastasiadis 1976:257, IA’):

- (218) a. Rótsin mi ær na sóripsa ta čorčópa.
 ask.PFV.PST.3SG 1SG.OBJ if SUBJ collect.PFV.PST.1SG the.N.ACC.PL trash.N.ACC.PL
 ‘She asked me if I collected the trash.’
- b. Čo lé son ɣazætæ ær na
 not say.IPFV.NPST.3SG in.the.M.ACC.SG newspaper.M.ACC.SG if SUBJ
 vrešiši.
 rain.PFV.NPST.3SG
 ‘It does not say on the newspaper whether it will rain.’

A yes-no complement clause is also often accompanied by the quasi-obligatory object marker. However, the *ki* particle cannot occur (see chapter 4 for further information):

- (219) Rótsin mi ta (*ki) ær na sóripsa ta
 ask.PFV.PST.3SG 1SG.OBJ 3OBJ PRT if SUBJ collect.PFV.PST.1SG the.N.ACC.PL
 čorčópa.
 trash.N.ACC.PL
 ‘She asked me if I collected the trash.’

2.4.9.2.2 Wh-questions When a *wh*-question, such as the one in (220a), is turned into a *wh*-complement clause, such as the one in (220b), it does not undergo morpho-syntactic changes, except for the necessary changes on the personal pronouns and/or the locative adverbs and/or the person inflection on the verb, which are modified according to the point of the speaker of the complex clause that includes the complement *wh*-question.

- (220) a. Pos a píku mo ató to táli?
 what FUT.DEF do.PFV.NPST.1SG with this.SG the.N.ACC.SG branch.N.ACC.SG
 ‘What am I going to do with this branch?’

- b. Rótsin mi pos a píči mo ačíno to
 ask.PFV.PST.3SG 1SG.OBJ what FUT.DEF DO.PFV.NPST.3SG with that.SG the.N.ACC.SG
 táli.
 branch.N.ACC.SG
 ‘She asked me what she is/was going to do with that branch.’

If there is more than one *wh*-word in the *wh*-complement clause, all of them are placed in preverbal position, complying with the order given in section 2.4.3.2, ex. (146):

- (221) Rótsin mi tis tína pos póti pítaksin.
 ask.PFV.PST.3SG 1SG.OBJ who.NOM who.ACC what when send.PFV.PST.3SG
 ‘She asked me who sent what to whom when.’

A *wh*-complement clause is also often marked on the verb with the quasi-obligatory object marker *ta*. Yet, the *ki* particle is ungrammatical:

- (222) Rótsin mi ta (*ki) tis pítaksin to
 ask.PFV.PST.3SG 1SG.OBJ 3OBJ PRT who.NOM send.PFV.PST.3SG the.N.ACC.SG
 mextúpi.
 letter.N.ACC.SG
 ‘She asked me who sent the letter.’

2.4.10 Other subordinate clauses

A subordinate clause, i.e., a finite clause introduced by a subordinating conjunction, can also function as the subject of a clause or as a complement of a preposition. Moreover, it also functions as a modifier of a noun or as an adverbial clause modifying the main clause. The function of the subordinating clause depends on the subordinating conjunction that is used.

2.4.10.1 Nominalized clauses

A finite clause can not only serve as a direct object complement to a verb (see section 2.4.9), but it can also be used as a nominal, functioning as a noun phrase that appears in other positions in a clause, such as the subject of the clause or the complement of a preposition. In this usage, a declarative clause, whether indicative or subjunctive, is introduced by the subordinating conjunction *tu* ‘that’. This is exemplified in (223) with an indicative clause and in (224) with a subjunctive clause; (223a, 224a) illustrate declarative clauses used as a subject, while (223b, 224b) illustrate declarative clauses used as the complement to a preposition (the relevant clauses are shown in square brackets).

- (223) a. [Tu muyóθan son mayará pésu]
 that hide.NACT.PFV.PST.3PL in.the.M.ACC.SG cave.M.ACC.SG inside
 píin so zóri mu.
 go.PFV.PST.3SG to.the.N.ACC.SG discomfort.N.ACC.SG my
 ‘(The fact) that they hid in the cave hurt me.’
- b. yríkxa ta s [tu íristin ksopísu tárna].⁸²
 understand.PFV.PST.1SG 3OBJ from that return.PFV.PST.3SG back quickly
 ‘I understood it (judging) by the fact that she returned back quickly.’
- (224) a. [Tu na mi ta pitáksis] čo íniti.
 that SUBJ NOT 3OBJ send.PFV.NPST.2SG not become.IPFV.NPST.3SG
 ‘It is not possible that you not send it.’
 lit.: ‘That you do not send it does not become (possible).’
- b. Sos [tu na nási ton tópu]
 until that SUBJ plow.PFV.NPST.3SG the.M.ACC.SG field.M.ACC.SG
 írtan ta čoúxa.
 come.PST.PFV.3PL the.N.NOM.PL children.N.NOM.PL
 ‘Until/before he plowed the field, the children came.’

A subordinate interrogative clause, as a yes/no-question or a *wh*-question, can also be nominalized, functioning as the subject of a clause or the complement of a preposition. Unlike declarative clauses, the subordinate interrogative clause is not introduced by the subordinator *tu* ‘that’. This is illustrated in (225), where a yes/no-question (225a) and a *wh*-question (225b) serve as the subject of the clause (the relevant clauses are shown in square brackets).

- (225) a. [Ær na nárti] íni ávu meselés.
 if SUBJ come.PFV.NPST.3SG be.NPST.3SG other.SG matter.M.NOM.SG
 ‘Whether she will come or not is a different matter.’
- b. [Tis ta píćin] a síri íni.
 who.NOM 3OBJ do.PFV.PST.3SG a secret.N.NOM.SG be.NPST.3SG
 ‘Who did this is a secret.’

2.4.10.2 Relative clauses

2.4.10.2.1 Headed relative clauses Unlike in many other languages, complement clauses to nouns such as *the news that the President will visit Senegal* do not exist in PhG. On the other hand, relative clauses, i.e., finite subordinate clauses that modify

⁸² When the preposition *s* precedes the subordinating conjunction *tu* the [t] of the conjunction is dropped, giving rise to [su].

nouns, are introduced by the subordinating conjunction *tu* ‘that’ and can precede (226a) or follow the noun they modify (226b) (the relative clauses are shown in square brackets; see section 2.4.1.5 for the word order in the noun phrase).

- (226) a. [Tu paɣásin ta pejkíra o nomát]
 that take.PFV.PST.3SG the.N.ACC.PL horse.N.ACC.PL the.M.NOM.SG man.M.NOM.SG
 íni xekím.
 be.NPST.3SG doctor.M.NOM.SG
 ‘The man who took the horses is a doctor.’
- b. [O nomát tu paɣásin ta pejkíra]
 the.M.NOM.SG man.M.NOM.SG that take.PFV.PST.3SG the.N.ACC.PL horse.N.ACC.PL
 íni xekím.
 be.NPST.3SG doctor.M.NOM.SG
 ‘The man who took the horses is a doctor.’

For a theoretical discussion of the difference between relative clauses that precede vs. follow the noun, see Bağrıaçık (2016); Bağrıaçık and Danckaert (2016).

Subjects (226), direct objects (227), indirect objects (228) and circumstantial (locative or temporal) adjuncts (229) can be relativized with *tu*. Genitives, however, cannot (230) (the headed relative clauses are shown in square brackets).

(227) Direct object

- a. [Tu θorís to pejkíri] íni to mon.
 that see.IPFV.NPST.2SG the.N.NOM.SG horse.N.NOM.SG be.NPST.3SG the.SG my.SG
 ‘The horse that/which you see is mine’
- b. [To pejkíri tu θorís] ...
 the.N.NOM.SG horse.N.NOM.SG that see.IPFV.NPST.2SG

(228) Indirect object

- a. [Tu ðókan ta pejkíra o nomát]
 that give.PFV.PST.3PL the.N.ACC.PL horse.N.ACC.PL the.M.NOM.SG man.M.NOM.SG
 íni xekím.
 be.NPST.3SG doctor.M.NOM.SG
 ‘The man (to) whom they gave the horses is a doctor.’
- b. [O nomát tu ðókan ta pejkíra] ...
 the.M.NOM.SG man.M.NOM.SG that give.PFV.PST.3PL the.N.ACC.PL horse.N.ACC.PL

(229) Circumstantial (temporal) adjunct

- a. [Tu enótun to maxčúmi so]
 that become.PFV.PST.3SG the.N.NOM.SG baby.N.NOM.SG in.the.N.NOM.SG

vaxúti] írtin an axsaxallús.
 time.N.NOM.SG come.PFV.PST.3SG a white.bearded.man.M.NOM.SG
 ‘The time when the baby was born, a white bearded man came.’

- b. [So vaxúti tu enótun to
 in.the.N.NOM.SG time.N.NOM.SG that become.PFV.PST.3SG the.N.NOM.SG
 maxčúmi] ...
 baby.N.NOM.SG

(230) Genitive

- a. * [Tu íðami ti néka (tu) o
 that see.PFV.PST.1PL the.F.ACC.SG wife.F.ACC.SG (his) the.M.NOM.SG
 nomát] íni xekím.
 man.M.NOM.SG be.NPST.3SG doctor.M.NOM.SG
 int.: ‘The man whose wife we saw is a doctor.’
- b. * [O nomát tu íðami ti
 the.M.NOM.SG man.M.NOM.SG that see.PFV.PST.1PL the.F.ACC.SG
 néka (tu)] ...
 wife.F.ACC.SG (his)

2.4.10.2.2 Free relative clauses The main characteristics of a free relative (which is also called a “headless relative”) clause is that there is no overtly expressed noun which the relative clause modifies. Free relatives can be used either as nominals or as adverbials.

A nominal free relative clause is introduced either by the inflected relative pronoun *ótis* ‘who(ever)’ for human entities or *óti* ‘what(ever)’ for non-human entities (see Table 2.31 and Table 2.32 respectively), or by the subordinating conjunction *tu* ‘that’ for both human and non-human entities. The first two relativizers can express subjects, direct and indirect objects, and genitive possessors (231) of the subordinate clause, while the last can express subjects or direct and indirect objects only (232) (free relative clauses are shown in square brackets).

	Relative pronoun	Function
Nom.	ótis	subject (human)
Acc.	ótina	direct/indirect object (human)
Gen.	ótunus	genitive possessor (human)

Table 2.31: The relative pronoun *ótis* ‘who(ever)’

As can be seen in (232), PhG free relatives with *tu* ‘that’ do not come with any sort of case “matching” requirement.

Adverbial free relative clauses are introduced by an indefinite free relative pronoun (see also Anastasiadis 1976:167, θ’): *náatara* ‘how(ever) much/many’ and *čápu* ‘where(ver)’:

- (233) a. [Náatara paráða yrévis], epár ta.
 however.much money.N.ACC.PL want.IPFV.NPST.2SG take.PFV.IMP.2SG 3OBJ
 ‘Take as much money as you want.’
- b. [Čápu paénis], yo páli a nártu dáma.
 where(ever) go.IPFV.NPST.2SG I.NOM PRT FUT.DEF come.PFV.NPST.1SG together
 ‘Where(ever) you go, I will (also) come along.’

2.4.10.3 Adverbial clauses

A finite clause can also serve as an adverbial clause, modifying the action or the event expressed by the main verb. An example of this has already been given in section 2.4.10.1, in example (224b), where the clause introduced by the preposition/conjunct *sos* ‘until’ serves as a temporal adverbial clause indicating that the action expressed in the adverbial clause took place before the action expressed in the main clause. The functions of adverbial clauses are differentiated by the subordinating (adverbial) conjunctions that introduce them.

2.4.10.3.1 Temporal clauses Temporal clauses are adverbial clauses that describe an event or action that took place before, after or at the same time as the event or action described in the main clause. The most widely used subordinating conjunctions that introduce temporal adverbial clauses in PhG are the following (see also Anastasiadis 1976:244, H’): *čas* ‘as’, *fótes* ‘while’, *samú* ‘when’, *sa* ‘while/when’, *sos* ‘until’ and *pír* ‘before’. Some representative examples are provided in (234):

- (234) a. Sa/fótes vgalénkan néro, írtin a
 while take.out.IPFV.PST.3PL water.N.ACC.SG come.PFV.PST.3SG a
 nomát.
 man.M.NOM.SG
 ‘While they were taking out water, a man came.’
- b. yrévi na si iđí pir mi xaθí.
 want.IPFV.NPST.3SG SUBJ 2SG.OBJ see.PFV.NPST.3SG before not die.NPST.PFV.3SG
 ‘She wants to see you before she dies.’

- c. Samú íristin ksopísu o Andriás,
 when return.PFV.PST.3SG back the.M.NOM.SG Andrew.M.NOM.SG
 ðókan ta an katsára.
 give.PFV.PST.3PL 3OBJ an admonition.F.NOM.SG
 ‘When Andrew returned back, they scolded him.’

2.4.10.3.2 Purpose clauses Purpose clauses express for what purpose the event or the action expressed in the main clause takes place. In PhG, purpose clauses are subjunctive clauses marked by the conjunction *tejí* ‘in order that/so (that)/since’ (< T. *diye*). *Tejí* is placed at the end of the purpose clause:

- (235) (Na) mi mis piésun tejí piáyam sa
 SUBJ not 1PL.OBJ catch.PFV.NPST.3PL COMP go.PFV.PST.1PL to.the.N.ACC.PL
 rušia.
 mountain.N.ACC.PL
 ‘We went to the mountains in order that they do not catch us.’

Tejí can be omitted in casual speech.

2.4.10.3.3 Causal clauses Causal clauses express the cause or reason of the event or action expressed in the main clause. There are three basic ways to form a causal adverbial clause. In the first strategy, the preposition *s* ‘from’ introduces a nominalized declarative clause (see section 2.4.10.1 for nominalized clauses and (236a)). In the second strategy, the causal clause is introduced by the conjunction *čunkí* ‘because’ (< T. *čünkü*); see (236b).⁸³ In the final strategy, the conjunction *tejí* ‘in order that/so (that)/since’ introduces a declarative indicative clause, which serves as a causal clause (236c).⁸⁴

⁸³ A clause introduced by *čunkí* ‘because’ can also act as a rationale clause, which provides the causal relation between the main proposition and the speaker’s epistemic attitude:

- (i) Xerxaltá čo írtin čunkí čo θoró ta.
 possibly not come.PFV.PST.3SG because not see.IPFV.NPST.1SG 3OBJ
 ‘Possibly she did not come because I do not see her.’

⁸⁴ Indicative clauses introduced by the temporal conjunction *fótes* ‘while’ can also express causation:

- (i) Fótes íni kénči, s ipá atós.
 while be.NPST.3SG young.SG HORT go.PFV.NPST.3SG he.NOM
 ‘As/since he is young, he should go.’

- (236) a. S tu poní kardía ton Andriá,
 from that hurt.IPFV.NPST.3SG heart.F.NOM.SG the.M.ACC.SG Andrew.M.ACC.SG
 fténi čip tu yrévi.
 do.IPFV.NPST.3SG all that want.IPFV.NPST.3SG
 ‘Because she loves Andrew, she does everything he wants.’
- b. Čo a nárti čunkí kamnóni.
 not FUT.DEF come.PFV.NPST.3SG because work.IPFV.NPST.3SG
 ‘She is not coming because he is working.’
- c. Čo tros tejí atós páli čo trói.
 not eat.IPFV.NPST.2SG COMP he.NOM PRT not eat.IPFV.NPST.3SG
 ‘He does not eat because you do not eat.’

2.4.10.3.4 Concessive clauses A concessive adverbial clause expresses a proposition that is unexpected in some way, or contrasts with the information provided in the main clause. Adverbial conjunctions that express concession, such as *although* or *even if* in English, do not exist in PhG (see also Anastasiadis 1976:242, Z', 1.α'). Concession is mostly expressed with a subjunctive clause that is followed by the contrastive particle *páli*:

- (237) Na mi nártis si páli, yo a ipáu.
 SUBJ not come.PFV.NPST.2sg you.SG.NOM PRT I.NOM FUT.DEF go.PFV.NPST.1sg
 ‘Even if you do not come, I will go.’

2.4.10.3.5 Conditional clauses A conditional clause, which is also referred to as the “protasis”, is a subordinate clause expressing a condition on the main clause (sometimes called as “apodosis”). In PhG, a conditional clause is introduced by the conjunction *ær* ‘if’ (< T. *eđer*) followed by the subjunctive particle *na*. The latter can be omitted if the negation marker *mi* is also present (see section 2.4.5.3). The first conjunction can be omitted, although this is a rare occurrence (see also Anastasiadis 1976:237, ΣT’):

- (238) Ær na ta iđí i ma su, a
 if SUBJ 3OBJ see.PFV.NPST.3SG the.F.NOM.SG mother.F.NOM.SG your.SG FUT.DEF
 xoliestí.
 be.angry.PFV.NPST.3SG
 ‘If your mother sees it, she will become angry.’

2.4.10.3.5.1 Factual conditional clauses Factual conditional clauses express a condition that can potentially be fulfilled. The action or event expressed in the main clause can or should also be fulfilled concomitantly. The verb in the conditional

clause must have a [–past, +perfective] or [–past, –perfective] specification. The main clause can be a present indicative, a future, an imperative, a subjunctive or a hortative:

- (239) a. *Ær na θorís ató to ryo, yasantízis*
 if SUBJ see.IPFV.NPST.2SG this.SG the.N.ACC.SG work.N.ACC.SG earn.IPFV.NPST.2SG
puḡá paráða.
 a.lot money.N.NOM.PL
 ‘If you do this job, you earn a lot of money.’
- b. *Ær na mi mis ta ðíksi o θεός,*
 if SUBJ not 1PL.OBJ 3OBJ show.PFV.NPST.3SG the.M.NOM.SG God.M.NOM.SG
a xaθúmi
 FUT.DEF die.PFV.NPST.1PL
 ‘If God does not show it to us, we are going to die.’
- c. *Ær na ḡrévis na fas, eðó!*
 if SUBJ want.IPFV.NPST.2SG SUBJ eat.PFV.NPST.2SG come.IMP.2SG
 ‘If you want to eat, come!’

2.4.10.3.5.2 Counterfactual conditional clauses A counterfactual conditional clause expresses an event or a situation that has not been realized so far or cannot be realized in the future. The event or the situation in the main clause has also not been realized or will not be realized. The verb of the conditional clause must have the [+past, –perfective] specification, while the verb of the main clause appears with the counterfactual future particle *xa* (see section 2.4.4.1.3 for this marker).⁸⁵ There is no morpho-syntactic differentiation of tense (e.g., past vs. future/present) in a counterfactual conditional clause. Time-reference is inferred from the context. Recall from section 2.4.4.1.3 that this is also true for the counterfactual future particle *xa*, which can refer to either a present or a perfect conditional reading:

- (240) a. *Ær na ta katénka tu čo xa nárti, čo xa*
 if SUBJ 3OBJ know.IPFV.PST.1SG that not FUT.CF come.PFV.NPST.3SG not FUT.CF
ipáu.
 go.PFV.NPST.1SG
 ‘If I knew/had known that she were not coming, I would not go/have gone.’

⁸⁵ Verbs which do not make a [±perfective] aspectual distinction in the past, such as *éxu* ‘(I) have’ or the copula *ími* ‘(I) am’, are used in their [+past] forms.

- b. Ær na fšin axúli, aúča aškára si stráta
 if SUBJ have.PST.3SG mind.N.NOM.SG such openly on.the.F.ACC.SG road.F.ACC.SG
 čo xa nárti.
 not FUT.CF come.PFV.NPST.3SG
 ‘If he were/had been clever, he would not (have) come on the road openly.’

2.4.11 Other syntactic phenomena

2.4.11.1 Coordination

2.4.11.1.1 Clausal coordination Clausal coordination can be asyndetic; i.e., no overt coordinating conjunction is used. The most natural reading of this coordination is temporal; namely, the events are sequential (241).

- (241) Xítsan, mujóθan so káči písu.
 run.PFV.PST.3PL hide.NACT.PFV.PST.3PL in.the.N.ACC.SG rock.N.ACC.SG behind
 ‘They ran (and) hid behind the rock.’

The most frequently used coordinating conjunction is *če* ‘and’ (cf. SMG *και* [ke]/[ki]), which typically expresses a temporal/sequential reading (242a), although it can also establish a causal (242b) or adversative relation (242c) between two clauses (for the latter see also Anastasiadis 1976:243).

- (242) a. Xítsan če mujóθan so káči písu.
 run.PFV.PST.3PL and hide.NACT.PFV.PST.3PL in.the.N.ACC.SG rock.N.ACC.SG behind
 ‘They ran and hid behind the rock.’
 b. Fa ta če kaó íni.
 eat.PFV.IMP.2SG 3OBJ and good.SG be.NPST.3SG
 ‘Eat it, (because) it is good.’
 c. Enótun vrađí če kanís páli čo írtin.
 become.PFV.PST.3SG evening.N.NOM.SG and no.one.NOM.PRT not come.PFV.PST.3SG
 ‘It was getting dark but no one came.’

Typical adversative coordinating conjunctions are *ja* ‘but’ (< T. *ya*), *ammá* ‘but, however’ (< T. *ama*) and *lákin* ‘but’ (< T. *lákin*; see also Anastasiadis 1976:273–275, B’1.α1):

- (243) Írta ja/ammá/lákin kanína čo íða.
 come.PFV.PST.1SG but/however no.one.ACC not see.PFV.PST.1SG
 ‘I came but I saw no one.’

Disjunctive coordination is expressed by the conjunctions *ja* ‘or’ (< T. *ya*), *jóχusa* and *jóχsa(m)* ‘or, otherwise’ (< T. *yoksa*):

- (244) *ɣapá mi ja/joxsá(m) čo ɣapá mi.*
 love.ipfv.npst.3sg 1sg.obj or not love.ipfv.npst.3sg 1sg.obj
 ‘She loves me or she does not love me.’

Certain coordinating conjunctions are repeated before the first and second conjunct clauses. These include *næ ... næ* ‘neither ... nor’ (< T. *ne ... ne*), *xem ... xem* ‘both ... and’ (< T. *hem ... hem*) and *kerék ... kerék* ‘either ... or’ (< T. *gerek ... gerek*; Anastasiadis 1976:279, Γ', 1):

- (245) a. *Næ tróí næ píni.*
 neither eat.ipfv.npst.3sg nor drink.ipfv.npst.3sg
 ‘She neither eats nor drinks.’
 b. *Xem čanaxévi mi xem azarlatízi mi.*
 both make.fun.ipfv.npst.3sg 1sg.obj and scold.ipfv.npst.3sg 1sg.obj
 ‘She both makes fun of me and scolds me.’

Another element that seems to act as a coordinator in PhG is *ki* (< T. *ki*). In a coordinate structure with *ki*, the first clause functions as the justification of the statement in the second clause (246).

- (246) *Atós páli múɣusin to kθári ki ðókan*
 he.nom prt hide.pfv.pst.3sg the.n.acc.sg barley.n.acc.sg prt give.pfv.pst.3pl
ta an katsára.
 3obj an admonition.f.nom.sg
 ‘He hid the barley and (this is why) they scolded him.’

For a treatment of *ki*, see chapter 4.

2.4.11.1.2 Constituent coordination The most frequently used coordinators of constituents are the conjunctive *če* ‘and’ and the disjunctive *ja* ‘or’:

- (247) *O Andriás če i Nerkíza*
 the.m.nom.sg Andrew.m.nom.sg and the.f.nom.sg Nerkíza.f.nom.sg
írtani.
 come.pfv.pst.3pl
 ‘Andrew and Nerkíza came.’

Coordinating conjunctions which are composed of two identical conjunctions, such as *næ ... næ* ‘neither ... nor’, *xem ... xem* ‘both ... and’, and *kerék ... kerék* ‘either ... or’ (see section 2.4.11.1.1) can also be used to coordinate constituents:

- (248) *Kerék mitsíku kerék méɣa, čip sóripsan ta.*
 either young.sg or old.sg all collect.pfv.pst.3pl 3obj
 ‘Either young or old, they collected them all.’

2.4.11.2 Comparison of adjectives and adverbs

The comparative form of adjectives and adverbs is composed of two parts. The first part is the standard, preceded by the preposition *s* ‘from’, and the second part is the comparative adjective/adverb, which refers to the quality of the object/event of comparison. The adjective/adverb is preceded by the morpheme *čav* ‘more’, but this can be omitted (Anastasiadis 1976:66, IV,A, 1.α’):

- (249) O Andriás si Nerkíza (čav) méya
 the.M.NOM.SG Andrew.M.NOM.SG from.the.F.NOM.SG Nerkiza.F.NOM.SG more old.SG
 íni.
 be.NPST.3SG
 ‘Andrew is older than Nerkiza.’

The superlative form of an adjective/adverb is marked by *en* ‘most’ (< T. *en*). The adjective in this case is obligatorily preceded by the third person singular or plural articles (that are required by the rules of obligatory definiteness spread; see section 2.4.1.4):

- (250) a. En to méya íni o Andriás.
 most the.SG old.SG be.NPST.3SG the.M.NOM.SG Andrew.M.NOM.SG
 ‘Andrew is the oldest.’/ ‘The oldest one is Andrew.’
 b. En ta zóræ ta pejkíra ínti ađæ.
 most the.PL good.PL the.N.NOM.PL horse.N.NOM.PL be.NPST.3PL here
 ‘The best horses are here.’

3

Word order in PhG and the composition of the left periphery

3.1 Introduction

The main focus of this chapter is the relative order of the subject (S), verb (V) and direct object (O) in declarative main clauses in PhG. I focus only on clauses with a mono-transitive verb and I will leave clauses with ditransitive, unaccusative/passive and unergative verbs for future research. The issue of word order is approached from both a linear and a hierarchical perspective.

As illustrated in (1), PhG allows all six permutations of S, V and O in a declarative main clause (see also section 2.4.3.1). These examples are presented without context here and without commenting on the subtle interpretive details they entail, topics which are discussed in detail later on in this chapter. Similarly, the nature of the object clitic *ta* ‘it/him/her/them’ (1b,e,f), which doubles the direct object and in certain cases (1f) becomes obligatory, is also clarified below (glosses in (1b–f) are simplified).

- (1) a. (SVO)
O nomát piésin to rkúđi.
the.M.NOM.SG man.M.NOM.SG catch.PFV.PST.3SG the.N.ACC.sg bear.N.ACC.SG

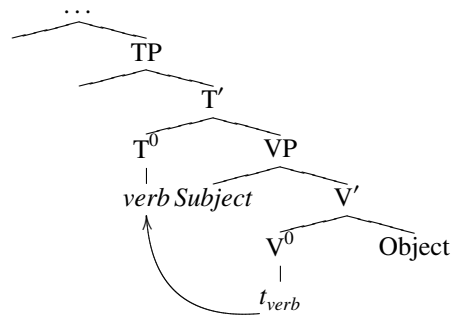
- b. O nomát to rkúði piésin (ta). (SOV)
the man the bear caught 3OBJ
- c. Piésin o nomát to rkúði. (VSO)
caught the man the bear
- d. Piésin to rkúði o nomát. (VOS)
caught the bear the man
- e. To rkúði piésin (ta) o nomát. (OVS)
the bear caught 3OBJ the man
- f. To rkúði o nomát piésin ta. (OSV)
the bear the man caught 3OBJ
'The man caught the bear.'

The present chapter has three main goals. The first is to investigate which, if any, of the six possible orders presented in (1) can be taken as the PhG discourse-neutral word order(s), i.e. the order(s) in which no particular constituent receives a special discourse-oriented interpretation. I will conclude that a subset of SVO (1a) patterns and all VSO (1c) patterns qualify as discourse-neutral word orders. The investigation also reveals that a subset of SVO clauses may have pragmatically marked properties. The other word orders—SOV (1b), VOS (1d), OVS (1e) and OSV (1f)—all qualify as non-neutral word order patterns, in which at least one constituent receives a pragmatically marked interpretation.

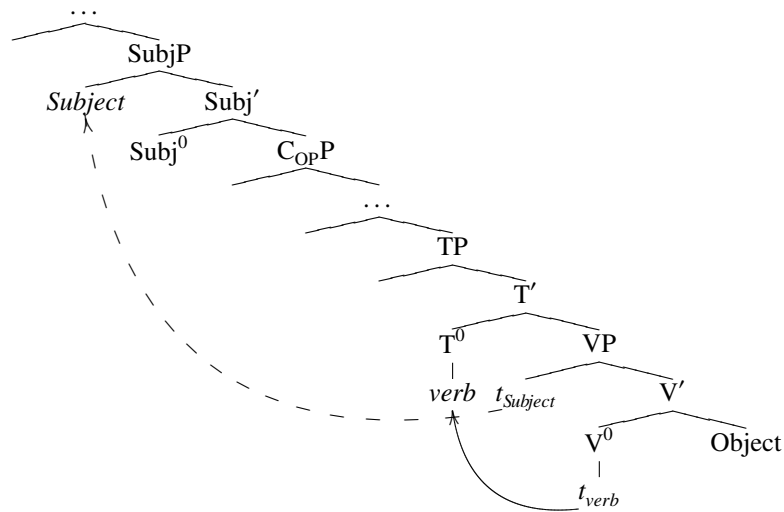
The second goal of this chapter is to provide a phrase structure analysis of clauses with SVO and VSO orders, with special attention for the positions that subjects and verbs occupy. The background I assume for this syntactic analysis is the framework of generative grammar in the Chomskyan tradition, which is introduced in some detail in section 3.3.1. I adopt the assumption that the hierarchical structure of the clause consists of three layers, namely (from bottom to top) the lexical domain, labeled VP (for Verb Phrase), the inflectional domain, labeled TP (Tense Phrase), and the discourse domain, labeled CP (Complementizer Phrase; referred to here as the CP-domain). I further adopt the cartographic approach, which assumes these three layers to be shorthand terms for a more richly articulated structure. Against this background, I develop the following three proposals. First, verbs are first merged in the lexical domain, in V^0 , and they move to the highest head in the inflectional domain, T^0 , as shown in (2). Verb movement always terminates in this position. The second proposal is that in a discourse-neutral clause, subjects can occupy two positions: (i) They can remain in their VP-internal base position, Spec, VP (abstracting away from a further ν P-VP articulation) (2a). This derivation gives rise to a neutral VSO order. Alternatively, (ii) subjects can move to the specifier position of a dedicated subject position, Spec, SubjP (Subject Phrase), where the subject-of-predication fea-

ture on Subj^0 is checked. I argue that in PhG, SubjP is situated in the CP-domain above a dedicated complementizer position, $\text{C}_{\text{OP}}\text{P}$ (Operator Complementizer Phrase in (2b)). When a subject sits in Spec, SubjP , a discourse-neutral SVO order arises. A consequence of the second proposal is that Spec, TP, is not a possible halting site for subjects in PhG.

(2) a.

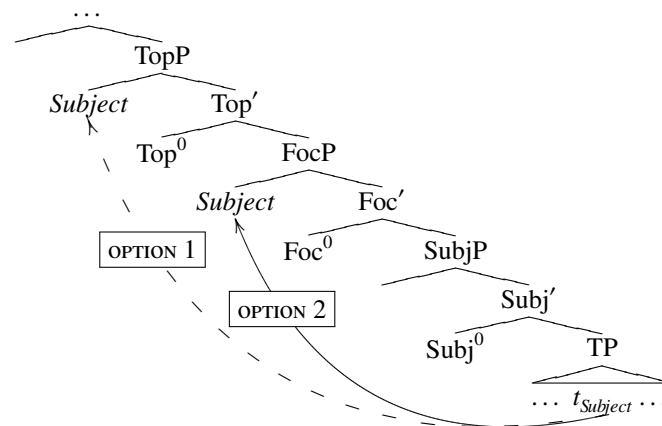


b.



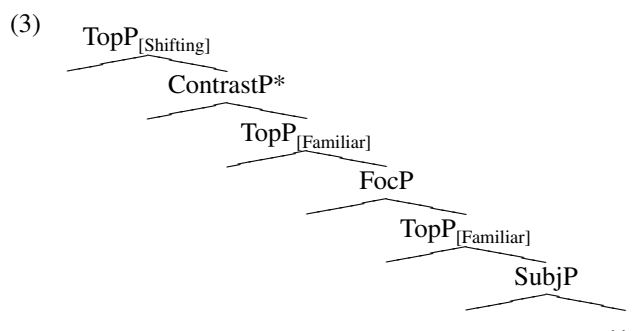
The third and final proposal is that the subject is not necessarily in Spec, SubjP in every SVO clause. A subject in an SVO clause may also occupy one of the dedicated scope-discourse projections dominating SubjP , such as TopP (Topic Phrase; $\text{OP}^{\text{ION}} 1$) or FocP (Focus Phrase; $\text{OP}^{\text{ION}} 2$), as represented in the (simplified) tree in (2c). If a subject moves to FocP or TopP , a pragmatically non-neutral SVO clause emerges. Hence, the ambiguity of SVO structures between a neutral and non-neutral reading is captured by the exact position of the subject:

(2) c.



The final goal of this chapter is to further investigate the derivation of non-neutral SOV (1b) and O-initial (1e–f) word orders. Assuming that V^0 -to- T^0 movement takes place in all clauses, I argue that non-neutral SOV clauses and O-initial clauses involve displacement of at least one argument to the left periphery of the clause (i.e., the expanded CP-domain). This part of the chapter focuses on the precise nature of the landing site of left-peripheral arguments. In particular, adopting the tripartite classification of topics proposed by Frascarelli and Hinterhölzl (2007), I show that there are two clear types of topic in PhG: shifting topics and familiar topics (which will be defined below). While there is a unique shifting topic projection in a declarative main clause, familiar topics can be iterated.¹ A shifting topic expression is hosted rather high in the left periphery, in $\text{TopP}_{[\text{Shifting}]}$, higher than other scope-discourse projections. Familiar topic expressions situated in $\text{TopP}^*_{[\text{Familiar}]}$, on the other hand, can be located both high (preceding a focus) or low (following a focus). The final discourse projection I identify is a recursive ContrastP^* (Contrast Phrase), which hosts constituents—among which subjects—that can receive an array of contrastive readings. These contrastive constituents show properties that are shared by both topics and foci. Evidence from naturally occurring data is provided to show that ContrastP^* is also situated high in the left periphery, but lower than $\text{TopP}_{[\text{Shifting}]}$. The hierarchy of FocP, ContrastP^* and different TopPs in the left periphery of PhG is shown in (3).

¹ Whenever a given functional projection is iterative, this will be marked by adding an asterisk (*) to the immediate right of the label of the relevant projection.



The organization of the chapter is as follows: in section 3.2, I identify the environments in which clauses with discourse-neutral word orders can be used felicitously, thus identifying the discourse-neutral word orders of PhG as VSO and SVO. The remaining possible word orders, namely SOV, VOS and O-initial clauses, are shown to be pragmatically marked: they contain one or more constituents whose referents receive topic or focus interpretation, two diagnostics which I deploy to identify non-neutrality. In section 3.3, I provide a phrase structural analysis of the discourse-neutral orders VSO and SVO. More specifically, after briefly introducing the theoretical assumptions adopted in this thesis in section 3.3.1, in section 3.3.2 I investigate the position of the verb in VSO clauses. I conclude that VSO clauses involve V^0 -to- T^0 movement. This conclusion is then further extended to SVO clauses. In section 3.3.3, I turn to the position of subjects in VSO and SVO clauses. I argue that postverbal subjects remain in their base position, Spec, VP. Preverbal subjects, on the other hand, may be hosted in discourse projections, such as TopP or FocP. In this case, a pragmatically non-neutral SVO clause arises. Based on an asymmetry between preverbal object topic expressions and preverbal subjects in the scope of a focus expression, I argue that a subject position with a quantificational feature (SubjP) should be identified in the lower portion of the left periphery. As I further illustrate in this section, if a subject is hosted in Spec, SubjP, a discourse-neutral SVO clause emerges. In section 3.4, I return to non-neutral SOV and O-initial clauses. In this section, I look specifically at the properties and hierarchical relations of projections which host different types of topic. Based on the interpretive properties of topic constituents, I argue that there are two types of topic in PhG: shifting topics and familiar topics. In addition to FocP, and two types of topic, I identify one more scope-discourse projection, ContrastP, which hosts constituents receiving an array of contrastive reading and whose properties are shared by both topics and foci. Finally, section 3.5 summarizes the main conclusions reached in this chapter and a number of questions that are left for further research.

3.2 Neutral and non-neutral word orders in PhG

This section identifies the discourse-neutral and discourse non-neutral orders of the elements S, V and O in declarative main clauses in PhG. The discussion is organized as follows. In section 3.2.1, I review how neutral word order has been defined in the literature, and I further provide a working definition of neutral word order for this dissertation, based on Dryer (2005). In section 3.2.2, I provide a survey of neutral word order(s) in PhG according to four criteria: (i) question-answer congruence, (ii) introductory clauses to narratives, (iii) generic statements, and (iv) intonation. I conclude that VSO patterns and a subset of SVO patterns are the best candidates to qualify as PhG discourse-neutral word orders, whereas SOV, VOS, O-initial clauses as well as certain SVO patterns are not. In section 3.2.3, I present a brief literature survey on VSO and SVO as neutral word orders. To conclude, in section 3.2.4, I discuss the formal and interpretive properties of the non-neutral word orders.

3.2.1 On “neutral” and “non-neutral” word orders

Since Greenberg (1966[1963]), the issue of the neutral ordering of the main constituents, i.e., (non-pronominal) S, V and (non-pronominal) O, in a declarative main clause has been a major issue in typological research (a.o., Steele 1978; Comrie 1981:86–103, section 4; Croft 1990:69–80, section 3.4; Dryer 1992, 1995, 1996, 1997, 2005, 2013a).² Some authors argue that the neutral word order of a language should be defined either as the only possible order or as the order which is the most frequently attested (Greenberg 1966[1963]). Other scholars argue that it is not the frequency of attestation that determines the neutrality of a clause. Rather the presence or absence of pragmatic markedness of a clause should be taken as the diagnostic for its status as neutral or non-neutral, i.e. pragmatically marked (e.g., Dryer 1995 et seq.). According to Dryer (1995:112), a clause “[...] is pragmatically marked relative to another if the range of contexts in which it is appropriate is a proper subset of the set of contexts in which the unmarked [clause, MB] is used”. Regardless of which of these two definitions is assumed, we can say that all six possible permutations of S, V and O seem to be attested as the neutral word order in the languages of the world, although it should be also noted that whether the pattern OSV really exists as a genuine neutral word order is still debated (Dryer 1996, 2007, 2013b).

According to Dryer (2005), natural languages can be classified into two major categories with respect to the issue of word order: those with a “rigid order” and those with a “flexible order”. A language with rigid order can straightforwardly be

² Various alternative terms have been adopted in the literature to characterize neutral word orders, the most well-known among which are the terms “basic”, “default”, “dominant” and “unmarked”. In this dissertation, I use the terms “neutral” and “discourse-neutral” interchangeably.

assigned to one of the six types (if indeed OSV is also a type) given above because in such languages, the elements S, V and O occur in a specific neutral order and other word orders deviating from that order are either ungrammatical or are attested only in very specific pragmatic contexts, and hence are clearly pragmatically marked. English is a typical example of a rigid word order language, in which the neutral word order is SVO:

- (4) Sam solved the equation. (SVO)

A deviation from SVO either becomes ungrammatical or brings along certain interpretive effects. Leaving the latter issue aside for the time being, we see in (5) that VSO and SOV are not grammatical word orders in English:

- (5) a. *Solved Sam the equation. (VSO)
b. *Sam the equation solved. (SOV)

In a language with flexible order, on the other hand, all the possible permutations of S, V and O are grammatical in a declarative main clause. Some of the languages belonging to this type may have a neutral order, i.e., the order characterized by pragmatic neutrality. In such languages, different word orders are employed in specific pragmatic contexts in which discourse-related phenomena may play a major role. Such languages are also referred to as “discourse configurational languages” (É. Kiss 1995b:6–7). An illustrative case is Turkish (Erguvanlı 1984, see also É. Kiss 1995b:5). In this language, the SOV pattern is accepted as the neutral order, but all other word order permutations are equally grammatical (6) (see, a.o., Erguvanlı 1984; Kural 1992; Kelepir 2001; Kornfilt 2003).

- (6) a. Kedi sütü içti. (SOV)
cat.NOM milk.ACC drink.PST.3SG
b. Kedi içti sütü. (SVO)
cat.NOM drink.PST.3SG milk.ACC
c. Sütü kedi içti. (OSV)
milk.ACC cat.NOM drink.PST.3SG
d. Sütü içti kedi. (OVS)
milk.ACC drink.PST.3SG cat.NOM
e. İçti kedi sütü. (VSO)
drink.PST.3SG cat.NOM milk.ACC
f. İçti sütü kedi. (VOS)
drink.PST.3SG milk.ACC cat.NOM
'The cat drank the milk.'

[Turkish]

As (6) shows, changing the order of the S,V and O in Turkish does not result in ungrammaticality; however, pragmatic factors affect the felicitousness of the resulting clauses. In other words, a word order that departs from the neutral order is sensitive to the “information structure”, i.e., “[...] the aspects of natural language that help speakers to take into consideration the addressee’s current information state and hence to facilitate communication” (Krifka and Musan 2012:1). For example, the SOV and SVO clauses in (6a–b) have a reading in which the clause is about *kedî* ‘the cat’. The referent of *kedî* ‘the cat’ is interpreted as “given” in the discourse, i.e., it is assumed by the speaker to be present in the hearer’s consciousness at the time of hearing the utterance (Chafe 1976; Prince 1981). The noun phrase *kedî* ‘the cat’ in these cases is often referred to as a “topic”.³ The sentence topic is what a sentence is about, and it evokes knowledge that is shared by the speaker and hearer(s) or assumed by the speaker(s) to be shared with the hearer(s) (Strawson 1964; Reinhart 1981; Büring 2016:80–85). For the purposes of this dissertation, the following definition of topic is adopted (see also Lambrecht 1994:131):⁴

- (7) A referent which a proposition is construed to be about in a given discourse situation; a proposition is about a referent if it expresses information which is relevant to, and which increases the hearer’s knowledge of, this referent.

(Lambrecht and Michaelis 1998:494, their (19))

Based on (7), in (6a–b) there can be said to be an “aboutness” relation between the topic *kedî* ‘the cat’ and the rest of the clause, which is referred to as the “comment”: the proposition expressed by the comment is about *kedî* ‘the cat’ (see also Strawson 1964). In the OSV and OVS clauses (6c–d), on the other hand, the object, *sütü* ‘the milk’, has topic status and is interpreted as familiar in the discourse. The verb-initial clauses in (6e–f) are felicitous in contexts where all of the information is new. The reader is referred to Erguvanlı (1984) and Temürcü (2001) for further information about the interpretations of different word orders in Turkish.

In some instances, a sharp contrast in grammaticality emerges in Turkish if certain pragmatically marked constituents do not occupy designated positions. An illustrative case is the positional constraint on constituents that function as focus. “Focus”, for the purposes of this dissertation, can be defined as the non-presuppositional part of a clause (Zubizarreta 1998, after Jackendoff 1972; Chomsky 1976).⁵ This defi-

³ To be precise, according to Krifka (2007) and Krifka and Musan (2012:6) the noun phrase in the clause, *kedî*, should be called a “topic constituent” or “topic expression”, and the discourse referent anchored to it, i.e. the specific cat this noun phrase refers to, should be called a “topic denotation”. Even though I acknowledge this difference, in this dissertation I will refer to both as “topic”.

⁴ For other definitions of the notion of topic, see Reinhart (1981); Heim (1982); Vallduví (1992); Krifka (2007:41). For different sub-types of topic, see section 3.4.1.

⁵ For other, and indeed quite different, formal definitions of focus, see Lambrecht (1994:213, 2000:612)

dition assumes that a statement is partitioned into a “focus” and a “presupposition”. Zubizarreta (1998) uses the traditional question-answer test to differentiate focus and presupposition. The question in (8a) presupposes that John ate something and requests information about the identity of this entity. The answer in (8b), then, is divided into two parts: that which is already presupposed, i.e., the presupposition (*John ate*), and that which is the new, non-presupposed information, i.e., the focus (*the guacamole*). The logical structure of (8b) can be represented as in (8c).

- (8) a. What did John eat?
 b. John ate *the guacamole*.
 c. There is an *x*, such that John ate that *x*.

É. Kiss (1998) differentiates two types of focus, which also become the phonologically most prominent element in a given sentence. According to her, (8b) is an instantiation of “information focus” which expresses new, non-presupposed information. Another type of focus is “identificational focus” which is defined as follows:⁶

- (9) An identificational focus represents a subset of the set of contextually or situationally given elements for which the predicate phrase can potentially hold; it is identified as the exhaustive subset of this set for which the predicate phrase actually hold.

(É. Kiss 1998:245, ex.(1))

In some languages, such as Modern Standard Arabic, SMG (É. Kiss 1998) or Persian (Karimi 2005), this type of focus is interpreted as a “contrastive focus”, i.e., its referent is exhaustively identified and is contrasted with an item presupposed by the addressee. In other languages such as Hungarian (É. Kiss 1998, 2016), the identificational focus may be, but is not necessarily, interpreted as contrastive. Returning to Turkish, any constituent that functions as an information focus or an identificational focus (which also receives a contrastive reading), must both occur immediately preverbally (see a.o., Erguvanlı 1984; Göksel and Özsoy 2000; Güner 2014; see (10Ba, 11Ba) respectively). These constituents are ungrammatical in postverbal position, as (10Bb, 11Bb) show (the focus expression is indicated in small capitals indicating that the focal material receives the heaviest stress of the clause).

(10) Information focus

and Rooth (1992).

⁶ This corresponds to Lambrecht’s (1994:297) term “argument focus”. Certain scholars (e.g. Rooth 1992) do not make a semantic distinction between identificational and information focus, but derive the relevant distinctions from the pragmatic use of focus.

- A: Kedi neyi içti?
 cat.NOM what.ACC drink.PST.3SG
 ‘What did the cat drink?’
- B: a. Kedi sütü içti.
 cat.NOM milk.ACC drink.PST.3SG
 ‘The cat drank the milk.’
- a. *Kedi içti sütü.
 cat.NOM drink.PST.3SG milk.ACC

(11) Identificational focus

- A: Kedi suyu içti.
 cat.NOM water.ACC drink.PST.3SG
 ‘The cat drank the water.’
- B: a. Hayır, kedi sütü içti(, suyu değil).
 no cat.NOM milk.ACC drink.PST.3SG water.ACC not
 ‘No, the cat drank the milk(, not the water).’
- a. *Hayır, kedi içti sütü(, suyu değil).
 no cat.NOM drink.PST.3SG milk.ACC water.ACC not

[Turkish]

Similar positional restrictions on pragmatically marked constituents have been argued to obtain in other discourse-configurational languages (see especially the papers in É. Kiss 1995a).⁷

PhG, which shows all six permutations of S, V, O in a declarative main clause (1), would at first sight qualify as a language with flexible word order. The question that arises then is whether one or some of these permutations can be identified as the neutral word order(s). Following Dryer’s (1995) argument, a neutral clause should be one in which no constituent is associated with pragmatic markedness. So far, we have seen two concepts associated with pragmatic markedness; topic and focus. Then in a neutral clause we expect that no constituent is associated with a topic or a focus reading. For the purposes of this thesis, I propose the following working definition of a neutral clause (adapted from Kirk 2012:27, see also Cruschina 2011:3–8):

- (12) A clause displays neutral word order if it does not contain any element that has a special discourse-oriented interpretation of focus or topic.

⁷ There may be another type of language in which all permutations of S, V, O are freely allowed. Some examples of this are Warlpiri and Nunggubuyu (two aboriginal languages spoken in Australia). Such languages are often referred to as non-configurational languages (see Hale 1983). I refer the reader to Austin and Bresnan (1996) and Danckaert (2017:75–77, section 1.8) for an overview of the notion of (non-)configurationality.

To identify a neutral clause as defined in (12), we have to identify discourse environments that do not impose any special discourse-oriented interpretation on a constituent. In the next section, I present three environments in which a neutral clause can be uttered felicitously. These environments reveal that VSO and SVO qualify as neutral clauses, which is further supported by the fact that these two orders can be uttered without special intonation.

3.2.2 Contexts evoking neutral word order(s)

3.2.2.1 Answer to an all-focus question

A test that is typically used to elicit neutral clauses is to ask a question with wide-focus, such as *What happened?* (Halliday 1967:207–208; Comorovski 1991; Zubizarreta 1994; Anagnostopoulou 1994; Alexiadou and Anagnostopoulou 1995; Alexiadou 1996, 1999; Dik 1997:256, a.o.). In a pragmatically felicitous answer to a wide-focus question, no single constituent is narrowly focalized; in the light of the definition in (12), a felicitous answer to such a question is thus regarded as a neutral clause. On the other hand, a congruent answer to a question which puts narrow-focus on a constituent, such as *Who kissed Mary?* in which the subject is narrowly focused, is considered to be pragmatically marked.⁸

In English, a language with rigid word order (section 3.2.1), no difference in linear word order is observed between answers to wide-focus questions and answers to narrow-focus questions (13). In SMG, which, like PhG, allows all word order permutations (e.g., Philippaki-Warburton 1985), on the other hand, VSO is argued to be the most felicitous answer to a wide-focus question (14aB), whereas SVO is judged as pragmatically marked (14aB'). A question which puts narrow-focus on the subject, on the other hand, evokes an answer in SVO order (a.o., Philippaki-Warburton 1985:122; Alexiadou 1996, 1999; Roussou and Tsimpli 2006, (14bB)).⁹

- (13) a. A: What happened?
 B: John repaired my computer.
 b. A: Who repaired your computer?
 B: John repaired my computer.
- (14) a. A: Ti ejine?
 What happened?

⁸ As Reich (2002:73) puts it, “A is a congruent answer to *Q*, only if the constituent in *A* that corresponds to a *wh*-phrase in *Q* is focused.”

⁹ To be precise, (14bB) is not the only felicitous answer to the question in (14bA). The fragment answer *o Janis* ‘John’ is equally felicitous and in fact it occurs more naturally in casual speech. Such answers may be seen as the result of ellipsis. The test applied here concerns full clause answers.

- B: Episkevase o Janis ton ipoljisti mu. (VSO)
 repaired-3sg the John the computer mine
 ‘John repaired my computer.’
- B’: # O Janis episkevase ton ipoljisti mu. (SVO)
 the John repaired-3sg the computer mine
- b. A: Pjos episkevase ton ipoljisti su?
 who repaired-3sg the computer your
 ‘Who repaired your computer?’
- B: O Janis episkevase ton ipoljisti mu. (SVO)
 the John repaired-3sg the computer mine
 ‘John repaired my computer.’

[SMG (adapted from Roussou and Tsimpli 2006:318, fn. 3)]

In PhG, a wide-focus question most naturally triggers an answer with VSO order (15Ba), similar to SMG; however, unlike SMG, an answer with SVO order is also accepted by informants as felicitous in this context (15Bb).

- (15) A: Pos enótun?
 what happen.PFV.PST.3SG
 ‘What happened?’
- B: a. Piésin o nomát to rkúði.
 catch.PFV.PST.3SG the.M.NOM.SG man.M.NOM.SG the.N.ACC.SG bear.N.ACC.SG
- b. O nomát piésin to rkúði.
 the.M.NOM.SG man.M.NOM.SG catch.PFV.PST.3SG the.N.ACC.SG bear.N.ACC.SG
 ‘The man caught the bear.’

According to my informants, other word orders—SOV, VOS, OVS, OSV— are not pragmatically felicitous answers to the question in (15A); for some general properties of the latter word orders see section 3.2.4.

3.2.2.2 Introductory clauses to narratives

Another context that triggers neutral word order is what is referred to as “out of the blue” utterances, i.e. utterances that are not embedded in an ongoing discourse but which rather initiate a piece of discourse. In an out of the blue context, no constituent is “given” (i.e. accessible in the discourse) and taken up again, and no constituent is contrasted to a referent established in the preceding discourse. In such utterances, the referent of the subject or the object in the clause has of course not previously been mentioned in the discourse, there being no preceding discourse. Introductory utterances to narratives are typical out of the blue utterances: they do not contain

constituents associated with pragmatic markedness and they also qualify as neutral clauses.

The recordings that form the empirical basis of this dissertation (see section 1.5.1), contain in total 26 narratives (including stories, fables, parables and folktales). 11 narratives are about personal events; the participants and events in these are known to the narrators either because the narrators have experienced the events themselves or because they are familiar with the reported events and discourse participants. Though strictly speaking not evoked in the preceding discourse, the narrator's familiarity with these participants may have an impact on how these participants are introduced in the story, so I have not taken these narratives into consideration. Moreover, 3 narratives use existential (i.e., there is/there are *x*) structures as introductory clauses, and 3 narratives are introduced by a clause containing an intransitive verb, hence without an object. These are also discarded from the analysis.

10 remaining narratives are introduced by a clause featuring a transitive verb and an overt subject and object. The subjects in these clauses are indefinite as they are introduced by the indefinite article *a(n)* 'a(n)' (see section 2.4.1.2), an expected result given that "[...] indefinite noun phrases cannot be used to refer to given entities [...]" (Krifka and Musan 2012:22).¹⁰ Out of these 10 introductory clauses, 7 show the order SVO and 3 show the order VSO. An example of each order is given in (16a–b) respectively.¹¹

- (16) a. A jérus xer ti méra pérkin
 an old.man.M.NOM.SG every the.F.ACC.SG day.F.ACC.SG take.IPFV.PST.3SG
 karvóna so títu ...
 coal.N.NOM.PL in.the.M.ACC.SG thingy.M.ACC.SG
 'An old man would take coal to such and such a place every day ...'
 [#2:49.01–49.04]
- b. A forá stríngsin a γræ tis γončĩĩi
 a time call.PFV.PST.3SG a beldam.F.NOM.SG the.M.ACC.PL neighbor.M.ACC.PL

¹⁰ As the reader may have recognized, this test should not be generalized over definite subjects.

¹¹ The noun phrase *a forá* (literally: 'one time') 'once (upon a time)' occurs in 4 of these stories, the prepositional phrase *so paló ton taró* 'in the old times' in 2 and the noun phrase *xer ti méra* 'every day' in 1. Except for 1 narrative where *a forá* 'once' (i) and *xer ti méra* 'every day' (16a) occur after the subject in a sentence with SVO order (i), these phrases are always initial:

- (i) A nomát, a forá, pérni to ávγu tu ...
 a man.M.NOM.SG a time take.IPFV.NPST.3SG the.N.ACC.SG horse.N.ACC.SG his
 'A man, once upon a time, takes his horse and ...'
 [#6:39.23–39.24]

The example in (i), which exhibits SVO order, is also included in the analysis.

s ...

her

‘Once upon a time a beldam called her neighbors ...’ [#2:62.32–62.34]

If we interpret introductory clauses as out of the blue utterances in which none of the constituents are known in the discourse, then both VSO and SVO can be considered as neutral word orders in PhG.¹²

3.2.2.3 Generic statements

A “generic statement” (also labeled as a “characterizing” or “gnomic statement”) is a statement which does not describe a specific episode or isolated fact. It summarizes groups of particular episodes or facts that are in some way essential for the characterization of the subject (a.o., Carlson 1989:162; Krifka et al. 1995:2–3; Papafragou 1996). For example, (17) reports on a general property attributed to the planet Earth; it can be considered a generalization over a series of recurring particular events. (18) includes an “individual-level predicate”, *know*, which describes a state of being about *Sam* which is typically true of *Sam* throughout his existence (Milsark 1974; Carlson 1977). It does not express an action which is true of a temporal stage of *Sam*’s existence. (19) explains something general about the kind (i.e., species) of elephants (of the genus *Elephas*), not a specific group of elephants:

(17) The Earth orbits the Sun.

(18) Sam knows Tibetan.

(19) Elephants eat grass.

Since the subject of a generic statement does not refer to any salient individual in the discourse, a generic statement can be taken as a neutral clause (see also Kirk 2012:37). A generic statement with the constituents S, V and O which involves a kind-referring noun acting as a subject (see section 2.4.1.2), most naturally gives rise to an SVO order in PhG (20a). Any other word order is judged as either non-neutral or ungrammatical ((20b–f); with simplified glosses).

(20) a. I sirtlángi tróni kræs. (SVO)
 the.M.NOM.PL hyena.M.NOM.PL eat.IPFV.NPST.3PL meat.N.ACC.SG
 ‘Hyenas (*Hyaenidae*) eat meat.’

¹² Although the discussions in this dissertation are based on synchronic spoken data in PhG, I would like to mention here that a similar conclusion is drawn from a survey of the stories collected in Theodoridis (1960, 1964) in PhG. Theodoridis (1960, 1964) provides 13 stories with an introductory sentence that has a nominal indefinite subject, a transitive verb and a nominal object. Of these 13 sentences, 8 have SVO order and the remaining 5 VSO order; thus, SVO and VSO can be argued to qualify as neutral orders in these written texts as well.

- | | | |
|----|--|-------|
| b. | # Tróni i sirtlángi kræs.
eat the hyenas meat | (VSO) |
| c. | # Tróni kræs i sirtlángi.
eat meat the hyenas | (VOS) |
| d. | * Kræs i sirtlángi tróni.
meat the hyenas eat | (OSV) |
| e. | # Kræs tróni i sirtlángi.
meat eat the hyenas | (OVS) |
| f. | # I sirtlángi kræs tróni.
the hyenas meat eat | (SOV) |

The VSO order in (20b), though acceptable, does not give rise to a generic reading. In this example, the subject cannot be kind-referring, but rather it has to refer to a specific group of hyenas. The order VOS (20c) is judged acceptable only if the object is focused; and in this case too, the subject is interpreted as specific. The OSV order (20d) is universally judged unacceptable. OVS (20e) and SOV (20f) orders are acceptable as long as the object is focused and the subject refers to a specific group of hyenas.

Similar judgments are obtained for clauses with individual-level predicates, such as *katéxu* '(I) know', which are also most natural with the order SVO (21a). A VSO order (21b) is judged marginal. VOS (21c), OVS (21e) and SOV (21f) orders are judged as acceptable as long as the object is focused. The OSV order (21d) is judged unacceptable ((21b–f) are given with simplified glosses).

- | | | |
|---------|--|-------|
| (21) a. | I Nerkíza katéši Túrčika.
the.F.NOM.SG Nerkiza.F.NOM.SG know.IPFV.NPST.3SG Turkish.N.NOM.PL
'Nerkiza knows Turkish.' | (SVO) |
| b. | ?? Katéši i Nerkíza Túrčika.
knows the Nerkiza Turkish | (VSO) |
| c. | # Katéši Túrčika i Nerkíza.
knows Turkish the Nerkiza | (VOS) |
| d. | * Túrčika i Nerkíza katéši.
Turkish the Nerkiza knows | (OSV) |
| e. | # Túrčika katéši i Nerkíza.
Turkish knows the Nerkiza | (OVS) |
| f. | # I Nerkíza Túrčika katéši.
the Nerkiza Turkish knows | (SOV) |

As is clear from the examples (20–21), the SVO order can be associated with a generic reading. However, it should be noted that even in languages in which VSO is argued to be the only neutral word order, such as in SMG (see Philippaki-Warbuton 1985; Tsimpli 1990; Alexiadou 1996; Alexiadou and Anagnostopoulou 1995; Roussou and Tsimpli 2006), or in languages such as Italian (Calabrese 1992) or Spanish (Zubizarreta 1994), generic statements always feature the order SVO. The SMG example in (22) with an individual-level verb illustrates that SVO is the grammatical word order (the examples and judgments are taken from Alexiadou 1999:54, her (20)):

- (22) a. I Meropi kseri Ispanika. (SVO)
 the-Meropi-nom knows Spanish
 ‘Meropi knows Spanish.’
 b. *Kseri Ispanika i Meropi (VOS)
 c. *Kseri i Meropi Ispanika (VSO)

[SMG]

We can tentatively conclude that generic statements alone are not sufficient to identify the neutral word order in a language. However, as a generic clause satisfies the criterion (12) in the sense that none of its constituents is associated with pragmatic markedness, I include the word order they appear in (i.e., SVO) among the possible candidates for neutral word orders in PhG.

3.2.2.4 Intonation

Lack of special intonation is often associated with pragmatic neutrality (Holton et al. 1997:32, section 1.6.2 for SMG), whereas divergent intonational patterns are regarded as relevant for distinguishing discourse-related constituents, such as topic and focus, or classifying their sub-types (see, a.o., Szendrői 2002, 2003; Frascarelli 2000; Frascarelli and Hinterhölzl 2007; Gryllia 2008:chapter 5).

If no constituent of a declarative main clause in PhG is made discourse-prominent (by phonologically emphasizing it *in situ*), the nuclear, i.e., main, stress of the clause falls on the last word of the clause (Figures 3.1–3.2; see also section 2.4.3.1). Both SVO and VSO are the word orders that are typically associated with this most neutral intonation.

- (23) a. Piésin o nomát to rkúđi.
 catch.PFV.PST.3SG the.M.NOM.SG man.M.NOM.SG the.N.ACC.SG bear.N.ACC.SG
 ‘The man caught the bear.’ (VSO)
 b. O nomát piésin to rkúđi.
 the.M.NOM.SG man.M.NOM.SG catch.PFV.PST.3SG the.N.ACC.SG bear.N.ACC.SG
 ‘The man caught the bear.’ (SVO)

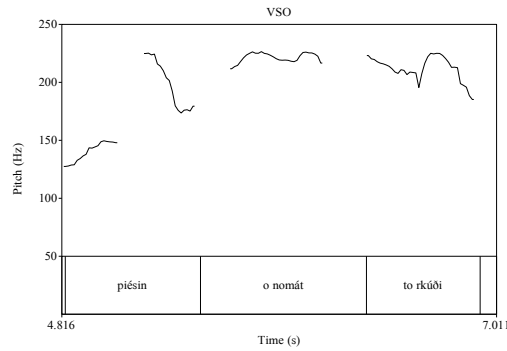


Figure 3.1: Pitch track of (23a)

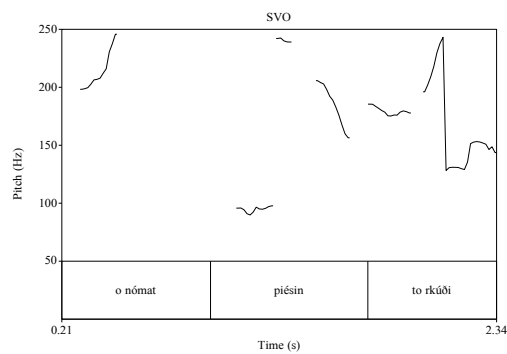


Figure 3.2: Pitch track of (23b)

In other word order patterns, one constituent receives extra heavy stress and/or is separated from the clause with a minor prosodic break. On these cases, see section 3.2.4.

3.2.3 VSO-SVO cross-linguistically

In the preceding four subsections, I have identified two possible neutral word orders in PhG: VSO and SVO. The proposal that both VSO and SVO clauses may constitute neutral word orders in a single language is not new. Greenberg (1966[1963]:appendix II), for example, observes that languages with a neutral VSO order also have an alter-

native neutral word order SVO. He cites languages such as Modern Hebrew, Welsh and Zapotec as relevant examples, and based on this observation he formulates the 6th language universal, given below:

- (24) All languages with dominant VSO order have SVO as an alternative or as the only alternative basic order.

(Greenberg 1966[1963]:79)

In recent theory-oriented research, however, (24) has been challenged for certain languages, and several of Greenberg's examples have been disputed. Modern Hebrew, for example, has been argued to be an SVO language (Doron 2000), rather than a VSO language with an SVO alternate, as claimed by Greenberg (1966[1963]:107, appendix I). Furthermore, contrary to the generalization in (24) from Greenberg (1966[1963]), there are languages with VSO neutral order in which SVO does not constitute an alternative neutral order. With respect to Zapotec, in which, according to Greenberg, VSO neutral order alternates with SVO, Lee (2008) shows that (Quiaviní) Zapotec is a VSO language but in this language SVO clauses are allowed only when the initial constituent, S, is interpreted as a contrastive focus; therefore SVO is not a neutral alternative of VSO, *contra* Greenberg (1966[1963]). In addition, Greenberg's analysis of SMG has also been disputed. Greenberg (1966[1963]:107, appendix I) classifies SMG as a language with neutral SVO order. *Contra* Greenberg (1966[1963]), recent theory-oriented work (e.g. Philippaki-Warbuton 1985; Tsimpli 1990; Alexiadou 1996; Alexiadou and Anagnostopoulou 1995; Roussou and Tsimpli 2006) has established that SMG is in fact a VSO language. Assuming (24), a legitimate question is then whether SVO is perfectly equivalent to VSO in SMG too. The literature on SMG suggests a negative answer: as illustrated above in (14a–b), a felicitous answer to a question with wide-focus in SMG can only feature the order VSO. Moreover, Alexiadou (1996:38, 1997:59) and Alexiadou and Anagnostopoulou (1998:506) argue that in a clause with SVO order and an indefinite subject, the subject only receives a “strong” interpretation (in the sense of Fodor and Sag 1982), meaning that it must be interpreted either as specific (i.e., a certain x) or partitive (i.e., one of the contextually given x 's) (25a). On the other hand, in VSO clauses an indefinite subject receives most naturally a “weak”, i.e., existential, interpretation (though it can also be interpreted as strong; 25b).¹³

¹³ When an existential interpretation obtains, an indefinite noun phrase is interpreted as an existential quantifier, $(\exists(x))$, which means “there is at least one entity in the domain [of discourse] such that ...” (Gamut 1991:71). (25b) has the following logical structure:

- (i) $\exists(x)$ [child(x) \wedge read(x , Fairytale.without.title)]

- (25) a. Ena pedhi diavase to ‘Paramithi horis onoma’
 a child read the *Fairy-tale without a title*
 ‘A certain child/one of the children read *Fairy-tale without a Title*’
- b. Diavase ena pedhi to ‘Paramithi horis onoma’
 read a child the *Fairy-tale without a title*
 ‘A child read *Fairy-tale without a Title*’
 [SMG (Alexiadou and Anagnostopoulou 1998:596, ex.(23))]

Other arguments of Alexiadou and Anagnostopoulou (1998) on the differences between VSO and SVO in SMG are provided in detail in section 3.3.3.2.1. For now, there is some initial reason to assume that an SVO clause in SMG is pragmatically marked.

The case of PhG is similar to the one in SMG: we consider VSO clauses to display neutral order (see sections 3.2.2.1, 3.2.2.2, 3.2.2.4) but against the generalization in (24), VSO clauses and SVO clauses should not be considered exactly equivalent in PhG. First, a generic statement allows only the SVO order (see section 3.2.2.3). Moreover, as is the case in SMG, the most natural interpretation of an indefinite subject of an SVO clause is a “strong” one (26a), whereas an indefinite subject in a VSO clause can be interpreted as both “strong” and “weak” (26b).

- (26) a. A néka čáltsin tis strátis. (SVO)
 a woman.F.NOM.SG sweep.PFV.PST.3SG the.F.ACC.PL road.F.ACC.PL
 ‘A specific woman/ one of the women swept the streets.’
- b. Čáltsin a néka tis strátis. (VSO)
 sweep.PFV.PST.3SG a woman.F.NOM.SG the.F.ACC.PL road.F.ACC.PL
 ‘A woman swept the streets.’/ ‘A specific woman/one of the women ...’

In section 3.3.3.2.8, I argue that the interpretive difference between (26a) and (26b) is not due to the fact that SVO order is pragmatically marked under the definition in (12). Rather, I argue that the interpretive difference stems from the structural positions the subjects occupy in (26a–b). In anticipation of upcoming discussion, I argue that the position occupied by the subject in (26a) does not allow the existential reading. In the same section, the argument is extended to generic clauses, which, as we saw in section 3.2.2.3, have no pragmatically marked constituent but must display SVO order.

In the rest of the chapter, based on the criterion in (12), I assume that PhG has two neutral word orders, which however are not perfectly interchangeable: VSO and SVO. These two orders are associated with pragmatic neutrality. The remaining word orders, SOV, VOS, OVS and OSV are pragmatically marked word orders in PhG. In the next section, I present a brief description of these non-neutral word orders.

3.2.4 Non-neutral word orders in PhG

In this section, I look at each of the non-neutral word orders—OVS, OSV, SOV and VOS—in turn and investigate their formal and interpretive properties in more detail. I base most of this investigation on naturally occurring data from recordings (section 1.5.1), on the basis of which it is possible to formulate a number of generalizations about their pragmatic properties. Interestingly, some SVO clauses are characterized by some of these properties too, suggesting that SVO may, but need not, instantiate a pragmatically neutral order at all times.

3.2.4.1 OVS clauses

Based on recordings, two types of OVS clauses can be identified in PhG, the crucial formal differences between the two being (i) the presence or absence of an object clitic co-referential with the clause-initial object and (ii) the presence or absence of a minor prosodic break which separates the clause-initial object from the rest of the clause. If one of these diagnostics is present in a clause, the other is also present and if one is absent, the other is absent as well. The first type is illustrated in (27a), and the second in (27b). These examples are given out of context here but I will further elaborate on the interpretive properties of these clauses later in this section.

- (27) a. To ya, suziénkam ta, mis ...
 the.N.ACC.SG milk.N.ACC.SG filter.IPFV.PST.1PL 3OBJ we.NOM
 ‘The milk, we would filter it...’
- b. ... čočúxa fténkan i nomáti.
 children.N.NOM.PL make.IPFV.PST.3PL the.M.NOM.PL person.M.NOM.PL
 ‘... the people would make children.’

In (27a), which illustrates the first type of OVS clause, the clause-initial object *to ya* ‘the milk’ is separated from the verb *suziénkam* ‘(we) would filter’ by a minor prosodic break. This minor prosodic break is marked by a vertical bar (|) in Figure 3.3 below, which is the pitch track of (27a). Furthermore, the third person object clitic *ta* which is co-referential with the clause-initial object is added to the verb. In this specific case the clitic is placed immediately after the verb (see section 2.4.8 for the position of clitics). The clause in (27b), which exemplifies the second type of OVS clause, differs from (27a) in both respects: (i) between the clause-initial object *čočúxa* ‘children’ and the verb *fténkan* ‘(they) would make’, there is no minor prosodic break, as Figure 3.4, which is the pitch track of (27b), reveals. (ii) There is also no object clitic added to the verb to resume this clause-initial object. A further difference between (27a) and (27b) is the fact that the initial object in (27b) is heavily stressed—unlike the object in (27a). Cf. Figure 3.3–3.4.

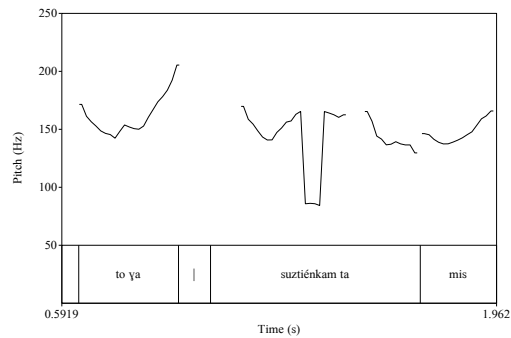


Figure 3.3: Pitch track of (27a)

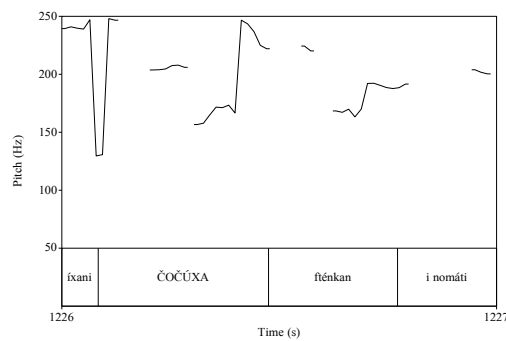


Figure 3.4: Pitch track of (27b)

Even though in both types of OVS clauses the clause-final subject can be either given or new information, the two types that are formally distinguished above differ in the respective information status of the clause-initial object. In the first type, which is exemplified in (27a), the clause-initial object denotes an entity that has already been mentioned in the discourse, i.e., it is “given” (familiar, identifiable, see Rochemont 2016 for an overview) and is taken up again by the speaker. This clause-initial object can thus be said to act as a topic, adopting the definition in (7). Consider then the example in (28), where (27a) (now (28A’b)) is given in its context. Before the excerpt in (28), the interviewer asks if people in the village make *čokolíki* ‘a type of dry cottage cheese which was very famous in Pharasa’. Speaker A confirms that they

would make it (the long sequence of her utterances is mostly omitted) (28A). To avoid confusion and to ensure that the interviewer and speaker B are talking about the same type of food, the interviewer asks whether it is the *čokelíki* which is made of milk (28B). Speaker A replies that it is indeed made with milk (28A'a). At this point, 'the milk' has become a given/salient entity in the discourse. In (28A'b), which is the OVS clause in question, the clause-initial object *to ya* 'the milk', is taken up by the speaker again, and it constitutes the topic of her utterance. In this case, the rest of the clause functions as a comment on this topic. This clause could be paraphrased as follows: 'as for the milk, we would filter it'.

- (28) The interviewer (speaker B) asks whether certain Pharasiot dishes are still recognized in the village.

A: Aa, to čokelíki, xe ...
 INTRJ the.N.NOM.SG dry.cottage.cheese.N.NOM.SG yes
 'Oh, the dry cottage cheese ...'

B: Mo ya?
 with milk.N.NOM.SG
 'With milk?'

A': a. Mo to ya, mo to ya ...
 with the.N.ACC.SG milk.N.ACC.SG with the.N.ACC.SG milk.N.ACC.SG
 'With the milk, with the milk ...'

b. To ya_i, suziénkam ta_i mis ...
 the.N.ACC.SG milk.N.ACC.SG filter.IPFV.PST.1PL 3OBJ we.NOM
 'The milk, we would filter it ...'

[#3:06.51–07.05]

In the second type of OVS clauses, which is exemplified in (27b), the clause-initial object may or may not have been previously mentioned, but the crucial interpretive property of this clause is the fact that this object is interpreted exhaustively, and contrasted with another discourse-salient entity. Hence it functions as an identificational focus (9), which moreover is interpreted contrastively. This is illustrated in (29), which is the context of (27b). In (29b = 27b), the speaker contrasts *čočúxa* 'children' with the object of her previous utterance (29a), *ryo* 'work'. The initial object is interpreted as a contrastive focus. Then, (29b) could be paraphrased as follows: 'they would make children, not work'.

- (29) The speaker is talking about the first years after the settlement of the refugees into the village in Greece. She reports that there were not many jobs to take on and that people were often unemployed.

- a. Xáre ryo čo íxani ... ,
 now work.N.ACC.SG not have.PST.3PL
 ‘Now (that) they did not have work ... ’
- b. ... čočúXA fténkan i nomáti.
 children.N.NOM.PL make.IPFV.PST.3PL the.M.NOM.PL person.M.NOM.PL
 ‘... the people would make children.’

[#3:20.26–20.28]

To recapitulate, two types of OVS clauses are distinguished in PhG. In the first, the clause-initial object has already been mentioned in the discourse, i.e., it is given and is taken up by the speaker again, hence it functions as a topic. This object is separated from the rest of the clause by a minor intonation break and it is doubled by a co-referential object clitic added to the verb. In the second type of OVS clauses, the object is contrasted with another discourse-salient entity and it is interpreted exhaustively. In this case, it functions as a contrastive focus. This object is not phonologically separated from the rest of the clause and it cannot be resumed by a co-referential clitic. Furthermore, it is heavily stressed. These are summarized in Table 3.1 (I.S. stands for ‘information status’).

	Obligatory resumption	Intonation break	Emphasis	I.S.: Object	I.S.: Subject	Ex.
<i>Type 1</i>	YES	YES (after O)	NO	topic	given/new	(28A’b)
<i>Type 2</i>	NO	NO	YES (on O)	focus	given/new	(29b)

Table 3.1: Properties of two types of OVS clauses in PhG

3.2.4.2 OSV clauses

All OSV clauses in the oral corpus share two formal properties: (i) the clause-initial object is separated from the rest of the clause by a minor prosodic break, and (ii) it is doubled by an obligatory resumptive clitic that is added to the verb. However, based on the formal properties of the subjects, two types of OSV clauses can be identified. In the first type, the subject does not carry extra heavy stress and may be followed by a minor prosodic break, whereas in the second one it does carry extra heavy stress and is never separated from the rest of the clause by a minor prosodic break. Concomitantly, the information state of the subjects in these two kinds of OSV clauses also differ, as I will elaborate on below.

Consider first (30B'), which exemplifies the first type. Up to (30B'), the entity *i matáči* 'the cat' has been mentioned in the discourse several times and is thus very salient. In (30B'), then, the object *ta matáka* 'cats' functions as the topic of the clause and the rest of the clause constitutes a comment on this topic. The topic object is separated from the comment by a minor intonation break and it is doubled inside the clause by the object clitic *ta*. In this example, the subject *i palé* 'the old ones' is new information and it constitutes part of the comment. It does not carry extra stress, nor is it contrasted with any other salient entity in the discourse.

- (30) Speakers A and B, both native speakers of PhG, are discussing the word *matáči* (plural *matáka*). Speaker A thinks that the word means 'cat', and that it is synonymous with *pséka* 'cat'. Speaker B corrects her and states that it means 'little girl'.

A: ... *matáči íni* *i* *pséka,* *xe?*
 matáči be.NPST.3SG the.F.NOM.SG cat.F.NOM.SG yes
 '... *matáči* is the cat, right?'

B: *Matáči* ... *matáči*
 '*Matáči* *matáči*'

A': *Ta* *matáka* ... *pséka* *íni.*
 the.N.NOM.PL *matáka* cat.F.NOM.SG be.NPST.3SG
 'The *matáka* ... it is cat.'

B': *Ta* *matáka_i,* *i* *palé* *lénkan* *ta_i ja*
 the.N.NOM.PL *matáka* the.M.NOM.PL old.M.NOM.PL say.IPFV.PST.3PL 3OBJ for
 koríča.
 girl.N.NOM.PL
 'The old ones used to say *matáka* for girls.' [#5:12.00–12.40]

The second type of OSV clauses is exemplified in (31B).

- (31) Speaker B has just told a story about a wedding. Even though she previously mentioned that the story was told to her by her aunt, speaker A did not hear this and in (31A) she wants to know the identity of the person who told the story.

A: ... *i* *Vangélna?* '
 the.F.NOM.SG *Evangelia.F.NOM.SG*
 '... *Evangelia?*'

B: *jox, ató_i,* *i* *kukú* *mu ta_i ípin.*
 no this.N.ACC.SG the.F.NOM.SG aunt.F.NOM.SG my 3OBJ say.PFV.PST.3SG
 'No, my aunt told this.'

[#5:37.10–37.13]

In (31B), the relevant response of speaker B starts with the demonstrative object *ató* ‘this’ (ignoring the initial *jox* ‘no’), which refers to the story she has just told, therefore the referent of this demonstrative is given. This demonstrative functions as a topic. It is separated from the rest of the clause by a minor prosodic break (Figure 3.5, which is the pitch track of (31B)), and it is resumed by a co-referential object clitic *ta* that cannot be omitted (based on the speaker judgments). This object is followed by the subject *í KUKÚ MU* ‘my aunt’. Unlike the first type of OSV clauses exemplified in (30B’), in this case the subject is contrasted with *i Vangélna* ‘Evangelia’, the presupposition in speaker A’s question in (31A) and it is interpreted exhaustively. Therefore, it is safe to assume that it functions as an identificational (contrastive) focus. This subject bears extra heavy stress, as Figure 3.5 shows. Observe the rise of the intonation contour on the subject and its rapid fall immediately after this subject.

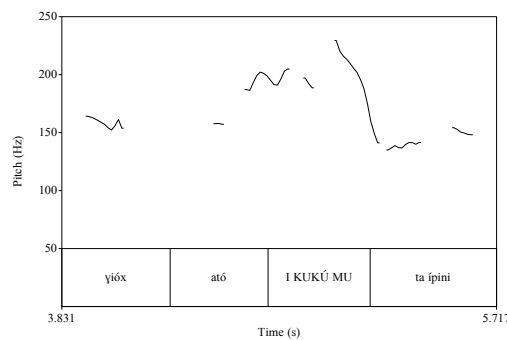


Figure 3.5: Pitch track of (31B)

The properties of the two types of OSV clauses identified here are summarized in Table 3.2.

	Obligatory resumption	Intonation break	Emphasis	I.S.: Object	I.S.: Subject	Ex.
<i>Type 1</i>	YES	YES (after O)	NO	topic	given/new	(30B’)
<i>Type 2</i>	YES	YES (after O)	YES (on S)	topic	focus	(31B)

Table 3.2: Properties of two types of OSV clauses in PhG

3.2.4.3 SOV clauses

Three types of SOV clauses can be distinguished in PhG based on formal and interpretive diagnostics. The first type of SOV clause features (i) a subject which is given in the discourse and taken up again as a topic expression and (ii) an object which is contrasted with another entity that is salient in the discourse. The subjects in this type are separated from the rest of the clause by a minor prosodic break. In this SOV pattern, the object is never doubled by a matching object clitic, and it is strongly emphasized. This type is exemplified in (32). In this example, the subject *i đefi mu* ‘my sister’ has been mentioned several times in the preceding discourse; therefore, it is given. It is separated from the rest of the clause by a minor prosodic break, as Figure 3.6 shows. The object *TO MÉTRU TI γWÓSA* ‘our language, i.e., PhG’ is strongly emphasized (Figure 3.6), and it is contrasted with another language, ‘German’, which the speaker has mentioned several times, hence it functions as identificational (contrastive) focus.

- (32) The speaker often talks with her granddaughter in German since they both know this language well, but in this setting they were speaking with the speaker’s sister in PhG; however, her mother thought they were speaking in German.

... i đefi mu, TO MÉTRU TI γWÓSA
 the.F.NOM.SG sister.F.NOM.SG my the.SG our.SG the.F.ACC.SG language.F.ACC.PL
 kačéfkini.
 speak.IPFV.PST.3SG
 ‘... my sister was speaking in our language.’ [#3:23.40–24.10]

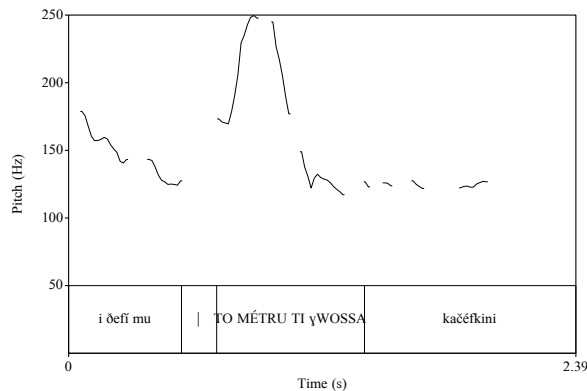


Figure 3.6: Pitch track of (32)

In the second type of SOV clauses, such as that illustrated in (33), both the subject and the object nominals refer to entities that have already been mentioned in the discourse several times and are taken up again as topic expressions. Unlike (32), there is no constituent which is contrasted with any other entity, nor is any constituent heavily stressed. Furthermore, between the subject and the object and the object and verb there is always a minor prosodic break. In this type, the object is always doubled by a matching clitic that is added to the verb.

- (33) Two speakers have been talking about the close relationship between the Phariasiot people. Their parents were very helpful to each other at every occasion. One of the speakers utters the following sentence:

O tatá mu, o tatá su,
 the.M.NOM.SG father.M.NOM.SG my the.M.NOM.SG father.M.NOM.SG your
 o títus ... , číp ta spíta tun_i,
 the.M.NOM.SG so.and.SO.M.NOM.SG all the.N.ACC.PL house.N.ACC.PL their
 éktisan ta_i penendáu tun aďáé so Vaθíflaku.
 build.PFV.PST3SG 3OBJ among their here in.the.M.ACC.SG Vathylakkos.M.ACC.SG
 ‘My father, your father, the so-and-so person . . . all built their houses together
 here in Vathylakkos.’

[#3:19.55–20.05]

In (33), six coordinated subjects, some of which is given in the example (*o tatá mu, o tatá su, o títus . . .* ‘my father, your father, the so-and-so person . . .’) precede the object *ta spíta tun* ‘their houses’. The speakers have mentioned the referents of both these subjects as well as their houses several times in the immediately preceding discourse. Their houses were very close to each other, and many villagers helped while the house of the parents of one of the speakers was being built. For these reasons, it is legitimate to consider the object *ta spíta tun* ‘their houses’ salient in the discourse. Notice that the clitic *ta*, co-referential with the object, is obligatorily added to the verb.

Finally, in a third set of SOV clauses, the subject carries extra stress, whereas the object is salient in the discourse. Again in these instances, there is always a clitic co-referential with the object. (34b) exemplifies this pattern. The bare negative quantifier subject *KANÍS* ‘nobody’ is clearly emphasized in the recording (see Figure 3.7). If heavy stress marks a constituent receiving an identificational focus reading, as is the case with other non-neutral word orders involving focal constituents (see above and sections 3.2.4.1–3.2.4.2), then we can tentatively assume that the subject here may also be categorized as an identificational focus. The pronominal object *čina* refers to the two characters of the story who have been mentioned several times in the discourse, which makes them “given” information.

(34) The speaker narrates a story about two people who, after doing a lot of bad things in their life, changed habits and started to help others.

- a. Istérku íxan puyá mákæ ... ja ...
 later have.PST.3PL a.lot labor.N.NOM.PL but
 ‘Later they did a lot of efforts (for helping others) ... but ...’
- b. ... KANÍS čína_i čo saitiénkin ta_i. ‘
 nobody.NOM that.PL not respect.IPFV.PST.3SG 3OBJ
 ... nobody would respect them.’ [11:16.01–16.03]

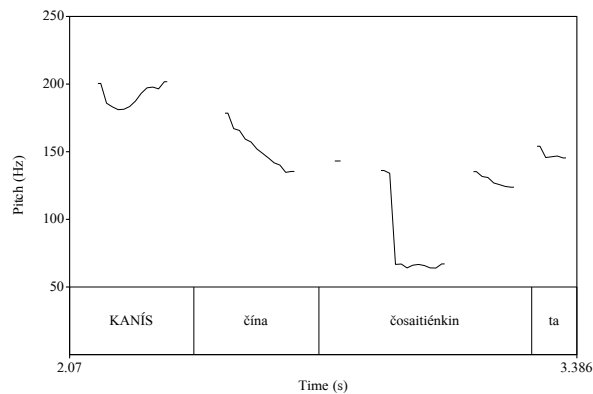


Figure 3.7: Pitch track of (34b)

The properties of the three types of SOV clauses identified here are summarized in Table 3.3.

	Obligatory resumption	Intonation break	Emphasis	I.S.: Object	I.S.: Subject	Ex.
<i>Type 1</i>	NO	YES (after S)	YES (on O)	focus	topic	(32)
<i>Type 2</i>	YES	YES (after S, O)	NO	topic	topic	(33)
<i>Type 3</i>	YES	YES (after O)	YES (on S)	topic	focus	(34b)

Table 3.3: Properties of three types of SOV clauses in PhG

3.2.4.4 VOS clauses

The most distinctive property of VOS clauses in PhG is the fact that the object is always slightly emphasized, receiving the most prominent accent of the clause. It should be noted that the emphasis on the object should not be identified as contrastive; rather the object is merely highlighted. An object clitic co-referential with the object may be added to the verb but it is not obligatory according to speaker judgments, suggesting that it may function as an object marker here (section 2.4.2.2). There is no intonation break between any two constituents. The object can be given or mentioned in the discourse. An illustrative example is provided in (35).

- (35) The speaker is telling a story about a woman who wanted to go to the hospital.
 ... ex, paéni TI NEKÁ i
 INTRJ take.iPFV.NPST.3SG the.F.ACC.SG woman.F.ACC.SG the.F.NOM.SG
 kukú mu.
 aunt.F.NOM.SG my
 ‘... well, my aunt takes the woman (to the hospital).’

[#2:64.45–64.47]

As Figure 3.8 reveals, the prominent accent of the clause in (35) lies on the object:

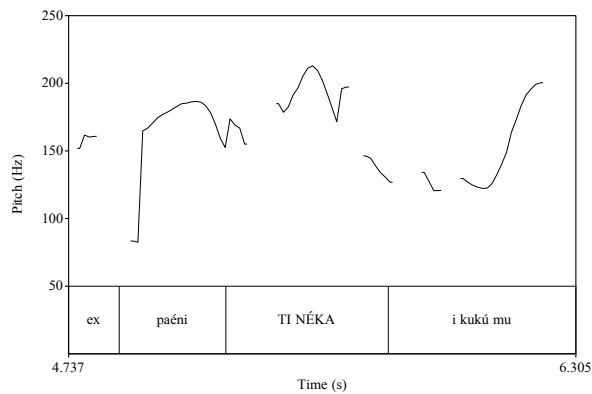


Figure 3.8: Pitch track of (35)

3.2.4.5 Non-neutral SVO clauses

Although the SVO order with neutral intonation was identified as a neutral clause (section 3.2.2), there are also numerous instances of SVO clauses in the recordings that are best characterized as non-neutral. Based on the interpretive properties of the subject constituents to be elaborated on below, two different types of non-neutral SVO clauses can be distinguished.

In one type of non-neutral SVO clauses, the subject is contrasted with another entity which is salient in the discourse. Such subjects are characterized by extra heavy stress. There is no minor prosodic break separating any two constituents. This pattern is illustrated in (36); see also Figure 3.9: the subject of the clause *atós* ‘he’ is interpreted exhaustively and it is in direct contrast with *yo* ‘I’, i.e., the subject of the previous clause, therefore it functions as an identificational (contrastive) focus.

- (36) The speaker narrates an incident in which he had a discussion with a Turkish person regarding the name of a village.

yo *ípa* *ta* *Čuxurkói* ... *atós* *lé*
 I.NOM say.PFV.PST.1SG 3OBJ Čuxurkói.N.NOM.SG he.NOM say.IPFV.NPST.3SG
ta *Čukurjurt*.
 3OBJ Čukuryurt.N.NOM.SG

‘I called it Čuxurkói, ... he calls it Čukuryurt.’

[#3:25.20–25.26]

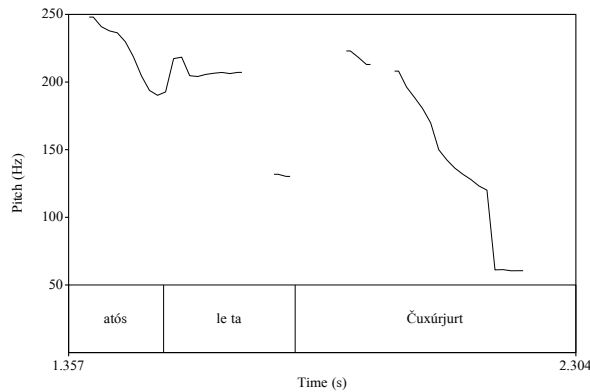


Figure 3.9: Pitch track of (36)

In the second type of non-neutral SVO clauses, the subject refers to an entity that

has just been mentioned in the discourse and is now resumed as a topic expression. In such cases, a minor prosodic break separates the subject from the rest of the clause. Unlike the previous type (see (36)), in this type the clause-initial subject is not contrasted with any other entity. This is illustrated in (37b). In (37a), two entities, *o tatá mu* ‘my father’ and *to ávu to nomáti* ‘the other man’, are introduced (after having been mentioned before as well). Then, in (37b), one of these subjects, *o tatá mu* ‘my father’, is taken up as a topic. It does not carry extra heavy stress and it is not contrasted to the other entity, *to ávu to nomáti* ‘the other man’, unlike the way *atós* ‘he’ in (36) is contrasted with the subject of the preceding clause *yo* ‘I’. As can be seen in the subsequent discourse, the other man, too, has a father and a mother (who are still alive) (37c).

(37) The speaker reports an event that her father witnessed when he was very young.

- a. Le ta to tatá mu če ... to ávu
 say.IPFV.NPST.3SG 3OBJ the.M.ACC.SG father.M.ACC.SG my and the.SG other.SG
 to nomáti, “Tatá eš ma
 the.M.ACC.SG man.M.ACC.SG father.M.ACC.SG have.NPST.2SG mother.F.ACC.SG
 eš?”
 have.NPST.2SG
 ‘He says to my dad and the other man, “Do you have a father? Do you have a mother?”’
- b. O tatá mu le ta, ... “Tatá
 the.M.NOM.SG father.M.NOM.SG my say.IPFV.NPST.3SG 3OBJ father.M.NOM.SG
 pal éxu ma pal éxu.”
 PRT have.NPST.1SG mother.F.NOM.SG prt have.NPST.1SG
 ‘My father says, “I have both a father and a mother.”’
 ...
- c. O nomát páli le ta, “yo páli xem
 the.M.NOM.SG man.M.NOM.SG PRT say.IPFV.NPST.3SG 3OBJ I.NOM PRT both
 tatá éxu xem ma éxu.”
 father.M.NOM.SG have.NPST.1SG and mother.F.NOM.SG have.NPST.1SG
 ‘The other says, “I also have both a father and a mother.”’

[#2:47.03–47.12]

In both types of SVO clauses, the clause-final object may denote a given or a new entity. The properties of non-neutral SVO clauses are provided below:

	Obligatory resumption	Intonation break	Emphasis	I.S.: Object	I.S.: Subject	Ex.
<i>Type 1</i>	NO	NO	YES (on S)	new/given	focus	(36)
<i>Type 3</i>	NO	YES (after S)	NO	new/given	topic	(37b)

Table 3.4: Properties of two types of non-neutral SVO clauses in PhG

3.2.4.6 Summary of the properties of the non-neutral word orders

In sections 3.2.4.1–3.2.4.5, I have provided a number of properties of non-neutral word orders. One common characteristic of most marked word orders is that at least one constituent, S or O, receives extra heavy stress and is highlighted or contrasted with another entity. This suggests that such a constituent receives a focus interpretation (9). Whenever the relevant focalized constituent is O, the clause does not contain a clitic object pronoun co-referential with O. Another property of non-neutral word orders (excluding VOS), is that either S or O (or both) can refer to an entity that has already been mentioned in the discourse but which may be backgrounded. Then either or both constituents reintroduce the relevant entity back into the discourse, suggesting that, based on the definition in (7), such constituents can be characterized as topics. If the relevant topical constituent is O, the clitic object pronoun co-referential with O occurring before or after V is obligatory. Furthermore, this constituent is separated from the rest of the clause by a minor prosodic break. The properties of non-neutral word order are summarized in Table 3.5.

Word order	Type	Subject Focus	Object Focus	Subject Topic	Object Topic	Clitic resumption	Intonation break	Heavy stress	Ex.
OVS	1	NO	NO	NO	YES	YES	YES (after O)	NO	(28A'b)
	2	NO	YES	NO	NO	NO	NO	YES (on O)	(29b)
OSV	1	NO	NO	NO	YES	YES	YES (after O)	NO	(30B')
	2	YES	NO	NO	YES	YES	YES (after O)	YES (on S)	(31B)
SOV	1	NO	YES	YES	NO	NO	YES (after S)	YES (on O)	(32)
	2	NO	NO	YES	YES	YES	YES (after S, O)	NO	(33)
	3	YES	NO	NO	YES	YES	YES (after O)	YES (on S)	(34b)
VOS		NO	YES	NO	NO	NO	NO	YES (on O)	(35)
SVO	1	YES	NO	NO	NO	NO	NO	YES (on S)	(36)
	2	NO	NO	YES	NO	NO	YES (after S)	NO	(37b)

Table 3.5: Properties of marked word orders in PhG

3.2.5 Interim summary

In this section, based on three environments evoking pragmatically neutral clauses, I identified VSO and SVO as the best candidates to be neutral word orders in PhG declarative main clauses. This conclusion is further supported by the fact that VSO and SVO may be delivered with default intonation. I showed that clauses with all other word orders, i.e., SOV, VOS and O-initial word orders, have at least one constituent that is associated with a pragmatically-marked interpretation. Two types of pragmatically marked constituents were identified according to their interpretive and formal properties: topic and focus. Focus expressions are interpreted exhaustively and are either contrasted to another entity or highlighted in the discourse. Topic expressions, on the other hand, refer to an entity that has already been mentioned in the discourse but may be backgrounded and are reintroduced back into the discourse. Focus expressions bear focal stress but topicalized constituents do not. Topics are separated from the comment part of the clause by a minor intonation break while foci are not. (In)direct objects functioning as topics are resumed within the comment by a co-referent object clitic, whereas (in)direct objects functioning as foci are not. In the next section, I will focus on the neutral SVO and VSO word orders and provide a syntactic analysis of these linear orders.

3.3 The derivation of neutral clauses in PhG

In section 3.2, I examined the interpretive properties of word orders in declarative main clauses in PhG, and showed that VSO patterns as well as a subset of SVO patterns qualify as neutral word orders, at least according to the definition in (12). In this section, I provide a syntactic analysis of the linear order of neutral clauses.

While developing this analysis, I adopt the framework of generative syntax. In the next subsection, I provide a brief introduction to the basic concepts and terminology developed in this tradition and adopted in the remaining part of this dissertation. Some more specific concepts will be introduced throughout the thesis at points where they become directly relevant. For a more detailed introduction to generative syntax, the reader is referred to, among others, Haegeman (1994[1991], 1997) and Carnie (2013[2002]). Readers familiar with the theory will find nothing novel in these sections but will be able to assess which particular implementation I have adopted.

3.3.1 Theoretical assumptions

The fundamental goal of generative syntax is to formally represent the linguistic knowledge that is available to the human species. It aims at discovering the syntactic

rules that allow humans to form grammatical sentences on the basis of lexical items, as well as in identifying the constraints that exclude ungrammatical sentences. To this end, generative syntacticians analyze the formal properties of specific languages, in as much detail as possible. A basic tenet of generative syntax is that linear orders are derived from syntactic structures that are intrinsically hierarchically organized.

3.3.1.1 Hierarchical structure

A major strength of generative grammar assuming hierarchical rather than linear relations among constituents is that it can account for possible semantic ambiguities which do not immediately follow from the linear string of the constituents in the structure. Instead, within such a hierarchical system, semantic ambiguities may correspond to structural ambiguities which occur “[...] whenever a single (grammatical) string of words corresponds to more than one possible syntactic structure” (Danckaert 2017:46). Consider for instance, the sentence in (38).

(38) Sam saw the man with the binoculars.

(38) is semantically ambiguous: it can mean that Sam saw a specific man and this man happened to have binoculars, or that Sam had binoculars and by using them he saw a specific man. It seems then that the ambiguity stems from the fact that the constituent *with the binoculars* may modify two different things in (38): under the first reading it modifies *the man* and under the second reading it modifies the seeing event that is expressed by the verb. As is customary in generative syntax, let us represent the syntactic constituents, i.e., the building blocks, of the sentence in (38) in square brackets: the subject [Sam], the verb [saw], the direct object [the man], and the prepositional phrase [with the binoculars]. Once we assume that relations among constituents are hierarchical, we can represent the two readings as distinct hierarchical structures using the convention of square brackets. We can now obtain the first reading by expanding the direct object [the man] in such a way that it also accommodates the constituent [with the binoculars] that modifies it; hence, forming an internally complex constituent (39a). Then the verb [saw] unites with this new constituent in (39a) to form an even bigger constituent (39b). Finally, the subject combines with the newly built constituent in (39b) to form the highest constituent, which we refer to as a “sentence” (39c).

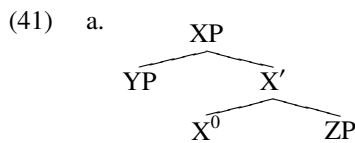
- (39) a. ... [the man [with the binoculars]]
 b. ... [saw [the man [with the binoculars]]]
 c. [Sam [saw [the man [with the binoculars]]]]. (reading 1)

The structure of the second reading differs considerably from that of the first one. This reading is obtained once we assume that, this time, the constituent [with

the binoculars] does not form a constituent with [the man], but rather with the verb which is already part of a bigger constituent that also includes the direct object [the man] (40a–b). Then the subject combines with the constituent formed in (40b) to form a full sentence (40c).

- (40) a. ... [saw [the man]]
 b. ... [saw [the man] [with the binoculars]]
 c. [Sam [saw [the man] [with the binoculars]]]. (reading 2)

The structures in (39–40) are rather simplistic and I return to them at the end of section 3.3.1.2. To represent such hierarchical relations between different constituents in a clause in a better way, generative syntacticians use the notational device called a “phrase marker”, or a “syntactic tree (diagram)”, which is based on the so-called X' -template (X -bar, also notated as \bar{X} -template; Chomsky 1970; Jackendoff 1977; (41a)). Each syntactic constituent is formed (derived) according to the basic X' -template in (41a).

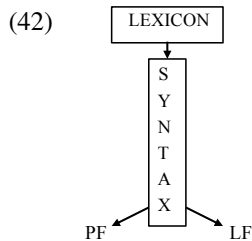


The tree in (41a) is a “projection” of X^0 , its “head”. XP is referred to as a “maximal projection” (or “phrase”), and X' is an intermediate projection. (41a) comprises in total three maximal projections (or phrases), namely XP , YP and ZP . ZP is the “complement” of the head X^0 : this head selects the phrase ZP . YP , on the other hand, is said to be located in the “specifier” position of XP (Spec, XP). XP , YP , X' , X^0 and ZP are referred to as “nodes” which are connected to one another by “branches” (lines). An alternative way to represent (41a) is using labeled brackets, as in (41b):

- (41) b. [_{XP} YP [_{X'} X⁰ ZP]]

In the remainder of this thesis, I adopt the structures in (41a–b) to represent hierarchical relationships among constituents (see section 3.3.1.2 more on this issue).

I further adopt the standard T-model prevalent especially within the *Principles and Parameters* framework for the architecture of grammar (see van Riemsdijk and Williams 1981; Chomsky 1981, 1986b, 1995, 2001; for a simplified discussion see Carnie 2013[2002]:398). Within this model, the lexicon feeds the syntactic component, which itself interacts with two other modules in turn, namely, Phonological Form (PF) and Logical Form (LF), which are, simply speaking, the sound, and the meaning components:



The lexicon comprises lexical (open-class) and functional (closed class) categories (see section 2.3.1 for these terms). Lexical categories include contentful words like nouns and verbs. Functional categories express information about tense, aspect, agreement (e.g., number and gender) and definiteness, among others.

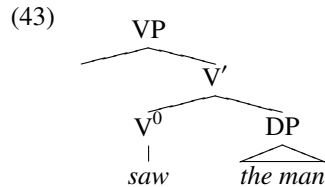
The syntactic component takes elements from a language-specific lexicon and puts them together conforming to the X' -template, forming larger structures that are “read off” at PF and LF interfaces. Hierarchical relationships between lexical and functional categories, i.e., a “derivation”, are established in the syntax through the operation “Merge”, which basically combines constituents. Two types of merge should be identified at this point: “external Merge” and “internal Merge” (also referred to as “Move”). External Merge either picks up two linguistic elements from the lexicon, and concatenates them to form a larger unit conforming to the X' -template, or it selects an item from the lexicon and combines it with a syntactic object that has already been built. How clauses are built by external Merge will be elaborated on in the next section (section 3.3.1.2), and Move will be discussed in sections 3.3.1.3–3.3.1.4.

3.3.1.2 Functional structure of the clause

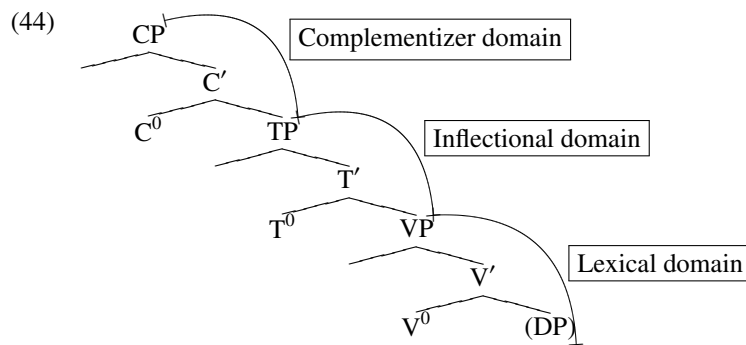
In clauses, (verbal) predicates and their arguments (i.e., obligatory constituents with which the predicate combines to form a simple proposition) are externally merged (first-merged) in the lexical domain, notated as VP (Verb Phrase). Within VP, the predicate assigns a thematic role (θ -role), such as THEME, GOAL, etc. to each of these arguments.¹⁴ A transitive verb, such as *see* for example, is merged with its internal argument (the object), e.g., *the man* and projects its category (“verb(al)”), forming a larger unit VP (43). The direct object is labeled as DP: I will elaborate on this later in this section.¹⁵

¹⁴ In recent work, θ -roles such as AGENT has been argued to be assigned not inside VP but in vP (read as “little VP”), which immediately dominates VP (Chomsky 1995; Kratzer 1996). However, in this dissertation, I will not consider vP as the position responsible for this and I will assume that AGENT role is also assigned inside VP. See also section 3.3.2.1.

¹⁵ A triangle represents a maximal projection whose internal structure is not relevant for the current discussion.



Verbs are taken to project a series of functional projections on top of them, the totality of which is referred to as the “extended projection” (Grimshaw 2005) of the verb. The entire series of functional projections of the clause is subdivided into three layers; the lexical domain, VP; the inflectional domain, TP (Tense Phrase) and the complementizer domain, CP (Complementizer Phrase) (Stowell 1981; Chomsky 1981, 1982; Haegeman 1997). CP dominates TP and VP, and TP dominates VP.¹⁶

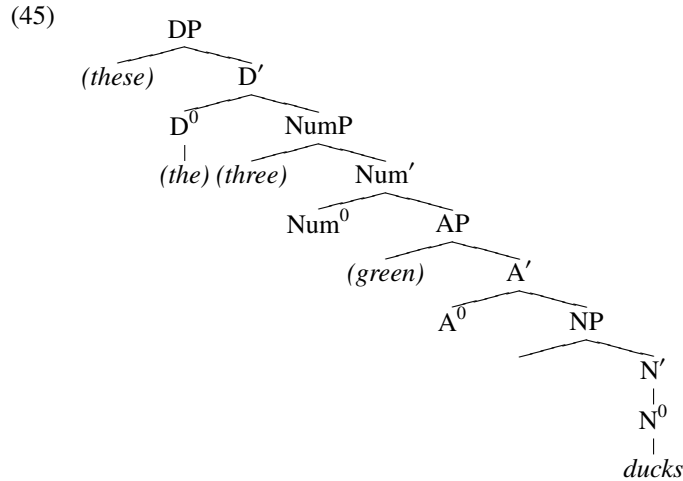


The inflectional domain (hereafter INFL-domain) encodes various modal, temporal and aspectual dimensions of the clause and is associated with verbal and nominal agreement inflection. The complementizer domain (hereafter CP-domain) encodes interpretive properties such as illocutionary force and notions of information structure such as focus, topic etc. Concretely, the CP projection hosts operator elements that take clausal scope, such as *wh*-phrases in a *wh*-question (Chomsky 1977) as well as complementizers, conjunctions, and constituents with a special discourse interpretation, such as topics and foci.

Even though it does not play a crucial role in the current thesis, a note should be made on the syntax of noun phrases. Since Abney (1987), it has been assumed that a lexical noun, too, projects a sequence of functional projections where modifiers such as demonstratives, articles, adjectives, numerals etc. are hosted, similar to the one projected by verbs in the clausal domain. This is currently known as the

¹⁶ A node X “dominates” a node Y, iff (if and only if) X is above Y in the tree and one can go from X to Y moving only downwards in the tree.

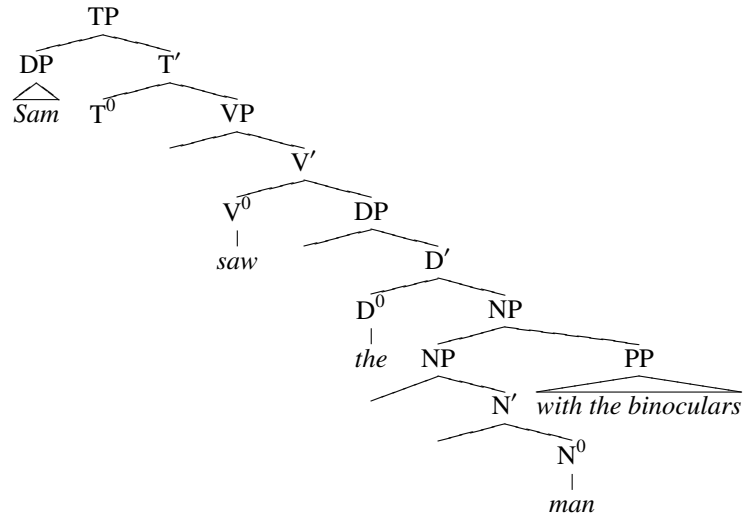
“DP-hypothesis”, where DP stands for “Determiner Phrase”. In (45), AP stands for “Adjective Phrase”, NumP for “Numeral Phrase” and NP for “Noun Phrase”.



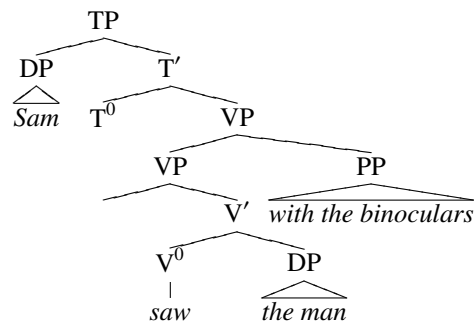
For details on the structure of DP see a.o., Alexiadou et al. (2007); Cinque (2005, 2009, 2010, in preparation).

Given the information provided so far, we can now provide a better, yet still very rough, representation of (39c) and (40c) with the phrase markers in (46a–b) respectively. For expository purposes, I present the merge position of the subject *Sam* in (46a–b) as Spec, TP, as in Chomsky (1981); this will be elaborated on in section 3.3.2.1. Notice that the difference between the two structures is that the PP (which stands for “Prepositional Phrase”) is externally merged in two different positions.

(46) a.



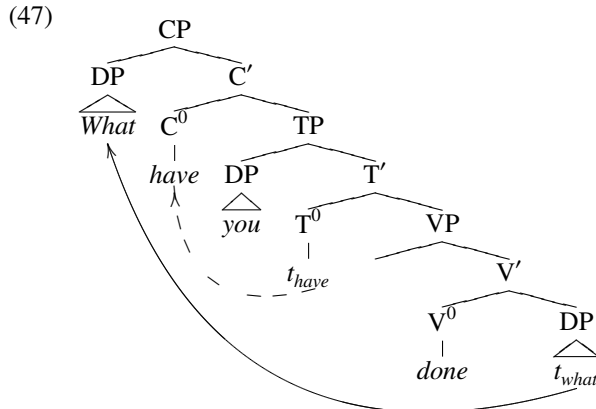
b.



3.3.1.3 Movement

Within the domains in (44), constituents may move in a systematic fashion: Heads move to higher head slots, whereas phrasal complements move to higher specifier positions. This has also been referred to as internal merge, because merge affects the top node of a large constituent, XP, out of which a smaller constituent, YP, is extracted. Movement creates traces, or copies, which are generally not pronounced (i.e., do not have a PF realization). Traces are postulated to ensure that some link between the moved item and its original position is maintained. The effect of move is that it captures dislocation: the same item can be interpreted both at the position in which it is originally (externally) merged as well as at the position in which it is found in the actual utterance (see section 3.3.1.4 and 3.3.1.6 for more on this issue).

To provide an example, consider the derivation of the English *wh*-question *What have you done?* in (47).



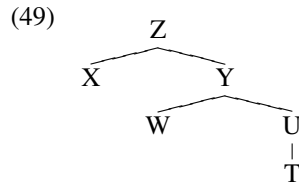
In this example, the DP *what* is not only an operator which “types” the whole sentence as a matrix *wh*-question, but it also is the argument of the verb *done*. To encode both these functions, it is proposed that the DP is displaced: it is first (externally) merged within VP where it is the direct object to V⁰ (the trace is indicated with *t*) and can thus encode the thematic relation, and then it is moved to the specifier of CP, in which position it can encode the scope of the *wh*-question (movements are shown with arrows). The perfective auxiliary *have* is a head, it is merged in T⁰, in which position it encodes the aspectual relation, and it moves to C⁰ for encoding illocutionary force. Again, for expository purposes, I presented the merge position of the subject *you* as Spec, TP (see section 3.3.2.1 for more on this).

3.3.1.4 Constraints on movement

In what follows, I will list some of the general properties of syntactic movement. First, movement is always to a constituent commanding (c-commanding) position (Kayne 1994), where c-command is defined as follows:

- (48) c-command
 A constituent X c-commands a constituent Y iff,
 a. X’s sister is Y, or
 b. X’s sister contains Y. (Adger 2015:141)

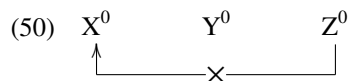
For the sake of exposition, consider the dummy phrase marker in (49):



According to the definition of c-command in (48), in (49) X c-commands its sister Y as well as W, U and T which are contained in Y, whereas W c-commands only U and T.¹⁷ Based on (48), in (47) we see that the trace of the DP *what* is contained in the c-commanding domain of the overt copy in Spec, CP, this c-commanding domain being the C' node and all its internal structure. As a result *wh*-movement is in this case allowed. Similarly, C⁰ c-commands T⁰, therefore the auxiliary in T⁰, *have*, can legitimately move to C⁰.

Second, movement is not optional, it is always motivated: basically movement arises because of the need for “feature checking” (Chomsky 1995 and subsequent work): in the case of phrasal movement, a given functional head is associated with one or more features that need to be checked against matching features of a maximal projection in its c-commanding domain. In the case of the matrix *wh*-question in (47), one proposal is that the head C⁰ is associated with an operator [+wh] feature that “probes” for a related feature, namely the *wh*-phrase *what*.¹⁸

Third, and finally, two basic types of movements can be distinguished: The first one is referred to as Head-movement, in which a head is displaced to another head that c-commands it. There is a constraint on Head movement, which is referred to as the “Head Movement Constraint” (hereafter HMC; Travis 1984:131, ex (55)). To put it informally, the HMC dictates that the movement of Z⁰ to X⁰ cannot skip an intervening head Y⁰ (see also Chomsky 1986a:71, ex. (160); as well as Rizzi 1990):



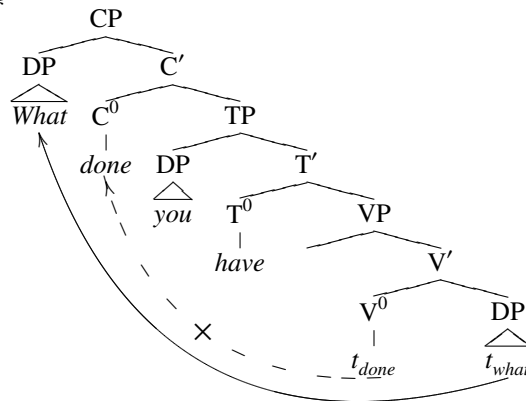
(50) ensures that head movement is strictly local. To illustrate this, compare the grammatical example in (47) with the ungrammatical one in (51a), whose structure is given in (51b). As the structure in (51b) shows, the ungrammaticality can be as-

¹⁷ Two sub-types of c-command relations can be identified: (i) symmetric and (ii) asymmetric. In symmetric c-command two nodes c-command each other, e.g., W and U in (49). In asymmetric c-command one node c-commands the other but not vice versa. In (49), asymmetric c-command holds between X and W and W and T.

¹⁸ Alternatives to the feature checking account are the “Probe-Goal” system of Chomsky (2000 et seq.) and the “criterial” approach developed in Rizzi (1996, 1997) and subsequent work. Nothing really hinges on these different options for the purposes of the present work.

cribed to a violation of HMC, because *done* (V^0) has illicitly moved to C^0 past the intervening head *have* (T^0).

- (51) a. * What done you have?
 b. *



For a refinement of the HMC, see section 3.3.1.5.

The second type of movement is referred to as XP movement (or phrasal movement): it displaces a phrasal constituent to a c-commanding specifier position. XP movement comes in two sub-types (i) A-movement and (ii) A'-movement (read as "A-bar movement").

A-movement displaces a phrasal category from the lexical-domain to the INFL-domain. It can be illustrated with the phenomenon called "raising". To illustrate this, consider the example in (52a):

- (52) a. Sam seems to have found a job.

In (52a) Sam is the AGENT, i.e., the subject, of the small clause *to have found a job* (see (52b)). This clause, whose exact category does not concern us (and is labeled as XP in (52b-c)), is embedded under a raising verb (i.e. *seem*). Raising verbs are known not to assign an AGENT θ -role. Yet, if we adopt the Extended Projection Principle (introduced by Chomsky 1981, 1982:10, hereafter EPP) according to which each clause is required to have a subject, and if we further assume that the EPP is realized as a feature on T^0 ([+EPP]) that must be checked against a nominal category, it remains problematic how the [+EPP] feature in a clause with a raising verb is checked. This problem is overcome by A-movement of *Sam* to the higher INFL-

domain, more specifically to the higher subject position (52c).^{19,20}

- (52) b. [_{TP} _____ [_{T_[+EPP]} [_{VP} seems [_{XP} Sam to have found a job]]]].
 c. [_{TP} Sam [_{T_[+EPP]} [_{VP} seems [_{XP} t_{Sam} to have found a job]]]].
-

A'-movement displaces a phrasal category to the CP-domain. An illustration for this type of movement was already given (47), in which the *wh*-phrase *what* is moved to Spec, CP (from within the VP).

3.3.1.5 Relativized minimality

Rizzi (1990) proposes that the HMC (section 3.3.1.4) is not a primitive, but that it follows from a more general property of natural language syntax which operates on all types of movements briefly introduced above: head-movement, A-movement, and A'-movement. Recall from (50) that according to the HMC, movement of Z^0 to X^0 cannot skip an intervening head Y^0 . However, Rizzi (1990) observes that similar restrictions apply to A- and A'-movement as well. Consider first the contrast between (53a) and (53b–c). All examples involve two clauses with raising predicates: *seems* of TP₁ and *is likely* of TP₂, one embedded into the other one. In the grammatical example in (53a), the subject of the small clause, *Sam*, raises (A-moves) to Spec, TP₂ to check [+EPP] on T₂⁰. In this example the [+EPP] feature on T₁⁰ is satisfied by the expletive *it* in Spec, TP₁. In (53b–c), on the other hand, *Sam* A-moved to Spec, TP₁. This type of movement is ungrammatical, whether or not the expletive *it* is inserted into Spec, TP₂. In other words, when two subject positions are available, movement has to target the closest potential one. Sentences in (53b–c) are ungrammatical because the movement of *Sam* is beyond the closest potential position.

- (53) a. [_{TP₁} It [_{T₁⁰} seems [_{CP} that [_{TP₂} Sam [_{T₂⁰} is likely [_{XP} t_{Sam} to have left]]]]]].
-

¹⁹ It should be noted that in recent work, the EPP has been taken to be a mere descriptive generalization: movement as shown in (52c) is taken to be driven due to checking requirements of nominative case and agreement features of T⁰ (Chomsky 1995).

²⁰ Another option is the insertion of the expletive *it* into the higher subject position; however, in this case, the complement clause of the raising predicate should be finite:

- (i) [_{TP} It [_{T_[+EPP]} [_{VP} seems [_{XP} Sam has found a job]]]].

- b. * [TP₁ Sam [T₁⁰ seems [CP that [TP₂ it [T₂⁰ is likely [XP t_{Sam} to have left
↑
-----X-----
↓
]]]]]].
- c. * [TP₁ Sam [T₁⁰ seems [CP that [TP₂ [T₂⁰ is likely [XP t_{Sam} to have left
↑
-----X-----
↓
]]]]]].

Let us also consider the ungrammatical sentence in (54), in which there is an extraction out of an embedded *wh*-interrogative.

- (54) * [CP₁ How did Sam wonder [CP₂ what Ed fixed t_{what} t_{how}]]?
↑
-----X-----
↓

According to Rizzi (1990) the ungrammaticality in the example in (54) is due to A'-movement of the *wh*-phrase *how* to Spec, CP₁ across another interrogative *wh*-phrase which has already A'-moved to Spec, CP₂. In other words, the ungrammaticality in (54) is due to the fact that *what* in an A'-position blocks A'-movement to a position higher in the structure.²¹

Based on such ungrammatical cases as (51a, 53b–54), Rizzi (1990) proposes the system of “Relativized Minimality” (hereafter RM), which constrains all types of syntactic movements in a principled manner. For an instance of syntactic movement to yield a grammatical structure, it has to respect RM. To put it simply, in a configuration such as (55)

- (55) X Y Z

an RM violation occurs if X and Y are of the same type (head, A- or A'-positions), and there is a movement from Z to X across Y (Rizzi 1990, 2004). To put it informally, RM says that likes cannot cross likes. If they do, an “intervention effect” arises and the sentence becomes ungrammatical, as in (51a, 53b–54). Rizzi (2004) conceives of Minimality as a representational principle “that must hold of chains at LF” (Rizzi 2004:225). Simply put, a chain is the (maximal) sequence of coindexed positions such that each is the closest antecedent of the following one (Chomsky 1981:333; Rizzi 1986b). A formal definition of a chain is as follows:

- (56) (A₁ ... A_n) is a chain iff, for 1 ≤ i < n,
 i. A_i = A_{j+1},

²¹ The example (54) is grammatical under a reading in which *how* is taken to be first-merged in CP₁ and the question is about the manner/way of Sam’s wondering event.

- ii. A_i c-commands A_{j+1} ,
- iii. A_{j+1} is in a Minimal Configuration with A_i , i.e., there is no element x of the same structural type as A_i , such that x occurs between A_i and A_{j+1} .
(from Rizzi 2004:225, ex. (7))

There are, however, notable cases which do not follow from this formulation of RM. Therefore in the more recent literature (Rizzi 2004, see also Starke 2001) RM has been refined, in particular to capture the behavior of constituents that undergo A' -movement. These refinements are presented in section 3.3.3.2.7, where they become relevant.

3.3.1.6 Reconstruction as a diagnostic for movement

Reconstruction has been considered a key diagnostic tool to understand whether a constituent has been internally or externally merged. To understand reconstruction, let us consider the sentences in (57) (for a general discussion on reconstruction phenomena, the reader is referred to Sportiche 2006).

- (57) a. $[_{TP} \text{Sam}_i [_{VP} \text{loves himself}_i]]$.
 b. $[_{TP} \text{Sam}_i [_{VP} \text{thinks } [_{CP} \text{that } [_{TP} \text{Ed}_j [_{VP} \text{loves himself}_{j'}]]]]]$.

In (57a) the nominal *Sam* and the anaphor *himself*, (i.e., an expressions whose referential interpretation depends upon another expression in the discourse, Chomsky 1981), can be co-referential. This follows from Principle A of the Binding Theory (Chomsky 1981, 1982), according to which a reflexive such as *himself* needs to be locally c-commanded by a clause-mate antecedent. Given that *Sam* c-commands *himself*, and as they are clause-mates, *Sam* can bind the reflexive and allow it to be interpreted.²² In (57b), *himself* can only be co-indexed with *Ed* and not with *Sam*, because even though *Sam* c-commands *himself*, *Sam* and *himself* are not clause-mates (*Sam* is in the higher clause, whereas *himself* is in the lower one). Consider now the sentence in (58):

- (58) [Which picture of himself_{*i*}] did Sam_{*i*} see?

²² Binding, which ensures the identification of the reflexive, is defined as follows:

- (i) X binds Y iff,
 - i. X c-commands Y,
 - ii. X and Y have the same referential index (i.e., the subscripts). (Rizzi 1990:87)

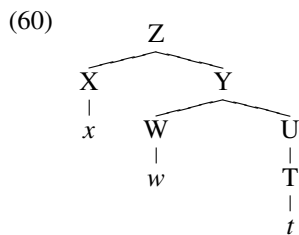
The sentence in (58) is grammatical with the relevant reading even though the antecedent *Sam* does not c-command the reflexive *himself*. The absence of a Principle A violation is explained once we look at the derivation of (58), as shown in (59). More specifically, (59) shows that the extraction site of the A'-moved DP *which picture of himself* is the postverbal object position, indicated with *t*. If we compute the binding relations at this earlier stage of the derivation, we obtain a configuration where *himself* is locally c-commanded by its antecedent *Sam*, as required. We can say that Principle A is satisfied “under reconstruction”.

(59) $[_{CP} [_{DP} \text{Which picture of himself}]_i [_{C^0} \text{did} [_{TP} \text{Sam}_i [_{VP} \text{see } t_j]]]]] ?$

The fact that we can retrieve the bound reading of the antecedent *himself* in (58) proves that the DP *which picture of himself* has indeed moved to Spec, CP from its external merge position.

3.3.1.7 The Linear Correspondence Axiom

So far I have been assuming that a hierarchical syntactic structure is linearized from left to right. However, nothing has been said yet as to how this is ensured. As to the linearization of syntactic structures, throughout the dissertation, I assume the “Linear Correspondence Axiom” (hereafter LCA), and hence the antisymmetric program of Kayne (1994). According to the LCA, the terminal nodes of a syntactic object are linearized (read off) at the interface level of PF based on the c-command relations between its non-terminal nodes, i.e., nodes that dominate at least one other node (terminal nodes, on the other hand, do not dominate other nodes). For illustration, consider the dummy phrase marker in (60):



The terminal nodes to be linearized in (60) are *x*, *w* and *t*. LCA can be stated informally as follows:

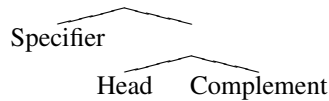
- (61) Take X, Y, non-terminal nodes that dominate the terminals *x*, *y*, respectively. Assume that X c-commands Y, while Y does not c-command X (asymmetric c-command). Then *x* precedes *y*.

(López 2009:239, ex. (1))

In the little tree in (60), the set of pairs of relevant non-terminal nodes such that the first member of the pair asymmetrically c-commands the second member is as follows: $\{\langle X, W \rangle, \langle X, T \rangle, \langle W, T \rangle\}$. Based on these c-command relations, the terminal nodes are ordered as follows: $\langle x, w \rangle, \langle x, t \rangle$ and $\langle w, t \rangle$. Assuming that transitivity holds, and that the ordering is total in that for every pair of terminals an ordering is specified (Kayne 1994:7), these three ordered pairs form a linearly ordered set $\{x, w, t\}$.

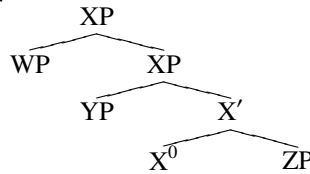
Kayne (1994) argues that the LCA derives a very restrictive version of the classical X'-template in which a specifier always precedes a head and a head always its complement, as in (62). From this claim it follows that (i) each projection has only one head, (ii) there is one and only one specifier per head, and (iii) one and only one complement per head.

(62)

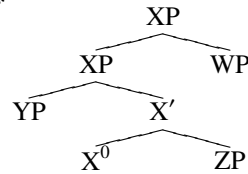


The LCA thus ensures that multiple adjunction to the left or to the right of a phrase, as in (63a–b), where WP is adjoined to XP, is banned. Rather, all adjuncts are considered to be specifiers of dedicated functional projections, as in (63c), where the relevant functional projection is given as FP. In this structure, the head F^0 encodes the semantic relation that WP bears with respect to XP.²³

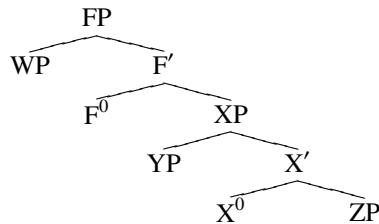
(63) a. *



b. *



c.



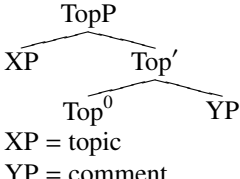
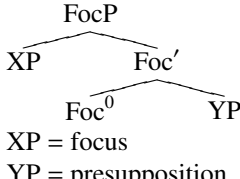
²³ According to this, the phrase markers in (46) should be revised; however, since it is not crucial for this dissertation, I will not provide an updated version of it here.

3.3.1.8 Cartography

Even though in (44), I showed that the clause is divided into three general domains, a substantial amount of literature has revealed that each domain may contain more functional structure. This idea can be traced back to, e.g., Pollock's (1989) "Split-INFL hypothesis" which represents tense and agreement as distinct functional heads in the INFL-domain. The exact description of the inventory of functional heads in the extended projection of lexical categories has become a systematic area of investigation especially after Rizzi (1997) and is known today as the "cartographic approach" (see Cinque and Rizzi 2010; Shlonsky 2010; Rizzi 2013; Rizzi and Bocci 2017 for overviews). The cartographic approach aims "[...] to draw maps as precise and detailed as possible of syntactic configurations" (Cinque and Rizzi 2010:65). The theoretical assumption of this approach is the universality of functional hierarchies with respect to the number and relative order of functional heads. A major piece of evidence for this assumption was provided by Cinque (1999). By analyzing a substantial number of genetically distinct languages, Cinque (1999) observes that functional morphemes (affixes, clitics or auxiliaries) and corresponding adverbs (or adverbials) consistently show the same ordering restrictions. Cinque (1999) suggests that this ordering is unambiguously determined by the hierarchical phrase structure in the INFL-domain, in which adverbs occupy unique specifiers of functional projections in the head of which functional morphemes are merged (as in Kayne 1994; see section 3.3.1.7). Cinque (1999) further observes that some languages have adverbs in a given functional projection or an affix, but crucially not both.

The component of the cartographic model which will be directly relevant to the current thesis is concerned with the articulated functional structure of the CP-domain, often referred to as the left periphery (henceforth LP) of clauses. Rizzi (1997), with refinements in Rizzi (2001, 2004, 2013, 2014), proposes that scope-discourse properties such as topic and focus also take part in the syntactic derivation, just like tense, negation, mood etc. In Rizzi's (1997) system, preverbal topic expressions and (contrastive) focus expressions are hosted in dedicated A'-positions: Spec, TopP (Topic Phrase) and Spec, FocP (Focus Phrase) respectively, in the LP. If TopP is projected, the material moved to Spec, TopP to check the [top(ic)] feature is syntactically marked as "given information", while the rest of the clause functions as a comment (64a). If FocP is projected, the constituent attracted to the specifier of FocP to check the [foc(us)] feature is syntactically encoded as "new, exhaustive" information, and the rest of the structure is interpreted as presupposed (64b).²⁴

²⁴ Languages may differ as to whether the left-peripheral FocP encodes only contrastive focus (e.g., Italian, Rizzi 1997) or allows non-contrastive, exhaustive interpretation as well (e.g., SMG, Gryllia 2008; Sicilian, Cruschina 2011).

- (64) a.  b. 

Evidence in support of (64) comes from the fact that there are certain languages in which Top^0 and Foc^0 can be claimed to be morphologically realized. An illustrative case is Gungbe, a Kwa language spoken mainly in Benin, in which topic and focus are marked by the particles *yà* and *wè* respectively (Aboh 1999, 2004, 2016).²⁵

- (65) a. [Lésì ló] *yà* Súrù d̀à è g̀anjí.
 rice $\text{DET}_{[\text{deixis}]}$ TOP Suru cook 3sg well
 ‘As for the rice, Suru cooked it very well.’
 b. [Lésì ló] *wè* Súrù d̀à g̀anjí.
 rice $\text{DET}_{[\text{deixis}]}$ FOC Suru cook well
 ‘Suru cooked THE RICE very well.’

[Gungbe (Aboh and Essegbey 2010:60, ex (51))]

The data in (65) can be accounted for by analyzing *yà* and *wè* as functional heads realizing Top^0 and Foc^0 and by assuming that the constituent *Lésì ló* ‘the rice’, which is left adjacent to *yà* and *wè*, occupies Spec, TopP in (65a) and Spec, FocP in (65b)—hence in a spec-head configuration with the functional heads realized as *yà* and *wè*, whose [top] and [foc] features are checked. These two discourse categories can co-occur in the same clause too—albeit in a fixed order—as the contrast between (65c) and (65d) illustrates.

- (65) c. [Kòfí] *yà* [g̀ankpá m̀è] *wè* kp̀oǹǹn lé sù-ì d̀ó.
 Kofi Top prison in Foc policeman Num shut-Perf-3sg Loc
 ‘As for Kofi, the policeman put him IN PRISON.’
 d. * [G̀ankpá m̀è] *wè* [Kòfí] *yà* kp̀oǹǹn lé sù-ì d̀ó.
 prison in Foc Kofi Top policeman Num shut-Perf-3sg Loc
 [Gungbe (Aboh 2004:299, ex. (22))]

Rizzi (1997) argues that even in the absence of overt morphological markers (heads), these functional projections still project in other languages too.²⁶ In Rizzi’s (1997)

²⁵ In the glosses of Gungbe examples in (65), DET stands for ‘determiner’, Num for ‘number’, TOP/Top for ‘topic’, FOC/Foc for ‘focus’, Perf for perfective’, Spf for ‘specific’.

²⁶ This follows from the Uniformity Principle of Chomsky (2001:2) which states that “[i]n the absence of compelling evidence to the contrary, assume languages to be uniform, with variety restricted to easily detectable properties of utterances”.

system, TopP and FocP are situated in the LP which is delimited by two functional categories, ForceP and FinP (66):

$$(66) \quad [_{\text{ForceP}} [_{\text{TopP}^*} [_{\text{FocP}} [_{\text{TopP}^*} [_{\text{FinP}} [_{\text{TP}} \dots]]]]]]]$$

ForceP (Rizzi 1997) encodes the illocutionary force (i.e., whether a clause is an assertion, exclamation, or a question, etc, see also Cheng 1991; Chomsky 1995) or the clausal type (i.e., whether a clause is a declarative, exclamative, interrogative), i.e., the necessary information that must be accessible to a higher selector in case of embedding (e.g., a verb such as *ask* selects an interrogative, and a verb such as *say* selects a declarative; Rizzi 1997:283; Rizzi and Bocci 2017:3–4). This information is sometimes expressed by overt morphological means, i.e., by means of complementizers in Force⁰, or sometimes by an internally merged operator in Spec, ForceP, or sometimes by both (Rizzi 1997:283). FinP (Finiteness Phrase), is taken to reflect the core characteristics of (non-)finiteness of the clause, its morphological realization generally depending on the finite or non-finite character of its host clause (Rizzi 1997:284; Rizzi and Bocci 2017:4). In certain languages, such as Italian, Fin⁰ hosts complementizers that are sensitive to finiteness/non-finiteness distinction of the clause (Rizzi 1997). However, languages may vary with respect to which additional information is expressed in Fin⁰. Some languages further express tense distinctions on Fin⁰, some mood distinctions, and yet others subject agreement (Rizzi 1997:284). To capture these finer distinctions too, Fin⁰ can be taken to “express[...] a specification of finiteness” (Rizzi 1997:284). In Rizzi’s system scope-discourse properties of topic and (contrastive) focus are also encoded in functional projections in the LP, between ForceP and FinP. According to Rizzi (1997), more than one constituent can be topicalized in a given clause, indicating that TopP is recursive. Furthermore, multiple topics can be realized in two different positions, whereas there is a unique FocP (Rizzi 1997:290–291).²⁷

Rizzi’s (1997) proposal that CP is indeed a much richer and articulated space than previously assumed has been extended to the VP (Belletti 2001, 2004) and DP (Bernstein 1997, 2001; Haegeman 2004a; Aboh 2004, 2005) domains. Of more relevance to the current dissertation are the proposals concerning the articulated layer above VP. According to Belletti (2001, 2004), the lower portion of INFL-domain, i.e., the area immediately above VP (which she refers to as “internal area” or “low periphery”) is parallel—to some extent—to the LP of the clause (which she refers to as “external area” or “high periphery”). The low periphery, Belletti (2001, 2004) argues, contains distinct positions associated with different scope-discourse properties than the projections in the high periphery. I will not present the details of Belletti’s

²⁷ See also Lambrecht (1994:329) and Lambrecht (2000:612) for the same conclusion in a different framework.

(2001, 2004) proposal here (for these details, see section 3.3.3.1.2, and especially Belletti 2004). Briefly speaking, with data from Italian, Belletti (2004) argues that the VP-periphery (low periphery) too contains a focus position on par with LP, which however, is associated with information focus, unlike the focus position in the LP which is associated with identificational (contrastive) focus (see Rizzi's 1997 argument above). Furthermore, according to her proposal, this low FocP is also preceded and followed by TopPs, as in (67).

(67) [_{TP} ... [_{TopP} [_{FocP} [_{TopP} [_{VP} ...]]]]]

3.3.1.9 Derivation of a neutral clause

The above theoretical assumptions provide us with the necessary machinery to formally distinguish between neutral and non-neutral word orders in PhG. Moreover, they enable us to provide a structural analysis of the pragmatic ambiguities that obtain in clauses with SVO orders, which, as I discussed in section 3.2, can occur in both neutral and non-neutral clauses. In the rest of the chapter, I adopt the definition in (68) for the derivation of a neutral clause (adapted from Kirk 2012:27, ex. (12)):²⁸

(68) Derivation of a neutral clause

A clause in which no element is A'-moved to a projection associated with scope discourse properties of focus (Spec, FocP) or topic (Spec, TopP).

According to (68), we expect the order VSO not to involve movement of any constituent to a discourse-related functional projection. For SVO, however, it is expected that pragmatically non-neutral clauses may involve such movement, while pragmatically neutral ones do not. Other word orders (SOV, OVS, VOS, OSV), on the other hand, are expected to involve movement of at least one constituent to a functional projection associated with scope discourse properties of focus or topic. In the rest of this chapter, I provide an account of these clauses by adopting the structures in (66) and (67) and by expanding the former based on the empirical data PhG provides. More specifically, VOS clauses will provide evidence for the existence of a low FocP above VP as in (67) (section 3.3.3.1.2). Non-neutral SVO clauses (sections 3.3.3.2.5–3.3.3.2.6) and non-neutral O-initial clauses (section 3.4) will provide support for (66) and evidence for further discourse-related functional projections in the LP. Neutral SVO clauses provide evidence for the existence of a further position in the LP, namely Subject Phrase (especially sections 3.3.3.2.7–3.3.3.2.8).

In the next two sections, I mainly focus on the syntactic positions the verb and the subject occupy in VSO and SVO clauses. The main conclusions of these sections

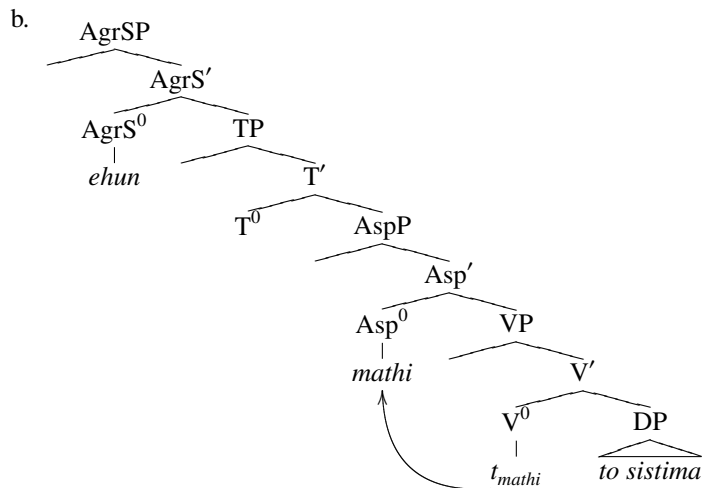
²⁸ Here, the phenomenon of "scrambling" (Ross 1967:51–54 and much subsequent work), which is not available in PhG, is abstracted away.

are the following: while the verb occupies the same position in both VSO and SVO orders, a neutral clause emerges only if the subject is in Spec, VP or in Spec, SubjP, hence obeying (68) and resulting in VSO and SVO order respectively. If the subject is in Spec, TopP or Spec, FocP, a non-neutral SVO order is obtained.

3.3.2 The position of the verb in PhG

In this section, I argue that verbs in PhG neutral clauses are hosted in T^0 , which I take to be the highest inflectional head of the INFL-domain. I should acknowledge at the outset that verbs in PhG may in fact target intermediate positions between V^0 and T^0 , assuming a more fine-grained articulation of the INFL-domain. Such a position is argued for by Alexiadou (1997, 1999) in relation to SMG, a closely related language. Alexiadou (1997, 1999) argues that inflected auxiliaries occupy $\text{Agr}(\text{eement})\text{S}(\text{ubject})^0$ —a functional head in the INFL-domain higher than T^0 —in SMG, whereas participles following inflected auxiliaries target a lower position, e.g., a functional head $\text{Asp}(\text{ect})^0$ situated above VP. The structure proposed by Alexiadou (1997, 1999) for the SMG clause in (69a) is given in (69b). For further details, I refer the reader to Alexiadou's works just cited:²⁹

- (69) a. ... ehun mathi to sistima.
 have.3PL learn.PTCP the system
 ‘... they have learnt the system.’



²⁹ Alexiadou (1997, 1999) assumes the presence of AgrSP as the highest projection in the INFL-domain. For the purposes of this dissertation AgrS⁰ could also be identified as T⁰. See also Chomsky (1995:349ff) for arguments against the existence of AgrSP as a functional projection.

[SMG (adapted from Alexiadou 1999:52, ex. (16))]

The fact that PhG does not have inflected (or uninflected) auxiliaries (see section 2.3.2.2) means that an important diagnostic for identifying possible low verb positions is not available in PhG. Another diagnostic test is the position of the verb with respect to various types of adverbs in the articulated INFL-domain (Cinque 1999). However, I do not incorporate the precise ordering of adverbs between V^0 and T^0 —hence the possible intermediary position of the verb—into the current discussion. For the time being, I assume that when a verb evacuates VP, the first position it reaches is T^0 . It should be noted that a more precise characterization of the INFL-domain in PhG would be arrived by studying the syntax of adverbs. I leave this for future study.

I first discuss the VSO order, and then the results are extended to the SVO order. There are two motivations for this choice; first, VSO is defined as an unambiguously neutral order, as opposed to SVO which may be ambiguous (section 3.2.4.5), and second, there is a substantial body of cross-linguistic literature on verb positions in languages with VSO neutral order. In the next section, I provide a general introduction to clause structure in languages which are claimed to have VSO as a neutral word order.

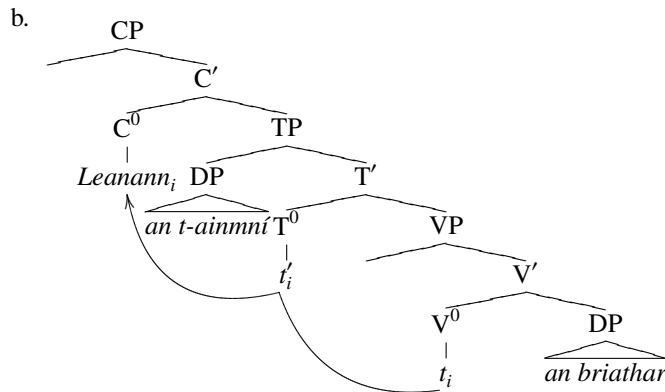
3.3.2.1 VSO order and verb positions cross linguistically

In the literature, there have been a number of proposals to derive the VSO order. Currently, the most generally adopted one involves movement of the verb to a head position in the CP- or INFL-domain across the subject.³⁰ The oldest family of proposals within this line of research assumes movement to C^0 , and was applied to for instance Celtic languages (Emonds 1979; Sproat 1983, 1985; Stowell 1989; Hale 1987). According to this analysis, a VSO clause such as the one from Modern Irish in (70a) is derived as in (70b):³¹

³⁰ Two other possibilities for the analysis of VSO which have been proposed should be mentioned here. The first one involves the subject lowering from Spec, TP into VP (e.g., Shlonsky 1987:126–195, chapter 4; Chung 1990). This analysis is no longer compatible with current theoretical assumptions which only allow for leftward movement (section 3.3.1.7). The second one involves remnant-movement of VP, i.e., the movement of a VP from which some constituent such as the subject or object has already been extracted earlier in the derivation (den Besten and Webelhuth 1990; Kayne 1994), to a higher specifier position (Massam 2000; Rackowski and Travis 2000; Lee 2000, 2008:49–106, chapter 3). Since this analysis is tangential to the current dissertation, I will not provide its details here.

³¹ Stowell (1989) employs the label IP (Inflectional Phrase) for what I present here as TP, COMP for what I present here as C^0 and e —standing for “empty category”—, for what I present here as t (trace). Nothing hinges on these differences for the purposes of the current presentation.

- (70) a. *Leanann an t-ainmní an briathar.*
 follow.PRS the subject the verb
 ‘The subject follows the verb.’
 [Modern Irish (adapted from Carnie and Guilfoyle 2000:4, ex. (1))]



(adapted from Stowell 1989:320, ex. (7))

According to (70b), the subject *an t-ainmní* ‘the subject’ is first-merged (externally merged) in Spec,TP, which was assumed to be the canonical subject position in the earlier generative framework (Chomsky 1981 and subsequent work), and the object *an briathar* ‘the verb’ occupies its first-merge position inside VP. The verb raises from its base position first to T⁰, and then to C⁰, respecting the HMC (section 3.3.1.4) and more broadly, RM (section 3.3.1.5). A similar analysis as in (70b) was proposed for the VSO order in SMG by Varlokosta and Hornstein (1993).

The approach that involves V⁰-to-T⁰-to-C⁰-movement is sometimes referred to as the “Weak-V2 approach” (Carnie and Guilfoyle 2000) as the proposed movement of the verb is reminiscent of verb movement in V2 (verb-second) languages (e.g., Dutch or German, den Besten 1983; or Breton, Schafer 1995). However, although the analogy between languages with VSO neutral order like Modern Irish and SMG and V2 languages like Dutch and German is apparently useful, there is a notable difference between the two types of languages: V2 languages generally exhibit an asymmetry between root and embedded clauses. While V⁰-to-T⁰-to-C⁰ is obligatory in root clauses, the availability of such movement tends to be much more restricted, or sometimes completely absent in embedded clauses.³² For illustration, consider (71–

³² There are varieties of Dutch and Northern Germanic languages in which V2 is allowed in embedded clauses as well. See, for example, Hoekstra (1993:168–169) who observes embedded V2 in Northern Dutch dialects, such as Frisian and the dialect of Groningen. For V2 in embedded clauses in Northern Germanic languages in general, see Vikner (1995:65–130, chapter 4) and Heycock (2006).

72) from Dutch. (71a–b) are grammatical root clauses in which the verb is linearly in second position and is preceded by either the subject *Sofie* (71a), or another constituent, e.g., the direct object *dit gerecht* ‘this dish’ ((71b); I ignore the interpretational difference between (71a–b) here). (71c) is also a root clause; however, it is ungrammatical as a declarative, because the verb is not in second position. The word order in the example is grammatical in a yes/no question. (72) illustrates embedded declarative clauses in Dutch. An embedded declarative clause is grammatical as long as the (inflected) verb (ignoring the finite auxiliaries) is in final position (72a).³³ If not, the sentence is ungrammatical (72b–c).

(71) Root clause

- a. Sofie wil dit gerecht niet.
Sofie want.3sg this dish not
‘Sofie does not want this dish.’
- b. Dit gerecht wil Sofie niet.
This dish want.3sg Sofie not
‘This dish, Sofie does not want.’
- c. * Wil Sofie dit gerecht niet.
want.3sg Sofie this dish not

(72) Embedded clause

- a. Ik denk [dat Sofie dit gerecht niet wil].
I think.1sg that Sofie this dish not want.3sg
‘I think that Sofie does not want this dish.’
- b. * Ik denk [dat Sofie wil dit gerecht niet].
I think.1sg that Sofie want.3sg this dish not
- c. * Ik denk [dat wil Sofie dit gerecht niet].
I think.1sg that want.3sg Sofie this dish not

[Dutch]

The root/embedded asymmetry in V2 languages has been analyzed by arguing that V^0 -to- T^0 -to- C^0 movement occurs in root clauses in which Spec, CP is also filled by overt material (e.g., a subject (71a) or an object (71b); den Besten 1983:54–69; Platzack 1986; Holmberg 1986; Holmberg and Platzack 1995:71–98, chapter 3, and much subsequent work).³⁴ In embedded clauses, on the other hand, verb movement

³³ Generally speaking, clausal complements or PPs, however, are extraposed to a clause-final position.

³⁴ For a different approach to V2 in subject initial root clauses which does not assume verb raising to C^0 , see Travis (1994) and Zwart (1997). For a general overview of V2, see Holmberg (2015).

to C^0 is blocked by the complementizer *dat* ‘that’ in (72), which competes for the same position, namely C^0 .³⁵

VSO languages, such as Modern Irish and SMG, however, do not exhibit the root/embedded asymmetry sketched above. VSO is allowed (or required, depending on the language and depending on the type of complementizer in embedded contexts) in both root and embedded clauses (for Modern Irish, see Stenson 1981; for SMG, see Alexiadou 1999). This is illustrated with the following Modern Irish example:

(73) Embedded VSO

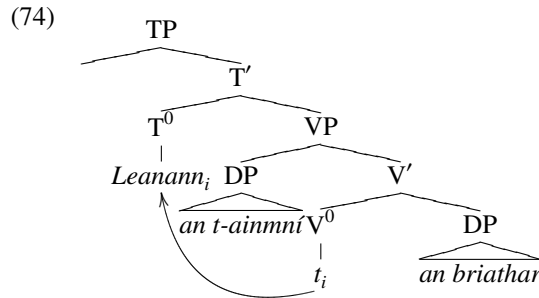
Sílim [go dtuigeann Bríd Gaeilge].
 think.PRS.1SG COMP understand.PRS Bridget Irish
 ‘I think that Bridget understands Irish.’

[Modern Irish (Stenson 1981:52)]

Under standard assumptions, the Modern Irish complementizer *go* ‘that’ (73) and the Dutch complementizer *dat* ‘that’ in (72) can both be taken to occupy the same position, say C^0 , for the sake of simplicity. If this is indeed the case, then the complementizer *go* ‘that’ in C^0 would block verb movement to C^0 on par with *dat* ‘that’ in Dutch (72), and (73) would be ungrammatical—contrary to fact.

With the advent of the “VP-internal subject” hypothesis (Sportiche 1988; Kuroda 1988; Koopman and Sportiche 1991), another possible derivation for V-initial orders emerged, which can also account for VSO in embedded clauses, as in (73). According to this hypothesis, the merge position of subjects is not Spec, TP but Spec, VP, hence inside the lexical-domain (see also section 3.3.1.2, fn. 14). In certain languages, the subject has to A-move to Spec, TP to check the [+EPP] feature on T^0 (or nominative case and agreement features on T^0 ; see also section 3.3.1.4). Under the VP-internal subject hypothesis, in VSO languages, the verb raises to T^0 , the highest functional head of the INFL-domain, and the subject remains *in situ* in Spec, VP (Guilfoyle 1990; McCloskey 1991). This approach is often referred to as the “Left-edge of IP approach” (Carnie and Guilfoyle 2000:8). According to this analysis, the Modern Irish VSO clause in (70a) is derived as in (74), in which it is shown that the subject remains *in situ*, but the verb moves around it to T^0 .

³⁵ Various proposals have been put forward for the structural position of the clause-final verb in embedded clauses in V2 languages of the Dutch type. See Haegeman (1998:631–634) for an overview of these proposals. According to one, the verb is argued to remain *in situ* in embedded clauses in V2 languages of the Dutch type (e.g., Zwart 1997); however, see also Haegeman (1998) who, based on data from West Flemish, argues that these clauses involve verb movement to the INFL-domain.



The Left-edge of IP approach has been adopted for analyzing various languages with neutral VSO order such as Standard Arabic (Fassi Fehri 1989), Breton (Schafer 1995), Welsh (Sadler 1988:section 1.2.2), Middle Egyptian (Kramer 2009) and SMG (a.o., Alexiadou and Anagnostopoulou 1998; Roussou and Tsimpli 2006). Another version of the Left-edge of IP approach incorporates the “Split-INFL” hypothesis of Pollock (1989) (see section 3.3.1.8). In this version, V^0 -to- T^0 raising is still assumed, but it is proposed that the subject is hosted in the specifier of an intermediary functional projection between T^0 and V^0 . See for example, McCloskey (1997, 2001, 2005) for Modern Irish, Roberts (2005:7–47, chapter 1) for Welsh, Fassi Fehri (1993:16–95, chapter 2) for Standard Arabic, and Tsimpli (1990) for SMG (see also section 3.3.3.1.1).

In the next section, I provide arguments from comparative syntax in favor of the claim that a configuration like the one shown for Modern Irish in (74) is also correct for VSO clauses in PhG. Here, I show that PhG has three properties that are canonically associated with V^0 -to- T^0 movement in the literature: (i) rich person and number agreement, (ii) null subjects, and (iii) rich synthetic tense distinctions. Empirical support for this hypothesis will follow in sections 3.3.2.3–3.2.2.4.

3.3.2.2 V^0 -to- T^0 raising in PhG: arguments from comparative syntax

3.3.2.2.1 Triggers for V^0 -to- T^0 raising In the generative literature, whether or not in a given language verbs must raise to a head in the INFL-domain—and in particular to T^0 —has been related to a range of properties of verbal inflection or of the properties of the INFL-domain. There are a number of different proposals, which I briefly list here. As I will show in the next section, the relevant criteria carry over seamlessly to PhG.

Verb movement has often been argued to depend on the presence of a rich set of person agreement suffixes attached to verbs (Emonds 1976, Roberts 1985:32, 1993, 1999; Pollock 1989; Kosmeijer 1986; Chomsky 1991; Vikner 1995, 1997; Rohrbacher 1999; Bobaljik and Thráinsson 1998, a.o.). Consider the following con-

The contrast between English and French shown in (75) has led to further research on verb movement in other languages, most notably Scandinavian ones (e.g., Kosmeijer 1986; Platzack 1986; Holmberg and Platzack 1988, 1990, 1995; Vikner 1995, 1997, a.o.), and resulted in the formulation of the “Rich Agreement Hypothesis” (RAH) (Rohrbacher 1994:177, 1999, a.o.):³⁸

- (76) If a language has rich inflection then it has verb movement to Infl.
(Bobaljik 2002:132, ex. (5))

In support of this hypothesis, consider the inflectional paradigm of the verb ‘hear’ in Danish and Icelandic, two closely related languages (Vikner 1995:132–151, data from Bobaljik 2002:31, ex. (3)) in Table 3.7. Icelandic inflected verbs display distinct (tense marking and) agreement with the subject in each person and number, whereas Danish ones do not. Rich agreement in Icelandic and lack thereof in Danish is understood as the underlying reason for the contrast in (77). In Icelandic (77a), the verb *keypti* ‘bought’ precedes the negation marker *ekki*, whereas in Danish, the verb *købte* ‘bought’ follows the negation marker *ikke* (77b). The negation marker in both languages is taken to mark the left-edge of VP (see e.g., Vikner 1995). Then, the simplest assumption is that in Icelandic the verb moves to T^0 across the negation marker *ekki*, but in Danish the verb remains *in situ* in VP.

- (77) a. ... að hann keypti ekki bokina
 that he bought not the.book
 ‘... that he did not buy the book’ [Icelandic]

³⁸ This is just one formulation of the hypothesis and it is often referred to as the “weak version” (Bobaljik 2002:132). In its formulation by Rohrbacher (1994:108, 118, 128, 1999:138), V^0 -to- T^0 movement takes place iff verbal agreement is rich where richness is defined as follows:

- (i) “Agreement is [rich] (... triggering overt verb movement) in exactly those languages where regular subject-verb agreement minimally distinctively marks the referential agreement features such that in at least one number of one tense, the person features [1st] and [2nd] are distinctively marked.”

(Rohrbacher 1994:108, 1999:138, ex. (77), formalized by Bobaljik 2002:132)

See Vikner (1997:195–196) for a criticism of this formulation. Based especially on diachronic evidence from English and Danish, Vikner (1997) reformulates RAH as follows:

- (ii) An SVO-language has V^0 -to- T^0 movement if and only if person morphology is found in all tenses.

(Vikner 1997:201, ex. (14))

The difference between (76) and (ii) has no effects on the following discussion of PhG facts.

	Icelandic <i>heyra</i>		Danish <i>høre</i>	
	Present	Preterite	Present	Preterite
1SG	heyri	heyrdi	hør-er	hør-te
2SG	heyri	heyrdi-r	hør-er	hør-te
3SG	heyri	heyrdi	hør-er	hør-te
1PL	heyrum	heyrdum	hør-er	hør-te
2PL	heyrið	heyrdið	hør-er	hør-te
3PL	heyra	heyrdi	hør-er	hør-te

Table 3.7: Inflectional paradigms of the verb ‘hear’ in Icelandic and Danish

- b. ... at han *ikke købte* bogen
 that he not bought the.book
 ‘... that he did not buy the book.’ [Danish]

Another phenomenon that has also been linked indirectly in the literature with verb movement to the INFL-domain is the availability of null subjects in a given language. Verb movement to INFL-domain is generally claimed to exist for null subject languages (henceforth NSLs) (excluding non-inflecting NSLs, or radical pro-drop languages which have poor inflection yet are NSLs, such as Chinese and Vietnamese). Since Taraldsen (1980[1978]), a correlation has been postulated between the richness of agreement suffixes and the availability of null subjects in the language—a hypothesis known as “Taraldsen’s Generalization” (see also Chomsky 1981:241). For some scholars, Taraldsen’s Generalization is taken to mean that the way in which the EPP condition (section 3.3.1.4) is satisfied is parametrized (e.g., Borer 1986; Barbosa 1995, 2009; Alexiadou and Anagnostopoulou 1998). According to Alexiadou and Anagnostopoulou (1998) for example, in languages with rich agreement morphology, such as SMG, verb raising to T^0 is sufficient to check the [+EPP] (or case/agreement) feature(s) on T^0 . As a result, there is no requirement in the relevant languages for the subject to move to Spec, TP. An alternative to this approach is to say that in languages with rich agreement—and therefore V^0 -to- T^0 movement—a subject is still required in Spec, TP, but that in these languages, this position can be filled by a first-merged *pro*, i.e., a phonologically null pronoun which is coreferential with the actual subject, which occurs lower in the structure (Rizzi 1982, 1986a; Chomsky 1982; Shlonsky 1990, a.o.). After the verb moves to T^0 , the nominal features of the verb are copied onto *pro* in Spec, TP.³⁹ The bottom line for both views is that there is a correlation

³⁹ As pointed out to me by Lieven Danckaert (p.c.), in order for this configuration not to lead to a violation of Principle C of the Binding Theory (which says that a non-pronominal referential expression cannot

between V^0 -to- T^0 movement and the licensing of null subjects.⁴⁰

Recently, Biberauer and Roberts (2010) suggested that V^0 -to- T^0 movement depends not on the rich person agreement suffixes in a language but on the tense features of T^0 . According to them, if a language has rich synthetic tense inflection, it has V^0 -to- T^0 movement. Licensing of null subjects, on the other hand, may depend on the availability of rich person agreement suffixes. Therefore, T^0 's tense (verbal) properties are distinguished from its agreement (nominal) properties. Concerning why V^0 -to- T^0 movement occurs in languages with rich synthetic tense distinctions, the arguments of Biberauer and Roberts (2010) can be summarized as follows. In finite clauses in every language, T^0 is valued for Tense. It also has an unvalued verbal feature, since it is inherently verbal, but as a functional head it lacks argument structure, a fundamental property of verbs. Verbs, on the other hand, do have argument structure and thus V^0 has a valued verbal feature. Moreover, V^0 also has an unvalued Tense feature, as finite verbs have no temporal content in isolation. Following the standard Agree system of Chomsky (2000, 2001), Biberauer and Roberts (2010) claim that T^0 and V^0 are in an Agree relation in which T^0 functions as a probe and V^0 as a goal in a simple clause. In languages without rich tense distinctions, V^0 's tense morphology is licensed by Agree alone. However, in languages with rich tense distinctions, T^0 is further associated with an [+EPP]-like feature that triggers V^0 movement to T^0 . On this analysis, the occurrence of V^0 -to- T^0 movement in languages such as Italian but not in English depends on the rich synthetic tense distinctions in the former (78a) but not in the latter (78b).

- (78) a. Italian: *parlo* (present), *parlerò* (future), *parlerei* (conditional), *parlavo* (imperfect), *parli* (present subjunctive), *parlassi* (past subjunctive), *parlai* (preterit),
 b. English: *speak* (present), *spoke* (past).

3.3.2.2.2 PhG as a NSL with rich inflection and tense distinctions PhG has all the relevant properties to be characterized as a consistent NSL. In this section, I will apply the three diagnostics discussed in the previous section to PhG.

First, null subjects are available in PhG without any tense, aspect or person restriction for both referential and non-referential, i.e., expletive, subjects. In (79),

be c-commanded by a coreferential pronoun), one would have to assume that the null *pro* comes to be coreferential with the lower subject via some process of backward binding, which arguably takes place in the syntactic component. In the earlier Principles and Parameters paradigm this process could be 'chain formation' (cf. Rizzi 1986b); in more recent models it would be 'Agree'. Thanks to Liliane Haegeman (p.c.) for raising this issue in the first place.

⁴⁰ Note, however, that this correlation is not universal: there are languages with V^0 -to- T^0 movement, but which do not license null subjects, e.g., French.

referential subjects are dropped, and in (80) there is no overt expletive, such as *it* in English, in clauses with the weather verb *vrešízi* ‘(it) rains’ (\emptyset stands for a null subject, either referential or expletive).

- (79) a. \emptyset xítáu. (1SG, [–past, –perfective])
 run.IPFV.NPST.1SG
 ‘I run./ ‘I am running.’
- b. \emptyset a xítsis. (2SG, [–past, +perfective])
 FUT.DEF run.PFV.NPST.2SG
 ‘You are going to run.’
- c. \emptyset xítankin. (3SG, [+past, –perfective])
 run.IPFV.PST.3SG
 ‘She was running.’
- d. \emptyset xítsam. (1PL, [+past, +perfective])
 run.PFV.PST.1PL
 ‘We ran.’
- (80) a. \emptyset vrešízi. [–past, –perfective]
 rain.IPFV.NPST.3SG
 ‘It rains./ ‘It is raining.’
- b. \emptyset a vrešísi. [–past, +perfective]
 FUT.DEF rain.PFV.NPST.3SG
 ‘It is going to rain.’
- c. \emptyset vrešínkín. [+past, –perfective]
 rain.IPFV.PST.3SG
 ‘It was raining.’
- d. \emptyset vréšisin. [+past, +perfective]
 rain.PFV.PST.3SG
 ‘It rained.’

Second, even though interpretively not identically with the Italian VSO order (on which see Belletti 2001, 2004, a.o.), VSO is also available in PhG—another characteristic of (consistent) NSLs (Rizzi 1982:117):

- (81) Trónkani ta čočúxa ta xalxáđa.
 eat.IPFV.PST.3PL the.N.NOM.PL child.N.NOM.PL the.N.ACC.PL bagel.N.ACC.PL
 ‘The children were eating the bagels.’

Finally, in biclausal constructions in PhG, an overt pronominal subject in an embedded clause does not easily allow for an interpretation in which it co-refers with the overt subject of the main clause—a property that distinguishes between consistent

NSLs and non-NSLs (Holmberg 2010:91; Roberts and Holmberg 2010:7; Frascarelli 2007:695). For example, in (82a) from Italian—a language characterized as a consistent NSL in the taxonomy of Holmberg (2005)—the overt pronominal subject in the adverbial clause *lui* ‘he’ refers to an entity which is distinct from the subject of the main clause, *il professore* ‘the professor’ (for more on the nature of *lui*, see section 3.3.3.2.3.1). In contrast, a null subject in the adverbial clause is most naturally co-indexed with the overt subject in the main clause. In non-NSLs such as English, however, the overt pronominal subject of an embedded clause may be ambiguous between two readings (82b).

- (82) a. Il professore_i ha parlato dopo che lui_{i/jj/∅_{i/j}} è arrivato.
 The professor has spoken after that he/∅ is arrived
 ‘The professor spoke after he arrived.’ [Italian]
- b. The professor_i spoke after he_{i/jj} arrived.
 (adapted from from Roberts and Holmberg 2010:7, ex. (7))

With respect to the interpretation of overt pronominal subjects in embedded clauses, PhG behaves like Italian. As illustrated in (83a) below, overt pronominal subjects in adverbial clauses can only refer to an entity different from the subject of the main clause. The null subject in (83b), however, most naturally refers to the subject of the main clause.

- (83) a. I Nerkíza_i íðin ta tóstæ
 the.F.NOM.SG Nerkiza.F.NOM.SG see.PFV.PST.3SG the.N.ACC.PL friend.N.ACC.PL
 s [fótes até_{i/jj} paénkin si neklisía].
 her while she.NOM go.IPFV.PST.3SG to.the.F.ACC.SG church.F.ACC.SG
 ‘Nerkíza saw her friends while she was going to the church.’
- b. I Nerkíza_i íðin ta tóstæ
 the.F.NOM.SG Nerkiza.F.NOM.SG see.PFV.PST.3SG the.N.ACC.PL friend.N.ACC.PL
 s [fótes ∅_{i/j} paénkin si neklisía].
 her while go.IPFV.PST.3SG to.the.F.ACC.SG church.F.ACC.SG
 ‘Nerkíza saw her friends while she was going to the church.’

The discussion so far reveals that PhG can safely be classified as a consistent NSL. This conclusion naturally follows from Taraldsen’s Generalization. In other words, PhG has distinct verbal forms for all persons, and both numbers, hence it has rich agreement. Consider the person suffixes of the verb *parsévu* ‘(I) clean’ in [–past, –perfective] and [+past, perfective] contexts, given in Table 3.8.

From the presentation so far, it follows that V⁰-to-T⁰ raising is expected in PhG, as it is a consistent NSL with rich agreement.⁴¹ If V⁰-to-T⁰ movement is taken to

⁴¹ This conclusion remains constant irrespective of which formulation of the RAH we take. PhG also

	[-past, -perfective]	[+past, -perfective]
1SG	parsév-u	parséfk-a
2SG	parsév-is	parséfk-is
3SG	parsév-i	parséfk-in
1PL	parsev-umi	parséfk-ami
2PL	parsev-iti	parséfk-ati
3PL	parsev-un	parsévk-ani

Table 3.8: Declension of the verb *parsévu* ‘clean’ ([±past, -perfective])

depend on substantially rich synthetic tense distinctions rather than substantially rich agreement (as proposed by Biberauer and Roberts 2010), PhG is still expected to exhibit V^0 -to- T^0 movement, since it also has a rich system of synthetic tenses. Similar to SMG, which is classified as a language with “rich tense inflection” by Biberauer and Roberts (2010:257, ex. (5a)), PhG distinguishes four tenses (section 2.3.2.2). This point is illustrated in (84) with the verb *parsévu* ‘(I) clean’.⁴²

- (84) *parsévu* ([past, perfective] ‘present indicative’), *pársipsa* ([+past, + perfective] ‘aorist indicative’), *parséfka* ([+past, perfective] ‘imperfect’), *parsépsu* ([past, +perfective] ‘dependent’).

In the next section, I provide empirical evidence from the respective positions of low adverbs and the verb for the fact that verb movement indeed does take place in PhG.

3.3.2.3 Adverbs and V^0 -to- T^0 raising

Whether a verb has moved from its base position or not can be assessed by looking at its surface position with respect to VP-level adverbs (see (75) and the discussion around it). VP-level adverbs are adverbs which adjoin (Jackendoff 1972:47–107, section 3; Ernst 2004[2001]) to VP or which—in more current terminology—are merged in dedicated functional projections above VP (cf. the “lower adverb phrases” of Cinque 1999). Such an adverb is often argued to mark the left-edge of VP (Alexiadou 1997). If a verb linearly precedes a VP-level adverb, then it is argued that the

shows person morphology in all tenses (cf. section 2.3.2.2), therefore it is also expected to show V^0 -to- T^0 movement according to Vikner’s (1997) formulation of RAH (cf. fn. 38).

⁴² This categorization is identical to that proposed for SMG (see Tsangalidis 2002; Roussou 2006:33). If a more traditional categorization were to be applied, then [-past, -perfective] forms could be taken as ambiguous between present indicative and subjunctive, and the [-past, +perfective] form as subjunctive alone (cf. Roberts and Roussou 2003:81, fn. 3).

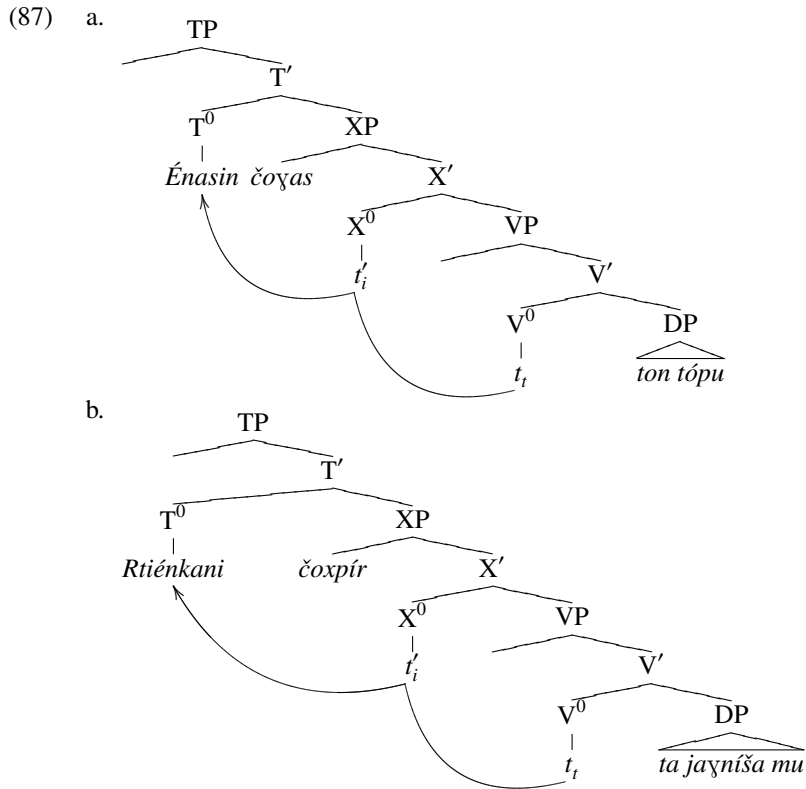
verb must have moved out of VP and landed in a higher position, which, as a null hypothesis for this dissertation, is T^0 (section 3.3.2). (Light) manner adverbs, such as *well* or *quickly*, and aspectual adverbs, such as *rarely* or *already*, are examples of VP-level adverbs (Cinque 1999, for further examples, see section 4.3.3.1.1).

In PhG, the most natural position of (light) manner and aspectual adverbs is to the right of the verb (85). In (85), I do not provide subjects NPs to keep the examples simple (on the position of subjects with respect to adverbs, see section 3.3.3.1.1). If the adverb precedes the verb, the structure is either ungrammatical (86a), or a non-neutral clause under the definition (12) emerges in which the adverb is focused, suggesting that the adverb has moved around the verb to a focus position (86b).

- (85) a. Énasin čóγas ton tópu.
 plow.PFV.PST.3SG already the.M.ACC.SG field.M.ACC.SG
 ‘She has already plowed the field.’
 b. Rtiénkani čoxpír ta jajníša mu.
 correct.IPFV.PST.3PL rarely the.N.ACC.PL mistake.N.ACC.PL my
 ‘They would rarely correct my mistakes.’
- (86) a. * Čóγas énasin ton tópu.
 already plow.PFV.PST.3SG the.M.ACC.SG field.M.ACC.SG
 b. Čoxpír rtiénkani ta jajníša mu.
 rarely correct.IPFV.PST.3PL the.N.ACC.PL mistake.N.ACC.PL my
 ‘They would RARELY correct my mistakes(, not frequently).’

Since in a neutral clause a VP-level adverb follows the verb (85), I assume that adverbs are in their base position at the VP-edge, and the verbs have raised to the INFL-domain, most naturally to T^0 . The derivations of (85a–b) is schematically shown in (87a–b) respectively.⁴³

⁴³ In the structures in (87) I assume, in line with Cinque (1999; see also Alexiadou 1997), that the adverbs in question are not adjoined to VP but first-merged in the specifier position of a functional projection, whose precise category I do not specify here.



The position of VP-level adverbs with respect to the verb in a neutral clause contrasts with that of “higher adverbs” (Alexiadou 1997; Cinque 1999) such as *pérki* ‘perhaps’ or *élpætta* ‘surely’ which are argued to be located above T^0 (Alexiadou 1997; Cinque 1999). Such adverbs in PhG have to precede the verb (cf. (88–89) and (85–86)), suggesting that the verb does not move to a higher location around these adverbs (on the (approximate) location of these adverbs, see section 3.3.3.2.5, and for a refined proposal see section 4.5.2.3).

- (88) a. *Pérki énasin ton tópu.*
 perhaps plow.PFV.PST.3SG the.M.ACC.SG field.M.ACC.SG
 ‘Perhaps she plowed the field.’
- b. **Énasin pérki ton tópu.*
 plow.PFV.PST.3SG perhaps the.M.ACC.SG field.M.ACC.SG

- (89) a. *Élpætta rtiénkani ta jayníša mu.*
 surely correct.IPFV.PST.3PL the.N.ACC.PL mistake.N.ACC.PL my
 ‘They would surely correct my mistakes.’
- b. **Rtiénkani élpætta ta jayníša mu.*
 correct.IPFV.PST.3PL surely the.N.ACC.PL mistake.N.ACC.PL my

(88–89) strongly suggest that verb movement does not continue beyond T^0 in PhG. In the next two sections, I show with evidence from the availability of embedded VSO (section 3.3.2.4) and the respective position of modal particles, negation markers and verbs (section 3.3.2.5) that verb movement does indeed terminate in T^0 .

3.3.2.4 VSO in embedded clauses

In section 3.3.2.1, I showed that a major reason for adopting some version of the Left-edge of IP approach for the analysis of neutral VSO orders in languages such as Modern Irish and SMG, is the fact that in these languages there is no word order asymmetry between root clauses and embedded clauses.

PhG is similar to Modern Irish and SMG in this sense, and thus it is also distinct from V2 languages. VSO is available in both root and embedded clauses, even in those which are known to resist Main Clause Phenomena (MCP), i.e., certain syntactic operations that are freely available in root clauses but are degraded or ungrammatical in embedded clauses (Emonds 1970; Hooper and Thompson 1973; Haegeman 2003b, 2006a,b, 2010a,b, 2012 a.o.). One MCP is topicalization of arguments. Topicalization as a MCP has been argued to be excluded in complement clauses to factive predicates, i.e., predicates that presuppose the truth of the proposition in their complement clauses, such as *regret* or *forget* (Kiparsky and Kiparsky 1970; see section 4.3.2.1.1 for further information on presupposition and factive predicates), as well as in *when*-adverbial clauses. Compare (90a)–(90b–c):

- (90) a. This movie, he has never seen.
 b. * John regrets [that this movie, he has never seen].
 c. * [When this equation, he could not solve], he consulted an expert.

Similar to English, in PhG too, topicalization is available in root clauses (91a) but is ungrammatical in factive complements, which are introduced by the complementizer *tu* ‘that’ (90b) (see also section 2.4.9.1.2 for the complement clauses introduced by *tu* ‘that’), and in *samú* ‘when’ adverbial clauses (90c) (see also section 2.4.10.3.1 on temporal adverbial clauses in general).⁴⁴

⁴⁴ Haegeman (2006a, 2012) observes that clitic left-dislocation (CLLD) is available in clausal complements to factive predicates and in adverbial clauses in French and Italian (iii). This suggests that topicalization

- (91) a. Ton tópu, énasin ta o nomát.
 the.M.ACC.SG field.M.ACC.SG plow.PFV.PST.3SG 3OBJ the.M.NOM.SG man.M.NOM.SG
 ‘The field, the man plowed.’
- b. *Pušmánepsin [tu ton tópu, énasin ta
 regret.PFV.PST.3SG that the.M.ACC.SG field.M.ACC.SG plow.PFV.PST.3SG 3OBJ
 o nomát].
 the.M.NOM.SG man.M.NOM.SG
 int.: ‘She regretted that the field, the man plowed.’
- c. *Samú ton tópu, énasin ta o
 when the.M.ACC.SG field.M.ACC.SG plow.PFV.PST.3SG 3OBJ the.M.NOM.SG
 nomát . . .
 man.M.NOM.SG
 int.: ‘When the field, the man plowed . . .’

Non-factive complements, i.e., complement clauses to predicates which only assert the proposition in the complement clause without presupposing its truth (Kiparsky and Kiparsky 1970; see section 4.3.2.1.1 for further information on assertion and assertive predicates), e.g., *think*, are argued not to resist MCP, such as topicalization:

with a resumptive clitic in PhG is not entirely the same thing as CLD in Italian and French. Thanks to Liliane Haegeman (p.c.) for pointing this out to me (in the examples below, *PART* stands for “participle”).

(i) CLD in clausal complements to factive predicates

- a. Jean regrette [que son texte tu ne l’aies pas encore lu].
 Jean regret-3SG that his text you *ne* it-have-SUBJ-2SG not yet read-PART
 ‘Jean regrets that you haven’t read his text yet.’ [French]
- b. Mi dispiace [che questo problema gli studenti non l’abbiano potuto
 me displeas-3SG that this problem the student-PL non it-have-SUBJ-3PL can-PART
 risolvere].
 solve
 ‘I am sorry that the students haven’t been able to solve this problem.’ [Italian]
 (Haegeman 2012:260, ex.(8))

(ii) CLD in adverbial clauses

- a. [Quand cette chanson je l’ai entendue] j’ai pensé à mon premier amour.
 When that song I it-have-1SG heard-FEM I-have-1SG think-PART to my first love
 ‘When I heard that song, I thought of my first love.’ [French]
- b. [Da quando, al mercato, ci va lui] non mangiamo più bene.
 From when, to-the market, there go-3SG he non eat-1PL anymore well
 Ever since he has started doing the shopping, we don’t eat well anymore.’
 [Italian (reference omitted)]
 (Haegeman 2012:157–158, ex. (21c,g))

(92) John thinks [that this movie, he has never seen].

In PhG too, topicalization is freely available in complement clauses to non-factive predicates, which are not introduced by an overt complementizer:

(93) Pandíeskin [ton tópu, énasin ta
 suppose.IPFV.PST.3SG the.M.ACC.SG field.M.ACC.SG plow.PFV.PST.3SG 3OBJ
 o nomát].
 the.M.NOM.SG man.M.NOM.SG
 ‘She supposed (that) the field, the man plowed.’

Returning to the availability of embedded VSO in PhG, both types of embedded clauses, i.e., those that allow and those that resist MCP, freely allow VSO. (94a) exemplifies the VSO order in a factive-complement clause, (94b) illustrates it in a *samú* ‘when’ adverbial clause and (94c) illustrates it in a non-factive complement clause. Notice that the verb in every embedded clause precedes the VP-level adverb *čóγas* ‘already’, suggesting that it moved out of VP.

(94) a. Zálmonsa [tu énasin čóγas ton tópu].
 forget.PFV.PST.1SG that plow.PFV.PST.3SG already the.M.ACC.SG field.M.ACC.SG
 ‘I forgot that she plowed the field already.’
 b. Samú énasin čóγas ton tópu ...
 when plow.PFV.PST.3SG already the.M.ACC.SG field.M.ACC.SG
 ‘When she plowed the field already ...’
 c. Pandíeska [énasin čóγas ton tópu].
 suppose.PFV.PST.1SG plow.PFV.PST.3SG already the.M.ACC.SG field.M.ACC.SG
 ‘I supposed (that) she plowed the field already.’

The availability of VSO in all types of embedded clauses can be interpreted to mean that the verb does not reach C^0 in an embedded clause in PhG, as this position is occupied by the overt complementizers *tu* (94a), *samú* (94b), and presumably by a null complementizer in (94c). Judging by the fact that VSO occurs freely in root clauses as well, we can conclude that verb movement terminates in T^0 in this context too.

3.3.2.5 Demarcating CP from TP

Further evidence for the fact that verb movement does not target C^0 in PhG but rather terminates in T^0 comes from the relative positions of modal particles, negation markers, object clitics and the verb in declarative clauses. Recall from section 2.4.4 that the future particles *a*, *éna*, *xa*, the subjunctive particle *na* and the hortative particle *s*

are in complementary distribution, and they all attract object clitics to a preverbal position (see also section 2.4.8 for the position of object clitics). Furthermore, in section 2.4.5.1, I showed that the preverbal negation marker *čo* is employed in clauses which do not contain any modal marker or which contain only one of the future particles. If the latter is the case, *čo* precedes the future particles *a'éna/xa*, which is schematically shown in (95a). Clauses that involve the subjunctive *na* and hortative *s* particles can only be negated by the negation marker *mi*, which immediately follows these markers and immediately precedes (object clitics and) the verb (in this order) (section 2.4.5.3). Moreover, when *mi* is present, *na/s* can be omitted (95b). Finally, the emphatic negation marker *ma* only occurs in clauses which do not involve any modal markers, and it is used with the verb forms [+past, ±perfective] (section 2.4.5.2). *Ma* is also immediately preverbal and only object clitics can interpolate between it and the verb (95c).

- (95) a. *čo* > *a'éna/xa* > clitic > verb
 not FUT.DEF/FUT.INDF/FUT.CF
- b. (*na/s*) > *mi* > clitic > verb
 SUBJ/HORT not
- c. *ma* > clitic > verb
 not

In this section, I argue that the orders in (95) are particularly telling about the position of the verb in a declarative main clause. More specifically, I propose that negation markers and modal particles in PhG are situated low in the LP, and that they therefore constitute landmarks that delineate the boundaries of the CP-domain and INFL-domain. As the (clitic+)verb immediately follows these particles, I will assume that it is situated in the highest head of the INFL-domain, i.e., T^0 . This argument is based on the discussion in Roussou (2000) on similar ordering restrictions of modal particles, negation markers and object clitics in a closely related language, SMG. Below, I will first provide a very brief overview of the SMG data. In section 3.3.2.5.1, I will provide an overview of previous analyses for this ordering by paying specific attention to the analysis of Roussou (2000). In section 3.3.2.5.2, I extend Roussou's analysis to PhG.

Unlike PhG, SMG does not make a three-way distinction between future markers. The only future marker is *θa* (e.g., Philippaki-Warburton 1994; Rivero 1994, a.o.), which gives rise to all modal readings that *a*, *éna* and *xa* express in PhG, depending on the [+past, ±perfective] specifications of the verb that it combines with (Tsangalidis 1999, 2001, 2002; Roussou 2000, 2006, 2015; Roussou and Tsangalidis 2010). A tentative conclusion then is that SMG *θa* is underspecified with respect to the range of modal readings which are expressed by three distinct modal

markers in PhG. Clauses with the future marker *θa* are negated with the indicative negation marker *ðe(n)* (Holton et al. 1997:418–420). This negation marker precedes the future marker (96a). The distribution of the subjunctive and hortative particles, *na* and *as* respectively, in SMG and the readings they give rise to are identical to the distribution and interpretation of *na* and *s* in PhG (see Joseph and Philippaki-Warbuton 1987:180–181; Rouchotta 1991; Roussou 2000; Roussou and Tsangalidis 2010). Clauses with *na* and *as* are negated with the negation marker *mi(n)*. This negation marker follows *na/as*. Moreover, when *mi(n)* is present, *na/as* can be omitted (96b). If any of the modal particles and/or negation markers are present, the object clitics occur between the negation markers/modal particles and the verb (96):⁴⁵

- (96) a. *ðe(n)* > *θa* > clitic > verb
 not FUT
ðen θa mas voiθisi.
 not FUT 1PL.OBJ help.PFV.NPST.3SG
 ‘She will not/is not going to help us.’
- b. (*na/as*) > *mi(n)* > clitic > verb
 SUBJ/HORT not
 (*Na/as*) *mi(n)* *mas voiθisi.*
 SUBJ/HORT not 1PL.OBJ help.PFV.NPST.3SG
 ‘She should not help us.’ / ‘Let him/her not help us.’ [SMG]

3.3.2.5.1 Previous analyses of SMG modal and negation particles The order in (96) has been given different analyses in the literature. According to one line of research which was pioneered by Rivero (1994; see also Drachman 1994), SMG modal markers are taken to be functional heads in the INFL-domain, based on the fact that these modal particles (except for *as* which occurs only in root clauses) follow complementizers such as *oti* ‘that’, *pu* ‘that’ or *an* ‘if’, as shown in (97).⁴⁶

⁴⁵ The emphatic negator of PhG, *ma*, does not have a counterpart in SMG.

⁴⁶ Here I abstract away from the differences between *pu* and *oti*. The reader is referred to Roussou (1994, 2000, 2006) for details. It should be noted that, unlike *pu*, *oti* and *an* are not compatible with *na* (cf. (i) with (97a, c)).

- (i) a. * *Pistevo* [*oti na min mas voiθisi*].
 believe.IPFV.NPST.1SG that SUBJ not 1PL.OBJ help.PFV.NPST.3SG
- b. * *Anarotjeme* [*an na mi mas voiθisi*].
 wonder.IPFV.NPST.1SG if SUBJ not 1PL.OBJ help.PFV.NPST.3SG

- (97) a. Pistevo [oti ðen θa mas voiθisi].
 believe.IPFV.NPST.1SG that not FUT 1PL.OBJ help.PFV.NPST.3SG
 ‘I believe that she will not/is not going to help us.’
- b. ðen iparxi kati [pu na min mas aresi].
 not exist.IPFV.PST.3SG something that SUBJ not 1PL.OBJ please.PFV.NPST.3SG
 ‘There is nothing that we do not like.’
- c. Anarotjeme [an ðen θa mas voiθisi].
 wonder.IPFV.NPST.1SG if not FUT 1PL.OBJ help.PFV.NPST.3SG
 ‘I wonder if she will/is going to help us.’ [SMG]

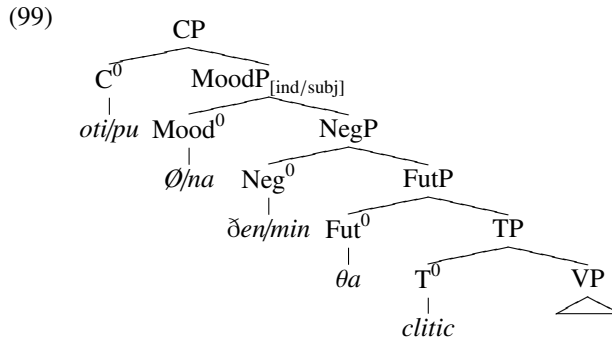
Rivero (1994) argues that *θa* and *na* occupy the head of a Modal Phrase (MP) in the INFL-domain above TP, and that the negation markers *ðen/min* are base generated in Neg^0 (following Zanuttini 1989), which dominates MP. She further proposes that pronominal clitics are attached to TP “[...] probably in the Spec of this projection” (Rivero 1994:68). The order of functional projections Rivero proposes is given in (98).⁴⁷

- (98) [_{CP} oti/pu [_{NegP} ðe(n)/mi(n) [_{MP} θa/as/na [_{TP} clitic [_{T'} [_{VP} ...]]]]]]]
 (adapted from Rivero 1994:72, ex. (11))

(98) establishes the surface order of the negation marker *ðe(n)* and the particle *θa* (96a). To derive the relative positions of *na(as)* and *mi(n)* (96b), Rivero proposes that *na(as)* moves upwards and incorporate(s) into Neg^0 (Rivero 1994:70). As Roussou (2000) notes, what remains unclear in this proposal is the driving force behind the head-incorporation of *na(as)* to Neg^0 .

According to the analysis pioneered by Philippaki-Warbuton (1992, 1994, 1998), *na*, as a subjunctive mood marker, occupies a position distinct from the “future tense marker” *θa*: *na* is in MoodP, *θa* is in Fut(uture)P, with MoodP dominating FutP. NegP dominates FutP and is dominated by MoodP (99). The head $Mood^0$ is specified as [+indicative] or [+subjunctive]. *Na* is the overt realization of the [+subjunctive] value, while the [+indicative] value is the unmarked one and is expressed by a zero marker (\emptyset). *θa*, the overt exponent of the future tense, is only compatible with the indicative mood, i.e., *θa* can only appear when $Mood^0$ carries the feature [+indicative]. Similarly, the negation marker *ðe(n)* is only compatible with [+indicative] in $Mood^0$, while *mi(n)* is only compatible with [+subjunctive] in $Mood^0$. As for the placement of clitics, the author follows Kayne (1989, 1991) in assuming that clitics incorporate to T^0 :

⁴⁷ Rivero (1994) does not analyze the position of the modal particle *as*, but as Roussou (2000:66) states, Rivero’s analysis can be extended to this particle as well.



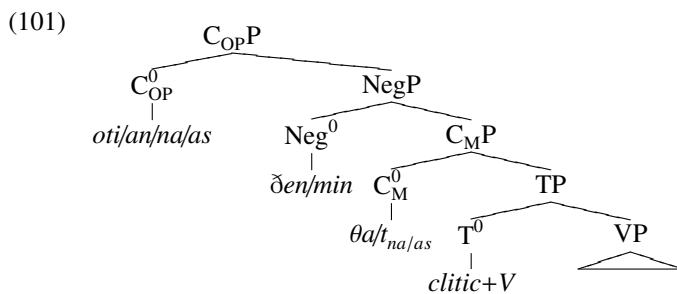
(adapted from Philippaki-Warbuton 1998:169, ex. (17))

(99) avoids the problem raised in relation to the incorporation in Rivero's approach; however, as Roussou (2000) shows, a treatment of *θa* as a head in the INFL-domain, more specifically as the head of FutP, is problematic on the grounds that *θa* does not give rise to future interpretation in every sentence it occurs in. Depending on the [±past, ±perfective] specifications of the verb that it combines with, it may also give rise to a number of modal readings (Tsangalidis 1999, 2001, 2002; Roussou 2000, 2006, 2015; Roussou and Tsangalidis 2010). For instance, while in (100a) it gives rise to a simple future reading, in (100b) it gives rise to an epistemic reading (or a future continuous reading), in (100c) to a past epistemic reading and in (100d) to a counterfactual reading (I refer the reader to the references cited above for more examples).

- (100) a. *θa kaθarisi to spiti.* ([−past, +perfective])
 FUT clean.PFV.NPST.3SG the.N.ACC.SG house.N.ACC.SG
 'She will clean the house.'
- b. *θa kaθarizi to spiti.* ([−past, −perfective])
 FUT clean.IPFV.NPST.3SG the.N.ACC.SG house.N.ACC.SG
 'She must be cleaning the house/(She will be cleaning the house).'
- c. *θa kaθarise to spiti.* ([+past, +perfective])
 FUT clean.PFV.PST.3SG the.N.ACC.SG house.N.ACC.SG
 'She must have cleaned the house.'
- d. *θa kaθarize to spiti.* ([+past, −perfective])
 FUT clean.IPFV.PST.3SG the.N.ACC.SG house.N.ACC.SG
 'She was supposed to clean/would have cleaned the house.'

[SMG (adapted from Roussou 2000:67–68, ex. (4))]

Based on these objections to the previous accounts, Roussou (2000) argues that the absence of any inflectional markings on *θa/na/as* should be taken as evidence that they actually do not realize inflectional heads in the INFL-domain. She takes T^0 to be the highest inflectional head in the INFL-domain, and following Kayne's argument (1989, 1991), according to which clitic pronouns are attached to T^0 , she argues that clitics in SMG also attach to T^0 ; therefore, modal particles and negation markers realize positions above TP. Following a cartographic implementation (section 3.3.1.8) she claims that the modal particles are base generated in the LP, more specifically in the head position of a modal complementizer phrase, $C_M P$, which corresponds to Rizzi's Fin^0 . $C_M P$ is dominated by $NegP$, the locus of the negation markers *ðe(n)* and *mi(n)*. Roussou further argues that complementizers, such as *oti* 'that' or *an* 'if' occupy a higher complementizer position where clause-typing takes place. In other words, whereas the lower C position is reserved for modal particles, the higher C position hosts prototypical complementizers. Differently from Rizzi, though, Roussou labels the higher complementizer position as an operator position, $C_{OP} P$. Roussou further argues that *na/as* but not *θa* move further to $C_{OP} P$ crossing $NegP$. Thus, while *θa* spells out only a modal feature, and *oti/an* spells out only a clause-typing feature, *na* and *as* are the spell-out of both a modal and a clause-typing operator feature. Movement of *na/as* to $C_{OP} P$ also derives the expected linear order with *na/as* preceding *min*, as in (96b). Moreover, it also accounts for the complementary distribution of *na/as* with *oti* and/or *an* (see fn. 46), since *na/as* moves from C_M^0 to C_{OP}^0 :



(from Roussou 2000:79, ex. (19))

Notice that according to (101), movement of *na/as* from C_M^0 to C_{OP}^0 would be blocked by the HMC (or more generally by RM; sections 3.3.1.4–3.3.1.5), because Neg^0 is an intervening head. To circumvent this problem, Roussou (2000) follows Roberts and Roussou (1999; see also Roberts and Roussou 2003:27–33, section 1.3 and Manzini and Roussou 2000) by arguing that the relevant lexical items are directly merged in the position where they surface in the derivation. From their merge positions, they may further relate to other elements in the clause structure under the

operation Attract/Agree. Under this approach then *na* and *as* does not strictly speaking move from C_M^0 to C_{OP}^0 , but are rather directly merged in C_{OP}^0 . From C_{OP}^0 , they attract and spell out the features of C_M^0 as well. If *mi(n)*, which is also specified for mood/modality, is present in Neg^0 , then *na/as* are associated with C_M^0 only indirectly, via *mi(n)*. Roussou (2000) also postulates additional discourse-oriented projections above $C_{OP}P$, as well as another higher complementizer projection, for which I refer the reader to her original paper. It is sufficient to retain from Roussou's (2000) work that modal particles and negation markers in SMG realize positions in the LP, an analysis which can be extended to PhG, as the next section shows.

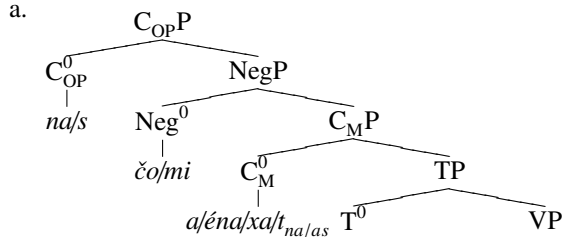
3.3.2.5.2 Modal particles in PhG and the position of the verb Based on the similarities in the order of modal particles, negation markers and object clitics between PhG and SMG (95–96), let us assume, in line with Roussou (2000), that the PhG modal particles *a'éna/xa/na/s* also realize a functional head in the lower LP, C_M^0 , which we can take to correspond to Rizzi's (1997) Fin^0 . Recall from section 3.3.1.8 that in Rizzi's system, finiteness is encoded in $FinP$, and that is a cover term for a number of properties. Finite forms can be specified for tense, mood, agreement etc., which can be expressed on verbal forms or they can be morphologically realized on Fin^0 . Strictly speaking, there is no [\pm finite] distinction in PhG as there are no infinitive forms (section 2.3.2.2), but instead modality can be analyzed as a feature realized morphologically in Fin^0 . In other words, finiteness can be taken to be reflected through modality. This is a legitimate assumption given that there are languages, such as English, in which modal auxiliaries are finite (except for those dialects that allow double modals, on which see Di Paolo 1989; van Gelderen 2003; Elsmann and Dubinsky 2009).⁴⁸ This would enable us to capture the interaction of modality with the inflectional properties of the INFL-domain, as well as the different modal readings these interactions give rise to.

Next, let us also assume, again in line with Roussou (2000), that $C_M P$ is dominated by $NegP$, in the head position of which the negation markers *čo/ma/min* are generated. In principle, it would be possible to argue for two different $NegPs$ (consistent with Cinque 1999), one above $C_M P$, which hosts *čo*, and one below $C_M P$, which hosts *ma/min*; however, as these negation markers never co-occur together and as the morphological shape of the negation marker clearly interacts with the modal properties of the clause, postulating a single $NegP$ in the LP seems to be a more economical option at this point. The order $NegP > C_M P$ captures the order of *čo* and *a'éna/xa* (95a). As for the order in (95b), i.e. *na/s > mi*, I assume, in line with Roussou (2000), that *na/s* are base generated in a higher complementizer position, C_{OP}^0 , from which position they select the negator *mi* in Neg^0 . Recall that *ma* does not combine with

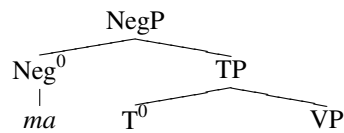
⁴⁸ I thank Liliane Haegeman (p.c.) for pointing this out to me.

any modal marker ((95c); see section 2.4.5.2). Given the present analysis, the fact that the emphatic negator *ma* does not combine with any modal marker can be attributed to the selectional properties of this specific negation marker, which does not select C_{MP} , but rather TP. The structures proposed so far for the modal particles and negation markers are given in (102).

(102) a.



b.



So far, the structure in (101) proposed for SMG by Roussou (2000) is (nearly) identical with the structure in (102a) postulated here for PhG. However, there are two differences between PhG and SMG. The first is that unlike SMG, PhG does not have an overt complementizer in non-factive complement clauses corresponding to *oti* ‘that’ of SMG. Predicates that select an *oti*-clause in SMG select a complement clause without an overt complementizer. Compare (97a) with (103).

- (103) Pistéu [Ø čo a mis píčin jartími].
 believe.IPFV.NPST.1SG not FUT.DEF 1PL.OBJ make.PFV.NPST.3SG help.N.NOM.SG
 ‘I believe (that) she is not going to help us.’

The second difference is that the interrogative complementizer *aer* in PhG must co-occur with *na* (section 2.4.9.2.1), whereas the SMG analogue is ungrammatical (cf. (104a–b); see also fn. 46).

- (104) a. Rotá [aer *(na) mis píčin jartími].
 ask.IPFV.NPST.3SG if SUBJ 1PL.OBJ make.PFV.NPST.3SG help.N.NOM.SG
 ‘She asks if she helped us.’ [PhG]
 b. Rotai [an (*na) mas voiθise].
 ask.IPFV.NPST.3SG if SUBJ 1PL.OBJ help.PFV.PST.3SG
 ‘She asks if she helped us.’ [SMG]

Therefore, unlike SMG *oti* and *an*, which are argued to occupy C_{OP}^0 and therefore are expected to be in complementary distribution with *na* (as in Roussou 2000), the PhG

null complementizer \emptyset ‘that’ and *ær* ‘if’ must be taken to occupy a distinct, higher complementizer position. I propose that this position has the properties of clause-typing and I label it ForceP, following Rizzi (1997). Rizzi (1997:328, fn. 6) already suggests that a tripartite C-system is possible.

As regards the position of object clitics, which may immediately precede or immediately follow the verb depending on the absence or presence of modal particles and negation markers (see section 2.4.8 for the complete list of factors influencing the position of the clitics), I tentatively assume, in line with Kayne (1989, 1991) and Roussou (2000), that they are attached to T^0 , the highest head of the INFL-domain. However, I should mention that nothing crucial hinges on this assumption for the purposes of this dissertation.⁴⁹ In principle, one could also postulate that clitics attach to V^0 and are carried along by the verb to T^0 as “free riders”. Both assumptions correctly predict that a clitic cannot be separated from its associate verb by a VP-level adverb such as *čóγas* ‘already’, as shown by the contrasting examples in (105a–b). The ungrammaticality of (105a) follows from both analyses: either the clitic in (105a) has attached to V^0 but has not been carried along by the verb to T^0 , or it failed to attach to the halting position of the moved verb, namely T^0 . In (105b), on the other hand, the clitic may have attached to V^0 and has been carried along by the verb to T^0 or it may have attached directly to T^0 , to which the verb has also moved.

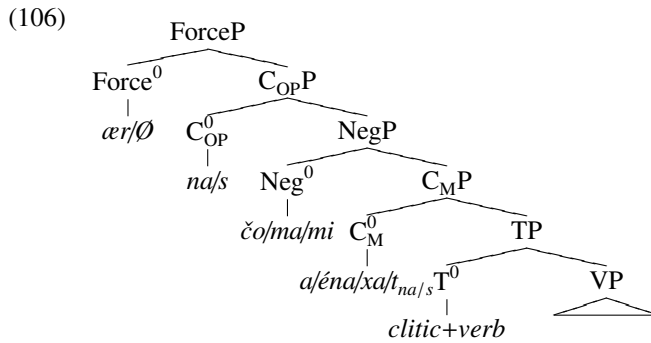
- (105) a. *Éfain čóγas ta.
eat.PFV.PST.3SG already 3OBJ
b. Éfain ta čóγas.
eat.PFV.PST.3SG 3OBJ already
‘She ate it already.’

⁴⁹ Recall from section 2.4.5 that there is a difference between the negation markers *mi/ma* and *čo* in terms of the relative position of object clitics. If a clause that does not contain any of the modal particles (*a*, *éna* or *xa*) is negated with *čo*, the object clitics are enclitic to the verb (cf. (ia–b)). In the presence of the negation markers *mi* and *ma*, on the other hand, clitics are immediately preverbal (ii).

- | | | | |
|---------|--|----|--|
| (i) a. | Čo ípa ta.
not say.PFV.PST.1SG 3OBJ
‘I did not say it.’ | b. | *Čo ta ípa.
not 3OBJ say.PFV.PST.1SG |
| (ii) a. | Ma ta ípa.
not 3OBJ say.PFV.PST.1SG
‘I did not say it’ | b. | *Ma ípa ta.
not say.PFV.PST.1SG 3OBJ |

The contrast between (i) and (ii) should be understood in relation to the fact that phonologically *čo*, unlike *ma/mi*, is not an eligible host for the object clitics. In particular, the negation marker *čo* is not a prosodic word (see Favis 1948:188, I; Anastasiadis 1976:262, IE). If an eligible preverbal host to the left is absent, object clitics seem to attach to the adjacent word on their right (see section 2.4.8), an analysis proposed by Halpern (1995) as “Prosodic Inversion”. See, especially Condoravdi and Kiparsky (2002) for an analysis of MG dialects, including PhG, that involves Prosodic Inversion.

The structure of the LP of PhG proposed so far can be represented as follows:



(106) is further elaborated in sections 3.3.3.2.4–3.3.3.2.8 and 3.4. For the purposes of this section, it is sufficient to conclude that modal particles (and negation markers) are situated in the LP, and therefore they can also serve as landmarks to separate the INFL-domain from the CP-domain.

A consequence of this proposal is that verbs in PhG are hosted in the highest head of the INFL-domain, T^0 , and that they never move further because the heads C_M^0 , Neg^0 , C_{OP}^0 etc. would in effect block movement, as the rigid order in (95) shows. As an alternative, one might propose that in fact modal particles and negation markers may encliticize to (clitic+)verb (combination) and the complex output of this operation would be able to move to higher positions in the LP.⁵⁰ Some evidence against this can be gleaned from the respective position of higher adverbs and the ‘modal particle + negation marker + clitic + verb’ complex. In section 3.3.2.3, in examples (88–89), I showed that the verb of a V(S)O clause cannot precede a higher adverb such as *pérki* ‘perhaps’ or *élpatta* ‘surely’. Similarly, when a preverbal modal particle, a negation marker and/or clitics are present in the clause, the ‘modal particle + negation marker + clitic + verb’ complex cannot precede the higher adverb either (cf. (107–108); the object clitics in the examples are preverbal because of the preverbal modal marker; see section 2.4.8):

- (107) a. *Pérki čo éna ta iđí o nomát.*
 perhaps not FUT.INDF 3OBJ see.PFV.NPST.3SG the.M.NOM.SG man.M.NOM.SG
 ‘Perhaps, the man will not see it.’

⁵⁰ Even though in the text I refer to the sequence formed by a verb and a clitic as *clitic + verb*, in which clitic precedes the verb, it should be noted that this is chosen simply for ease of exposition. The exact position of the clitic with respect to its associate verb depends on presence or absence of preverbal constituents and the precise nature of these preverbal constituents. I refer the reader to section 2.4.8 for a list of preverbal constituents that influence the position of the clitic with respect to the verb.

- b. *Ālpætta na mi ta iđi o nomát.*
 surely SUBJ not 3OBJ see.PFV.NPST.3SG the.M.NOM.SG man.M.NOM.SG
 ‘Surely, the man should not see it.’
- (108) a. **Čo éna ta iđi pérki o nomát.*
 not FUT.INDF 3OBJ see.PFV.NPST.3SG perhaps the.M.NOM.SG man.M.NOM.SG
- b. **Na mi ta iđi ālpætta o nomát.*
 SUBJ not 3OBJ see.PFV.NPST.3SG surely the.M.NOM.SG man.M.NOM.SG

The contrast in (107–108) can be accounted for on the assumption that higher adverbs such as *pérki* ‘perhaps’ or *ālpætta* ‘surely’ are merged in a position above C_{OP} P (unlike Cinque 1999 who situates them in the INFL-domain; for similar ideas see Speas and Tenny 2003; Tenny 2006; Giorgi 2010; also section 4.5.2.3). I label their position as XP in (109). The ungrammaticality of (108) then follows from the illicit movement of the ‘modal particle + negation marker + clitic + verb complex’ across the adverb.⁵¹

- (109) a. [_{XP} Pérki [_{INegP} čo [_{CMp} éna [_{TP} ta+iđi_i [_{VP} o nomát t_i]]]]]. (= (107a))
- b. [_{XP} Ālpætta [_{C_{OP}P} na [_{INegP} mi [_{TP} ta+iđi_i [_{VP} o nomát t_i]]]]]. (= (107b))

3.3.2.6 Interim summary

In section 3.3.2, I proposed that in PhG VSO clauses verbs systematically move from V^0 to T^0 and that T^0 is their halting place. First, I showed that PhG is a consistent NSL with rich agreement inflection, and with rich synthetic tense distinctions. This led me to conclude that it possesses all the properties which have been taken in the literature to be relevant for verb movement. Second, verbs in V(S)O clauses precede VP-level adverbs in neutral clauses but follow higher adverbs, which means that verbs move around the VP-level adverbs to a position in the INFL-domain below higher adverbs. Third, there is no root/embedded asymmetry in terms of the availability of VSO. Finally, PhG verbs have to follow modal particles which, by hypothesis, demarcate INFL-domain from CP-domain.

In the next section, assuming that V^0 -to- T^0 movement takes place in SVO clauses as well, I will investigate the nature of the position of the subject in VSO and SVO clauses.

⁵¹ The fact that clitic + verb cannot precede higher adverbs even in the absence of a modal particle and/or a negation marker (see (85–86)) can be interpreted to mean that there is no verb movement beyond T^0 , even in clauses without modal particles and/or negation markers.

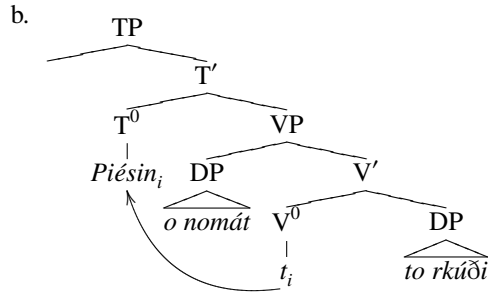
3.3.3 Subject positions in PhG

In this section, I show that subjects can be hosted in multiple positions and that the position of the subject is linked to the information structure of the clause. In pragmatically neutral clauses, I propose that subjects are hosted in one of two positions, either they remain in their base position, by hypothesis the specifier of VP, or they move to a dedicated subject phrase in the LP: SubjP. The former gives rise to the pragmatically neutral VSO order, and the latter gives rise to a pragmatically neutral SVO order. Subjects in clauses with SVO order, however, can be hosted in other positions associated with specific discourse properties, such as topic and focus, in which case the clause is no longer pragmatically neutral. A further possible preverbal subject position is discussed in section 3.4.2.3. In the remainder of this section I first discuss the postverbal subject position and I conclude that postverbal DP subjects are hosted in their base position, Spec, VP (section 3.3.3.1). Evidence for this claim comes from the relative order of VP-level adverbs and postverbal subjects (section 3.3.3.1.1) and from the information status of subjects and objects in VOS clauses (section 3.3.3.1.2). In section 3.3.3.2 I turn to preverbal subjects. More specifically, in section 3.3.3.2.1, I present an overview of Alexiadou and Anagnostopoulou's (1998) proposal that preverbal subjects in NSLs are left-dislocated to an A'-position as topics. In section 3.3.3.2.2, I provide a number of counterarguments that have been put forward in the literature against Alexiadou and Anagnostopoulou's proposal and that recognize Spec, TP as a preverbal subject position in NSLs too. In section 3.3.3.2.3, I provide the details of Cardinaletti's (1994 et seq.) proposal according to which preverbal subjects can be hosted in multiple subject positions, the most relevant of which is SubjP. In sections 3.3.3.2.4–3.3.3.2.7, I analyze preverbal subjects in PhG. In section 3.3.3.2.4, I show that Spec, TP is not a possible subject position in PhG. In sections 3.3.3.2.5–3.3.3.2.6, I show that preverbal subjects can be hosted in Spec, TopP and Spec, FocP, two A'-positions. In these cases, however, a non-neutral SVO clause emerges. In section 3.3.3.2.7, based on an ordering restriction between preverbal foci and preverbal DP subjects, I postulate the presence of SubjP in the LP, which can also host preverbal subjects with a quantificational feature. Further evidence for SubjP in PhG will be provided in section 3.3.3.2.8 analyzing data that can receive a “categorical” (rather than “thetic”) reading.

3.3.3.1 Postverbal subject position

In section 3.3.2 I proposed that PhG verbs land in T^0 , where verb movement terminates. Assuming the “VP-internal subject” hypothesis (section 3.3.2.1) for PhG VSO clauses, the most minimal assumption for the derivation of a neutral VSO clause (110a) is as in (110b), where the verb moves around the subject.

- (110) a. Piésin o nomát to rkúđi.
 catch.PFV.PST.3SG the.M.NOM.SG man.M.NOM.SG the.N.ACC.SG bear.N.ACC.SG
 ‘The man caught the bear.’



In principle, one could argue that postverbal subjects may leave their merge position and move to discourse-related positions, such as low the FocP above VP, whose existence was proposed by Belletti (2001, 2004; see also section 3.3.1.8). Belletti (2001, 2004) observes that in Italian a question that puts narrow-focus on the subject (111A) typically elicits an answer with VOS order (111Ba) (as for why it is slightly degraded, see fn. 53) but not VSO (111Bb) order.⁵²

- (111) A: Chi capirà il problema?
 Who will.understand the problem
 ‘Who will understand the problem?’
- B: a. ?? Capirà il problema Gianni. (VOS)
 will.understand the problem Gianni
 ‘Gianni will understand the problem.’
- b. * Capirà Gianni il problema. (VSO)
 will.understand Gianni the problem
 [Italian (adapted from Belletti 2004:34, ex. (41))]

⁵² A question with wide-focus in Italian, on the other hand, most naturally trigger an answer with SVO order in Italian (see also Roussou and Tsimpli 2006:318):

- (i) A: Che cosa è successo?
 What happened?
- B: Gianni ha riparato il mio computer. (SVO)
 Gianni has repaired the my computer
 ‘Gianni repaired my computer.’
 [Italian (adapted from Belletti 2004:21–22; Roussou and Tsimpli 2006:318)]

Based on the fact that a narrow-focus subject question triggers an answer with the order VOS (111Ba), Belletti proposes that subjects in VOS clauses in Italian are non-contrastive, new information foci. The syntactic corollary of this is movement of these subjects to a low focus position above VP (section 3.3.1.8). She further argues that the VO sequence is interpreted as topic; in the syntax VP, which contains the verb and the object, remnant moves to a topic position above the low FocP (112).⁵³

(112) ... [_{TOPP} [_{VP} t_i capirà il problema]_j [_{FocP} [_{DP} Gianni]_i t_j]]. (= (111Ba))

Concerning (111Bb), Belletti (2004) argues that VSO clauses in Italian are possible to the extent that subjects receive contrastive focus, as shown in (113a). To derive such VSO clauses, Belletti argues that first the object moves to a low left peripheral topic position and then the subject is attracted to the left peripheral focus position. Finally IP remnant-moves to a topic position higher than FocP (113b).

- (113) a. Capirà Gianni, il problema.
will understand Gianni the problem
'GIANNI will understand the problem.'
- b. [_{TOPP} [_{IP} t_i capirà t_j]_k [_{FocP} [_{DP} GIANNI]_i [_{TOPP} [_{DP} il problema]_j t_k]]]].

Neither of Belletti's proposals for Italian postverbal subjects can be extended to PhG. First, unlike Italian, postverbal subjects in VOS clauses in PhG are not associated with a non-contrastive, new information reading. For instance, a subject question in PhG (114A) triggers an answer with SVO order (114Ba), and not with VOS (114Bb) or VSO (114Bc).

- (114) A: Tis piésin to rkúđi?
who.NOM catch.PFV.PST.3SG the.N.ACC.SG bear.N.ACC.SG
'Who caught the bear?'
- B: a. O Andriás piésin to
the.M.NOM.SG Andrew.M.NOM.SG catch.PFV.PST.3SG the.N.ACC.SG
rkúđi.
bear.N.ACC.SG
'Andrew caught the bear.' (SVO)

⁵³ Belletti (2004) suggests that (111Ba) is degraded because objects in Italian canonically have to move out of their case positions. However, in (111Ba) the object fails to do so. She provides examples that show that removing the object from its case position rescues the clause. In (i), the object *il problema* 'the problem' in (111Ba) is expressed by the clitic *lo*, which clearly surfaces higher in the structure.

- (i) Lo capirà Gianni.
it.CL will.understand Gianni
'Gianni will understand it.'

- b. # Piésin to rkúði o Andriás. (VOS)
 caught the bear the Andrew
- c. # Piésin o Andriás to rkúði. (VSO)
 caught the Andrew the bear

Given the fact that VOS (or VSO) are not acceptable answers to a subject question, there is no reason to assume that postverbal subjects move to a low FocP in PhG (for more on VOS clauses, see section 3.3.3.1.2).

Second, postverbal subjects in VSO clauses are not associated with contrastive focus either. In support of this claim, recall that VSO clauses can be a neutral answer to a question with wide-focus (section 3.2.2.1), and that VSO clauses are typically associated with neutral intonation (section 3.2.2.4). Furthermore, observe in (115Ba–c) that a subject receiving contrastive focus reading naturally occurs preverbally:

- (115) A: I Nerkíza piésin to rkúði.
 the.F.NOM.SG Nerkíza.F.NOM.SG catch.PFV.PST.3SG the.N.ACC.SG bear.N.ACC.SG
 ‘Nerkiza caught the bear.’
- B: jox, íni jayníši ...
 no be.NPST.3SG wrong.N.NOM.SG
 ‘No, it is wrong ...’
- a. ... O ANDRIÁS piésin to
 the.M.NOM.SG Andrew.F.NOM.SG catch.PFV.PST.3SG the.N.ACC.SG
 rkúði.
 bear.N.ACC.SG
 ‘Andrew caught the bear.’ (SVO)
- b. # ... Piésin to rkúði o ANDRIÁS. (VOS)
 caught the bear the Andrew
- c. # ... Piésin o ANDRIÁS to rkúði. (VSO)
 caught the Andrew the bear

The fact that the subject of a VSO or a VOS clause in PhG does not receive any focus interpretation supports the claim that the subject is indeed in Spec, VP, and that it also has not been moved to Spec, FocP in the VP-periphery. In the next section, I provide evidence from the linear order of VP-level adverbs and subjects that (110b) is indeed the most plausible derivation of a neutral VSO order. Next, in section 3.3.3.1.2, I extend this analysis to non-neutral VOS clauses. The interpretation that these clauses receive suggests that the object has moved around the subject, which remains in its base position, i.e., Spec, VP.

3.3.3.1.1 VP-level adverbs and VP-internal subjects The linear position of a VP-level adverb with respect to a postverbal subject constitutes one diagnostic to define whether postverbal subjects in a given language occur in their base position, Spec, VP, or in a higher position. Consider for example the case of Modern Irish, as discussed by McCloskey (1996, 1997, 2001) extensively. McCloskey (1991 et seq.) argues that verbs in Modern Irish always move out of VP (see the discussion in section 3.3.2.1). According to McCloskey (1996 et seq.), postverbal subjects also move from their base position, Spec, VP, to a higher position in the INFL-domain, since they precede VP-level adverbs, as the example in (116) shows.

(116) V–S–ADV–O

Chuala Róise *go minic roimhe* an t-amhrán sin.

heard Róise often before-it that-song

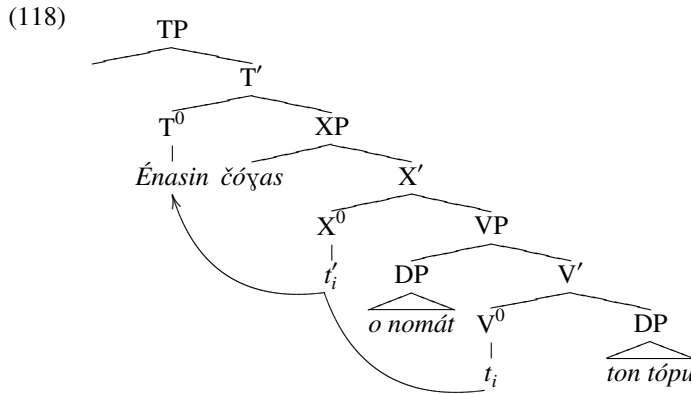
‘Róise had often heard that song before.’

[Modern Irish (McCloskey 1996:296, ex. (79))]

Unlike Modern Irish, PhG postverbal subjects follow VP-level adverbs, as the contrast between (117–b) shows.

- (117) a. Énasin *čóγas/čoxpír* o nomát ton
 plow.PFV.PST.3SG already/rarely the.M.NOM.SG man.M.NOM.SG the.M.ACC.SG
 tópu.
 field.M.ACC.SG
 ‘The man has already plowed the field.’/‘The man rarely plowed the field.’
- b. *Énasin o nomát *čóγas/čoxpír* ton
 plow.PFV.PST.3SG the.M.NOM.SG man.M.NOM.SG already/rarely the.M.ACC.SG
 tópu.
 field.M.ACC.SG

The fact that the subject *o nomát* ‘the man’ has to follow the VP-level adverb in a VSO clause indicates that the subject has not moved out from Spec, VP to a position between T^0 , which hosts the verb, and the functional projection which hosts the adverb *čóγas* ‘already’ (XP). All this is schematically shown in (118).



3.3.3.1.2 A note on VOS and object movement Sections 3.2.2 and 3.2.4.4 identified the VOS pattern as a non-neutral order in which the object is highlighted; as was already mentioned, the object's prominence is also indicated by the accent of the clause (see example (35) and Figure 3.8). In the present section, I briefly show that the most likely analysis of VOS orders is one in which the object moves out of VP around the subject to a higher position below TP, and not one in which VOS is derived from VSO through rightward movement (say, "extraposition") of the subject. The fact that the object is highlighted raises the possibility that its landing position is a low FocP in the sense of Belletti (2001, 2004).

One piece of evidence for the hypothesis that objects in VOS clauses move out of VP while subjects remain in Spec, VP comes from binding facts. Of particular relevance to the PhG VOS clauses is the binding behavior of bound variable possessive pronouns, i.e., possessive pronouns that have a quantified DP such as *every x* as their antecedents. The basic pattern of binding of bound variable possessive pronouns is illustrated in (119a–b).

- (119) a. [_{DP} Every boy]_i loves [_{DP} his_i dog].
 b. [_{DP} His_{-i/j} dog] loves [_{DP} every boy]_i.

In (119a), the subject is *every boy*, which is a universally quantified DP. *His* is a bound variable pronoun since its reference varies depending on which entities are referred to by its antecedent i.e., *every boy*. As *every boy* c-commands *his*, *his* can be bound by the former; therefore, it can receive a distributive reading. For instance, if we assume that *every boy* refers to *Sam* and *Ed*, *his* will variably refer to both *Sam* and *Ed*. Then the meaning of (119a) could be paraphrased as in (120a).⁵⁴

⁵⁴ Unlike the case of anaphors (cf. section 3.3.1.6), bound variable possessive pronouns and their an-

- (120) a. Sam_i loves his_i dog, and Ed_j loves his_j dog. (= (119a))

In (119b), on the other hand, the possessive pronoun *his* sits inside the DP subject and the object is a quantified DP. As the possessive pronoun *his* is not c-commanded by the universally quantified DP, it cannot be bound by the latter. As a result, *his* cannot receive a distributive reading, i.e., it cannot variably refer to *Sam* and *Ed*. Rather, it can refer only to an entity denoted by a third person in the discourse, for instance *Mike* (120b):

- (120) b. [Mike_i's dog] loves [Sam_j and Ed_k]. (= (119b))

An interesting difference similar to the one between (119a–b) emerges between a VSO and a VOS clause in PhG in which the object is a quantified DP and in which the subject contains a bound variable possessive pronoun. In a VSO clause of this sort, such as (121a), the bound variable possessive pronoun *tu* 'his' in the subject DP cannot receive a distributive reading where it variably refers to each of the entities denoted by the phrase *xer to čočúxi* 'every child'. To make this more concrete, if we assume that the set of referents of *xer to čočúxi* 'every child' encompasses *Sam* and *Ed*, the possessive pronoun can not variably refer to *Sam* or *Ed*. This means that *tu* 'his' is not bound by the quantified DP object *xer to čočúxi* 'every child'. Rather, the possessive pronoun chooses a fixed referent which, most naturally, is different from *Sam* and *Ed*, e.g. *Mike* (121a'–121b).

- (121) VSO

- a. Fíl_{sin} [i ma tu] [xer to
kiss.PFV.PST.3SG the.F.NOM.SG mother.F.NOM.SG his every the.N.ACC.SG
čočúxi].
child.N.ACC.SG
'His_{-ij} mother kissed every child_i'
a' His ≠ Sam, his ≠ Ed; his = Mike
b. Mike_i's mother kissed Sam_j and Ed_k.

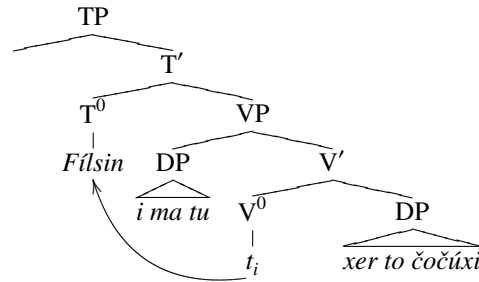
This follows from the assumption that the quantified DP-object in its base position inside VP does not c-command the DP subject in Spec, VP, as the structure in (121c) shows.

_____ antecedents do not have to be in the same clause, as shown in (i):

- (i) [_{DP} Every boy]_i thinks that [_{DP} his_i mother] likes ducks.

In (i) the antecedent *every boy* is in the higher clause, whereas the bound variable pronoun is in the lower one. I refer the reader to Haegeman (1994[1991]:231–232) for details on binding of possessive pronouns.

(121) c.



Interestingly, a VOS clause with a quantified DP object and a DP subject which contains a bound variable possessive pronoun, such as (122a) is ambiguous. In this clause, the possessive pronoun can either be bound by the quantified DP and therefore can receive a distributive reading (122b), or it can refer to a different unique entity in the discourse (122c).

- (122) a. Fílsin [xer to čočúxi] [i
 kiss.PFV.PST.3SG every the.N.ACC.SG child.N.ACC.SG the.F.NOM.SG
 ma] tu.
 mother.F.NOM.SG his
 'His_{ij} mother kissed every child_i' = 'every child is kissed by his mother'
- b. Sam_i's mother kissed Sam_i, Ed_j's mother kissed Ed_j. (his = Sam/Ed)
- c. Mike's mother kissed Sam and Ed. (his = Mike)

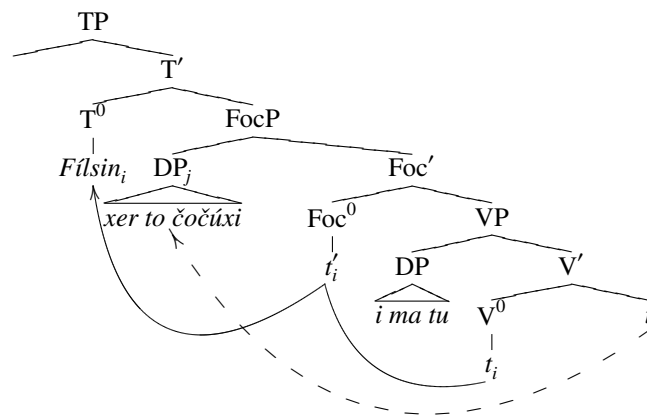
The most relevant point in the present context is the fact that a bound reading of the possessive pronoun, which is absent in a VSO clause (121), becomes available in a VOS clause (122). This neatly follows (i) if we assume that the quantified object has been moved around the subject to a position higher than VP, from where it c-commands the subject in Spec, VP,⁵⁵ and (ii) if we compute the binding relations between the DP object and the pronoun inside the DP subject according to this surface

⁵⁵ The fact that binding is not read off from the linear word order but rather depends on c-command is supported by (i), in which the quantified DP *xer to čočúxi* linearly follows the bound variable possessive pronoun *tu*; however, the former is in an adverbial clause and the latter is in the main clause. As the former does not c-command the latter, the latter cannot receive a distributive reading:

- (i) [_{CP_{adverbial}} Samú frístin ksopísu [xer to čočúxi]],
 when return.PFV.PST.3SG back every the.N.NOM.SG child.N.NOM.SG
 [_{CP_{main}} [i ma tu] xárin].
 the.F.NOM.SG mother.F.NOM.SG his rejoice.PFV.PST.3SG
 'When every child_i returned back, his_{ij} mother rejoiced.'

structure (122d).⁵⁶ Given the fact that the object in VOS clauses is emphasized and highlighted (section 3.2.4.4), I tentatively assume that this position is FocP, which is associated with non-contrastive focus, above VP, whose existence is discussed on independent grounds by Belletti (2001, 2004).

(122) d.



3.3.3.2 Preverbal subject positions

In the previous subsection, I have proposed that in neutral VSO clauses and in non-neutral VOS clauses the subject remains in its base position in Spec, VP. This analysis, however, raises the question of how the [+EPP] feature (or case and agreement features) on T^0 , which, by hypothesis, triggers movement of the subject to Spec, TP, is satisfied in PhG V-initial clauses. In relation to a similar issue for V-initial clauses in other languages, two analyses proposed in the literature were briefly discussed in section 3.3.2.1. According to the first, in V-initial clauses Spec, TP, an A-position, is filled by a null pronominal, *pro*, which satisfies the EPP requirement (Rizzi 1982, 1986a). According to the second proposal, the EPP may be parametrized among languages, and in languages with rich verbal inflection, the EPP condition can be satisfied by head movement of the verb alone (V^0 -to- T^0) (Alexiadou and Anagnostopoulou 1998). In languages with poor verbal inflection, on the other hand, the [+EPP] is necessarily checked by phrasal movement of the subject to Spec, TP or by insertion of an expletive in Spec, TP. The second possibility has as a consequence that in languages with rich verbal inflection, Spec, TP is not necessarily projected,

⁵⁶ On the other hand, the reading in (122c), where the pronoun inside the subject is not bound by the object can be obtained if we compute the binding relations at an earlier stage of derivation, before object movement takes place.

which has in turn been taken to mean that in such languages preverbal subjects are never in Spec, TP but rather hosted in left-dislocated A'-positions on par with left-dislocated objects (Barbosa 1995, 2009 on European Portuguese and Alexiadou and Anagnostopoulou 1998 on SMG).

In section 3.3.3.2.1, I first outline Alexiadou and Anagnostopoulou's (1998) proposal in more detail (see also Barbosa 1995, 2009). Next, in section 3.3.3.2.2 I provide some arguments put forward in the literature which reveal that Spec, TP should be recognized as a possible subject position in certain NSLs, contrary to Alexiadou and Anagnostopoulou's (1998) approach. Finally, in section 3.3.3.2.3, I summarize Cardinaletti's (1994 et seq.) approach, which, building on Rizzi (1982, 1986a), argues that Spec, TP should be recognized as a subject position in languages with rich agreement as well. In particular, Cardinaletti proposes that while Spec, TP is a *bona fide* subject position, not every preverbal subject is situated in this position. Instead, the author argues that certain preverbal subjects may be left-dislocated, while others may be hosted in a dedicated subject position above TP. Based on these overviews, in sections 3.3.3.2.4–3.3.3.2.8, I provide my analysis for PhG preverbal subjects.

3.3.3.2.1 Alexiadou and Anagnostopoulou (1998) Alexiadou and Anagnostopoulou (1998; henceforth A&A) argue that preverbal subjects in NSLs with V⁰-to-T⁰ movement (e.g., SMG, Spanish) are not situated in the canonical subject position, Spec, TP. Rather they are hosted in a left-peripheral topic position, and thus they share important characteristics with clitic left dislocated (CLLD-ed) objects, i.e., objects that occur preverbally and which are resumed by an object clitic inside TP.

The first piece of evidence A&A provide comes from the fact that a number of adjuncts can intervene between a preverbal subject and the associated verb in SMG, as the example in (123) shows.

- (123) O Petros xtes meta apo poles prospathies sinandise ti Maria.
 Peter yesterday after from many efforts met Mary
 'After many efforts, Peter met Mary yesterday.'

[SMG (A&A:502, ex. (15a))]

In (123) above, the subject, *o Petros* 'Peter', is separated from the verb by two adjuncts, *xtes* 'yesterday' and *meta apo poles prospathies* 'after many efforts', which suggests that it is not in Spec, TP, and hence not in a spec-head configuration with T⁰, which hosts the verb *sinandise* '(he) met' (on V⁰-to-T⁰ movement in SMG, see Tsimpli 1990; Rivero 1994; Alexiadou and Anagnostopoulou 1998; Roussou and Tsimpli 2006, a.o.). Similar to preverbal subjects, CLLD-ed objects in SMG can also be separated from the verb by a number of adjuncts. In (124), the fronted direct object, *ti Maria* 'Mary', which is resumed inside the clause with a clitic pronoun *ti* 'her' that

shares the same number and case features with the fronted direct object, is separated from the verb by the same adjuncts as in (123).

- (124) *Ti Maria, xtes meta apo poles prospathies ti, sinandise o Petros.*
 Mary yesterday after from many efforts CL-ACC met Peter
 ‘As for Mary, Peter met her after many efforts.’

[SMG (A&A:503, ex. (16a))]

Assuming that CILD is a means to “topicalize” a constituent (Cinque 1977, 1990; Rizzi 1997; Benincà and Poletto 2004; Frascarelli 2004 for Italian, Arregi 2003 for Spanish; Anagnostopoulou 1994; Skopeteas 2016 for SMG, a.o.), the similarity between (123–124) lead A&A to conclude that preverbal subjects are also topicalized in SMG.

The second piece of evidence A&A provide comes from Spanish, where preposing of certain adverbs triggers obligatory subject-verb inversion (this was originally observed and discussed by Piera 1982; cf. (125a–b)):

- (125) a. *Temprano salía Julia de casa.*
 early left Julia the house
 ‘Julia left the house early’
 b. **Temprano Julia salía de casa.*
 early Julia left the house

[Spanish (A&A:503, ex. (18))]

Regarding the ungrammaticality of (125b), A&A argue that there is a unique A'-position in Spanish, for which the subject *Julia* and the adverb *temprano* ‘early’ compete. According to A&A, this reveals that the preverbal subject in Spanish is not in an A-position, i.e., Spec, TP, since if it were, (125b) should be grammatical.

A&A’s third piece of evidence comes from a scopal property of DPs in SVO clauses with an indefinite subject DP and a universally quantified DP object (e.g., every *x*) in English and SMG. In English, an indefinite subject that co-occurs with a clause-mate universally quantified object is scopally ambiguous: (126) can either mean that one unique student filed every article, or that every article was filed by some (not necessarily the same) student.

- (126) Some student filed every article. (some (∃) > every (∀), ∀ > ∃)

Assuming that in English subjects are merged in Spec, VP and move to Spec, TP, A&A claim that why the indefinite subject preserves its narrow scope (∀ > ∃) is explained under the assumption that A-movement does not extend the scopal domain of a quantifier, which is then scopally interpreted as if it were in its base position (van Riemsdijk and Williams 1981; Cinque 1982). On the other hand, in SMG, when

an indefinite subject is in the preverbal position as in (127a), it obligatorily has wide scope, i.e., only the reading in which only one student filed every article is available. With the VSO order, however, scope is ambiguous (127b), just like in English (126).

- (127) a. Kapios fititis stihiothetise kathe arthro. ($\exists > \forall, * \forall > \exists$)
 some student filed every article
- b. Stihiothetise kapios fititis kathe arthro. ($\exists > \forall, \forall > \exists$)
 filed some student every article
- [SMG (A&A :505, ex. (20))]

A&A argue that if the preverbal indefinite subject in SMG were in an A-position, i.e., Spec, TP, this subject would preserve its narrow scope, on par with the preverbal indefinite subject in English (126). However, as (127a) shows, this is not the case. Their conclusion is that in SMG, preverbal subjects are not in an A-position. With respect to the scopal properties, the subject in (127a) behaves similarly to an indefinite object that is CILD-ed:

- (128) Kapjo pedhi to eksetase kathe kathigitis. ($\exists > \forall, * \forall > \exists$)
 some student CL-ACC examined every professor
 ‘As for some student, every professor examined him.’
- [SMG (A&A :505, ex. (21))]

Based on the interpretive similarity between (127a–128), A&A conclude that preverbal subjects are hosted in a topic position (i.e., an A'-position) on par with preverbal objects.

The final piece of evidence to be presented here comes from the specificity restriction on preverbal indefinite nouns, which was illustrated earlier in section 3.2.3: while postverbal indefinite subjects most naturally give rise to an existential reading in SMG, preverbal subjects only receive a partitive or specific reading. As illustrated in (129), an indefinite CILD-ed object, such as *enan anthropo* ‘a person’ cannot receive an existential reading, which suggests for A&A that preverbal subjects resemble CILD-ed objects in this respect too.

- (129) ? Enan anthropo ton heretise i Maria.
 one person CL-ACC greeted Mary
 ‘Mary greeted one of the people.’
 *Mary greeted a person.’
- [SMG (A&A :507, ex. (24))]

3.3.3.2.2 Arguments against A&A A&A’s analysis for preverbal subjects and EPP-checking makes a strong claim: in NSLs, and hence in languages with V^0 -to- T^0 movement, Spec, TP is not projected and all pronominal subjects are left-dislocated

to an A'-position. This claim has been challenged by data from Romance NSLs, such as Italian (Cardinaletti 1994, 1997, 2004, 2007), Spanish (Goodall 2001), Brazilian Portuguese (BP; Costa 1998) and European Portuguese (EP; Costa 2004). In this section, I review some of the arguments against A&A's approach.

First, Costa (2004) reports that in EP which allows both VSO and SVO orders, the answer to a wide-focus question *What happened?* (130A) elicits an answer with SVO order (130Ba). An answer with the VSO order is judged by Costa (2004) as infelicitous (130Bb).

- (130) A: O que é que aconteceu?
 what happened?
- B: a. O Pedro partiu o braço.
 Pedro broke the arm
 'Pedro broke his arm.'
- b. # Partiu o Pedro o braço.
 Broke Pedro the arm

[EP (Costa 2004:16, ex. (11))]

This means that in EP the SVO pattern can be pragmatically neutral (see also section 3.2.2.1 for the same observation on PhG). If preverbal subjects in SVO clauses were in an A'-position, then one would not expect an SVO order to be able to yield a pragmatically neutral clause. A clause with a CILD-ed object, which is presumably in a left peripheral A'-position, is not a legitimate answer to the question *What happened?* (130Bc).

- (130) B: c. # O braço o Pedro partiu-o.
 arm Pedro broke-it
 'The arm, Pedro broke it.'

[EP (Costa 2004:16, ex. (11))]

On account of the difference between (130Ba–Bc), Costa (2004) concludes that preverbal subjects in EP must be hosted in Spec, TP, an A-position, not in an A'-position, contra A&A's prediction.

The second argument against analyzing preverbal subjects as topicalized constituents involves preverbal bare negative quantifiers (BNQs) as subjects. Costa (2004: 122–123) shows that BNQ subjects can occur both in postverbal and preverbal position in EP, giving rise to different interpretations. They occur postverbally (131Bb) if they are in answers to subject questions (131A). When they are mentioned in the question (132A), they occur preverbally (132Ba).

- (131) A: Quem chegou?
 Who arrived?

- B: a. *Ninguém chegou.
no-one arrived
- b. Não chegou ninguém.
not arrived no-one
- (132) A: O que é que ninguém fez?
what did no-one do
- B: a. Ninguém chegou.
no-one arrived
- b. *Não chegou ninguém.
not arrived no-one

BNQs have often been characterized as elements that cannot be topicalized, i.e., CILD-ed (Rizzi 1986a, 1997:290; Cinque 1986, 1990:74–79; Cardinaletti 2007 for Italian, Costa 1998, 2004 for EP/BP). However, such constituents can occur in the LP, albeit as preverbal foci. This is shown by the examples from Italian (133). A DP object can be topicalized in Italian, as evidenced by the grammaticality of CILD, the diagnostic for topicalization in this language (Cinque 1990); (133a). On the other hand, BNQs cannot be topicalized (133b); they can, however, be a preverbal contrastive focus (133c). Observe that in the former case the topicalized object is doubled by a clitic, while this is not the case when the fronted object is focused.

- (133) a. Gianni_i, lo_i ho visto.
Gianni, him have seen
'Gianni, I saw him.'
- b. *Nessuno_i, lo_i ho visto
no one him have seen
'No one, I saw him'
- c. NESSUNO (*lo) ho visto.
no-one have seen
'NO ONE I saw.'

[Italian (Rizzi 1997:290, ex. (19a, 20a))]

Based on the fact that BNQs cannot be topicalized, Costa (2004) argues that *ninguém* 'no one' in EP (132Ba) is in the structural subject position, Spec, TP. According to Costa, this subject cannot be in a focus position because it is not associated with a focus reading (given that it is already mentioned in the question (132A)).

Another argument against A&A's proposal involves certain violations of RM (section 3.3.1.5). Costa (2004:14–15) argues that the EP sentence in (134a) is ungrammatical because both the *wh*-phrase *que livro* 'which book' and the CILD-ed dative-object *à Maria* 'to Maria' are in A'-positions, i.e., they have been both moved from within TP to a left peripheral A'-position. As such, the latter intervenes between the head and the foot of the chain created by movement of the *wh*-phrase.

- (134) a. *Perguntei que libro_i, à Maria, lhe deram t_i.
 I asked which book, to Maria, her_{CL-DAT} they gave
 int.: ‘I asked which book, to Maria, they gave.’
 [EP (Costa 2004:15, ex. (9b))]

However, if a DP subject follows a *wh*-moved direct object, the sentence is grammatical (134b).

- (134) b. Perguntei que libro_i, o Pedro leu t_i.
 I asked which book, Pedro, read
 ‘I asked which book Pedro read.’
 [EP (Costa 2004:15, ex. (9a))]

According to Costa, the difference in grammaticality between (134a–b) is explained if we assume that the subject DP in (134b) is in an A-position, i.e., Spec, TP. As such it does not count as an intervener for the A'-moved *wh*-phrase. CLD-ed objects, on the other hand, are in an A'-position (134a). Therefore, they induce an intervention effect to for A'-moved *wh*-phrases.

A final argument against A&A's proposal which I review here involves a restriction on left-dislocation of certain types of subjects in Italian. In Italian, both DP-subjects (135a) and certain pronominal subjects such as *egli* ‘he’ (135b) can occur preverbally in a declarative clause (the category of pronouns to which *egli* belongs is elaborated on in section 3.3.3.2.3.1).

- (135) a. Gianni ha invitato Marina.
 Gianni has invited Marina
 ‘Gianni invited Marina.’
 b. Egli ha invitato Marina.
 he has invited Marina.
 ‘He invited Marina’

As Cardinaletti (2004, 2007:58) shows, both DP-subjects and *egli* are excluded from a position between a fronted *wh*-phrase and the finite verb (136a, 137a). However, while DP subjects such as *Gianni* can—and in fact must—precede a *wh*-phrase (136b) in a *wh*-question, *egli* cannot occur in a position preceding the *wh*-phrase (137b).

- (136) a. *Chi Gianni ha invitato?
 whom Gianni has invited?
 int.: ‘Whom did Gianni invite?’
 b. Gianni chi ha invitato?
 Gianni whom has invited?
 ‘Whom did Gianni invite?’

- (137) a. *Chi egli ha invitato?
 whom he has invited?
 int.: ‘Whom did he invite?’
 b. *Egli chi ha invitato?
 he whom has invited?
 int.: ‘Whom did he invite?’

[Italian (Cardinaletti 2007:58)]

If every preverbal subject were left-dislocated to an A'-position in NSLs, as A&A's analysis predicts, then the difference between the Italian subject pronoun *egli* 'he' and regular DP subjects—in the sense that the latter can and the former cannot be topicalized to a position above *wh*-phrases—remains unaccounted for. Cardinaletti's analysis for the discrepancy between (136b) and (137b) is given in detail in the next section.

3.3.3.2.3 Cardinaletti (1994 et seq.)

3.3.3.2.3.1 SubjP In a series of papers, Cardinaletti (1994, 1997, 2004, 2007, 2014) argues that preverbal subjects in NSLs should not necessarily be attributed a different status than subjects in non-NSLs. Importantly, Cardinaletti argues that there is not just one unique subject position, Spec, TP. Rather, in addition to Spec, TP there is at least one other preverbal subject position, namely, Subject Phrase (Spec, SubjP), which is higher than TP (or AgrSP in her terms) as shown in (138) (see also Cardinaletti and Roberts 2002; Rizzi 2006; Rizzi and Shlonsky 2007; Greco 2013, a.o.).⁵⁷

- (138) [_{SubjP} [_{TP} [_{VP}]]]

The structure in (138) is argued to be universal, hence present in both NSLs and non-NSLs. The two types of languages differ only with respect to the nature of the agreement head, T⁰, which in NSLs (but not in non-NSLs) is able to license a null subject (as in Rizzi 1986a). This means that, unlike what A&A argue for, Spec, TP is projected in NSLs too, and preverbal subject DPs in these languages are not necessarily CILD-ed. Rather, it may be the case that they are (or at least can be) hosted in Spec, SubjP. The two preverbal subject positions, Spec, TP and Spec, SubjP, differ with respect to their functions. According to Cardinaletti (1994 et seq.), a subject in a clause is needed to satisfy two different requirements: a formal (grammatical) requirement and an (optional) semantic one. First, there is a formal requirement to the

⁵⁷ Cardinaletti (2004 et seq.) postulates another subject position above TP, labelled E_{pp}P. Since this position is tangential to the current dissertation, I do not discuss it in the running text and I refer the interested reader to Cardinaletti (2004:151–154).

effect that clauses must have a “syntactic subject”, which satisfies certain morphosyntactic conditions, such as nominative case assignment and checking of ϕ -features (gender, number and person) between the subject and the verb. Second, the interpretive requirement concerns the fact that subjects should also be “pragmatic subjects”, i.e., subjects of a predicative structure which at the syntax/semantics interface is interpreted as a categorical rather than athetic statement, a distinction first made by Kuroda (1972; see also section 3.3.3.2.8 for more on this distinction). A categorical statement foregrounds a particular individual as the subject (of predication) and then says something about this subject while athetic statement “[...]” simply reports an event where all the arguments of the verb are introduced as event participants” (Cardinaletti 2004:151). This means that in categorical statements the subjects satisfy some interface requirement, according to which the description of an eventuality must be expressed in subject-predicate format (Rothstein 2000), parallel to topic-comment and focus-presupposition formats (Rizzi 2006:122). Under Cardinaletti’s hypothesis, the grammatical requirements and semantic requirements on subjects are associated with different subject positions in the phrase marker: Spec, TP is responsible for the realization of the formal requirement, such as the case-agreement relation, while Spec, SubjP is associated with what Cardinaletti refers to as “subject-of-predication” relation: it is the locus where the semantic property of subjects is syntactically encoded.

Spec, SubjP and Spec, TP differ not only in terms of the features they are associated with but also with respect to the subject types that they host. As Spec, SubjP is associated with specific interpretive properties, it is legitimate to expect that expletives, which are inherently non-referential and are inserted into a clause purely for grammatical purposes, are excluded from this position. Conversely, certain constituents to be discussed below can function as subjects of predication, without necessarily being able to function as grammatical subjects at the same time. If this is the case, then such a constituent is expected to raise to Spec, SubjP without checking case or ϕ -features in Spec, TP. As Cardinaletti shows, both of these predictions are borne out. I illustrate both points in turn below.

Concerning the latter point, Cardinaletti (2004) provides evidence from dative fronting with unaccusative and unergative verbs and locative fronting and predicate fronting in inverse copular sentences in Italian (Cardinaletti 2004:122-126). I only provide here Cardinaletti’s arguments involving dative fronting with certain psych verbs; the reader is referred to her original paper and to Greco (2013:23–31) for an overview of the other arguments.

Cardinaletti looks at Italian psych verbs from the *piacere* ‘please’ class which are unaccusative verbs that select a THEME and a dative EXPERIENCER. In a clause with such a psych verb, either the THEME or the EXPERIENCER can be preposed to preverbal position; however, the verb always agrees with the THEME. In (139–140), *a Ezra* ‘to

A&A would suggest (section 3.3.3.2.1). This can be tested by looking at configurations that do not allow left-dislocated constituents, e.g., Aux-to-Comp configurations (Cardinaletti 2004:122). In this configuration, the dative (GOAL) argument of a transitive verb is not allowed between the auxiliary and the verb. This is shown with the ungrammatical example in (143a), where the dative argument *a Gianni* ‘to Gianni’ occurs between the auxiliary *avendo* ‘having’ and the verb *dato* ‘(I) given’. Under the assumption that dative arguments are fronted as left-dislocated constituents, (143a) suggests that Aux-to-Comp configurations do not allow left-dislocated elements. Cardinaletti (2004) argues that if dative EXPERIENCERS of psych verbs from the *piacere* ‘please’ class were also left-dislocated, they too should be ruled out in this environment. However, as the grammaticality of (143b) shows, this prediction is not borne out. Dative EXPERIENCERS in Aux-to-Comp configurations are grammatical, similar to nominative subjects, both of the DP type and of the *egli* type (143c).

- (143) a. *Avendo a Gianni dato questi libri (*dative argument)
 having to Gianni (I)given these books
 b. Essendo a Gianni piaciuto molto il regalo (dative EXPERIENCER)
 being to Gianni_[EXP] ‘pleased’ much the gift
 c. Avendo Gianni/egli telefonato a Maria ... (nominative subject)
 having Gianni/he called to Maria
 [Italian (Cardinaletti 2004:122, ex. (19); 141, ex.(96a))]

From the asymmetry between a preverbal dative experiencer and a fronted dative argument (143a–b), Cardinaletti concludes that preverbal EXPERIENCERS are not left-dislocated; rather, they occupy a preverbal subject position, on par with nominative subjects (143c) (see also Belletti and Rizzi 1988:337–338). However, because a preverbal dative EXPERIENCER checks neither case nor ϕ -features and because it does not sit in the same maximal projection as the finite verb—by hypothesis in T^0 , the position that hosts preverbal dative EXPERIENCERS cannot be identified as Spec, TP. A plausible position, then, is that the dative experiencer is hosted by another subject position above TP, the position which Cardinaletti identified as Spec, SubjP, where the subject-of-predication feature is checked.

We can now turn to the first point, i.e., that Spec, SubjP is expected to host referential subjects only, and thus that non-referential subjects such as expletives are excluded from this position.

Cardinaletti (2004) argues that there is a strong connection between referentiality and the “weak/strong” distinction of subjects. This distinction is based on Cardinaletti and Starke’s (1999) argument that pronominal elements come in three varieties, namely strong pronouns, weak pronouns and clitics. In this taxonomy, structural deficiency is to be understood as the absence of certain functional projections in

the internal structure of a given pronominal element. Pronouns with complete functional structure are categorized as strong, and those with reduced functional structure are categorized as weak, but still phrasal. Finally, clitics are analyzed as defective heads.

Expletives *there* or *it* in English, *il* in French and expletive *pro* in NSLs in general constitute examples of weak pronouns. These are phonologically deficient (in the sense that they cannot be stressed independently) and usually do not have independent referential content. They can occur in impersonal constructions, such as with weather verbs, in which case they do not qualify as subjects of predication:⁵⁸

- (144) a. *It* rains much here.
 b. *Il* pleut beaucoup ici.
 c. *pro* vrexɪ poli eðo.
 ∅ rain.IPFV.NPST.3SG a lot here
 ‘It rains much here.’ [SMG]

Strong pronouns, such as the English referential pronoun *he*, French *lui* and SMG demonstrative pronoun *afto* ‘it/this’, in contrast, can in fact independently refer. As such, they cannot occur in impersonal constructions:

- (145) a. *He rains much here.
 b. *Lui pleut beaucoup ici.
 c. *Afto vrexɪ poli eðo.
 it.NOM rain.IPFV.NPST.3SG a lot here
 int.: ‘it rains much here.’ [SMG]

Cardinaletti (2004) argues that the distinction between weak and strong pronouns is reflected in the positions they can occupy in the clause. In what follows, I ignore the subject position in the lexical domain, i.e., in VP, and summarize Cardinaletti’s account for preverbal subject position only. Strong pronouns and DP subjects have referential content and can occur in Spec, SubjP. Weak pronouns lack referential content and are thus excluded from this position. These elements can only occur in Spec, TP. Cardinaletti (2004) supports her claim with evidence from parenthetical insertion. Weak pronouns cannot be separated from the finite verb by parentheticals ((146), see also (142a) above), but strong pronouns and DP-subjects can (147).⁵⁹

⁵⁸ Even though *egli* in Italian is classified as a weak pronoun, it differs from expletives in that it is ungrammatical when used as nonreferential subject and it shows certain distributional similarities with DP subjects (on which see Cardinaletti 2004:132–133, section 4.2). Cardinaletti (2004) argues that *egli* does not occupy the same position as the expletives when used as a subject. This difference is not relevant to the current dissertation; therefore, I refer the interested reader to Cardinaletti (2004).

⁵⁹ Since *pro* has no phonological value, the parenthetical insertion test between a *pro* and a verb in a given clause cannot be properly applied to NSLs such as SMG or Italian. Cardinaletti’s analysis (2004),

- (146) a. * It, as you know, will rain the whole day.
 b. * Il, je crois, a plu tout au long de la journee.
- (147) a. John/he, as you know, will come tomorrow.
 b. Jean/lui, je crois, aime beaucoup la musique.
 c. Afto, opos kseris, perni poli kero.
 it.NOM like know.IPFV.NPST.2SG take.IPFV.NPST.3SG a lot time.M.ACC.SG
 ‘This, as you know, takes a lot of time.’ [SMG]

To sum up, according to Cardinaletti (1994 et seq.), (at least) two different preverbal positions host subjects: a lower position, Spec, TP, where the subject checks case and ϕ -features, and a higher position, Spec, SubjP, where the subject qualifies as the subject of predication. Only subjects with referential content (e.g., DP-subjects, strong pronouns) are legitimate subjects of predication and can thus be hosted in Spec, SubjP. Expletives, which are weak, on the other hand, do not have referential content and they are forced to stay in Spec, TP. This information is schematically shown in (148).

- (148)
$$\begin{array}{c} \text{Subj. of pred. feature} \quad \text{Case}/\phi\text{-features} \\ \boxed{\text{DP/strong pronouns}} \quad \boxed{\text{weak pronouns}} \\ \text{[SubjP } \boxed{\text{DP/strong pronouns}} \text{ [TP } \boxed{\text{weak pronouns}} \text{ [T}^0 \text{ ... [VP ...]]]]} \end{array}$$

As for the location of SubjP in the clausal spine, Cardinaletti (2004); Rizzi (2006); Rizzi and Shlonsky (2007) argue that it is located between TP (AgrSP) and Fin⁰:

- (149) [... [FinP [SubjP [TP [VP]]]]]

3.3.3.2.3.2 SubjP and questions relevant to PhG preverbal subjects PhG does not possess overt expletives. All overt subject pronouns (on which see section 2.4.2.1) are strong according to Cardinaletti and Starke’s (1999) classification. The only weak pronoun that could be argued to exist in PhG is *pro* (à la Cardinaletti 2004). Similar to DP-subjects, strong pronouns in PhG can occur both preverbally and postverbally, and are excluded from impersonal constructions (150a), which, according to Cardinaletti’s analysis for NSLs, involve *pro* (150b).

however, implies that the parenthetical in these languages is higher than *pro*, as *pro* is expected to occupy the same structural position as overt weak pronouns, such as expletives (see also the discussion below in the running text):

- (i) Opos kseris, *pro* vrexì poli eđo.
 as know.IPFV.NPST.2SG \emptyset rain.IPFV.NPST.3SG a lot here
 ‘As you know, it rains much here’

- (150) a. (*Ató) vrešízi (*ató).
 it.N.NOM.SG rain.IPFV.NPST.3SG it.N.NOM.SG
- b. *pro* vrešízi.
 Ø rain.IPFV.NPST.3SG
 ‘It rains.’/ ‘It is raining.’

An obvious question that arises now is where PhG preverbal subjects in an SVO clause are located. From the overviews in sections 3.3.3.2.1–3.3.3.2.3, three possible answers emerge. The first is that preverbal subjects occupy Spec, TP. I refer to this possibility as “Hypothesis I” (section 3.3.3.2.2). The second and third follow from A&A’s proposal of preverbal subjects in NSLs, according to which preverbal subjects in NSLs are systematically hosted in an A’-position. According to A&A’s analysis this position is to be identified as a topic position (section 3.3.3.2.1). However, admitting that preverbal focus is also an A’-position, I investigate, as a third possibility, whether there are subjects in PhG that are hosted in such a focus position. I refer to the former possibility as “Hypothesis II.a” (section 3.3.3.2.5) and the latter possibility as “Hypothesis II.b” (section 3.3.3.2.6). The final possible answer follows from the fine-grained taxonomy of subject positions by Cardinaletti (1994 et seq.; section 3.3.3.2.3). If her analysis of preverbal subject positions is cogent, then we would expect to find certain subjects in SubjP. I refer to this possibility as “Hypothesis III” (section 3.3.3.2.7).⁶⁰

In the next section (3.3.3.2.4), I test and reject Hypothesis I, and thus Spec, TP as a possible subject position. Moreover, the lack of evidence for an expletive *pro* in PhG suggests that Spec, TP may indeed not be a legitimate subject position at all. In section 3.3.3.2.5, I test Hypothesis II.a, where I show that certain preverbal subjects behave like CILD-ed objects and can thus be claimed to be hosted in a topic position (an A’-position). However, this does not mean that all preverbal subjects are in a left peripheral topic position. As I show in section 3.3.3.2.6, evidence from BNQ subjects supports Hypothesis II.b and suggests that preverbal subjects can also be hosted in a focus position (another A’-position). In section 3.3.3.2.7, I test Hypothesis III. Based on an ordering restriction between preverbal BNQ objects and preverbal DP subjects, I identify a dedicated subject position in the left periphery, also labeled Spec, SubjP (following Cardinaletti 1994 et seq.), which I take to be an A’-position (as in Ledgeway 2011). Finally, in section 3.3.3.2.8, I show that postulating a left peripheral Spec, SubjP may account for why preverbal indefinite subjects receive a strong interpretation in PhG, and why generic statements and clauses with individual-level predicates must feature the order SVO, points which were touched

⁶⁰ Although not presented in detail in section 3.3.3.2.3, Cardinaletti (1994 et seq.) also recognizes the possibility that preverbal strong subjects may be left-dislocated to a topic position, on par with CILD-ed objects (as in A&A) or to a focus position.

upon in sections 3.2.2.3 and 3.2.3.

3.3.3.2.4 Hypothesis I: PhG overt preverbal subjects \neq Spec, TP Assuming V^0 -to- T^0 movement to standardly take place in SVO clauses as well, with the least amount of assumptions, we would expect the subject of a neutral SVO clause to be hosted in Spec, TP, a position which is pragmatically neutral under the definition in (68).

However, this hypothesis can immediately be dispensed with on the basis of ordering restrictions between preverbal subjects, modal particles and verbs: overt preverbal subjects—whether pronominal or non-pronominal—are not allowed to intervene between a modal particle and a verb (151a), but they must precede the modal particle (151b) (or alternatively they can appear after the verb, giving rise to V-initial orders, see section 3.3.3.1).

- (151) a. * PRT–S–V–O
 * A o nomát/atós nási
 FUT.DEF the.M.NOM.SG man.M.NOM.SG/he.NOM plow.PFV.NPST.3SG
 ton tópu.
 the.M.ACC.SG field.M.ACC.SG
 int.: ‘The man/He is going to plow the field.’
- b. S–PRT–V–O
 O nomát/atós a nási
 the.M.NOM.SG man.M.NOM.SG/he.NOM FUT.DEF plow.PFV.NPST.3SG
 ton tópu.
 the.M.ACC.SG field.M.ACC.SG
 ‘The man/He is going to plow the field.’

Assuming that $C_M P$ hosts modal markers and constitutes the boundary between the CP- and TP-domains (section 3.3.2.5.2), and assuming that the verb is in T^0 (section 3.3.2), the ungrammaticality of (151a) suggests that subjects are excluded from Spec, TP. The structure of (151a) is shown in (152a).

- (152) a. * [C_{MP} [C_M^0 A [TP o nomát/atós_j [T^0 nási_i [VP t_j [V^0 t_i [DP ton tópu]]]]]]]].
 (= (151a))

On the other hand, the grammatical (151b) suggests that the subject is located in a position (indicated for the time being as FP) that is at least above $C_M P$, where modal particles are first-merged (152b).

- (152) b. [FP O nomát/atós_j [C_{MP} [C_M^0 a [TP [T^0 nási_i [VP t_j [V^0 t_i [DP ton tópu]]]]]]]].
 (= (151b))

nomát.
 man.M.NOM.SG
 ‘A man/ the man/ every man came.’

Definiteness effects are also observed in languages in which expletives are allowed in clauses with transitive verbs, in so called “Transitive Expletive Constructions”. Oft-cited languages that allow this construction are Icelandic, German and Dutch (Belletti 1988:12–15; Vikner 1995; Bobaljik and Jonas 1996; Vangsnes 2002, a.o.). In the examples below, the only grammatical associate of the expletive *það* (155a), and *es* (155b) is an indefinite subject.

- (155) a. Það hefur köttur/ *kötturinn/ *þessi köttur/ *Kalli étið mýsna.
 EXPL has cat/ *cat.the/ *this cat/ *Kalli eaten mice.the
 ‘A cat/ *the cat/ *this cat/ *Kalli ate the mice.’
 [Icelandic (Vangsnes 2002:48, ex. (12))]
- b. Es hat ein Mann/*?der Mann die Marie geküsst.
 EXPL has a man/*?the man the.ACC Marie kissed
 ‘A man/*?the man kissed Marie.’
 [German (Belletti 1988:14, ex. (30b))]

In this context as well, definiteness effects are absent in PhG. Postverbal subjects in a clause with a transitive verb can be both definite and indefinite:

- (156) Éfain i pséka/ a pséka/ ató i
 eat.PFV.PST.3SG the.F.NOM.SG cat.F.NOM.SG/ a cat.F.NOM.SG/ this.SG the.F.NOM.SG
 pséka ton pantikó.
 cat.F.NOM.SG the.M.ACC.SG mouse.M.ACC.SG
 ‘The cat/a cat/every cat ate the mouse.’

The contrasts in (153–154), and (155–156) suggest that even if an expletive *pro* is postulated in PhG, it would have different properties than overt expletives. In theory, the difference in PhG could be related to the covert nature of the expletive *pro*; however, there are also languages that can (plausibly) be argued to have covert expletives and still show definiteness effects. An example is Icelandic, in which the overt expletive *það* (see (155a)) is allowed only sentence initially (Vangsnes 2002:47). If another constituent occurs sentence initially in a V-2 clause, the expletive *það* is obligatorily dropped (which may suggest that there is a covert expletive in these cases; cf. (157a–b)). In a construction with a covert expletive, the associate of this expletive cannot be a definite or a universally quantified element (157c–d), similar to what is the case with overt expletives in Icelandic or in the other languages mentioned above.

- (157) a. *Það hafa verið nokkrir kettir í eldhúsinu.*
EXPL have been some cats in kitchen.the
'There were some cats in the kitchen.'
- b. *Í dag hafa (*það) verið nokkrir kettir í eldhúsinu.*
today have EXPL been some cats in kitchen.the
'Today there were some cats in the kitchen.'
- c. **Í dag hafa verið nokkrir kettir/ *allir kettirnir/ *báðir kettirnir í eldhúsinu.*
today have been some cats/ *all cats.the/ *both cats.the in kitchen.the
'Today there were some cats/ *all the cats/*both the cats in the kitchen.'
- d. **Í dag hefur verið *kötturinn/ *Pétur í eldhúsinu*
today has been cat.the/ *Peter in kitchen.the
'*Today there was the cat/ Peter in the kitchen.'
- [Icelandic (adapted from Vangsnes 2002:46–47, ex. (7–8))]

In the light of the data from Icelandic (157), I conclude that there is no reason to assume that overt and covert expletives have different syntactic properties in Icelandic or in any other language, including PhG. It follows from this conclusion that no expletive *pro* is required in PhG, as A&A predict (see also Fassi Fehri 1993:38–42 for a similar conclusion on Arabic).⁶²

3.3.3.2.5 Hypothesis II.a: preverbal subjects as topics The fact that preverbal subjects can occur to the left of modal particles suggests that they are situated in the LP, higher than $C_M P$ (in a position labeled temporarily as FP in section 3.3.3.2.4). One interpretation of this conclusion is that preverbal subjects in PhG are left-dislocated to an A' -position that can also host CILD-ed constituents (as predicted by A&A for all NSLs). Recall from section 3.3.3.2.1 that one piece of evidence for their argument is that a number of adjuncts can intervene between preverbal subjects and verbs in SMG. PhG behaves similar to SMG in this sense: higher adverbs such as *pérki* 'perhaps' can easily intervene between a preverbal subject and a modal particle:

⁶² A&A take the lack of definiteness restrictions in SMG to indicate that there is not only no expletive *pro* but also that Spec, TP is not projected. Recall from section 3.3.2.2.1 that for A&A [+EPP] (or case and ϕ -features) on T^0 is checked by the agreement morphology on the verb. I remain agnostic as to whether Spec, TP is projected in PhG or inherently empty.

- (158) O Andriás pérki éna pi to
 the.M.NOM.SG Andrew.M.NOM.SG perhaps FUT.INDF drink.PFV.NPST.3SG the.N.ACC.SG
 iraxí.
 raki.N.ACC.SG
 'Perhaps Andrew will drink the raki.'

In this respect, preverbal subjects behave exactly like topicalized, i.e., CILD-ed objects; the latter can also be separated from a modal particle by the same adverb:

- (159) To iraxí,
 the.N.ACC.SG raki.N.ACC.SG
 pérki éna ta_i pi o
 the.N.ACC.SG perhaps FUT.INDF 3OBJ drink.PFV.NPST.3SG the.M.NOM.SG
 Andriás.
 Andrew.M.NOM.SG
 'As for the raki, perhaps Andrew will drink it.'

As discussed in section 3.3.1.8, Rizzi (1997 et seq.) proposes that preverbal topics are hosted in a dedicated A'-position, TopP in the LP, between ForceP and FinP. I adopt his arguments concerning the position of topics and assume that preverbal topicalized constituents such as CILD-ed objects are hosted in TopP in the LP in PhG as well, above C_{OP}P:⁶³

- (160) [_{TopP} [_{XP} higher adverbs [_{C_{OP}P} na/as [_{NegP} čo/ma/mi [_{C_{MP}} a/éna/xa/t_{na/s} [_{TP} clitic+V [_{VP} t_V]]]]]]]]]

The structure in (160) captures the fact that CILD-ed objects can be separated from the verb by higher adverbs, on the assumption that higher adverbs are merged above C_{OP}P and below TopP (indicated as XP in (160)). The proposed structure of (159) is

⁶³ Henceforth, I do not consider the position of the complementizers, *Ø* 'that' and *ær* 'if' in PhG in the LP, since the discussion in the current chapter concerns declarative main clauses, i.e. clauses that lack a complementizer. Recall from section 3.3.2.5.2 that the complementizers *Ø* 'that' and *ær* 'if' were tentatively taken to occupy the highest head in the LP, Force⁰. Preliminary evidence suggests that the structure proposed in (160) can be further expanded as (i), since CILD-ed objects are freely allowed between the complementizer *ær* and the modal particle *na*, as shown in (ii).

- (i) [_{ForceP} *Ø/ær* [_{TopP} [_{C_{OP}P} na/as [_{NegP} čo/ma/mi [_{C_{MP}} a/éna/xa/t_{na/s} [_{TP} clitic+V [_{VP} t_V]]]]]]]]]
- (ii) Rótsin mi [ær ta paráđa_i na ta_i đóćin o
 ask.PFV.PST.3SG 1SG.OBJ if the.N.ACC.PL the.N.ACC.PL SUBJ 3OBJ give.PFV.NPST.3SG the.M.NOM.SG
 nomát ti néka].
 man.M.NOM.SG the.F.ACC.SG woman.F.ACC.SG
 'He asked me if the man will give the money to the woman.'

This point will be taken up again in section 4.5.4.2.

given in (161) with simplified glosses.⁶⁴

- (161) [_{TopP} To iraxí_i, [_{XP} pérki [_{C_MP} éna [_{TP} ta_i pi [_{VP} o Andriás t_V]]]]].
 the raki perhaps FUT.INDF 3OBJ drink the Andrew
 ‘As for the raki, perhaps Andrew will drink it.’ (= (159))

Given these assumptions, the structure in (160) could be hypothesized to capture (158) too:

- (162) [_{TopP} O Andriás [_{XP} pérki [_{C_MP} éna [_{TP} pi [_{VP} t_V to iraxí]]]]].
 the Andrew perhaps FUT.INDF drink the raki
 ‘Perhaps Andrew will drink the raki.’ (= (158))

On this approach, the only difference between a CILD-ed object and a preverbal subject reduces to the fact that only the former is resumed inside TP with a corresponding clitic, which is expected, as there are no subject clitics in PhG.⁶⁵

The assumption that preverbal subjects can be hosted in Spec, TopP finds further support from the fact that they can also be separated from a modal particle by a(nother) CILD-ed constituent. Assuming that TopP is recursive (Rizzi 1997 et seq.), a preverbal subject, such as *o nomát* ‘the man’ in (163), may sit in a higher TopP while a CILD-ed direct object, such as *ta paráða* ‘the money’ may sit in a lower one.

- (163) [O nomát [_{TopP} ta paráða_i, [_{C_MP} a
 the.M.NOM.SG man.M.NOM.SG the.N.ACC.PL money.N.ACC.PL FUT.DEF
 [_{TP} ta_i ðóči [_{VP} t_V ti néka]]]]].
 3OBJ give.PFV.NPST.3SG the.F.ACC.SG woman.F.ACC.SG
 ‘The man should give the money to the woman.’

⁶⁴ Rizzi (2004, 2013, 2014) departs from his earlier work Rizzi (1997) and provides distributional arguments from Italian to distinguish CILD-ed arguments from left-dislocated adverbs and PP modifiers. According to this updated version, left-dislocated adverbs and PP modifiers can fill a dedicated functional projection in the LP distinct from TopP. He calls this projection Mod(ifier)P. However, he also acknowledges that these adverbs and PP modifiers can also act as genuine topics by occupying TopP as well. For more discussion of modifiers, see also Haegeman (2012:72–104). Giorgi (2010) postulates that higher adverbs originate in ModP. According to her, ModP has to be split into an evaluative, an evidential, and an epistemic projection (see also Speas and Tenny 2003; van Gelderen 2004, 2011; Tenny 2006, a.o. who argue that such adverbs are merged in LP—contrary to the proposal of Cinque 1999, who locates them in the INFL-domain). Based on Giorgi (2010), the functional projection labeled as XP in (160)) can be identified as ModP. Since ModP is tangential to the current discussion, I do not discuss it in this section; however, see section 4.5.2.3 where this point is taken up again.

⁶⁵ Following Rizzi (1982), one could assume that *pro* in Spec, TP would have the same role as a clitic in that it would resume the subject. However, as I found no evidence for the existence of *pro* (cf. section 3.3.3.2.4), I do not pursue this issue any further.

The discussion so far reveals that preverbal subjects in PhG can be A'-moved to Spec, TopP—similar to CILD-ed objects, verifying A&A's argument for all NSLs.⁶⁶ However, as I show in the next section, some preverbal subjects which are excluded from TopPs, are hosted in Spec, FocP, another legitimate A'-position for preverbal subjects.

3.3.3.2.6 Hypothesis II.b: preverbal subjects as foci As briefly mentioned in section 3.3.3.2.2, a well-known restriction on CILD is that it cannot apply to bare quantificational elements, such as BNQs, e.g., *nobody*, *nothing*, or bare indefinite objects, e.g., *something*, *someone* (see, a.o., Rizzi 1986a, 1997:290; Cinque 1990, and especially Cinque 1990:74–79 for some apparent exceptions to this; Anagnostopoulou 1997:157; Goodall 2001; Giannakidou 1997, 1998, 2006; Arregi 2003). Here, I only discuss data with BNQ objects:

- (164) a. *Nessuno_i lo_i ho visto.
 no one him have seen.1sg
 int.: 'No one, I saw him.' [Italian (Rizzi 1997:290, ex. (19))]
 b. *Kanenan_i dhen ton_i idha.
 no one not him saw.1sg
 int.: 'Nobody I saw.' [SMG (Giannakidou 2006:350, ex. (49))]

In the absence of a resumptive clitic, and with the most prominent accent of the clause on the BNQ object, the patterns in (164) become grammatical (Rizzi 1997; Giannakidou 1997, 1998, 2006; Roussou and Tsimpli 2006, a.o.):

- (165) a. NESSUNO ho visto.
 no one have seen.1sg
 'No one I saw.' [Italian (Rizzi 1997:290, ex. (20a))]
 b. KANENAN dhen idha.
 no one not saw.1sg
 'Nobody I saw.' [SMG (Giannakidou 2006:372, ex. (115a))]

Rizzi (1997) and Roussou and Tsimpli (2006) associate the left-dislocated BNQs in Italian and SMG with focal stress (but see also Giannakidou 1997, 1998:227–231). Moreover, Rizzi (1997) specifically argues that these left-dislocated BNQs are not located in Spec, TopP (as the lack of clitic resumption suggests) but rather they

⁶⁶ Up to this point, all structural representations provided in this dissertation assume that left-dislocated topics are merged directly in Spec, TopP, but this was only done for ease of exposition. In this dissertation, I follow Rizzi (1997, 2004, 2005), who argues that left-dislocated topics involve A'-movement, where the topicalized constituent A'-binds a null epithet or null constant (see especially Rizzi 1994:158–160) licensed by the coreferential clitic.

occupy Spec, FocP, which, by hypothesis, is sandwiched between two layers of TopPs (see section 3.3.1.8).⁶⁷

Returning to the issue of preverbal subjects, in languages which do not allow CILD of BNQs, such BNQs can also function as preverbal subjects:

- (166) a. Nessuno ha visto Mario.
 nobody has seen Mario
 ‘Nobody saw Mario.’ [Italian (Giannakidou 2006:356, ex. (67b))]
 b. Kanenas dhen idhe ton Petro.
 nobody not saw.3SG Peter
 ‘Nobody saw Peter.’ [SMG (Giannakidou 2006:358, ex. (72b))]

Given that BNQs resist topicalization (as the lack of CILD reveals) (164), preverbal BNQ subjects (166) should also be excluded from Spec, TopP. As presented in section 3.3.3.2.2, this position is adopted by Costa (2004) (and Goodall 2001), who argues that preverbal BNQ subjects in EP (and Spanish) occupy Spec, TP. As I show below, the situation in PhG is different from EP (and Spanish).

Recall from section 2.4.6.1 that BNQs (referred to as “negative polarity items” in that section) can occur both postverbally and preverbally. When BNQ objects occur preverbally, they also precede negation markers and modal particles (167). Crucially, with a preverbal BNQ object a resumptive clitic is ungrammatical. Moreover, when preverbal, BNQ objects are associated with focal stress:

- (167) TÍPUS na mi (*ta) pǐči.
 nothing SUBJ not 3OBJ do.PFV.NPST.3SG
 ‘She should do NOTHING.’

The ungrammaticality of CILD and the presence of focal stress indicate that in PhG, preverbal BNQs are not hosted in TopP, but, as argued by Rizzi (1997), may rather be situated in Spec, FocP. This provides us with evidence for postulating a focus position in the PhG LP. The fact that structures in which a BNQ is both preceded and followed by a topic—such as the CILD-ed indirect object *eséna* ‘you’ and the preposed locative PP *ató so xoríu* ‘in this village’ in (168)—suggests that the relevant FocP occurs between two (possibly recursive) TopPs in PhG (169).⁶⁸

- (168) a. Eséna, típus ató so xoríu, čo éna
 you.SG.ACC nothing this.SG in.the.M.ACC.SG village.M.ACC.SG not FUT.INDF
 si ðókun.
 2SG.OBJ give.PFV.NPST.3PL

⁶⁷ The situation in SMG is slightly different. As Gryllia (2008:11–12, ex. (7)) shows, left peripheral focus in this language is not exclusively exhaustive and/or contrastive; information focus can also be left peripheral. See Skopeteas (2016) for an overview of SMG facts.

⁶⁸ There are no resumptive clitics for PPs in PhG.

- b. Ató so xoríu, típus eséna, čo éna
 this.SG in.the.M.ACC.SG village.M.ACC.SG nothing you.SG.ACC not FUT.INDF
 si ěókun.
 2SG.OBJ give.PFV.NPST.3PL
 ‘They will give nothing to you in this village.’

(169) [_{TopP}* [_{FocP} [_{TopP}* [_{OpP} na/as [_{NegP} čo/ma/mi [_{CMp} a/éna/xa/t_{na/s} [_{TP} clitic+V
 [_{VP} t_V]]]]]]]]]

BNQs can also function as subjects in PhG. They can occur pre- and postverbally (170a–b). In the former case they precede modal markers (170b), but—like preverbal DP subjects—they cannot occur between modal markers and verbs (170c). As is the case with preposed BNQ objects, preverbal BNQ subjects are obligatorily associated with focal stress (170b).

- (170) a. Čo a iěí kanís ti Nerkíza.
 not FUT.DEF see.PFV.NPST.3SG nobody.NOM the.F.ACC.SG Nerkíza.F.ACC.SG
 ‘No one is going to see Nerkíza.’
 b. KANÍS čo a iěí ti Nerkíza.
 nobody.NOM not FUT.DEF see.PFV.NPST.3SG the.F.ACC.SG Nerkíza.F.ACC.SG
 ‘No ONE is going to see Nerkíza.’
 c. *Čo a kanís/KANÍS iěí ti Nerkíza.
 not FUT.DEF nobody.NOM see.PFV.NPST.3SG the.F.ACC.SG Nerkíza.F.ACC.SG

If left-dislocated BNQ objects are excluded from TopP, all other things being equal, preverbal BNQ subjects (as in (170b)) are also expected to be excluded from the same position. Concomitantly, we do not expect them to be hosted in Spec, TP either, given that preverbal BNQ subjects are ungrammatical between a modal particle and a verb (in T⁰) (170c). A natural position for BNQ subjects, then, is the Spec, FocP—similar to left-dislocated BNQ objects. If this hypothesis is correct, then we expect not to find a preverbal BNQ subject and a left-dislocated BNQ object within the same clause (regardless of the order between them), due to the fact that both constituents would compete for Spec, FocP, which—as discussed by Rizzi (1997)—is a non-recursive functional projection (see also Lambrecht 1994 for the uniqueness of focus). This expectation is met. If only one of the two BNQ shown in (171) is in postverbal position, the examples become grammatical (172).

- (171) a. *KANÍS KANÍNA čo a iěí.
 nobody.NOM nobody.ACC not FUT.DEF see.PFV.NPST.3SG
 b. *KANÍNA KANÍS čo a iěí.
 nobody.ACC nobody.NOM not FUT.DEF see.PFV.NPST.3SG

- (172) a. KANÍs čo a iđí kanína.
 nobody.NOM not FUT.DEF see.PFV.NPST.3SG nobody.ACC
- b. KANÍNA čo a iđí kanís.
 nobody.ACC not FUT.DEF see.PFV.NPST.3SG nobody.NOM
 ‘NOBODY is going to see anybody.’

Some additional evidence in favor of the claim that preverbal BNQ subjects are in Spec,FocP comes from the fact that they can be both preceded and followed by constituents hosted in TopPs (173), similarly to left-dislocated BNQ objects (168).

- (173) a. Eséna, KANÍs ató so xoríu, čo éna
 you.SG.ACC nobody.NOM this.SG in.the.M.ACC.SG village.M.ACC.SG not FUT.INDF
 si đóči psomí.
 2SG.OBJ give.PFV.NPST.3SG bread.N.NOM.SG
- b. Ató so xoríu, KANÍs eséna, čo éna
 this.SG in.the.M.ACC.SG village.M.ACC.SG nobody.NOM you.SG.ACC not FUT.INDF
 si đóči psomí.
 2SG.OBJ give.PFV.NPST.3SG bread.N.NOM.SG
 ‘NOBODY will give bread to you in this village.’

The evidence so far indicates that in PhG, the left peripheral FocP should also be recognized as a possible host for a preverbal subject. This position is not confined to preverbal BNQ subjects: non-quantificational subjects, e.g., DP-subjects, can also be left-dislocated to Spec,FocP (175), on par with left-dislocated DP objects which do not give rise to CILD) (174) (see also section 3.4.2.3 for another structural difference between CILD and focalization). In this case, the preposed constituent is in clear opposition to another entity, hence it functions as an exhaustive/contrastive focus expression.

- (174) TON ANDRIÁ a strínsu (jox ti
 the.M.ACC.SG Andrew.M.ACC.SG FUT.DEF invite.PFV.NPST.1SG not the.F.ACC.SG
 Nerkíza.).
 Nerkíza.F.ACC.SG
 ‘I am going to invite ANDREW(, not Nerkíza).’
- (175) O ANDRIÁS a mi strínsi (jox
 the.M.NOM.SG Andrew.M.NOM.SG FUT.DEF 1SG.OBJ invite.PFV.NPST.3SG not
 i Nerkíza).
 the.F.NOM.SG Nerkíza
 ‘ANDREW is going to invite me(, not Nerkíza).’

The claim that the preverbal subject in (175) sits in Spec, FocP is supported by the fact that the co-occurrence of a preposed BNQ object and a preverbal DP subject receiving an exhaustive focus interpretation is once again ungrammatical. This ungrammaticality follows from the fact that both constituents are competing for the same position, namely Spec, FocP:

- (176) a. * *TÍPUS o ANDRIÁS čo a mi*
 nothing the.M.NOM.SG Andrew.M.NOM.SG not FUT.DEF 1SG.OBJ
ďóči (jox i Nerkíza).
 give.PFV.NPST.3SG not the.F.NOM.SG Nerkíza.F.ACC.SG
- b. * *O ANDRIÁS TÍPUS čo a mi*
 the.M.NOM.SG Andrew.M.NOM.SG nothing not FUT.DEF 1SG.OBJ
ďóči (jox i Nerkíza).
 give.PFV.NPST.3SG not the.F.NOM.SG Nerkíza.F.ACC.SG
 int. ‘ANDREW is going to give me nothing(, not Nerkíza.)’

Finally, similar to preverbal BNQs (168, 173), a DP subject interpreted as an exhaustive focus can be preceded and followed by topic expressions (177), confirming our earlier conclusion about the relative order of TopPs and FocP (cf. (169)).

- (177) a. *Eséna, o ANDRIÁS ató so*
 you.SG.ACC the.M.NOM.SG Andrew.M.NOM.SG this.SG in.the.M.ACC.SG
xorú, a si yrévi (jox i
 village.M.ACC.SG FUT.DEF 2SG.OBJ look.after.IPFV.NPST.3SG not the.F.NOM.SG
Nerkíza).
 Nerkíza.F.ACC.SG
- b. *Ató so xorú, o ANDRIÁS*
 this.SG in.the.M.ACC.SG village.M.ACC.SG the.M.NOM.SG Andrew.M.NOM.SG
eséna, a si yrévi (jox i
 you.SG.ACC FUT.DEF 2SG.OBJ look.after.IPFV.NPST.3SG not the.F.NOM.SG
Nerkíza).
 Nerkíza.F.ACC.SG
 ‘In this village, ANDREW is going to look after you(, not Nerkíza.)’

The discussion so far has provided empirical evidence for postulating two LP A'-positions: Spec, TopP and Spec, FocP. Both can function as legitimate preverbal subject positions in PhG. Under the definition in (68), when a subject is hosted in one of these positions, a non-neutral SVO clause emerges.

In the next section, I discuss one particular restriction on left peripheral subjects: DP-subjects are excluded from the lower TopP, which is dominated by FocP

(169). This gives rise to a subject/non-subject asymmetry in eligibility for this position, which may be accounted for by postulating the existence of a dedicated subject position, SubjP, along the lines of Cardinaletti (2004 et seq.) and Greco (2013).

3.3.3.2.7 Hypothesis III: SubjP There is an ordering restriction between non-subjects in Spec, FocP and DP-subjects that do not receive a focus interpretation; such a DP-subject is grammatical in a position preceding a focal non-subject but it is ungrammatical in a position following it. This suggests that if FocP projects, the lower TopP in (169) is not accessible to DP-subjects.

Consider first the interaction between preverbal BNQ objects and non-contrastive DP-subjects. As the contrast between (178a–b) shows, only the order “subject > BNQ” object is grammatical in preverbal position. If, on the other hand, one of the two constituents is in the postverbal position, the resulting patterns are grammatical (178c–d).

- (178) a. O Andriás típus čo ग्रévi.
 the.M.NOM.SG Andrew.M.NOM.SG nothing not want.IPFV.NPST.3SG
 ‘Andrew wants NOTHING.’
- b. *Típus o Andriás čo ग्रévi.
 nothing the.M.NOM.SG Andrew.M.NOM.SG not want.IPFV.NPST.3SG
- c. O Andriás čo ग्रévi típus.
 the.M.NOM.SG Andrew.M.NOM.SG not want.IPFV.NPST.3SG nothing
 ‘Andrew does not want anything.’
- d. Típus čo ग्रévi o Andriás.
 nothing not want.IPFV.NPST.3SG the.M.NOM.SG Andrew.M.NOM.SG
 ‘Andrew wants NOTHING.’

The ungrammaticality of (178b) cannot be accounted for by saying that the DP-subject and the BNQ compete for Spec, FocP, since then we would expect (178a) to be ungrammatical too, contrary to fact. Moreover, there is also no reason to assume that the DP-subject in examples (178a–b) is interpreted as a focal element. Therefore, under the analysis given in section 3.3.3.2.5, it is, at first glance, reasonable to assume that the DP-subjects in (178a–b) are in two different Spec, TopPs, one higher (178a) and one lower (178b) than FocP, and only the latter gives rise to ungrammaticality (glosses simplified):

- (179) a. [_{TopP} O Andriás [_{FocP} típus [_{NegP} čo [_{TP} ग्रévi]]]].
 the Andrew nothing not wants
- b. * [_{FocP} Típus [_{TopP} o Andriás [_{NegP} čo [_{TP} ग्रévi]]]].
 nothing the Andrew not wants

However, on this approach, the ungrammaticality of (178b) comes as a surprise, as CILD-ed objects which are presumably hosted in the lower Spec, TopP, do not give rise to the same ungrammaticality:

- (180) [_{FocP} Třpus [_{TopP} eséna, [_{NegP} čo [_{TP} si ěókán]]]].
 nothing you.SG.ACC not 2SG.OBJ give.PFV.PST.3PL
 ‘They gave NOTHING to you.’

Note moreover that the ungrammaticality of (178b) does not depend on the fact that Spec, FocP is occupied by a BNQ; if FocP hosts a regular DP-constituent, a preverbal DP subject immediately below FocP is also ungrammatical (181a). On the other hand, a DP-subject preceding a DP focus expression is grammatical (181b).

- (181) a. *TON ANDRIÁ i néka a
 the.M.ACC.SG Andrew.M.ACC.SG the.F.NOM.SG woman.F.NOM.SG FUT.DEF
 strıngsi.
 invite.PFV.NPST.3SG
 b. I néka, TON ANDRIÁ a
 the.F.NOM.SG woman.F.NOM.SG the.M.ACC.SG Andrew.M.ACC.SG FUT.DEF
 strıngsi.
 invite.PFV.NPST.3SG
 ‘The woman is going to invite ANDREW(, not Nerkiza).’

The contrast in (181a–b) dissolves if a DP focus expression co-occurs in preverbal position with a CILD-ed object. Irrespective of the order between the two elements, both structures are grammatical.

- (182) a. TON ANDRIÁ ta síra, a ta
 the.M.ACC.SG Andrew.M.ACC.SG the.N.ACC.PL secret.N.ACC.PL FUT.DEF 3OBJ
 ipó.
 tell.PFV.NPST.1SG
 b. Ta síra, TON ANDRIÁ a ta
 the.N.ACC.PL secret.N.ACC.PL the.M.ACC.SG Andrew.M.ACC.SG FUT.DEF 3OBJ
 ipó.
 tell.PFV.NPST.1SG
 ‘I am going to tell the secrets to ANDREW(, not to Nerkiza).’

From the above discussion, as a first approximation, we can conclude that preverbal subjects are excluded from the (lower) TopP following FocP (183a), but they can occur in the (higher) TopP preceding FocP (183b). Non-subject CILD-ed constituents, however, can occur both in higher and lower TopPs (183c).

is fulfilled as the *wh*-phrase and the verb are in a spec-head configuration, and both the subject (186a) and the CLLD-ed object (186b) are hosted in a higher Spec, TopP.

The *Wh*-Criterion has been challenged by empirical evidence in the literature. Cardinaletti (2007), for instance, shows that the higher adverbs of Cinque (1999) can occur between *wh*-phrases and verbs without any loss of grammaticality, suggesting that the *wh*-phrase and the verb are not in a spec-head relation; hence the *Wh*-Criterion seems to be violated without giving rise to ungrammaticality:

- (187) a. Cosa francamente si poteva evitare?
 what frankly si could avoid?
 b. Cosa forse potevamo evitare?
 what perhaps we could avoid?

[Italian (Cardinaletti 2007:61, ex. (15))]

Cardinaletti (2007) formulates a generalization regarding the ungrammaticality of DP-subjects between a *wh*-phrase and the verb (i.e., (185a)): only strong subjects are excluded from occurring between a *wh*-phrase and the verb in a *wh*-question. Recall from section 3.3.3.2.3.1 that, according to Cardinaletti, strong preverbal subjects in Italian are hosted in a dedicated subject position, Spec, SubjP, in the higher INFL-domain.⁶⁹ Building on her previous arguments, Cardinaletti (2007) concludes that only strong subjects occupying Spec, SubjP are excluded from occurring between a *wh*-phrase, which occupies Spec, FocP, and the verb, which occupies T⁰.

More recently, Greco (2013, to appear) provides a formal analysis for Cardinaletti's generalization about strong subjects. Greco (2013) observes that preverbal subjects are not only excluded from a position between a *wh*-phrase and the verb in *wh*-questions, but they also give rise to ungrammaticality in other constructions such as focus fronting (188) and free relatives (189).

- (188) Focus-fronting
 a. ?? SOLO BISCOTTI Ezra mangia (non solo patatine fritte).
 only cookies Ezra eats (not only french fries).
 b. SOLO BISCOTTI mangia Ezra (non solo patatine fritte).
 only cookies eats Ezra (not only french fries).

[Italian (Greco 2013:43, ex. (52))]

- (189) Free relatives
 a. *? So bene [chi Ezra conosce].
 I know well who Ezra knows.

⁶⁹ Even though *egli* is syntactically weak, its occurrence between a *wh*-phrase and a verb gives rise to an ungrammatical structure (cf. (137a)). Cardinaletti (2004) suggests that *egli* also occupies Spec, SubjP.

- b. So bene [chi conosce Ezra].
I know well who Ezra knows.

[Italian (Greco 2013:41, ex. (44))]

Greco's unified answer for the ungrammaticality of (185a, 188a, 189a) is based on Rizzi's (2004) system of feature-based RM (see also Starke 2001), according to which A'-elements are split up into at least two general subclasses; those with "quantificational" features and those with "non-quantificational" features. For example foci and (interrogative) *wh*-elements are quantificational, whereas topics, and modifiers are non-quantificational. This typology results in a number of sets of elements which display similar behavior with respect to RM (from Rizzi 2004:243):

(190) A'-elements:

- a. Quantificational: *wh*, neg, measure, focus, ...
- b. Non-quantificational:
 - i. Modifier: evaluative, epistemic, neg, frequentative, celerative, measure, manner, ...
 - ii. Topic

According to this modified version of RM, which is referred to as feature-based RM, A'-elements endowed with identical feature compositions in (190) count as interveners for each other (see section 3.3.1.5 for more on RM). Greco (2013) also adopts Cardinaletti's (1994 et seq.) argument that preverbal strong subjects in Italian are hosted in Spec, SubjP in a higher portion of the INFL-domain. Similar to other A'-positions, such as Spec, FocP or Spec, TopP, he proposes that Spec, SubjP is also an A'-position. Recall that for Cardinaletti (1994 et seq.), SubjP is associated with the Subject of Predication feature. Greco (2013) thus assumes that this Subject of Predication feature is quantificational, and updates Rizzi's (2004) taxonomy of A'-elements accordingly:

(191) A'-elements:

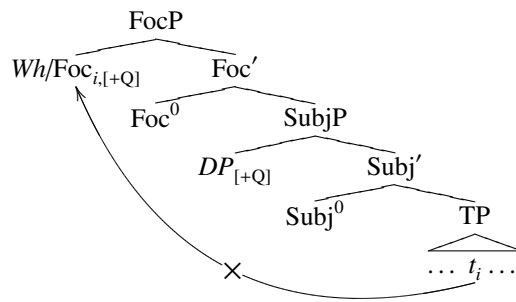
- a. Quantificational: *wh*, neg, measure, focus, **SubjP subjects**, ...
- b. Non-quantificational:
 - i. Modifier: evaluative, epistemic, neg, frequentative, celerative, measure, manner, ...
 - ii. Topic

(Greco 2013:77, ex. (110))

According to (191) subjects hosted in Spec, SubjP are potential interveners for movement of other quantificational A'-elements. As this classification suggests, the ungrammaticality of (185a, 188a, 189a) reduces to a violation of RM: subjects in SubjP

are endowed with the quantificational feature ([+Q]), on par with *wh*-phrases and focus phrases. As such, these subjects block (interrogative or relative) *wh*- and focus-movement to Spec, FocP, as shown schematically in (192).⁷⁰

(192)



(adapted from Greco 2013:79, ex. (113))

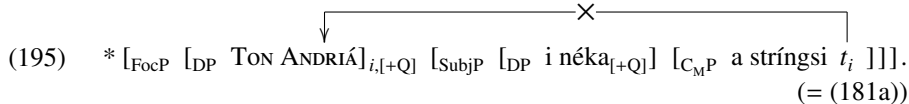
By adopting the analysis of Greco (2013, to appear) presented above, we can neatly capture the subject/non-subject asymmetry in PhG focus constructions given in (183–184), without appealing to extra stipulations that assume differences between topicalized constituents. Let us assume, in line with Cardinaletti (1994 et seq.), Rizzi (2006) and Greco (2013, to appear), that in PhG a SubjP is situated below FocP and above C_{OP}P, and that this position hosts DP-subjects of predication endowed with a [+Q]-feature (see also Ledgeway 2011 for arguments for locating SubjP in the LP). This means that in an SVO clause, preverbal non-focal DP-subjects can either be left-dislocated to a TopP above FocP or be situated in Spec, SubjP (similar to the analysis of Italian SVO clauses proposed by Cardinaletti 2004:143). As elaborated on in section 3.3.3.2.8, the pragmatically neuter nature of certain SVO clauses can be explained by assuming that the subject sits in Spec, SubjP. Before further pursuing this point, let us update the structures in (183–184) to those in (193–194): only subjects that are hosted in Spec, SubjP are ungrammatical under FocP:

- (193) a. * [_{TopP} non-subject [_{FocP} XP [_{SubjP} subject [... [_{TP} ...]]]]]
 b. [_{TopP} subject [_{FocP} XP [_{TopP} non-subject [... [_{TP} ...]]]]]
 c. [_{TopP} non-subject [_{FocP} XP [_{TopP} non-subject [... [_{TP} ...]]]]]

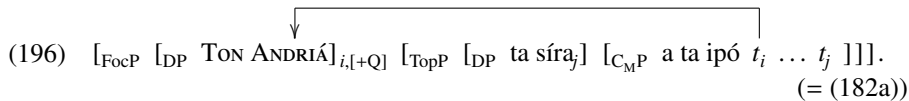
- (194) a. * [_{FocP} XP [_{SubjP} subject [... [_{TP} ...]]]]
 b. [_{FocP} XP [_{TopP} non-subject [... [_{TP} ...]]]]

⁷⁰ Greco's (2013) analysis assumes that free relatives have the structure [_{DP} [_{CP} ...]], and that relative operators do not occupy D⁰ but are attracted to Spec, CP (as proposed by Groos and van Riemsdijk 1981 and much subsequent work).

The updated structures in (193–194) now reduces the ungrammaticality of (181a) to a violation of RM: a DP-subject endowed with [+Q]-feature in Spec, SubjP intervenes between the head and the foot of the chain created by focus movement, as schematically represented (with simplified glosses) in (195).



Notice that within this analysis, non-subject constituents which are CILD-ed to the lower TopP immediately below FocP do not to violate RM, since topics are non-quantificational (Rizzi 1997:291–295, section 5). As the structure of (182a) given in (196) with simplified glosses illustrates, this is endorsed in PhG.



I therefore conclude among the two positions immediately below FocP, i.e., SubjP and TopP, subjects can only target SubjP.

So far, the account I provided for subjects below FocP has remained silent as to why a subject cannot target the lower TopP (below FocP), though it can move to the higher TopPs (above FocP). Even though I acknowledge that this issue should be addressed in more detail, a tentative answer may be suggested in terms of the Anti-Locality Hypothesis (Abels 2003; Grohmann 2003), which is a condition on the distance that a movement operation can span:

- (197) Anti-Locality Hypothesis
 Movement must not be too local. (Grohmann 2003:26)

The definition of when movement is too local varies among authors. In Grohmann's (2003) approach, movement is considered too local if it takes place within VP, TP, or CP (his "prolific domains"); according to Pancheva and Tomaszewicz (2010), movement is too local if the specifier of XP is adjoined to XP. A relevant observation along the lines of the second definition is made by Lasnik and Saito (1992:110–111) and Saito and Murasugi (1999). These authors observe that in English, the subject reflexive of an embedded clause cannot be bound by the subject of the superordinate clause, because the anaphor and the antecedent are not clause-mates (section 3.3.1.6; (198a)). Surprisingly, however, if the object reflexive of an embedded clause occurs preverbally, it can be bound by the subject of a superordinate clause (198b).

- (198) a. John_i thinks that himself_i likes Mary.
 ≡ "John thinks that he likes Mary."

- b. John_i thinks that himself_i, Mary likes.
 ≡ John thinks that Mary likes him.”

Along the lines of Lasnik and Saito (1992) and Saito and Murasugi (1999), we can understand the patterns in (198a–b) in the following way: in (198b) the object reflexive *himself* has moved to a position close enough to the matrix subject, *John*, to enable binding of *himself* by *John*:

- (199) John thinks that [_{TP} himself_i [_{TP} Mary likes *t_i*]]. (= (198b))

Since the subject reflexive cannot be bound the same way, we can conclude that a representation such as (199), which would create a similar configuration for the subject reflexive, is not available:

- (200) * John thinks that [_{TP} himself_i [_{TP} *t_i* likes Mary]]. (= (198a))

This suggests that a subject cannot be short-distance topicalized. Observe that subject topicalization in (200) would be string vacuous. As the structures in (199–200) suggest, Lasnik and Saito (1992) and Saito and Murasugi (1999) take topicalization as adjunction to TP (in their terms IP). In (198b) movement of the subject from Spec, TP to a TP- adjoined position is taken to be too local.

The analysis of Lasnik and Saito (1992) and Saito and Murasugi (1999) is insightful, even though it cannot be easily extended to the current analysis, given that the cartographic approach rejects (multiple) adjunction of topics. On the other hand, if we assume that Spec, SubjP is immediately dominated by the lowest TopP (TopP > SubjP), then we could also assume that movement from Spec, SubjP to the lowest Spec, TopP is too local, whereas subject movement to higher TopPs is not.

3.3.3.2.8 SubjP and categorical statements Postulating Spec, SubjP as an obligatory landing site for preverbal subjects may also shed light on two puzzling facts mentioned in sections 3.2.2.3 and 3.2.3. The first, from section 3.2.3, is that indefinite subjects in SVO clauses always receive a specific/partitive (a specific *x*/one of the *x*'s ...) reading in PhG, whereas in VSO clauses, they naturally receive existential reading (there is at least an *x* such that ...), though specific/partitive readings are also possible. The relevant examples are reproduced from (26) in (201).

- (201) a. A néka čáltsin tis strátis. (SVO)
 a woman.F.NOM.SG sweep.PFV.PST.3SG the.F.ACC.PL road.F.ACC.PL
 ‘A specific woman/ one of the women swept the streets.’
 b. Čáltsin a néka tis strátis. (VSO)
 sweep.PFV.PST.3SG a woman.F.NOM.SG the.F.ACC.PL road.F.ACC.PL
 ‘A woman swept the streets.’/ ‘A specific woman/one of the women ...’

The second fact (from section 3.2.2.3) is that clauses with individual-level predicates and clauses with kind-referring subjects prefer SVO orders. The relevant examples are provided in (202a–b), from (21a) and (20a) respectively.

- (202) a. I Nerkíza katěši Túrčika. (SVO)
 the.F.NOM.SG Nerkiza.F.NOM.SG know.IPFV.NPST.3SG Turkish.N.NOM.PL
 ‘Nerkiza knows Turkish.’
- b. I sirtlángi tróni kræs. (SVO)
 the.M.NOM.PL hyena.M.NOM.PL eat.IPFV.NPST.3PL meat.N.ACC.SG
 ‘Hyenas (*Hyaenidae*) eat meat.’

Let us start with the first case (201a–b). Building on the distinction between stage-level and individual-level predicates proposed by Milsark (1974) and Carlson (1977), Diesing (1992) argues that individual-level predicates only allow for presuppositional subjects, whereas stage-level predicates, i.e., predicates which are true at a temporal stage of their subjects, are compatible with both presuppositional and non-presuppositional subjects. For example, in (203a), the bare plural subject is interpreted presuppositionally, in the sense that the set of *opera singers* is presupposed to be non-empty. In other words, a quantification over the set of *opera singers* is presupposed. On the other hand, in (203b), the stage-level predicate *available* does not require a non-empty set of *firemen*. Rather, the existence of *firemen* is asserted. In this sentence no quantification over the set of *firemen* is presupposed.

- (203) a. Opera singers know Italian. (individual-level verbal predicate)
 b. Firemen are available. (stage-level adjectival predicate)
 (Diesing 1992:17–18, ex. (4–5))

Diesing (1992) claims that the distinction between the presuppositional and existential readings of subjects is reflected in the syntax. In particular, she proposes that there is a systematic correspondence between the syntactic position of a subject and its relevant interpretation. This generalization is known as the “Mapping Hypothesis” (Diesing 1992:15, ex. (14)), according to which the semantic interpretation of an indefinite NP (subject) is determined by its location—inside or outside VP. To paraphrase the Mapping Hypothesis informally, we can say that an indefinite DP in TP is presupposed, whereas a DP in VP is existentially interpreted. As for (203a–b), Diesing argues that the subjects of individual-level predicates are like subjects of control predicates and are generated outside VP, while PRO stays in Spec, VP to be θ -marked (204a). The subjects of stage-level predicates, on the other hand, are generated inside VP (and may further raise to e.g., Spec, TP in languages such as English for case/EPP-checking). Subjects that are generated VP-internally introduce an individual into the discourse that gets bound by an existential operator at the edge of

VP (a phenomenon known as “existential closure”; Heim 1982; (204b)). VP-external subjects as in (204a), on the other hand, are outside the domain of existential closure, and they require the existence of an individual in order for the structure to be interpretable.

- (204) a. $[_{TP} \text{Opera singers}_i [_{T^0} [_{VP} \exists [_{VP} \text{PRO}_i \text{ know Italian }]]]]$.
 b. $[_{TP} \text{Firemen}_i [_{T^0} \text{ are } [_{VP} \exists [_{VP} t_i \text{ available }]]]]$.

In languages such as English, VP-internal subjects that move to Spec, TP may reconstruct into their base position; for instance, the bare noun *firemen* is interpreted existentially in (203b, 204b).

The distinction presented above is extended by Ladusaw (1994) to “thetic” and “categorical” statements (building on Kuroda’s 1972 work). According to Ladusaw (1994), a thetic statement consists of one act, namely, the recognition or rejection of material of a statement, whereas a categorical statement consists of “two separate acts, one, the act of recognition of that which is to be made the subject, and the other, the act of affirming or denying what is expressed by the predicate about the subject” (Kuroda 1972:154). Concerning thetic judgments, eventuality descriptions are built at the VP-level and are quantified over by an existential operator at the edge of VP, which unselectively binds all clause-mate indefinite variables in its c-command domain. The subject of an eventuality also falls in the scope of the existential closure operator and is interpreted as a non-quantificational element. On the other hand, the subject of a categorical statement is understood as a quantificational element whose role is to provide a subject of predication. Recently, Greco (2013, to appear) and Bianchi and Chesi (2014) have argued with evidence from Italian that subjects situated in SubjP are the syntactic counterpart of Ladusaw’s categorical statements, i.e., statements in which subjects are outside the scope of the domain of existential closure. On the other hand, the subject of a thetic statement is situated in its base position, Spec, VP, where it is in the scope of the existential operator.

The asymmetry between (201a–b) neatly follows when we adopt Bianchi and Chesi’s (2014) and Greco’s (2013; to appear) analysis for Italian. As (201a) shows, preverbal indefinite subjects (i.e., those which occur in the SVO order) seem to disallow a thetic statement in PhG; rather, they foreground a particular individual as the subject of predication which is interpreted as specific (see also Ledgeway 2011). On the other hand, a VSO clause (201b) is licit as a thetic statement; the existence of the referent of the indefinite subject in this clause is asserted. In other words, SVO always gives rise to categorical judgments, whereas thetic judgments can be compatible with VSO order (as in other various other NSLs, such as SMG; Alexiadou 1996:38, 1997:59; Alexiadou and Anagnostopoulou 1998:506, or Italian; Greco 2013:72–75). This follows, if we assume in line with Greco (2013) that in (neutral) SVO clauses, subjects are situated in Spec, SubjP and therefore outside the scope of the VP-edge

existential operator. Moreover, if we assume, again in line with Greco (2013), that in the VSO order, subjects are situated in Spec, VP, hence within the scope of this operator, we can capture why they are interpreted existentially. The structures of (201a–b) are given below in (205a–b) respectively.

- (205) a. [_{SubjP} [_{DP} A néka]_i [_{TP} čáľtsin [_{VP} ∃ [_{VP} *t_i* tis strátis]]]]. (= (201a))
 b. [_{TP} Čáľtsin [_{VP} ∃ [_{VP} a néka tis strátis]]]]. (= (201b))

The analysis provided above with respect to thethetic/categorical distinction also extends to the examples in (202). Let us look at (202a) first. As argued in Ladusaw (1994), individual-level predicates, such as *know*, are not descriptions of an eventuality, so they cannot be part of athetic statement. Rather, such predicates correspond to categorical judgments which induce quantificational subjects. From this, it follows that subjects of clauses with individual-level predicates are not bound by the existential operator. If quantificational subjects are hosted in Spec, SubjP, as hypothesized above, we can now understand why clauses with individual-level predicates also require SVO order in PhG (or in SMG, see Alexiadou 1996, 1999; Alexiadou and Anagnostopoulou 1998). Since VP-internal subjects are in the scope of the existential operator and thus interpreted existentially, a VSO order is incompatible with individual-level predicates.

Consider next (202b). Krifka et al. (1995:72ff) argue that clauses with kind-referring NP subjects express generic statements. These generic statements receive a categorical judgment, which appear with a subject of predication (Kuroda 1972; Ladusaw 1994; Alexiadou 1996 et seq.; Giannakidou 1999a). Categorical statements require an individual as a subject, and kind-referring subjects satisfy this requirement. As clauses with kind-referring subjects are categorical statements, their subjects should also be in Spec, SubjP, hence outside the scope of the existential operator at the VP-edge.

3.3.3.3 Interim summary

In section 3.3.3, I investigated the nature of subject positions in PhG. I showed that postverbal subjects are hosted in their first merge position, Spec, VP. Preverbal subjects, on the other hand, are invariably in the LP, where they can target SubjP, FocP or the higher TopP. Under the definition in (68), I identified clauses which involve subjects in Spec, TopP and Spec, FocP as non-neutral SVO clauses, and clauses which involve subjects in Spec, SubjP as neutral SVO clauses. The hierarchy of functional projections in the PhG LP discussed so far is provided in (206).

- (206) $[_{\text{Top}^*} [_{\text{FocP}} [_{\text{Top}^*} [_{\text{SubjP}} [_{\text{C}_{\text{OpP}}} \text{na/s} [_{\text{NegP}} \check{\text{o}}/\text{ma}/\text{mi} [_{\text{C}_{\text{MP}}} \text{a}/\acute{\text{e}}\text{na}/\text{xa}/\text{t}_{\text{na/s}} [_{\text{TP}} \text{clitic}+\text{V} [_{\text{VP}} \text{t}_V]]]]]]]]]]$

In the next section, I investigate non-neutral SOV and O-initial word orders in more detail; specifically, I look at whether all topic positions have the same interpretive function of reintroducing an entity which has already been specified in the discourse. The discussion reveals yet another potential subject position.

3.4 Expanding the LP: evidence from O-initial word orders

This section focuses on the non-neutral SOV orders and O-initial orders whose general properties were presented in sections 3.2.4.1–3.2.4.3. Assuming that in these clauses V^0 -to- T^0 movement canonically takes place, we can reasonably assume that they involve left-dislocated elements. In terms of information structure, I identified two types of left-dislocated elements: topic and focus.

As argued in sections 3.3.3.2.5–3.3.3.2.6 and summarized in the representation in (206), there can be multiple topics per clause. An obvious question that arises is whether all topics share the same discourse function, or if different topic positions host constituents with different interpretations. I address this point here.

In the literature, various classifications of topics have been proposed (Reinhart 1981; Givón 1983; Lambrecht 1994; Benincà and Poletto 2004; Frascarelli and Hinterhölzl 2007; Bianchi and Frascarelli 2010, a.o.) The present section is based on the classification by Frascarelli and Hinterhölzl 2007; henceforth F&H). Two sub-types of topic with different discourse properties should be identified in PhG: the “shifting/aboutness” topic and the “familiar” topic (to be defined below). This distinction is reflected in the syntax in that each type of topic is hosted in distinct functional projections in the LP. A third type of topic identified by F&H is the “contrastive” topic. However, evidence suggests that there are no genuine contrastive topics in PhG. Nevertheless, there is a recursive functional projection in the PhG LP which hosts constituents receiving various contrastive readings. Such constituents, however, display properties of both topics and foci. I label this projection ContrastP^* (following Sitaridou and Kaltsa 2014). The ordering restrictions uncovered here will reveal that (206) should be refined as in (207).

- (207) $[_{\text{TopP}_{[\text{Shifting}]}} [_{\text{ContrastP}^*} \text{páli} [_{\text{TopP}_{[\text{Familiar}]}} [_{\text{FocP}} [_{\text{TopP}_{[\text{Familiar}]}} [_{\text{SubjP}} [_{\text{C}_{\text{OpP}}} \text{na/s} [_{\text{NegP}} \check{\text{o}}/\text{ma}/\text{mi} [_{\text{C}_{\text{MP}}} \text{a}/\acute{\text{e}}\text{na}/\text{xa}/\text{t}_{\text{na/s}} [_{\text{TP}} \text{clitic}+\text{V} [_{\text{VP}} \text{t}_V]]]]]]]]]]]]$

The majority of the generalizations and discussions in this section are based on naturally occurring examples extracted from the recordings in the dialect (section 1.5.1).

3.4.1 A hierarchy of topic and focus, and types of topics

In Rizzi's (1997) original study, the recursive topic projections (see section 3.3.1.8) were tacitly treated as interpretatively homogeneous, an idea which has been maintained so far in this section. However, because other left-peripheral functional projections, such as ForceP, FocusP or FinP are not recursive, admitting that TopP is recursive amounts to a moot conclusion. Not unexpectedly, this conclusion has been challenged on empirical grounds, and different proposals in favor of a refined typology of topics have been put forward (e.g., Benincà and Poletto 2004; Frascarelli and Hinterhölzl 2007; Jiménez-Fernández and Miyagawa 2014). In particular, F&H distinguish three sub-types of topics on the basis of evidence from Italian and German: shifting topic, contrastive topic and familiar topic. Although all three topic types express pragmatic "aboutness" (Reinhart 1981), they exhibit different interpretive functions and different intonational contours. Moreover, they occur in a fixed position in the LP:

- (208) [_{ShiftP} shifting topic_[+aboutness] [_{ContrP} contrastive topic [_{FocP} [_{FamP*} familiar topics [[_{TP} ...]]]]]]]

(adapted from F&H:97, ex. (8))

As the structure in (208) suggests, among the three topic sub-types, only familiar topics allow multiple realizations. In the next three sections, I provide a brief definition of each type of topic.

3.4.1.1 Shifting topic

A shifting topic expresses "a newly introduced, newly changed or newly returned to" referent (Givón 1983:8). Shifting topics do not involve a set of different entities that are being contrasted. The Spanish example in (209) illustrates this.

- (209) Has estado hablando de Juan durante horas ... ¿Y tu hermano cómo
have.2SG been talking of Juan during hours and your brother how
está?
be.3SG
'You have been talking about John for hours ... (as for) your brother, how is he?'

[Spanish (Jiménez-Fernández 2016:177, ex. (3))]

In (209), the relevant DP, *tu hermano* 'your brother', shows a shift of topic with respect to the previous context, without establishing a contrast with Juan in the previous clause. Shifting topics characteristically have L*+H tone pitch accent in certain languages (see F&H:90–91 for Italian, Jiménez-Fernández 2016:176 for Spanish).

3.4.1.2 Contrastive topic

A contrastive topic expresses “an element that induces alternatives which have no impact on the focus value and creates oppositional pairs with respect to other topics [references omitted]” (F&H:88). This is illustrated with the following example from Italian:⁷¹

(210) Context: A farm producing a set of goods that are known to the people involved in the conversation.

La frutta la regaliamo, la verdura la vendiamo.
 the fruit it give for free the vegetables it sell
 ‘We give fruit for free, while we sell the vegetables.’

[Italian (Benincà and Poletto 2004:67, ex. (47a))]

In (210), both objects, *la frutta* ‘the fruit’ and *la verdura* ‘the vegetables’, are CILD-ed in distinct clauses, without one being introduced to replace or correct the other. They are contrasted to each other without this yielding an exhaustive reading, i.e., without one “canceling” the other. The characteristic tone pitch accent of contrastive topics in Italian and Spanish is H* (see F&H:92 for Italian, Jiménez-Fernández 2016: 176 for Spanish).

3.4.1.3 Familiar topic

Familiar or given topics express referents which have been introduced at some point prior in the discourse and are simply repeated for the purpose of topic continuity, or to resume backgrounded information. Their introduction in the discourse can but need not come through the explicit mentioning of the expression in the previous discourse but it can also be inferred from other means as well (see Prince 1981). A familiar topic is illustrated by an example from Spanish:

(211) A: Espero que la cena esté lista ya. Estoy muerto de hambre.
 hope that the dinner be.3sg ready already be.1sg dead of hunger
 ‘I hope dinner is ready. I am starving.’

B: La cena la he preparado yo ya.
 the dinner it have.1sg prepared I already
 ‘I have already prepared dinner.’

[Spanish (Jiménez-Fernández 2016:178, ex. (7))]

⁷¹ Benincà and Poletto (2004) label the interpretation which such fronting gives rise to as the “List Interpretation”. See especially Benincà and Poletto (2004:27, fn. 16) where they state that “[t]his class of Topics possibly corresponds to what has been named Contrastive Topic by some linguists [...]”.

In (211B), the DP *la cena* ‘dinner’ in B’s utterance is the repetition of the entity which has just been mentioned by A; hence, *la cena* merely conveys shared information. Familiar topics are characterized by an L* tone pitch accent in Italian (F&H:93–94) and Spanish (Jiménez-Fernández 2016:176).

Among the three types of topic, only familiar topics are recursive (F&H:97). To illustrate, in the example below both constituents *su questa* ‘on this’ and *loro* ‘they’ are presented as familiar topics by F&H:

- (212) E su questa, loro, i gladiatori lottavano.
and on this they the gladiators fight.PST.3PL
‘And gladiators, they would fight on this.’

[Italian (F&H:97, ex. (xii))]

In the next section, based on data from the spoken corpus, I show that shifting and familiar topics can be preliminarily identified in PhG as well. It should be noted that the classification I propose in this study is based merely on the discourse function that a left-dislocated constituent has. Due to the fact that the recordings are not clear enough for providing pitch accents in all cases provided below, the question whether these topic types are associated with a different tone pitch accents in PhG or not is not addressed in this dissertation.

3.4.2 A typology of PhG topics

3.4.2.1 Shifting and familiar topics

Two of the sub-types of topic identified by F&H can quite straightforwardly be identified in PhG main clauses. These are “shifting topics” and “familiar topics”. In (213b), I illustrate a topic that is best identified as a shifting topic.

- (213) Shifting topic

The speaker is explaining how weddings would be held in her village.

- a. Pérkan ti nífi. Samú erxúsanti
take.PFV.PST.3PL the.F.ACC.SG bride.F.ACC.SG when come.IPFV.PST.3PL
so spíti toplandínkani taa en bro,
to.the.N.ACC.SG house.N.ACC.SG gather.IPFV.PST.3PL INTRJ most front
þeknínkan ta sázæ, píran
take.IPFV.PST.3PL the.N.ACC.PL instrument.N.ACC.PL take.PFV.PST.3PL
ti nífi tejí, čaltinkán ta.
the.F.ACC.SG bride.F.ACC.SG COMP play.IPFV.PST.3PL 3OBJ
‘They would take the bride. When they reached home, they would gather up in front (of the house), they would take the musical instruments, and they would play them since they took the bride.’

- b. To γ ambrú_i, pitázkán ta_i so
 the.M.ACC.SG groom.M.ACC.SG send.IPFV.PST.3PL 3OBJ to.the.N.ACC.SG
 spíti pésu.
 house.N.ACC.SG inside
 ‘The groom, they would send him into the house (to bring the bride out).’
 [#5:03.40–04.02]

Prior to the exchange above, the speaker had already begun to talk about brides in wedding ceremonies in the village, e.g., what brides do during the ceremony and what other activities take place in this context. The excerpt in (213a) starts with conveying information about the friends/family members of the groom who would come and take the bride from her house. After this information is given, i.e., in (213b), the speaker changes the theme from the bride to *to γ ambrú* ‘the groom’ and then talks about what people involved in the ceremony do to the groom (this theme continues after the given excerpt). An important point is that the left-dislocated entity ‘the groom’ is introduced into the conversation, although a wedding by default implies the existence of a groom. This entity signals a switch from the previous context, which is about the bride, to a new one, which is about the groom. According to this function, ‘the groom’ qualifies as a shifting topic. The topic analysis of this left-dislocated constituent is also confirmed by the fact that the construction involves CILD, as the resumptive clitic *ta* reveals.

The excerpt in (214) below illustrates a familiar topic, i.e., an element that is part of the common ground shared by the speaker and the addressee.

(214) Familiar topic

The speaker gives information on how the wheat the villagers harvested would be excised back in Varašos.

- a. θ erískam to kočí, θ eknínkam ta an
 harvest.IPFV.PST.1PL the.N.ACC.SG wheat.N.ACC.SG put.IPFV.PST.1PL 3OBJ as
 šaxrás. Istérku rxútun o Túrkus, ...
 stack.M.NOM.SG then come.IPFV.PST.3SG the.M.NOM.SG Turk.M.NOM.SG
 ‘We would harvest the wheat and keep it as a stack. Then the Turk would
 come ...’
- b. To kočí_i, γ ref \acute{t} ínkin ta_i, pandínkin ta_i
 the.N.ACC.SG wheat inspect.IPFV.PST.3SG 3OBL impress.IPFV.PST.3SG 3OBJ
 to muxúri.
 the.N.ACC.SG seal.N.ACC.SG
 ‘He would inspect the wheat (and) he would impress a seal.’
 [#2:00.03–00.18]

From (214a) the entity *to kočí* ‘the wheat’ is well established in the discourse, as the speaker has mentioned it explicitly. Then the speaker utters a sentence about the Turkish inspector and in (214b) she resumes the previous topic immediately with the preposed DP constituent *to kočí* ‘the wheat’. This strategy is used by the speaker to resume backgrounded information (i.e., the wheat). Again, this DP is resumed inside the comment with a clitic, which is our standard diagnostic for topic-hood of (in)direct object DPs in PhG. These two facts, i.e., that the preposed DP resumes backgrounded information and that it is CILD-ed, constitute evidence for taking this DP as a familiar topic.

The two cases above provide evidence that shifting topics and familiar topics are situated in the PhG LP. The example (215) below further illustrates that shifting topics are located higher than familiar topics in PhG, confirming the conclusion of F&H.

(215) Shifting topic > familiar topic

The speaker is telling a tale about a Sultan and Sultan’s son and daughter. The Sultan had a son and a daughter but as he was getting old, he wanted his son to accede to the throne.

- a. Samú ta íksin i kóri tu, pín
 when 3OBJ hear.PFV.PST.3SG the.F.NOM.SG daughter.F.NOM.SG his go.PFV.PST.3SG
 si čačiyarísa na tanišeftí. I
 to.the.F.ACC.SG witch.F.ACC.SG SUBJ consult.PFV.NPST.3SG the.F.NOM.SG
 čačiyarísa ípin ta na fer tría xiáða
 witch.F.NOM.SG tell.PFV.PST.3SG 3OBJ SUBJ bring.PFV.NPST.3SG three oka
 malí ...
 hair.N.NOM.SG
 ‘When his daughter heard this, she went to the witch to consult with her.
 The witch told her to bring three okas (a unit of measurement of ~1.28kg)
 of hair ...’
- b. To korčóku, čip até_i, pírín ta_i če
 the.N.NOM.SG little girl.N.NOM.SG all them take.PFV.PST.3SG 3OBJ and
 pín ta_i si čačiyarísa.
 bring.PFV.PST.3SG 3OBJ to.the.F.ACC.SG witch.F.ACC.SG
 ‘The little girl took all of them and brought them to the witch.’

[#4:00.19–00.40]

In (215b) above, there are two constituents in preverbal position: the DP subject *to korčóku* ‘the little girl’ and the CILD-ed object *čip até* ‘all these’. The latter constituent, which is resumed by the clitic *ta*, refers to that which the witch has just asked the little girl to bring (i.e., the hair and other things). These objects have just been mentioned in the context, so here the relevant constituent is repeated to create

topic continuity.⁷² The preverbal subject *to korčóku* ‘the little girl’, on the other hand, marks a shift in the conversation. The discourse is still focused on the things the witch asked for when the speaker changes the topic of the conversation to the little girl. Notice that, according to the analysis in section 3.3.3.2.6, this preverbal subject could also be a focus. However, on the grounds that it is not associated with contrast, and that it does not receive focal stress, this possibility should be discarded.

The example in (215) suggest that shifting topics precede familiar topics in PhG, confirming F&H’s claims. In the next section, I investigate the position of shifting and familiar topics with respect to focal constituents in PhG. Although examples with focal constituents are scarce, the data still allow for some generalizations to be made.

3.4.2.2 Shifting and familiar topics co-occurring with focus

In the recordings, there are a few cases that illustrate that shifting topics occur higher than (i.e. precede) focal constituents. One example is provided in (216).

(216) Shifting topic > focus

The speaker speaks about what happened to (most) Greek men during the population exchange.

- a. I néčis čip írtani šíris.
 the.F.NOM.PL woman.F.NOM.PL all come.PFV.PST.3PL widow.F.NOM.PL
 ‘The women all came (to Greece) as widows.’
- b. Sis ándris, KANÍNA čo fíkan.
 from.the.M.ACC.PL man.M.ACC.PL nobody.ACC not leave.PFV.PST.3PL
 Píran ta i askéri. Kanís čo
 take.PFV.PST.3PL 3OBJ the.M.NOM.PL soldier.N.NOM.SG nobody.NOM not
 írtini.
 come.PFV.PST.3SG
 ‘Of the men, they left NO ONE. The soldiers took them. Nobody came.’
 [#3:15.28–15.35]

(216) begins with the comment that women came to Greece as widows after the population exchange (216a). Immediately after this comment, in (216b), the speaker shifts the topic to the men by means of the left-dislocated PP *sis ándris* ‘from the men’. This constituent functions as a shifting topic. This shifting topic is followed by the BNQ object *KANÍNA* ‘nobody/anybody.ACC’, which, as we saw in section 3.3.3.2.6, can

⁷² That this familiar topic appears as a pronoun (which in PhG are identical in form with proximal demonstrative, cf. sections 2.4.2.2 and 2.4.1.4) is also consistent with F&H’s argument (attributed to Pesetsky 1987) that familiar topics typically occur in pronominal form.

only be fronted as a focus. This example confirms that shifting topics are hosted in a position above the position where focus constituents are hosted.

In the corpus there are no instances of shifting topic following a preverbal focus; however, there are many instances in which topic constituents follows a focal element. These can be identified as familiar topics. One example is given below:

(217) Focus > familiar topic

Speaker A has been giving information about how their village in Greece was before the Greek people settled in it after the population exchange. We know from historical data that it was a Turkish settlement previously.

A: a. Ató to xorú mas lénkan ta Kečípaš
 this.sg the.M.ACC.SG village.M.ACC.SG our say.IPFV.PST.3PL 3OBJ Kečípaš
 ‘This village of ours, they would call it Kečípaš ...’

B: ... Kečilér
 ‘Kečiler.’

A: b. ... KANís ató to xorú_i čo
 nobody.NOM this.sg the.M.ACC.SG village.M.ACC.SG not
 lénkin ta_i Kečilér.
 say.IPFV.PST.3SG 3OBJ Kečilér.
 ‘... This village, nobody would call it Kečilér.’

c. I Túrči Kečípaš lénkan ta.
 the.M.NOM.PL Turk.M.NOM.PL Kečípaš say.IPFV.PST.3PL 3OBJ
 ‘The Turks called it Kečípaš.’

[#3:30.27–30.34]

In (217Aa) Speaker A states that their village was called Kečípaš in the past. Speaker B, who is much younger than Speaker A, attempts to correct Speaker A by stating that in fact the name of the village was Kečilér (217B). Then in (217Ab), Speaker A starts her sentence with KANís ‘nobody.NOM’. This quantifier is a focus expression, and it is immediately followed by a CILD-ed direct object: *ato to xorú* ‘this village’, which is resumed within the comment part with the postverbal clitic *ta*. The village has repeatedly been mentioned in the previous discourse, as one token in (217Aa) reveals, so it can be considered as part of the already established information. In (217Ab), it is simply repeated for topic continuity, so it is best considered a familiar topic.

The two examples above verify the order of shifting topics, focal elements and familiar topics proposed by F&H. Shifting topics are pre-focal, while familiar topics seem to be post-focal. This is further confirmed by another instance in the recordings in which a shifting topic, a focal element and a familiar topic co-occur, in this order:

(218) Shifting topic > focus > familiar topic

Within the Pharasiot society, there was a strong tradition according to which brides were not allowed to speak in the house except when they were alone with their husband (on this tradition, see Papadopoulos 2011:69–71). Prior to the excerpt below, the speaker is listing who could speak freely at home; the mother-in-law, the children, and the father-in-law etc.

- a. ... o peθerós kačéfkini.
 the.M.NOM.SG father-in-law.M.NOM.SG speak.IPFV.PST.3SG
 ‘... the father-in-law would speak.’
- b. I nífi típus ynendá tu čo lenkíni.
 the.F.NOM.SG bride.F.NOM.SG nothing front his not say.IPFV.PST.3SG
 ‘The bride would say NOTHING in front of him.’
- c. ... mo ta šéra kačéfkini.
 with the.N.ACC.PL hand.N.ACC.PL speak.IPFV.PST.3PL
 ‘She would speak with her hands.’

[#10:28.53–29.03]

In (218a), the excerpt begins with the statement that the father-in-law could speak at home. Then, in (218b), the speaker proposes a new topic, *i nífi* ‘the bride’. This constituent can best be characterized as a shifting topic. It is followed by the BNQ *típus* ‘nothing’, which functions as the focus of the sentence. Finally, another constituent, the PP *ynendá tu* ‘in front of him’, follows the focus constituent *típus* ‘nothing’. The pronominal in this PP refers to the father-in-law, which is the aboutness topic of the previous clause. This PP qualifies as a familiar topic, as the referent of the pronominal has been mentioned in the previous discourse, and it is not contrastive (see also fn. 72). This example reveals that the order proposed F&H for shifting topics, foci and familiar topics is instantiated in PhG as well.

In my recordings there are no instances of post focal shifting topic, confirming F&H’s hypothesis. However, there are a few examples in which a pre-focal topic should be classified as a familiar topic. This point is illustrated by example (219).

(219) Familiar topic > focus

The speaker is telling a story that involves a little boy, an old woman and the woman’s nine flesh-eating sons. ‘The little boy hit the door and an old woman came out. When she saw the little boy, she said, “Oh, my little boy, how did you come here? If my sons come, they will eat you.”’

- a. Ató i néka íšin ené čočúxa
 this.SG the.F.NOM.SG woman.F.NOM.SG have.PST.3SG nine child.N.ACC.PL
 řáči ...
 monster.M.NOM/ACC.PL

- ‘This woman had nine children, monsters . . .’
- b. Samú írtan i đráči, . . . i
 when come.PFV.PST.3PL the.M.NOM.PL monster.M.NOM.PL the.F.NOM.SG
 néka típus čo ípin ta . . .
 woman.F.NOM.SG nothing not say.PFV.PST.3SG 3OBJ
 ‘When the monsters arrived . . . , the woman said NOTHING to them.’
 [#4:02.30–03.05]

In (219b) above, the preverbal subject *i néka* ‘the woman’ cannot plausibly be categorized as a shifting topic, since it is mentioned various times in the immediately preceding discourse and it does not signal any topic shift, as the previous utterances were also about this woman. This constituent does not signal any contrast by itself either. Therefore, I conclude that the preverbal subject must be a familiar topic. This familiar topic is then followed by the BNQ object *típus* ‘nothing’, which is the focus. On the basis of this example, we must conclude that in PhG familiar topics can also occur in a position above focus elements, contrary to F&H’s proposal.

We have seen that familiar topics can both precede and follow the focus, yielding the order in (220). Because shifting topics always precede familiar topics (see (215)), we can further assume that this ordering restriction is also maintained, when familiar topics appear to the left of a focus.

- (220) Shifting topic > Familiar topic > Focus > Familiar topic

The ordering in (220) allows for recursion of familiar topics only, which is plausible because as F&H:97 also argue, multiple elements can simultaneously be accessible in the discourse. On the other hand, the authors argue that no more than one shifting topic is licensed in a sentence. Both of these claims appear to be verified by the PhG data. While there are no examples with more than one shifting topic in the same clause in the recordings, there are numerous instances with multiple preverbal familiar topics in the same clause. One such example is given below:

- (221) Familiar topic > familiar topic

This excerpt immediately follows the example (216), in which the speaker mentions that all Greek men were detained, and that the women came to Greece as widows. In this excerpt, the interviewer (Speaker A) tries to ask how her father managed to come to Greece.

A: O tatá su?
 the.M.NOM.SG father.M.NOM.SG your
 ‘Your dad?’

B: a. O tatá mu, tuz írtini?
 the.M.NOM.SG father.M.NOM.SG my how come.PFV.PST.3SG
 ‘My dad, how did he come?’

- b. O tatá mu, ap ačí ítan ěíu
 the.M.NOM.SG father.M.NOM.SG my from there be.PST.3SG two
 xrónes sin stráta.
 year.M.ACC(?).PL on.the.F.ACC.SG road.F.ACC.SG
 ‘My dad, from there, he was on the road for two years’

[#3:15.40–15.50]

In (221b), there are two preverbal constituents: the DP subject *o tatá mu* ‘my father’ and the PP adjunct *ap ačí* ‘from there’. Referents of both constituents, the speaker’s father and Asia Minor, i.e., the referent of the distal demonstrative in the PP *ačí* ‘there’, have been mentioned repeatedly in the previous discourse and are simply resumed here. Therefore, they both qualify as familiar topics.

Having established that shifting topics are unique (and thus that only one is allowed per clause), while familiar topics allow multiple realizations in a single main clause in PhG, I now investigate whether PhG provides evidence for the third type of topic by F&H, i.e., contrastive topic. This investigation reveals a position in the pre-focal field between the shifting and familiar topic positions identified earlier. At first glance, this new position can be associated with contrastive topics. However, further diagnostic tests reveal that this position is different from the other topic positions, in that constituents located in this position exhibit a mixed behavior between topics and foci.

3.4.2.3 Contrast(ive topic)?

A contrastive topic (section 3.4.1.2) differs from a contrastive focus in that a contrastive focus such as (222) gives rise to an exhaustive reading (see Rizzi 1997:286; É. Kiss 1998) whereas a contrastive topic does not, i.e., it does not cancel out all the alternative(s) that are salient in the discourse (Büring 2016:65) (223):

- (222) Contrastive focus

IL TUO LIBRO ho comprato (non il suo).
 the your book (I)have bought not the his
 ‘Your book I have bought (not his)’

[Italian (adapted from Rizzi 1997:290, ex. (16a))]

- (223) Contrastive topic

La frutta la regaliamo, la verdura la vendiamo.
 the fruit it give for free the vegetables it sell
 ‘We give fruit for free, while we sell the vegetables.’

[Italian (Benincà and Poletto 2004:67, ex. (47a))]

In the recordings, some preverbal constituents can at first glance be classified as contrastive topics. A distinguishing property of such constituents is that they are left-adjacent to a discourse particle *páli*.⁷³ *Páli* originates from the AG adverb *πάλιν* [palin] ‘again’ (Papadopoulos 1961:130; Anastasiadis 1976:17, 265, B’I; see also Soltic 2013), yet it does not mean ‘again’ in these clauses.⁷⁴ The particle is also attested in a reduced form in Pontic Greek; i.e., *pa* (Drettas 1997, 2000; Sitaridou and Kaltsa 2014). An illustrative example from PhG is given in (224).

- (224) The speaker is telling a story about a boy who sets off on a long journey in order to save his sister.
- a. To fšóku to ávu tin iméra
 the.N.NOM.SG little boy.N.NOM.SG the.SG other.SG the.F.ACC.SG day.F.ACC.SG
 ksílsin sis strátis.
 fall.PFV.PST.3SG to.the.F.ACC.PL road.F.ACC.PL
 ‘The boy started off the next day.’
- b. Tin iméra perpatínkin, skotiná páli pnónkin.
 the.F.ACC.SG day.F.ACC.SG walk.IPFV.PST.3SG dark.ADV PRT sleep.IPFV.PST.3SG
 ‘During the day, he would walk, (and) during the night, he would sleep.’
 [#4:01.42–01.50]

In (224b) the fronted adverb *skotiná* ‘during the night’ is left-adjacent to the particle *páli*. This fronted adverb is contrasted with another element in the list of already salient items, namely, *tin iméra* ‘during the day’, which occurs in the immediately preceding clause. At first glance, this fronted adverb would seem to qualify as a contrastive topic. Another example is given in (225):

- (225) The speaker is talking about where in Greece refugees from Pharasa had settled before they ended up in the village in which the recording was being made.
- a. ... írtan si Mitilíni. Ačí čo íxan
 come.PFV.PST.3PL to.the.F.ACC.SG Lesvos.F.ACC.SG there not have.PST.3PL
 xoráfa ... iréfkán xoráfa. Istérku írtan
 field.N.NOM.PL want.IPFV.PST.3PL field.N.NOM.PL then come.PFV.PST.3PL

⁷³ Even though I indicate the stress in this word, I should note that there is no actual auditorily distinct stress and the final [i] is very often dropped. The loss of its earlier meaning ‘again’ and phonological reduction suggest that its usage in PhG is the result of grammaticalization. See Hopper and Traugott (2003[1993]:154–159, section 6.2.4) and Roberts and Roussou (2003:224–229, section 5.3.2) for arguments in favor of the assumption that grammaticalization/morphologization involves phonological reduction.

⁷⁴ Anastasiadis (1976:265, B’I): “*pali* is a copulative conjunction mostly with ‘correlative (?)’ (επιδοτική) meaning [reference omitted], but it is used as an additive and adversative. It never starts a clause but it is always added after one or two or more words [MB].”

- sa Grevená.
 to.the.N.ACC.PL Grevena.N.ACC.PL
 ‘... they arrived in Lesvos. There, they didn’t have fields ... They
 wanted fields. Later, they came to Grevena.’
- b. Ačí pal íšin xoráfa ja čo pukándisan ta.
 there PRT have.PST.3SG field.N.NOM.PL but not like.PFV.PST.3PL 3OBJ
 There, there were fields there but they didn’t like it (either).
 [#3:16.45–17.05]

In (225b), the crucial part of the excerpt, the speaker contrasts Grevena to Lesvos, which were mentioned in (225a). This is signaled by the left-dislocated locative adverb *ačí*, which refers to Grevena and is followed by the particle *páli*: in Grevena—as opposed to Lesvos—there were (enough) fields; yet they also did not like it there.

Based on (224–225), it seems legitimate to argue that the left peripheral contrastive topic identified by F&H is also attested in PhG. Moreover, based on cartographic principles (section 3.3.1.8), the discourse particle *páli* can be understood as a functional head situated in the head position of a functional projection hosting contrastive topics: $\text{TopP}_{[\text{Contrastive}]}$. This means that a constituent functioning as a contrastive topic is fronted to Spec, $\text{TopP}_{[\text{Contrastive}]}$, where it would be in a spec-head configuration with *páli*: (226) is a first approximation.

- (226) [$\text{TopP}_{[\text{Contrastive}]}$ XP [$\text{Top}^0_{[\text{Contrastive}]}$ páli]]

In the closely related dialect of Pontic Greek, the particle *pa* (etymologically related to *páli* in PhG, see above) is argued by Drettas (1997:122) to be a contrastive topic marker, which might seem to provide some additional support for this conclusion. However, there are certain arguments that shed doubt on the proposed structure in (226). Most of these arguments have been put forward for Pontic Greek *pa* by Kaltsa and Sitaridou (2010) and by Sitaridou and Kaltsa (2014), who reject the one-to-one identification of a phrase followed by *pa* with a contrastive topic. Their arguments neatly carry over to PhG.

First, not all phrases followed by *páli* (henceforth *páli*-phrases) qualify as topics. For example, *páli*-phrases can be CILD-ed; however, this is not obligatory (see also section 2.4.7.3). There are various instances in the recordings in which a left-dislocated *páli*-direct object is not resumed with a clitic pronoun. The contrast between (227–228) illustrates this point.

- (227) The speaker narrates a story, according to which her grandfather was going to spend the night as a guest in someone else’s house.
- a. Íšini, le ta džú divána. ... so ína
 have.PST.3SG say.IPFV.NPST.3SG 3OBJ two sofa.N.NOM.PL on.the.SG one

le ta íšin an tipsís ...
 say.IPFV.NPST.3SG 3OBJ have.PST.3SG a tray.M.NOM.SG
 ‘[My grandfather] says, there were two sofas ... on the one, he says,
 there was a tray.’

- b. To ávu páli_i píkan ta_i jatáxi.
 the.SG other.SG PRT make.PFV.PST.3PL 3OBJ bed.N.ACC/NOM.SG
 ‘The other one, they made it a bed’

[#2:50.43–50.54]

- (228) ... éfain ína. Ta pómina páli čo toxántsin.
 eat.PFV.PST.3SG one the.PL others PRT not touch.PFV.PST.3SG
 ‘... he ate one (biscuit). The others, he did not touch’

[#9:52.54–52.55]

In both (227b) and (228), a *páli*-phrase is contrasted with another entity in the discourse (the other sofa in (227b) and just one biscuit in (228)). However, only in (227b) is the fronted object clitic-resumed. We have identified CILD as the diagnostic for topic-fronting of (in)direct objects; the absence of CILD, on the other hand was taken to be an indicator of focus-fronting of (in)direct objects. Given this diagnostic, the examples in (227b) and (228) suggest that *páli*-phrases can be either topics or foci. This conclusion leads to the prediction that constituents which resist CILD (topicalization) should be compatible with *páli*. This prediction is borne out: BNQ objects, for example, which can only be fronted as foci (see section 3.3.3.2.6), can be *páli*-phrases:

- (229) a. Kanína páli čo éxu (*ta).
 nobody.ACC PRT not have.NPST.1SG 3OBJ
 ‘I have nobody.’
 b. Típus páli čo ípin mi (*ta).
 nothing PRT not tell.PFV.PST.3SG 1SG.OBJ 3OBJ
 ‘She told me nothing.’

Further evidence for the fact that *páli*-phrases have focus properties comes from the fact that these phrases give rise to weak crossover (WCO) effects. To illustrate the phenomenon of WCO, consider the example in (230a–b):

- (230) a. [_{TP} [_{DP} His_i [_{NP} mother]]_j [_{VP} saw [_{DP} Sam]_i]].
 b. ??/* [_{CP} Who_i [_C^o did [_{TP} [_{DP} his_i [_{NP} mother]]_j [_{VP} see *t*_i]]]]?

(230a) shows that co-reference between the pronoun which is contained in the DP subject *his mother* that linearly precedes but does not c-command the DP object *Sam* is possible. However, if the direct object is *wh*-moved to Spec, CP leaving a trace inside the VP, co-indexation between the *wh*-phrase and the pronoun becomes markedly

less acceptable, but not entirely ungrammatical (230b) (Haegeman 1994[1991]:417). This degradation is referred to as a WCO-effect (Postal 1971; Wasow 1972), which can be formalized as follows: an A'-moved phrase (XP) crosses a pronoun, with which it is co-indexed, in such a way that the pronoun does not c-command the foot of the chain created by the A'-movement:⁷⁵

(231) $??/* XP_i \dots [_{DP} pro_i [_{NP} YP]]_j \dots t_i$

In the generative literature, there is a broad consensus that WCO-effects emerge in cases of focus movement (or, more generally, in contexts of A' movement with quantificational properties), and that topics are immune to these effects (for SMG, see Tsimpli 1995:192; Alexopoulou 1996; Skopeteas 2016; for Italian, see Rizzi 1997:290; Benincà and Poletto 2004; Giorgi 2015:234). This is illustrated by the minimal pair in (232) from SMG (see Rizzi 1997:290, ex. (17–18) for similar data from Italian). (232a) involves topicalization (via CILD) and the topicalized object, *ton Aleksis* 'Aleksis', can be co-referential with the possessive pronoun inside the clause, *tu* 'his'. On the other hand, (232b) involves focus movement of the same object, as the emphasis and lack of clitic resumption shows. In this case, it is difficult to obtain a reading in which the fronted object and the pronoun *tu* 'his' are coreferential.

- (232) a. $[_{\text{TopP}} [_{\text{DP}} \text{Ton Aleksis}]_i [_{\text{TP}} \text{ton}_i \text{ agapai } [_{\text{VP}} [_{\text{DP}} \text{i mana tu}_i]_j t_i]]]$.
 the Aleksis him love.3SG the mother his
 'Aleksis' mother loves him.' (CILD)
- b. $[_{\text{FocP}} [_{\text{DP}} \text{TON ALEKSI}]_{*i/k} [_{\text{TP}} \text{agapai } [_{\text{VP}} [_{\text{DP}} \text{i mana tu}_i]_j t_i]]]$.
 the Aleksis love.3SG the mother his
 'ALEKSI, his mother loves.' (Focus fronting)
 [SMG (adapted from Alexopoulou 1996:59, ex. (15))]

PhG behaves similar to SMG in this respect. CILD does not give rise to WCO-effects but focus movement does, as shown in (233) (with simplified glosses):

- (233) a. $[_{\text{TopP}} [_{\text{DP}} \text{Ton Andriá}]_i [_{\text{TP}} \text{γapá ta}_i [_{\text{VP}} [_{\text{DP}} \text{i ma tu}_i]_j t_i]]]$.
 the Andrew love.3SG 3OBJ the mother his
 'Andrew's mother loves him.' (CILD)

⁷⁵ In relative clauses, which according to one line of research involve A'-movement of the relative pronoun (e.g., Lees 1961; Chomsky 1965:137ff; Platero 1973, a.o.), the WCO-effect is harder to detect (Chomsky 1982; see also Lasnik and Stowell 1991, who argue that WCO-effects are fully absent only in appositive relative clauses):

(i) $[_{\text{DP}} \text{Sam}_i, [_{\text{CP}} \text{who}_i [_{\text{TP}} \text{his}_i \text{ mother has not seen } t_i \text{ for years}]]]$, is now out of jail.

- b. $[_{\text{FocP}} [_{\text{DP}} \text{TON ANDRIÁ}]_{i/k} [_{\text{TP}} \text{ɣapá} [_{\text{VP}} [_{\text{DP}} \text{i ma tu}_i]_j t_i]]]$.
 the Andrew love.3SG the mother his
 ‘ANDREW, his mother loves.’ (Focus fronting)

Returning to *páli*-phrases, the example in (234) reveals that a *páli*-phrase also gives rise to WCO-effects, similar to focus constructions (233b). Crucially, this happens irrespective of whether the fronted constituent is resumed by a clitic or not (the optional clitic is indicated in parentheses):

- (234) Ton Andriá^{?,ij} páli ɣapá (ta_i) i ma
 the.M.ACC.SG Andrew.M.ACC.SG PRT love.3SG 3OBJ the.F.NOM.SG mother.F.NOM.SG
 tu_i
 his
 ‘Andrew’s mother loves him.’

The lack of obligatory CILD of *páli*-phrases (228), the compatibility of BNQ objects with *páli* (229) and the fact that *páli*-phrases systematically give rise to WCO-effects (234) all suggest that *páli*-phrases share striking similarities with focus expressions. On the other hand, the fact that *páli*-phrases can be CILD-ed (227b) suggests that they may to some extent also qualify as topics, albeit that in spite of this they give rise to WCO-effects.⁷⁶ So somehow *páli*-phrases seem to combine focal and topical properties. Three additional properties support the special status of *páli*-phrases. I discuss them below.

First, unlike preverbal focal elements, *páli*-phrases never receive an exhaustive reading. Consider the examples in (235B) below. In (235Ba), the existence of *mo* ‘only’ excludes any other alternatives and imposes exhaustivity on the constituent that it modifies. Hence the constituent *mo to róidi* ‘only the pomegranade’ is a focus expression. This is further supported by the ungrammaticality of the resumptive clitic *ta* (see section 2.4.8 on possible positions of object clitics). In (235Bb), *mo* combines with *to róidi* and is immediately followed by *páli*. In this case, the answer is ungrammatical. The marker *páli* is incompatible with phrases that necessarily give rise to an exhaustive reading. Notice that this ungrammaticality occurs independently of the presence or absence of a resumptive clitic (which is indicated in parentheses). In (235Bc), there are two clauses, and in each clause the direct object is fronted. In the second clause, the fronted direct object is followed by *páli*, and it is contrasted with the fronted constituent in the former clause without giving rise to an exhaustive reading. Finally, (235Bd) provides further evidence for the fact that *páli* does not exclude an alternative. In this example, both fronted constituents are followed by *páli*.

⁷⁶ The relative strength of the judgments in (233b–234) can be taken to constitute further evidence for the hybrid status of *páli*-phrases between topics and foci.

Such a structure yields an emphatic interpretation where the speaker wants both the pomegranate and the pear.

- (235) A: Pos γ révis? To róiði joxsám
 what want.IPFV.NPST.2SG the.N.ACC.SG pomegranate.N.ACC.SG or
 to xráði?
 the.N.ACC.SG pear.N.ACC.SG
 ‘What do you want? The pomegranate or the pear?’
- B: a. Mo to róiði (*ta) γ révu.
 only the.N.ACC.SG pomegranate.N.ACC.SG 3OBJ want.IPFV.NPST.1SG
 ‘I want ONLY THE POMEGRANATE(, not the pear, or both).’
- b. *Mo to róiði páli γ révu.
 only the.N.ACC.SG pomegranate.N.ACC.SG 3OBJ want.IPFV.NPST.1SG
 int.: ‘I want ONLY THE POMEGRANATE(, not the pear, or both).’
- c. To xráði čo γ révu ta, to
 the.N.ACC.SG pear.N.ACC.SG not want.IPFV.NPST.1SG 3SG the.N.ACC.SG
 róiði páli γ révu (ta).
 pomegranate.N.ACC.SG PRT want.IPFV.NPST.1SG 3OBJ
 ‘The pear, I don’t want (it), the pomegranate (however), I want.’
- d. To róiði páli γ révu (ta),
 the.N.ACC.SG pomegranate.N.ACC.SG PRT want.IPFV.NPST.1SG 3OBJ
 to xráði páli γ révu (ta).
 the.N.ACC.SG pear.N.ACC.SG PRT want.IPFV.NPST.1SG 3OBJ
 ‘I want both the pomegranate and the pear.’

Second, a *páli*-phrase obligatorily precedes a constituent which is itself a focal element, such as the BNQ $\tau\iota\pi\acute{\upsilon}\varsigma$ ‘nothing’ in (236a) or the DP-constituent $\mu\omicron$ $\tau\omicron\Nu$ $\text{ANDR}\acute{\iota}\text{A}$ ‘only Andrew’, which receives a contrastive reading (236b). Under the uniqueness assumption of focus (but see also Puskás 2000, and Benincà and Poletto 2004; Poletto 2006 who argue for the existence of a focus field in Hungarian and Italian respectively), if *páli*-phrases were genuine foci, then we would expect these clauses to be ungrammatical, contrary to fact.

- (236) a. I Nerkíza páli $\tau\iota\pi\acute{\upsilon}\varsigma$ čo íðin.
 the.F.NOM.SG Nerkiza.F.NOM.SG PRT nothing not see.PFV.PST.3SG
 ‘Nerkiza saw NOTHING.’
- b. I Nerkíza páli $\mu\omicron$ $\tau\omicron\Nu$ $\text{ANDR}\acute{\iota}\text{A}$
 the.F.NOM.SG Nerkiza.F.NOM.SG PRT only THE.M.ACC.SG Andrew.M.ACC.SG
 íðin.
 see.PFV.PST.3SG
 ‘Nerkiza saw ONLY ANDREW.’

Finally, unlike foci, *páli*-phrases, are iterable, as (237) shows.

- (237) [Até páli] [to ávu to práđi páli] čo
 she.NOM PRT the.SG other.SG the.N.ACC.SG foot.N.ACC.SG PRT not
 éplini.
 wash.PFV.PST.3SG
 ‘She did not wash the other foot.’

[#2:65.02–65.05]

The discussion so far has revealed that *páli*-phrase share properties with both preverbal topic and preverbal focus expressions. These properties are summarized in Table 3.9.

Property	Preverbal topic	Preverbal focus	<i>Páli</i> -phrase
Clitic resumption (CILD)	YES	NO	OPTIONAL
Exhaustive reading	NO	YES	NO
Co-occurrence with focus	YES	N.A.	YES
Multiple realization	YES	NO	YES
Compatibility of BNQs	NO	YES	YES

Table 3.9: Properties of preverbal topics, preverbal foci and *páli*-phrases

If *páli*-phrases are associated with contrast but cannot be categorized as topics or foci, then the question arises as to what their status is.

The notion of contrast has been closely linked to both foci and topics (Valluví and Vilkuňa 1998; Repp 2009; Neeleman et al. 2009; Molnár and Winkler 2010, a.o.), and contrastive topics are sometimes referred to as foci; for example, Vilkuňa (1995) argues that contrastive focus and contrastive topic occupy the same structurally-designated position in Finnish. For *páli*-phrases, I follow Molnár and Winkler (2010) and Sitaridou and Kaltsa (2014), and claim that focus and contrast are related notions and that they also share some features. In line with Sitaridou and Kaltsa (2014), I take *páli* to be the overt exponent of the head of a specific functional projection, ContrastP (238). This means that a constituent that is attracted to Spec, ContrastP does not automatically qualify as a focus or a topic, which is in line with Molnár and Winkler’s (2010) argument regarding the “dual character of contrast”.

- (238) [_{ContrastP} XP [_{Contrast⁰} páli]]

From an interpretive perspective, the claim that *páli* is the overt exponent of Contrast⁰ is supported by the fact that it conveys the different types/degrees of contrast pro-

posed by Molnár (2002) (examples below are modeled after Sitaridou and Kaltsa 2014:21, ex. (52)). In (239a) the *páli*-phrase is emphatic; in (239b) the *páli*-phrase is juxtaposed to *si* 'you'. Finally, the example in (239c) gives rise to a distributive reading.

- (239) a. *Íni tærpætæri, atóna páli mis yref tínkam*
 be.NPST.3SG vagabond.N.NOM.SG he.ACC PRT we.NOM look after.IPFV.PST.1PL
 (ta).
 3OBJ
 'He is a vagabond; as for him, we would look after him.'
- b. *yo páli a ta ylitósu, si pos a*
 I.NOM PRT FUT.DEF 3OBJ elude.PFV.NPST.1SG you.NOM what FUT.DEF
 pík?
 do.PFV.NPST.2SG
 'I (on my side) am going to elude it; you, what are you going to do?'
- c. *To kræs tu, a ta píkum*
 the.N.ACC.SG meat.N.ACC.SG his FUT.DEF 3OBJ make.PFV.NPST.1PL
pasturmáðe, to álima tu páli a ta
 pastrami.N.NOM/ACC.PL the.N.ACC.SG fat.N.ACC.SG his PRT FUT.DEF 3OBJ
píkum yavurmás.
 make.PFV.NPST.1PL roast.M.NOM.SG
 'Its meat, we are going to make it into pastrami and its fat, we are going to roast it.'

(see also Theodoridis 1964:294, 1.26)

Having discussed *páli* as the overt exponent of Contrast⁰, in what follows I investigate the position of ContrastP in the LP. In the discussion of the examples in (236), I stated that a *páli*-phrase co-occurs with focus constituents. However, this statement must be nuanced. A *páli*-phrase and a focus constituent can co-occur as long as the former precedes the latter (cf. (236–240)).

(240) * Focus expression > *páli*-phrase

- a. * *Típús i Nerkíza páli čo íðin.*
 nothing the.F.NOM.SG Nerkíza.F.NOM.SG PRT not see.PFV.PST.3SG
 int.: 'Nerkíza saw NOTHING.'
- b. * *Mo ton Andriá i Nerkíza páli*
 only the.m.ACC.SG Andrew.M.ACC.SG the.F.NOM.SG Nerkíza.F.NOM.SG PRT
íðin.
 see.PFV.PST.3SG
 int.: 'Nerkíza saw ONLY ANDREW.'

The contrast between (236) and (240) clearly suggests that ContrastP is situated higher than FocP, which hosts the BNQ object *TIPÚS* ‘NOTHING’ and the DP-object *MO TON ANDRIÁ* ‘ONLY ANDREW’ in the above examples. Moreover, there are a few instances in the recordings in which it appears that a *páli*-phrase follows a shifting topic (241).

(241) Shifting topic > *páli*-phrases

The discussion between Speaker A, B and a person C who does not speak during the excerpt concentrates on the plants and vegetables they had in Pharasa and whether or not they have them in Greece as well.

// In SMG://

A: a. Kseris ta kuzugopéka?

know.IPFV.NPST.2SG the.N.ACC.PL sponge.morel.N.ACC.PL
‘Do you know the *kuzugopéka* (i.e., sponge morels)?’

B: a. Ta kuzugopéka ... ine manitarja.

the.N.NOM.PL sponge.morel.N.NOM.PL be.NPST.3PL mushroom.N.NOM.PL
‘The sponge morels ... they are (a type of) mushroom.’

A: b. To person C:

Ne, katalaves?

Yes, understand.PFV.PST.2SG
‘Yes, did you get it?’

c. To speaker B:

Afto pu eleje itan to
this.N.NOM.SG that say.IPFV.PST.3SG be.PST.3SG the.N.NOM.SG
kuzukulák.

lamb’s.ear.N.NOM.SG

‘What he was talking about was *kuzukulák* (i.e., lamb’s ear).’

B: b. *Kuzukulák?* oxi.

lamb’s.ear.N.NOM.SG no
‘*Lamb’s ear?* no.

...

// In PhG://

c. Ta kuzugopéka_i mis pal ađé pal éxum

the.N.ACC.PL sponge.morel.N.ACC.PL we.NOM PRT here PRT have.NPST.1PL
ta_i.

3OBJ

‘The sponge morels, we have them here.

[#2:13.38–13.55]

contrastive and non-exhaustive interpretations are always left-adjacent to a discourse particle *páli*. *Páli*-phrases are associated with properties of both foci and topics. Following Sitaridou and Kaltsa (2014), I proposed that *páli* is situated in the head position of a recursive functional projection, ContrastP, which hosts elements that resemble both topics and foci. Finally, based on naturally occurring data, I located this functional projection lower than the topic projection that hosts shifting topics and higher than focus constituents. Tentatively, I proposed that it immediately follows $\text{TopP}_{[\text{Shifting}]}$.

3.5 Conclusions

In this chapter, I investigated the possible word order patterns in PhG declarative main clauses with a transitive verb, and how these different word orders can be analyzed in terms of a hierarchical structure.

In section 3.2, I first identified VSO and SVO as neutral word orders in PhG. All other word orders, SOV, VOS and O-initial orders, give rise to pragmatically non-neutral clauses.

In section 3.3, I investigated the position of the verb in clauses with neutral word order, concluding that verbs systematically move to T^0 , and no further. Assuming that V^0 -to- T^0 movement takes place in all clauses, I then turned to the position of subjects in VSO and SVO clauses. Regarding VSO clauses, I showed that the subject remains in its base position, Spec, VP. I further argued that the subject of SVO clauses can be hosted in a number of different A' -positions, i.e., in Spec, TopP as a topic, in Spec, FocP as a focus and in Spec, SubjP as a subject of predication. A major conclusion of the analysis is that all preverbal subjects are in a LP position. I tentatively concluded that an SVO clause is pragmatically neutral only when the subject is situated in SubjP.

Finally, in section 3.4, I focused on non-neutral SOV and O-initial word orders, which were analyzed as involving left-peripheral objects (and subjects). More specifically, I investigated the interpretive properties and precise locations of different types of topic expressions identified by Frascarelli and Hinterhölzl (2007) for Italian and German. I concluded that shifting topics and familiar topics also exist in PhG. A shifting topic occurs in the higher portion of the LP, whereas familiar topics occur both before foci (immediately after shifting topics) and after them. I was not able to identify a topic projection that would perfectly correspond to Frascarelli and Hinterhölzl's contrastive topic projection. However, following Sitaridou and Kaltsa (2014), I did identify a recursive functional projection, i.e., ContrastP, immediately below the shifting topic projection, which hosts constituents receiving different types of contrastive readings and displaying properties that are shared by both foci and topics.

The hierarchy of the functional projections that results from the various discussions above is the following:

- (244) $[_{\text{TopP}}[_{\text{Shifting}}] [_{\text{ContrastP}^*} \text{páli} [_{\text{TopP}}[_{\text{Familiar}}] [_{\text{FocP}} [_{\text{TopP}}[_{\text{Familiar}}] [_{\text{SubjP}} [_{\text{COP}} \text{na/s}]]]]] [_{\text{NegP}} \text{čo/ma/mi} [_{\text{CP}} \text{a/éna/xat}_{na/s} [_{\text{TP}} \text{clitic+V} [_{\text{VP}} t_V]]]]]]]]]]]]$

This chapter has left a number of essential questions unanswered, which should be addressed in future work. First, I argued that subjects in PhG are either in their low merge position, Spec, VP or in a position in the LP, but crucially not in Spec, TP. This conclusion raises the issue how case/[+EPP]-features on T^0 are checked, and why Spec, TP is not a possible subject position (if its presence is to be assumed). Second, I proposed SubjP is situated in the LP (as in Ledgeway 2011), but this conclusion radically diverges from the discussion by Cardinaletti (2004 and much subsequent work) which locates SubjP in the INFL-domain. The reason why PhG differs in this respect should be addressed in more detail. Third, naturally occurring examples in PhG have suggested that familiar topics are realized both lower and higher than focus constituents; however, in this respect, PhG does not conform to the conclusion by Frascarelli and Hinterhölzl (2007), according to whom familiar topics occur only lower than focus expressions. Finally, I concluded that *páli*-phrases are in certain senses ambiguous between topic and focus expressions; however, the exact status of these phrases should be addressed in more detail in future work.

4

Expanding the LP of declarative main clauses: Speech Act Phrase

4.1 Introduction

As noted both by previous authors (e.g., Dawkins 1916:197–204, §379–385; Andriotis 1948:75–79; Anastasiadis 1980a,b, 1994:28–33, a.o.) and in section 2.3.4 of this dissertation, one of the most remarkable aspects of PhG is the existence of a substantial number of lexical, functional and phonological elements (presumed to be) borrowed from Turkish. Among these elements are a number of particles whose interpretive properties or structural functions are very difficult to identify. As a result, they have either been ignored or they have received very little attention in previous work. The empirical focus of this chapter is on one of these particles, namely *ki*. The aim is to offer an analysis of the interpretive and structural properties of *ki*. The current chapter does not address issues such as how *ki* was borrowed from Turkish in the first place and whether the *ki*-elements in the donor and the recipient languages have similar or different functions; I leave these topics for future research.

Based on naturally occurring data, I show that *ki* in PhG may optionally appear in five seemingly unrelated configurations. After certain verbs, *ki* can introduce reported speech (1a) and complement clauses (1b). In what seems a second use, *ki* occurs

clause-finally (1c). *Ki* may also be found to the right of certain adverbs, such as *élpætta* ‘certainly/surely’ or *temék* ‘apparently’ (1d). Finally, *ki* can combine two clauses, apparently acting as a coordinator, on par with *če* ‘and’ (1e). The examples in (1) are given out of context and the subtle interpretive properties of *ki* are not provided here but will be discussed in detail throughout the current chapter.

- (1) a. Lénkin ta (*ki*), “Čip pérkin mis sa
say.IPFV.PST.3SG 3OBJ PRT all take.IPFV.PST.3SG 1PL.OBJ in.the.N.ACC.PL
šéræ tu.”
hand.N.ACC.PL his
‘[My grandmother] used to say, “[The guard] would take us all in his hands.”’
- b. Nanósta ta (*ki*) xa píkum to
think.IPFV.PST.1SG 3OBJ PRT FUT.CF make.PFV.NPST.1PL the.N.ACC.SG
kačí penendáu mas.
promise.N.ACC.SG among our
‘I thought (that) we were going to reach an agreement among us.’
- c. Típus čo ípa (*ki*)!
nothing not say.PFV.PST.1SG PRT
‘I did not say anything!’
- d. Ālpætta/temék (*ki*) čo a nárti o
certainly/apparently PRT not FUT.DEF COME.PFV.NPST.3SG the.M.NOM.SG
Andriás.
Andrew.M.NOM.SG
‘Certainly/apparently, Andrew is not going to come.’
- e. O nomát múyusin to kθári
the.M.NOM.SG man.M.NOM.SG hide.PFV.NPST.3SG the.N.ACC.SG barley.N.ACC.SG
ki/če đókan ta an kačára.”
PRT/and give.PFV.PST.3PL 3OBJ an admonition.F.NOM.SG
‘The man hid the barley and they scolded him.’

The fact that *ki* may optionally be employed in such a wide range of configurations raises the following questions:

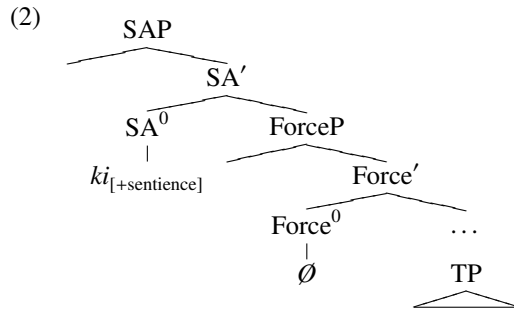
- (i) Are the different manifestations of *ki* in (1a–e) genuinely optional or is their use contextually conditioned? If the latter is the case, which factors give rise to the use of *ki* and which interpretive nuances does *ki* contribute to the examples in (1a–e)?
- (ii) Are all usages of *ki* in (1a–e) instantiations of the one item, or should we identify a number of distinct yet homophonous *ki*’s?

(iii) How is *ki* integrated in the clausal syntax of the various examples in (1a–e)?

The main goal of this chapter is to answer the questions (i–ii). I will show that despite the fact that leaving out *ki* in (1a–d) or replacing it with *če* ‘and’ in (1e) would not yield an ungrammatical utterance, *ki* is not optional in (1a–e). In addition, I also argue in favor of a unified analysis of *ki*, i.e. I disagree with the hypothesis that examples (1a–e) involve distinct but homophonous *ki*’s.

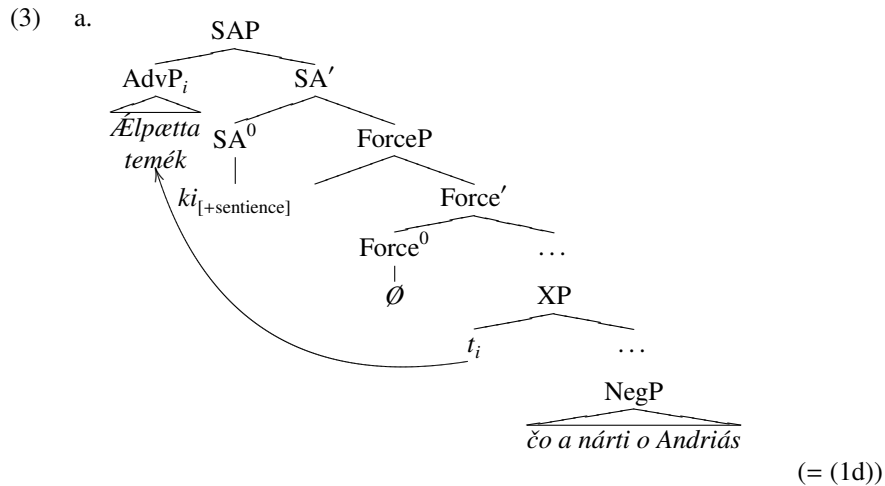
I start by showing that *ki* in all its various instantiations has one unique interpretive function: it is a speaker-oriented discourse marker employed by the speaker to signal to the hearer her authority and competence with respect to the content of her assertion and/or to show the hearer her benevolence and trustworthiness with respect to the content of her assertion.¹ This hypothesis entails that the occurrence of *ki* is bound to the existence of the pragmatic roles of “hearer” and, more importantly, “speaker”, and it singles out the speaker as the “sentient mind” (in terms of Speas and Tenny 2003). These concepts will be made precise in sections 4.5.1.1–4.5.2. Furthermore, I show that *ki* is a MCP, hence appears only in main clauses. Based on the theoretical background introduced in section 3.3.1 and further elaborated on throughout chapter 3, I adopt Speas and Tenny’s (2003) hypothesis that the pragmatic roles of “speaker” and “hearer” are encoded in the syntax. More precisely, these authors assume that discourse participants and the “utterance content” are represented in a dedicated discourse domain in a predicative shell structure, in a way that parallels how the θ -roles of AGENT, THEME and GOAL are encoded in the lexical domain. Following Speas and Tenny (2003), I identify this discourse domain as Speech Act Phrase (SAP), but, simplifying Speas and Tenny’s (2003) shell-hypothesis to a unique SAP, I identify *ki* as the overt exponent of SA⁰, the functional head which is endowed with a [+sentience] feature identifying the “speaker” as the “sentient mind”. SAP dominates ForceP, whose head position is not overtly lexicalized in a declarative main clause. This hypothesis is based on a recent proposal that discourse markers head functional projections high in the LP (a.o., Munaro and Poletto 2003, 2009; Hill 2008; Haegeman and Hill 2013, 2014; Haegeman 2014; see also Roussou 2015; but see also Coniglio 2011 who locates some German discourse markers in the INFL-domain). The proposed phrase marker of a declarative main clause in which SAP projects is given in (2).

¹ Throughout the chapter, I refer to the speaker as ‘she/her’ and the hearer as ‘he/him’ if their gender is irrelevant or has not already been specified. There is, however, no gender implication in this convention.



Assuming the standard feature-checking mechanism (see section 3.3.1.4), I argue that the [+sentence] feature on SA^0 can be checked either by an internally or externally merging category in Spec, SAP. I show that there are three possible ways of checking this feature, and these three processes also derive the apparently unrelated construction types exemplified in (1a–e).

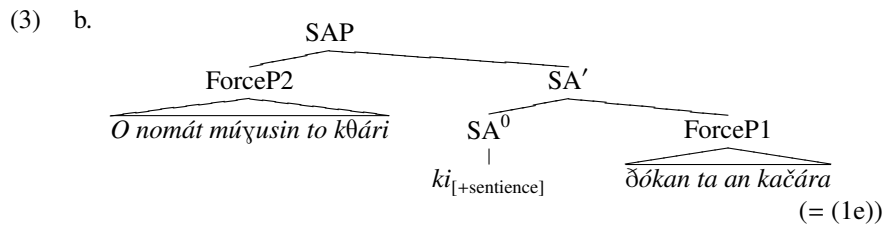
First, adapting Hill's (2007a et seq.) analysis for similar configurations in Romanian, I argue that only a subset of higher adverbs which are merged in the lower LP, namely, adverbs that express epistemic modality and evidential mood, are compatible with *ki*. These adverbs are attracted from their first-merge position, indicated as XP for convenience in (3a), to Spec, SAP, where they enter in spec-head configuration with *ki*, deriving structures like (1d).



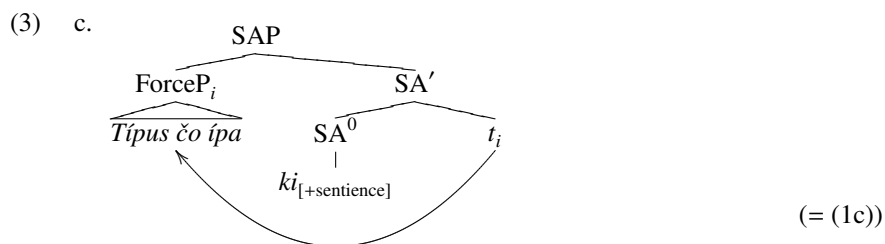
As I will discuss in detail below, the adverbs that undergo this type of movement can only receive a subjective modal reading and cannot express objective modality,

which follows from the fact that *ki* indexes the “speaker” as the “sentient mind”. The ordering restrictions between an adverb + *ki* sequence and other left peripheral constituents in a declarative main clause (identified in chapter 3) further support the claim that (3a) is the appropriate derivation for (1d).

Second, if there are no evidential or epistemic adverbs in the functional structure of ForceP which could be attracted to Spec, SAP, a full-blown clause, shown as ForceP2 in (3b), is externally merged in Spec, SAP as an adverbial clause. ForceP2 modifies the main clause (shown as ForceP1 in (3b)), and checks the [+sentence] feature on *ki*. By means of this adverbial clause, the speaker presents justification for the truth of the proposition she expresses with ForceP1. What we then arrive at is the configuration in (1e), which, as detailed later, has a number of properties in common with a coordinated structure:



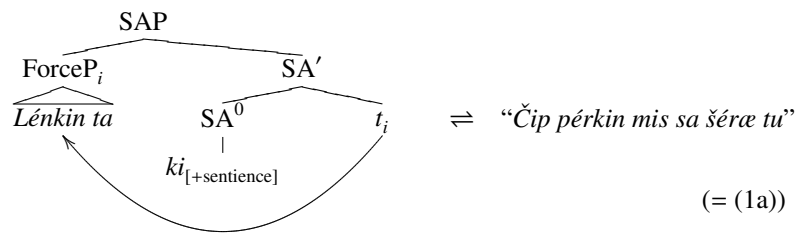
Finally, if there are no evidential or epistemic adverbs (as in (3a)) or adverbial clauses (as in (3b)) in a given clause with SAP to check the [+sentence] feature on *ki*, then ForceP itself, which is dominated by SAP, is attracted to Spec, SAP (along the lines of Munaro and Poletto 2003, 2009; Haegeman and Hill 2013, 2014; Haegeman 2014). The outcome of this derivation is summarized in (3c), where *ki* occurs clause-finally, just as in (1c). With the clause-final *ki*, the speaker attempts to raise her credibility with respect to the proposition in the clause (i.e., ForceP) she utters.



Extending this line of reasoning, I argue that (3c) is also the representation of (1a–b). In these clauses too, the speaker employs *ki* to raise her credibility with respect to the proposition in the reporting or the main clause. Concerning (1a), I represent the structural connection between a piece of reported speech and the clause that reports

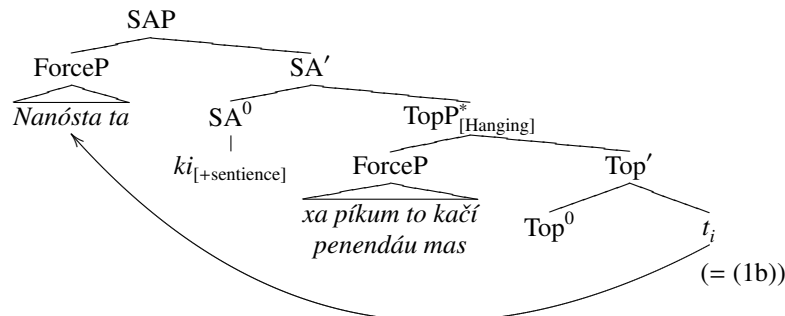
it simply as “ \Rightarrow ”, without pursuing the question how a piece of reported speech is structurally connected to the clause that reports it. I claim that the reporting clause (ForceP) is attracted to Spec, SAP to check the [+sentence] feature associated with *ki* (3d).

(3) d.



Concerning (1b), I show, with evidence from the absence of connectivity effects between the two clauses in configurations like (1b), that what at first sight looks like a complement clause is not actually a genuine internal argument of the matrix predicate. Rather, I argue that it is generated in a (recursive) hanging topic position ($\text{TopP}_{[\text{Hanging}]}$) between SAP and ForceP, the existence of which is further supported by independent observations. To check the [+sentence] feature on *ki*, ForceP moves to Spec, SAP around the apparent complement clause in Spec, $\text{TopP}_{[\text{Hanging}]}$, as shown in (3e).

(3) e.



To summarize, in my proposal (1a–e) are represented as the output of one and the same configuration, in which ForceP is dominated by SAP. In (1a–c), ForceP, being dominated by SAP, i.e., the root clause in (1c), the reporting clause (1a), and the matrix clause (1b), is attracted to Spec, SAP. In (1d), the epistemic or evidential adverb within ForceP is attracted Spec, SAP and in (1e), an adverbial clause is first-merged in Spec, SAP.

Further investigation of the interpretive and structural properties of *ki* in this chapter will lead us to postulate yet another (recursive) projection to host hanging topics

Before we proceed, a brief comment on the morpheme *di* (which is sometimes observed as *ti* in the written corpus) and its status in present day PhG is in order. Dawkins (1916:654) states that *di* is a “[...] particle used after the verb λέγω [*léγω* ‘(I) say’, MB] to introduce reported speech, generally followed by *ki* [...]”. However, from Dawkins’ accounts, it is not clear whether *di* or *ki*—or both—are responsible for introducing reported speech. Leaving this problem aside for a moment, I should point out that Dawkins (1916:654), Andriotis (1948:52) and Anastasiadis (1976:259) all agree that *di* is etymologically related to *óti* ‘that’ (*ὄτι* [*hóti*] in AG), which in SMG and various MG dialects functions as a complementizer (see, a.o., Christidis 1981; Roussou 1994, 2000, 2006 for SMG and Nicholas 2001; Roussou 2009 for a survey on MG dialects). In AG and Medieval Greek, on the other hand, *óti* had a wider range of functions (see Maier 2012 for AG, Chamberlain 1941:177–179 and Levinsohn 1991 for its uses in New Testament Greek, and Préaux 1931 and Bentein 2017 for Post-Classical Greek). The function of *óti* in AG/Medieval Greek that is most relevant to PhG is its ability to introduce reported speech (Liddell and Scott 1996[1940]; De Boel 1980; Maier 2012; Welo 2013, a.o.). For instance, according to Liddell and Scott (1996[1940]:1265), AG *óti* is “[...] freq[ue]ntly inserted pleon[astically] in introducing a quotation (where we use no conj[unction] and put inverted commas) [...]”. Similarly, De Boel (1980:295) states that in AG *óti* was “[...] an equivalent of our quotation marks [...]”. The examples in (6) illustrate *óti* introducing reported speech in AG (6a), Post-Classical Greek (6b) and Medieval Greek (6c–e).³

- (6) a. ... íso:s àn eípoien hóti “ò Só:krates, mèn:
 perhaps PRT say.OPT.AOR.3PL óti oh Socrates.VOC not
 thaúmaze tà legóména all’
 be.surprised.IMP.PRS.2SG the.N.ACC.PL say.PASS.PTCP.PRS.N.ACC.PL but

³ The textual sources of the examples in (6) are as follows: (6a): Crito = Plato, *Crito*. Translation: Fowler, Harold N. 2005[1914]. *Plato: Euthyphro, Apology, Crito, Phaedo, Phaedrus*. Cambridge, MA: Harvard University Press, p. 177. (6b): bgu 2.602 = Tasucharion letter (Berlin, Staatliche Museen, Papyrussammlung, P. 6699). Translation: Bagnall Roger S. and Raffaella Cribiore. 2006. *Women’s letters from Ancient Egypt. 300 BC-AD 800*. Ann Arbor: The University of Michigan Press, p. 177. Available at <http://berlpap.smb.museum/01666/>. (6c): Jo. Mal = John Malalas. Translation: Jeffreys, Elizabeth, Michael Jeffreys, Roger Scott et al. 1986. *The chronicle of John Malalas. A translation*. Melbourne: Australian Association of Byzantine Studies, p. 125. (6d): Ptoch = Ptochoprodromos poems. Edition: Hesselung, Dirk C. and Hubert O. Pernot. 1910. *Poèmes Prodromiques en Grec vulgaire*. Amsterdam: Johannes Müller, p. 75. (6e): Ch. Makh = Chronicle of Makhairas. Edition: Dawkins, Richard, M. 1980 [1932]. *Leontios Makhairas: Recital concerning the sweet land of Cyprus entitled ‘Chronicle’*. 2 vols. New York: AMS Press. Available at http://users.uoa.gr/~nektar/history/2romanity/makhairas_chronicle.htm.

- apokρίνου...”
 answer.IMP.PRS.2SG
 ‘... perhaps they would continue, “Don’t be surprised at what they say, Socrates, but answer ...’
 ... ἴσως ἂν εἴποιεν, ὅτι, ὃ Σώκρατες, μὴ θαύμαζε τὰ λεγόμενα ἀλλ’ ἀποκρίνου...
 (Crito 50c, 5th-4th c. BC)
- b. pros emé Suchas.M.NOM.SG léyon [ó]ti, “agórasón
 to me Suchas.M.NOM.SG say.PTCP.PRS.M.NOM.SG óti buy.IMP.AOR.2SG
 mu to méros tu el[e]ónos...”
 my the.N.ACC.SG share.N.ACC.SG the.M.GEN.SG olive yard.M.GEN.SG
 ‘Suchas saying to me , “buy my share of the olive yard...”
 πρὸς ἐμέ Σουχᾶς λέγων [ὄ]τι ἀγόρασόν μου τὸ μέρος τοῦ ἐλ [αι]ῶνος
 (bgu 2.602. 2nd-3rd c. AD)
- c. ... Aléxandros ... ípen óti; “épia gála
 Alexander.M.NOM.SG say.AOR.3SG óti drink.AOR.3SG milk.N.ACC.SG
 tis emís mitrós.”
 the.F.GEN.SG my.F.GEN.SG mother.F.GEN.SG
 ‘... Alexander ... said, “I have drunk my mother’s milk.”
 ... Ἀλέξανδρος ... εἶπεν ὅτι· ἔπια γάλα τῆς ἐμῆς μητρός.’
 (Jo. Mal. 10.10.5, 6th c. AD.)
- d. ... na ton ípo, óti “máthe to grammatiká na
 PRT him say.SUBJ.AOR.1SG óti teach.IMP.AOR.2SG it.ACC letter.N.ACC.PL PRT
 zísi...”
 live.SUBJ.AOR.3SG
 ‘... I should say to him, “teach him letters so that he may live...”
 ... καὶ εἶπω ὅτι μάθε το γραμματικὰ νὰ ζήση ...
 (Ptoch. 4.42, 12th c. AD)
- e. ... tu ípasin, óti “o theós théli
 he.GEN say.AOR.3PL óti the.M.NOM.SG God.M.NOM.SG want.PRS.3SG
 pépsin megalín péðevsin is aftís mas.”
 send.AOR(?).INF big.F.ACC.SG lesson.F.ACC.SG to REFL.F.GEN.SG(?) we.GEN
 ‘... they say to him, “God wants to send us a big lesson.”
 ... τοῦ εἶπασιν, ὅτι “Ὁ Θεός θέλει πέψειν μεγάλην παιδευσιν εἰς
 αὐτῆς μας.”
 (Ch. Makh. 2.§203, 15th. c. AD)

The fact that *óti* ‘that’ has been used to introduce reported speech in the long history of Greek (6) suggests that the function of PhG *di* in written texts is related

to *óti*, a suggestion that is in line with Dawkins (1916), Andriotis (1948:52) and Anastasiadis (1976:259).⁴ However, as will be further elaborated on in section 4.3.1, *di* is not used today by present-day speakers of PhG with verbs such as *léu* ‘(I) say’ introducing reported speech.⁵ For this reason, I will not discuss the structural or interpretive properties of *di* in this dissertation.⁶

Returning to *ki*, in Dawkins’ (1916) texts and in texts collected by other contemporary authors (e.g., Levidis 1892), we see that the presence of *ki* is not obligatory when a piece of reported speech is linked to the verb *léyo* ‘(I) say’ (and other verbs of saying) followed by the morpheme *di*. Compare (5), where *ki* is present, to (7), where it is absent. Both (5) and (7) are provided by Dawkins (1916) and are extracted from narratives told to Dawkins by the same native speaker.

⁴ Consider also the fact that *di* in Andriotis (1948) and Anastasiadis (1976) is written with an immediately preceding apostrophe, i.e., ‘*di* or ‘*ti*. These authors adopt this convention because they assume the deletion of the initial [ó] in *óti* in PhG and they mark the deleted constituent with an apostrophe.

⁵ There are two speakers from Varašos who express that *di* can be accepted but it is an archaic item.

⁶ Although not stated explicitly by Dawkins (1916), in older texts *di* seems to introduce not only reported speech but also clauses that seem to be complement clauses that are arguably structurally connected to their superordinate predicate. In these cases, the verb is often a verb of saying (ia), but verbs of perception, such as *θoró* ‘(I) see’ are not infrequent (ii). That the finite clause in square brackets in (ia) must be a complement clause rather than reported speech is evidenced by the fact that the subject agreement suffix on the copular verb is disjoint from the subject of the matrix clause, yet the subjects of the matrix and complement clauses are co-referential, which would be unexpected if it were a quote as in (ib). I would like to relate the complement status of the clause following *θoró* ‘(I) see’ + *ti* to the fact that *θoró* ‘(I) see’ is not a (typical) verb that can introduce reported speech (see also section 4.3.2.1).

- (i) a. Ató i Farsáxi len ti [ísánte Kúrti].
 this.PL(?) the.M.NOM.PL Varsak.M.NOM.PL say.IPFV.NPST.3PL PRT be.PST.3PL Kurd.M.NOM.PL
 ‘These Varsaks_i say (that) they_i were Kurds.’
 (Zurnatzis 1950s:127(4).2)
- b. Ató i Farsáxi len ti, “ísánte Kúrti.”
 this.PL(?) the.M.NOM.PL Varsak.M.NOM.PL say.IPFV.NPST.3PL PRT be.PST.3PL Kurd.M.NOM.PL
 ‘These Varsaks_i say, “they_{i/j} were Kurds.”’
 (constructed example by the informants)
- (ii) θoró ti [parpatí sa síðera pánu].
 see.IPFV.NPST.1SG PRT walk.IPFV.NPST.3SG on.the.N.ACC.PL railway.N.ACC.PL above
 ‘I see (that) he is walking on the railway.’
 (Zurnatzis 1950s:93.18)

The examples in (i–ii) provide additional evidence for the fact that *ti* is etymologically related to *óti*, which in certain dialects, such as SMG is fully grammaticalized as a complementizer. As reported in earlier work (e.g., Andriotis 1948), PhG may be a dialect where *di* also had an optional complementizer function along with its function of introducing reported speech, on par with AG/Medieval Greek. The important point for us is that today *di* is not used by the speakers when a verb of speaking/perception (or any other non-factive verb) selects a complement clause (see also section 4.3.2).

- (7) Ípen di, “Ĵo tavró se.”
 say.PFV.PST.3SG PRT not pull.IPFV.NPST.1SG 2SG.OBJ
 ‘He said, “I will not pull you up.”’ (Dawkins 1916:468.17)

To sum up, according to Dawkins (1916), *ki* is optionally inserted after the sequence of a verb of speech + *di* introducing reported speech. The author does not, however, say anything about the interpretive contribution of *ki* in this type of context.

Andriotis (1948) provides, among others, the following example (glosses and translation are mine), which shows that *ki* could also be inserted after verbs selecting complement clauses:

- (8) Parakáltsen da *ki* ton batrikí na fíi.
 beg.PST.PFV.3SG 3OBJ PRT the.M.ACC.SG patriarch.M.ACC.SG SUBJ go.PFV.NPST.3SG
 ‘She begged the patriarch to leave.’

Andriotis (1948) is also the first author to suggest that the use of *ki* has some interpretive impact:

Very often, after ‘*ti* which accompanies the verb *léγο* [‘(I) say’, MB] and after the verbs *parakaló* [‘(I) beg’, MB], *vlépo* (sic) [‘(I) see’], and before a complement or a subjunctive clause, the particle *ki* with a weakened complementation meaning is inserted [. . .].

(Andriotis 1948:53, my translation)

However, it is not clear what is meant by “weakened complementation meaning” in the quotation above. Andriotis (1948) does not elaborate on this point.

Without putting forward any explicit argument about the origin of *ki*, Anastasiadis (1976:259) states that *ki* may follow a ‘verb + *ti*’ combination when a complement clause or a piece of reported speech is introduced. In his later work, however, he also states that *ki* is “a particle that is placed at the end of a clause or a phrase” (Anastasiadis 1980b:119, my translation). Anastasiadis (1976, 1980b) does not comment on the interpretive properties of *ki* in general, nor does he discuss what types of clauses or phrases *ki* may follow.

Finally, in the dictionary by Papastefanou (2009:62) *ki* (listed there as “*κι!*”) is taken to mean “. . . *μα* [*ma* ‘but’ MB], *τίνα σου πω* (sic) [*tí na su po* ‘what can I say?’, MB], *δεν* [*den* ‘not’, MB]”. The author does not provide any further information about *ki*, but he does give an example, which I cite below:

- (9) Piésin a vreší ki!
 catch.PFV.PST.3SG a rain.F.NOM.SG PRT
 “1. έπιασε μια βροχή [*épiase mia vroxí* ‘it has started to rain’, MB].
 2. αλλα (sic) τί βροχή [*allá tí vroxí* ‘but what a rain’ MB]”
 (Papastefanou 2009:99)

In (9), *ki* is sentence-final. Judging by the translation provided by Papastefanou (2009), *ki* seems to turn the clause in (9) into an exclamation (section 2.4.3.4)—in line with the paraphrase *ma tí na su po* ‘but what can I say?’, which Papastefanou (2009) proposes as the meaning of *ki*.

As this overview of the literature reveals, interpretive and structural properties of *ki* have been presented by previous authors in a rather fragmented way and—excluding the attempt by Papastefanou (2009)—*ki* was always left without a translation. From these studies, we can only conclude that *ki* was associated with reported speech, (some) complement clauses, and, possibly, root clause exclamations.

In section 4.3, I show that in present day PhG *ki* is employed in more contexts than those discussed by previous authors. The descriptive inventory I provide below is intended to reveal the interpretive properties of *ki*. I delay the detailed discussion of the structural properties of *ki* until section 4.5. Note that when I refer to configurations in which *ki* is used with the term “construction” in the following sections, I use this term in a pre-theoretical, non-technical sense.

4.3 The distribution and interpretation of the particle *ki*

In this section, I provide a full descriptive characterization of the five types of constructions, in which *ki* is employed in present day PhG, as already illustrated in (1a–e). Three out of these five construction types have already been briefly mentioned in previous work (see section 4.2). Although they are not taken into consideration by previous authors, examples for the other two constructions are also recorded in some earlier texts. Since this dissertation is concerned with the current status of the dialect, I only provide such relevant examples from the earlier texts in footnotes; I will not discuss them in detail.

This overview aims at providing an answer to question (i) in section 4.1. In particular, in the present section I focus on the interpretive properties of *ki*. The discussion is based on speaker judgments. This overview will reveal that *ki* is not optional *sensu stricto*; rather, it is a context-dependent marker employed by the speaker to display her authority and competence regarding the content of her utterance and to show her trustworthiness to the hearer with respect to the content of her utterance. The (rough) interpretive properties identified in section 4.3 can be subsumed under the notion of “epistemic vigilance”, which I discuss in section 4.4.

4.3.1 Quotative constructions

4.3.1.1 Setting the scene

Before starting the discussion, a terminological note is in order. Following de Vries (2006), I will use the terms “reporting clause”, “quote” and “quotative construction”. Reporting clause refers to the clause which hosts the predicate introducing the reported direct speech. The quote is the reported speech and the quotative construction is the combination of a reporting clause and a quote.

In recordings of present-day PhG, *ki* is often, but crucially not always, found after verbs of speech such as *léu* ‘(I) say’ in a reporting clause, when there is a quote linked to this verb. This has already been discussed by Dawkins (1916); Andriotis (1948) and Anastasiadis (1976). However, unlike what is reported in Dawkins (1916) and Andriotis (1948), the morpheme *ti* (see section 4.2) is systematically absent. Instead, a verb such as *léu* ‘(I) say’ of a reporting clause is always followed by the third person object clitic, *ta* ‘him/her/it/them’ (see section 2.4.2.2), suggesting that *ta* is obligatory in this context as a resumptive element of the quote. This requirement is also confirmed by the questionnaires (see section 1.5.3.2 for a brief description of the questionnaires).⁷ At all times when *ki* is present, it follows the sequence of the verb of the reporting clause and the object clitic *ta*, in this order. An important point is that *ki* does not have to be strictly right-adjacent to the object clitic *ta*. This adjacency restriction is not relevant for the current presentation, where I mainly focus on the interpretative function of *ki*, but I will return to it in section 4.5.2.2.2. For now, it is sufficient to state that *ki* follows the object clitic linearly.

The relevant patterns are shown in the near-minimal pair in (10). Both (10a–b) exemplify a quotative construction in which the quote follows its associate reporting clause. In both (10a–b), the reporting verb is *léu* ‘(I) say’, and in both cases this verb is followed by the clitic *ta*. The particle *ki* only appears in the reporting clause in (10b).

- (10) a. O Xačefendís le *(ta), “Si títi
 the.M.NOM.SG Haciefendi.M.NOM.SG say.IPFV.NPST.3SG 3OBJ you.NOM why
 dáraksis ta aúča?”
 meddle.PFV.PST.3SG 3OBJ like.that
 ‘Haciefendi says, “Why did you meddle it this way?”’
 [#:73.03–73.04]
- b. Lénkin *(ta) *ki*, “Čip pérkin mis sa
 say.IPFV.PST.3SG 3OBJ PRT all take.IPFV.PST.3SG 1PL.OBJ in.the.N.ACC.PL

⁷ See section 4.5.4, where I will slightly refine this and show that certain other resumptive elements can replace *ta*.

šéræ tu.”
 hand.N.ACC.PL his
 ‘[My grandmother] used to say, “[The guard] would take us all in his hands.”’

[#2:16.06–16.07]

It is important to point out that the third person object clitic *ta* in the quotative constructions in (10) does not function as the indirect object of the reporting verb. In both (10a–b), the subject of the reporting clause is addressing the speaker. As a result, an overt indirect object clitic in (10) would appear as *mi* ‘to me’ (referring to the speaker) and not as *ta*, which would refer to a third party. The claim that *ta* is not the indirect object is further confirmed by the fact that even in cases in which there is an overt indirect object clitic associated with the reporting verb, *ta* remains obligatorily present (after the indirect object; on the order of clitics, see section 2.4.8). This happens regardless of the presence or absence of *ki*, as the near-minimal pair in (11) shows.

- (11) a. Ípin mi *(ta) ki, “Čo yřévu ta.”
 say.PFV.PST.3SG 1SG.OBJ 3OBJ PRT not want.IPFV.NPST.1SG 3OBJ
 ‘She said to me, “I don’t want it.”’
- b. Ípin mi *(ta), “Ær na iřís aúča šej. . .”
 say.PFV.PST.3SG 1SG.OBJ 3OBJ if SUBJ see.PFV.NPST.1SG such thing.N.NOM.SG
 ‘She said to me, “If you see such a thing. . .”’

In both examples in (11), the indirect object of the verb *léu* ‘(I) say’ is *mi* ‘to me’. As two clitics realizing the same grammatical function cannot co-occur in a single clause (see section 2.4.2.3), *ta* in (11) should not be an indirect object. Therefore, I conclude that *ta* is obligatory with a (di)transitive reporting verb such as *léu* ‘(I) say’ and that it functions as the direct object. This is further verified by the fact that whenever the reporting verb is intransitive, *ta* is systematically absent in the corpora. To illustrate this point, consider the fact that verbs of mental state, e.g., *šérumi* ‘(I) rejoice’, verbs of emotion, e.g., *kléu* ‘(I) weep’, or verbs of bodily movement, e.g., *čirpiémi* ‘(I) flail’, which are all intransitive verbs, may also introduce a quote. In these cases as well, *ki* may, but does not have to, follow the reporting verb. Crucially, after intransitive verbs introducing a quote, the clitic *ta* is not found in the corpora. In this context, the clitic *ta* is also judged as unacceptable by the speakers. Some indicative examples are listed in (12).⁸

⁸ In the written corpus too, there are instances where the verb of the reporting clause is not a verb of saying and in which it is followed by *ki*. Interestingly, the *ti* morpheme (on which see section 4.2) is systematically missing in these cases. Indicative examples are provided in (i).

- (12) a. I néka šérede (*ta) (*ki*), “Írtin
 the.F.NOM.SG woman.F.NOM.SG rejoice.IPFV.NPST.3SG 3OBJ PRT come.PFV.PST.3SG
 i kóri mu!”
 the.F.NOM.SG daughter.F.NOM.SG my
 ‘The woman rejoices, “My daughter came!”’
- b. O nomát ékwapsin (*ta) (*ki*), “Koriénsa!”
 the.M.NOM.SG man.M.NOM.SG weep.PFV.PST.3SG 3OBJ PRT go.blind.PFV.PST.1SG
 ‘The man wept, “I went blind!”’
- c. I néka čirpiéstin (*ta) (*ki*), “γo xáre pos
 the.F.NOM.SG woman.F.NOM.SG flail.PFV.PST.3SG 3OBJ PRT I.NOM now what
 a píku?”
 FUT.DEF do.PFV.NPST.1SG
 ‘The woman flailed, “What am I going to do now?”’

We can conclude from (12) that the occurrence of the clitic *ta* depends on the valency of the reporting verb: it occurs only with (di)transitive verbs; with intransitive verbs, it is unacceptable. Once again, this suggests that it is a direct object. On the other hand, it is also clear that the occurrence of *ki* is not dependent on the valency of the reporting verb: it may be added both after (di)transitive and intransitive verbs when these verbs introduce a quote.

The presence of *ki* does not depend on the linear position of the quote either. As is the case in various other languages (see the papers in Coulmas 1986a), a quote may occur in a number of positions in relation to its reporting clause in PhG: it may follow, precede or be wrapped around its reporting clause. *Ki* may occur in all these contexts, and if it occurs, it is added after the clitic *ta* if the latter is independently required by the valency of the reporting verb. This is exemplified in (13). The reporting verb in (13) is ditransitive (viz. *léu* ‘I say’). (13a) exemplifies a quote following the reporting

- (i) a. Ékwapse o zaptiás *ki* “γo čo boró na
 cry.PFV.PST.3SG the.M.NOM.SG soldier.M.NOM.SG PRT I.NOM not can.IPFV.NPST.1SG SUBJ
 parpatíso.”
 walk.PFV.NPST.1SG
 ‘The soldier wept saying, “I cannot walk.”’
 (Dawkins 1916:544.8)
- b. Šérede i néka *ki* “koriéne o
 rejoice.PST.PFV.3SG the.F.NOM.SG woman.F.NOM.SG PRT go.blind.IPFV.PST.3SG the.M.NOM.SG
 ió mu.”
 son.M.NOM.SG my
 ‘The woman is pleased, “My son is blind.”’
 (Dawkins 1916:476.27)

clause, whereas the quote precedes its associated reporting clause in (13b). Finally, in (13c), one part of the quote precedes, and the other part follows the reporting clause.⁹

- (13) a. Ípin *(ta)(*ki*), “S ipámi sin Čísára.”
 say.PFV.PST.3SG 3OBJ PRT HORT go.PFV.NPST.1PL to.the.F.ACC.SG Kayseri.F.ACC.SG
 ‘She said, “Let’s go to Kayseri.”’
- b. “Piták ta!” le *(ta)(*ki*).
 send.PFV.IMP.2SG 3OBJ say.IPFV.NPST.3SG 3OBJ PRT
 ‘“Send it!” says she.’
- c. “Áanna,” le *(ta)(*ki*), “típus čo ksa.”
 no say.IPFV.NPST.3SG 3OBJ PRT nothing not hear.PFV.PST.1SG
 ‘“No,” says she, “I did not hear anything.”’

An important restriction on its distribution is that, regardless of the position of the quote, the particle *ki* cannot follow the quote. (14a) exemplifies this restriction with a quote following its reporting clause, (14b) with an initial quote and (14c) with a quote wrapped around its associated reporting clause. In all the examples, *ki* is acceptable neither after the initial nor after the final quote. All these suggest that *ki* is a part of the reporting clause and follows the reporting verb inside the reporting clause.

- (14) a. Ípin ta, “S ipámi sin Čísára
 say.PFV.PST.3SG 3OBJ HORT go.PFV.NPST.1PL to.the.F.ACC.SG Kayseri.F.ACC.SG
 (**ki*).”
 PRT
 int.: ‘She said, “Let’s go to Kayseri.”’
- b. “Piták ta (**ki*!)” le ta.
 send.PFV.IMP.2SG 3OBJ PRT say.IPFV.NPST.3SG 3OBJ
 int.: ‘“Send it!” says she.’
- c. “Áanna (**ki*),” le ta, “típus čo ksa (**ki*).”
 no PRT say.IPFV.NPST.3SG 3OBJ nothing not hear.PFV.PST.1SG PRT
 int.: ‘“No,” says she, “I did not hear anything.”’

There is only one condition that restricts the presence of *ki* in the reporting clause: Interrogative verbs in reporting clauses, the most representative of which is *rotáu* ‘(I

⁹ Leaving the issue of *ta* aside, the facts presented so far with respect to synchronic PhG apply to the written corpus too. *Di* always occurs after the reporting verb—as long as it is a verb of saying—no matter whether the quote precedes, follows or is wrapped around the reporting clause. *Ki*, on the other hand, occurs in some instances but not all. For representative examples, see Grégoire (1909:33); Dawkins (1916:472.1, 474.16, 476.3, 530.36, 576.1, 1955:277.12/36, 279), and Theodoridis (1960:224.6, 226.3, 228.20, 1964:278.35, 298.33, 318.20), a.o..

ask', are judged by the speakers as incompatible with *ki*. Notice, however, that the clitic *ta* must still follow these verbs as they are (di)transitive:¹⁰

- (15) a. Rótsa *(ta) (**ki*), “Si xáre pos a píčis?”
ask.PFV.PST.1SG 3OBJ PRT you.NOM now what FUT.DEF do.PFV.NPST.2SG
‘I asked, “What are you going to do now?”’
- b. “Si xáre pos a píčis?” rótsa *(ta) (**ki*).
you.NOM now what FUT.DEF do.PFV.NPST.2SG ask.PFV.PST.1SG 3OBJ PRT
“‘What are you going to do now?’ I asked.’

For the current discussion, it is sufficient to conclude that, excluding interrogatives,

¹⁰ There is a unique instance in the written texts where the verb *rotáu* ‘(I) ask’ co-occurs with *ki* in the reporting clause; however, notice that the first sentence in the quote is a declarative:

- (i) Rótse tin górin du *ki* “χο até to palikári
ask.PFV.PST.3SG the.F.ACC.SG daughter.F.ACC.SG his PRT I.NOM this.SG the.N.ACC.SG youth.N.ACC.SG
pítaksa da ađé na kópsete ton kelén du. Si, a
send.PFV.PST.1SG 3OBJ here SUBJ CUT.PFV.NPST.2PL the.M.ACC.SG head.M.ACC.SG his you.NOM INTRJ
kóri mu, sotípos to píjez atsé?”
daughter.VOC my why 3OBJ do.PFV.PST.2SG this.way
‘He asked his daughter, “I sent this youth here, for you to cut off his head. Why, my daughter,
have you done this?”’

(Dawkins 1916:500.11)

Interestingly Theodoridis (1939) rewrites the sentence by removing *ki* and adding the predicate *ípen* ‘(he) said’:

- (ii) Róts o vasilós tin kórin tu či ípen
ask.PFV.PST.3SG the.M.NOM.SG king.M.NOM.SG the.F.ACC.SG daughter.F.ACC.SG his and say.PFV.PST.3SG
ti “χο té to palikári pítaksa t ađé na kópsete
PRT I.NOM this.SG the.N.ACC.SG youth.N.ACC.SG send.PFV.PST.1SG 3OBJ here SUBJ CUT.PFV.NPST.2PL
ton kellén tu. Si, a kóri mu, sotípos ta píčes
the.M.ACC.SG head.M.ACC.SG his. you.NOM INTERJ daughter.VOC my why 3OBJ do.PFV.PST.3SG
avútsi?”
this.way
‘The king asked his daughter and said, “I sent this youth here, for you to cut off his head. Why,
my daughter, have you done this?”’

(Theodoridis 1939:A127)

Theodoridis’ addition of the verb *ípen* ‘(he) said’ (and the morpheme *ti*) to the reporting clause is noteworthy, as it may suggest that the verb *rotáu* ‘(I) ask’ could not be followed by *ki* in earlier stages of PhG, contrary to the example provided by Dawkins (1916) in (i). However, the corrections proposed in Theodoridis (1939) should be treated with some caution since at this point I am not entirely sure whether this deletion reflects a genuine correction attempt or it stems from a simple omission (see also section 1.5.2.2 on this issue).

any verb can be followed by *ki* in a reporting clause.¹¹ The quote may precede, follow or be wrapped around the reporting clause, but the particle *ki*, when present, must remain to the right of the verb to which the quote is linked, and it is separated from the reporting verb by the clitic *ta* if *ta* is present (see also section 4.5.4, where I will refine this and show that *ta* and *ki* do not have to be adjacent). As discussed, a (di)transitive verb of a reporting clause is obligatorily followed by the clitic *ta* which functions as the direct object, whereas an intransitive verb is incompatible with the clitic *ta*. The relevant patterns are summarized in (16).

- (16) a. (“Quote,”) [_{Reporting clause} V_[(di)transitive] + *ta* (*ki*)], (“Quote”)
 b. (“Quote,”) [_{Reporting clause} V_[intransitive] (*ki*)], (“Quote”)

The question that emerges now is what the function of the optional particle *ki* is in a quotative construction. This question will be addressed in the next section.

4.3.1.2 The role of *ki* in a quotative construction

The speakers I consulted uniformly judged a reporting clause with *ki* as “more emphatic” than one without *ki*, which is a first indication that *ki* is not entirely optional. To elaborate on this rather vague judgment, let us consider the minimal pair in (17a–b), which differ only with respect to the absence (17a) and presence (17b) of *ki*.

- (17) a. O Andriás ípin ta, “čo čo
 the.M.NOM.SG Andrew.M.NOM.SG say.PFV.PST.3SG 3OBJ I.NOM not
 píra ta paráďa.”
 take.PFV.PST.1SG the.N.ACC.PL money.N.ACC.PL
 ‘Andrew said, “I did not take the money.”’

¹¹ There is another restriction on the reporting clause, which however seems to be independent of *ki*. A reporting clause cannot host a negated predicate.

- (i) a. * Čo ípa ta (*ki*), “S ipámi sin Čisára.”
 not say.PST.PFV.1SG 3OBJ PRT HORT go.PFV.NPST.1PL to.the.F.ACC.SG Kayseri.F.ACC.SG
 ‘I did not say, “Let’s go to Kayseri.”’
 b. * “S ipámi sin Čisára,” čo ípa ta (*ki*).
 HORT go.PFV.NPST.1PL to.the.F.ACC.SG Kayseri.F.ACC.SG not say.PST.PFV.1SG 3OBJ PRT
 ‘Let’s go to Kayseri,’ ‘I did not say.’

(ia) is ungrammatical as a quotative construction, although it is grammatical under the reading ‘What I said was not “Let’s go to Kayseri”’ (i.e., with corrective negation), in which the utterance in quotation marks is not reported to a third party but is rather negated as a constituent. This dichotomy is clearer in (ib), where, due to the fact that the quote precedes the reporting clause, the reading ‘What I said was not “Let’s go to Kayseri”’ is difficult to obtain (see section 4.5.4.5 for an argument for why this should be so).

- b. O Andriás ípin ta *ki*, “*yo* *čo*
 the.M.NOM.SG Andrew.M.NOM.SG say.PFV.PST.3SG 3OBJ PRT I.NOM not
píra ta *paráða*.”
 take.PFV.PST.1SG the.N.ACC.PL money.N.ACC.PL
 ‘Andrew said, “I did not take the money.”’

Both (17a–b) are composed of a reporting clause, i.e., *o Andriás ípin ta* ‘Andrew said’, and a quote, i.e., *yo čo píra ta paráða* ‘I did not take the money’. Importantly, the presence or absence of *ki* has no effect on the propositional content of either of these, nor does it alter their truth conditions. However, while *ki* is truth conditionally neutral, it does have some interpretive impact on the speaker’s reporting act and not on the content of the reporting act: (17a–b) differ with respect to the reporter’s, i.e., speaker’s, subjective evaluation of the reporting act she makes. In (17a), the speaker simply reports to her interlocutor the event in which Andrew said that he did not take the money. She does not offer any personal evaluation for the factual status of the proposition, nor does she claim to offer any evidence for its factual status. Therefore, she does not commit herself to the truth of her utterance. The speaker may have witnessed the reporting act by Andrew. In this case, she herself would constitute the first-hand source for the factual status of the report, which would also mean that she has authority with respect to the message communicated. However, none of these are necessarily the case: the speaker may also, and more likely so, have (over)heard the event reported by another person or have obtained information about it via a different source, regarding whose trustworthiness she expresses no personal evaluation. She may even have inferred that Andrew uttered the quote from another (logical) proposition/event. As a logical outcome, the hearer is left to choose whether or not to believe that what the speaker utters is true.

In (17b), on the other hand, by using *ki* the speaker strongly commits herself to the truth of her utterance. The impact of *ki* can be paraphrased as follows: ‘In fact/truly/in actual fact, Andrew said “I did not take the money.”’ As such, (17b) is pragmatically felicitous only when the speaker claims authority for her report and commits to the truth of her proposition, which would most naturally be the case if she personally witnessed Andrew saying that he did not take the money, or less likely, if she heard it from a source that she judges as highly reliable.¹² By using *ki*, she strongly conveys that Andrew did actually make this statement and she thus encourages her interlocutor to believe that what she is reporting is true and has actually taken place. Since by using *ki* the speaker herself assumes responsibility for the truth of her reporting act, *ki* is not compatible in a reporting clause which is itself a question:

¹² Incidentally, during an interview with a native speaker who is highly religious, she used *ki* whenever citing a quote attributed to Jesus, which shows that she takes the Bible as a highly reliable source.

- (18) a. O Andriás ípin ta, “γο čo
 the.M.NOM.SG Andrew.M.NOM.SG say.PFV.PST.3SG 3OBJ I.NOM not
 píra ta paráða”?
 take.PFV.PST.1SG the.N.ACC.PL money.N.ACC.PL
 ‘Did Andrew say, “I did not take the money”?’
- b. *O Andriás ípin ta *ki*, “γο čo
 the.M.NOM.SG Andrew.M.NOM.SG say.PFV.PST.3SG 3OBJ PRT I.NOM not
 píra ta paráða”?
 take.PFV.PST.1SG the.N.ACC.PL money.N.ACC.PL

Furthermore, due to the fact that by means of *ki* the speaker assumes responsibility for the source and the truth of the event she is reporting, a quotative construction with *ki* becomes unacceptable if it is embedded under a matrix clause, in other words, quotative constructions with *ki* constitute a type of MCP (see section 3.3.2.4 for a brief introduction to MCP):

- (19) A nomát ípin ta [o Andriás
 a man.M.NOM.SG say.PFV.PST.3SG 3OBJ the.M.NOM.SG Andrew.M.NOM.SG
 ípin ta (**ki*), “γο čo píra ta paráða.”]
 say.PFV.PST.3SG 3OBJ PRT I.NOM not take.PFV.PST.1SG the.N.ACC.PL money.N.ACC.PL
 ‘A man said (that) Andrew said, “I did not take the money.”’

Ki in the utterance in (19) was uniformly rejected by my informants and there are no examples of this pattern in the recordings. This ungrammaticality follows once we assume that the subject of the matrix clause, *a nomát* ‘a man’, is explicitly cited as the source of the reporting event. The speaker of (19) merely reports what has been reported by the subject of the matrix clause. Since the speaker is not the immediate source of the reporting event, she can also not claim authority on the reporting event.

Another observation in the same vein is the incompatibility of the particle *ki* with expressions that are referred to in the pragmatics literature as “hedges”. Hedges are a particular type of lexical or syntactic device used to mitigate the force of a speaker’s claim. In such contexts, the speaker can avoid making a definite statement and keep her options open (Lakoff 1973:54; Holmes 1984; Palmer 2001[1986]:35; Coates 2013[2003]:31). Modal auxiliaries, such as *may*, *might*, *could*, etc., modal adverbs such as *perhaps*, *possibly* and *probably*, fixed phrases such as *I mean*, *I think*, *sort of*, discourse markers such as *well* or question tags may all function as hedges (Lakoff 1973). The examples in (20), taken from Lakoff (1973), illustrate how the question tag functions as a hedge at a discourse level. In (20a), the addition of a question tag after the statement ‘He was out at third’ is felicitous in the context in which the speaker has seen something only indistinctly and in which she might have reason to believe that her addressee had a better view. In (20b), however, the question

tag is pragmatically inappropriate because the personal experience of the speaker is directly involved; in such cases the speaker normally has the correct answer. As a result, hedging a claim that is patently true to the speaker is rather odd.

(20) a. I had my glasses off. He was out at third, wasn't he?

b. * I have a headache, don't I?

(Lakoff 1973:55 ex. (9,11), her judgments)

Returning to the use of the particle *ki*, we see that while a quotative construction without *ki* can be hedged, one which hosts *ki* in its reporting clause cannot. This is illustrated in the minimal pairs in (21–22). (21) exemplifies the adverb *pérki* 'perhaps', and (22) exemplifies tag questions *ma/xe/aúča čo íni?* 'isn't it/right/isn't it so?' (see section 2.4.3.2.1 on one type of tag question) as hedging devices in quotative constructions with and without *ki*. Only the quotative constructions without *ki* are compatible with these hedges (cf. (21a–b), and (22a–b)). Observe that in all cases the hedges are associated with the reporting clause and are not internal to the quote.

(21) a. Pérki o Andriás ípin ta, “ço čo
perhaps the.M.NOM.SG Andrew.M.NOM.SG say.PFV.PST.3SG 3OBJ I.NOM not
píra ta paráďa.”
take.PFV.PST.1SG the.N.ACC.PL money.N.ACC.PL
‘Perhaps, Andrew said, “I did not take the money.”’

b. # Pérki o Andriás ípin ta *ki*, “ço
perhaps the.M.NOM.SG Andrew.M.NOM.SG say.PFV.PST.3SG 3OBJ PRT I.NOM
čo píra ta paráďa.”
not take.PFV.PST.1SG the.N.ACC.PL money.N.ACC.PL

(22) a. O Andriás ípin ta, “ço čo
the.M.NOM.SG Andrew.M.NOM.SG say.PFV.PST.3SG 3OBJ I.NOM not
píra ta paráďa,” *ma/xe/aúča čo íni?*
take.PFV.PST.1SG the.N.ACC.PL money.N.ACC.PL not/yes/such not be.NPST.3SG
‘Andrew said, “I did not take the money,” isn't it/right/isn't it so?’

b. # O Andriás ípin ta *ki*, “ço čo
the.M.NOM.SG Andrew.M.NOM.SG say.PFV.PST.3SG 3OBJ PRT I.NOM not
píra ta paráďa,” *ma/xe/aúča čo íni?*
take.PFV.PST.1SG the.N.ACC.PL money.N.ACC.PL not/yes/such not be.NPST.3SG

The incompatibility of *ki* with hedging devices in the reporting clause (21b, 22b) follows from the claim that the use of *ki* in a reporting clause signals a strong commitment of the speaker to the truth of her proposition. Once this commitment is signaled by the speaker through the use of *ki*, the additional use of hedges to express

4.3.2.1.1 Assertion and assertive predicates As I will discuss further in section 4.3.2.1.3, *ki* is compatible with a PCC only if the matrix predicate expresses an assertion. Assertion is a central kind of speech act, typically carried out by the utterance of a declarative sentence. A more elaborate definition is as follows:

An assertion is a speech act in which something is claimed to hold, for instance that *there are infinitely many prime numbers*, or, with respect to some time *t*, that *there is a traffic congestion on Brooklyn Bridge at t*, or, of some person *x* with respect to some time *t*, that *x has a tooth ache at t*.

(Pagin 2016[2007])

It is often argued that all assertions are associated with the speaker (Hooper and Thompson 1973:473). Predicates taking clausal complements may be used to introduce assertions. Adopting the definition of assertion above, an assertive predicate such as *claim* is defined as a predicate that presents the proposition in its complement clause as an assertion (Hooper and Thompson 1973; Terrell and Hooper 1974; Hooper 1975; Hegarty 1990; Sheehan and Hinzen 2011, a.o.). According to Hooper and Thompson (1973:473) “[t]he assertion of a sentence may be identified as that part which can be negated or questioned by the usual application of the processes of negation and interrogation.” Consider the example in (25a), in which an assertive predicate, *claim* (Hooper 1975), takes as its complement the embedded clause *that Euler discovered the polyhedral formula*.

- (25) a. Sam claimed [that Euler discovered the polyhedral formula].

In (25a), the matrix subject, *Sam*, makes a claim that the propositional content of the complement clause is true. The verb *claim* represents the subject’s belief about the truth or falsehood of the embedded proposition. On the other hand, the speaker who utters (25a) does not commit to any given truth-value for the embedded proposition. Therefore, for (25a) to be true, the only requirement is that *Sam* claimed it to be true that Euler discovered the polyhedral formula. The embedded proposition that ‘Euler discovered the polyhedral formula’ does not have to be true; for instance, it may very well be the case that it is not Euler but someone else who discovered the relevant formula. In other words, the truth-value of the matrix clause in (25a) does not depend on the truth-value of its propositional argument ‘Euler discovered the polyhedral formula’. The proposition conveyed by the complement clause is thus merely asserted: this means that it can be negated as in (25b), or questioned as in (25c) by the speaker (Hooper and Thompson 1973:473).

- (25) b. Sam claimed [that Euler discovered the polyhedral formula], though Euler did not discover it.

- c. Sam claimed [that Euler discovered the polyhedral formula]. Did Euler (really) discover it?

In the literature, the concept assertion is standardly taken to contrast with the notion of “presupposition” (Terrell and Hooper 1974:485; Hooper 1975). According to Keenan (1971, also Shanon 1976; Hegarty 1990; Melvold 1991) presupposition is a relation between a sentence and a proposition. More specifically, it is a logical entailment of the truth of the propositional content of a complement clause which holds not only in positive declarative contexts, but also under the scope of sentential negation and in interrogatives.¹³ According to Karttunen (1973:169) “to presuppose something as a speaker is to take its truth for granted and to assume that the audience does the same.” (see also Stalnaker 1973).

Much of the literature has focused on the fact that certain predicates presuppose—rather than (merely) assert—the truth of the propositional content of a complement clause they take. Predicates that presuppose a proposition have been referred to with different terms such as “presuppositional predicates” (e.g., Givón 1998; Kastner 2015), “non-stance predicates” (Cattell 1978; Hegarty 1990), and more generally “factive predicates” (Kiparsky and Kiparsky 1970; Karttunen 1971, a.o.).¹⁴ As initially discussed by Kiparsky and Kiparsky (1970, see also Karttunen 1971, a.o.), factive predicates “presuppose [...] that the embedded clause expresses a true proposition and make some assertion about that proposition” (Kiparsky and Kiparsky 1970:145). An oft-cited example of a factive/presuppositional predicate is *be aware*. Consider the example in (26a).

- (26) a. Sam is aware [that Euler discovered the polyhedral formula].

The predicate *be aware* not only implies that Sam had the mental state of being aware of the proposition in the embedded clause, it also, and more crucially, implies that the speaker presupposes the truth of the same proposition. Unlike sentences with an assertive predicate, a sentence with a factive predicate such as (26a) can be true only if its propositional argument ‘Euler discovered the polyhedral formula’ is true. Presupposed propositions, as opposed to asserted ones, are not affected by negation (26b) or question operators (26c), since a proposition which is presupposed to be true is non-cancelable:

- (26) b. Sam is aware [that Euler discovered the polyhedral formula], # though he did not discover it.

¹³ This is the “semantic” definition of presupposition, which is sufficient for the purposes of the dissertation. In the literature, another definition of presupposition, namely, “pragmatic” presupposition has been put forward. I refer the reader to Karttunen (1973:169) and Stalnaker (1973) for this definition and to Shanon (1976) and Nye (2013:72) on the distinction between the two.

¹⁴ The differences that constitute motivation for proposing these different terms are tangential to the scope of this dissertation, since “presuppositionality” is not the main concern here.

- c. Sam is aware [that Euler discovered the polyhedral formula]. # Did he discover it?

We can therefore characterize factive predicates as “non-assertive”.

In certain languages, the semantic difference between complement clauses of assertive predicates and complement clauses of factive predicates is morphologically encoded in the shape of the complementizers that introduce them. In SMG, for instance, complement clauses of factive predicates are introduced by the complementizer *pu* and complement clauses of assertive predicates are introduced by the complementizers *óti* or *pos*; the difference between the latter two “assertive” complementizers is merely stylistic (Roussou 1994, 2000, 2006; Varlokosta 1994, a.o.).¹⁵

There is a substantial body of literature that further refines or replaces the factive/assertive dichotomy. Concepts that have been associated with the factive complement clauses include a.o., “definiteness” (Melvold 1991), “familiarity” (Hegarty 1992) and “referentiality” (de Cuba 2007; de Cuba and Ürögdi 2009; Haegeman and Ürögdi 2010a,b). Furthermore, various structural differences—the most salient of which is the (un)availability of MCP (section 3.3.2.4)—have been observed between complement clauses of factive predicates and complement clauses of assertive predicates (see especially Nye 2013:74–82 for an overview of these differences). These differences have been accounted for by a number of different proposals. The presentation of these differences and the proposals put forward to derive these differences extends beyond the purposes of the current chapter. I refer the interested reader to Kiparsky and Kiparsky (1970) and Hooper and Thompson (1973) for earlier observations on certain differences between complement clauses to factive predicates and complement clauses to assertive predicates, and to Haegeman (2006b:1663–1666, 2012:257–285) and the references therein for further differences and an overview of proposals to account for these differences.

It should be noted here that the category of non-assertive predicates includes other predicate types beyond just factive ones. For example, predicates that select complement clauses whose proposition is not realized, such as volitional and desiderative verbs (e.g., *want* and *wish*), directive verbs (e.g., *order* and *command*), verbs of endeavor (e.g., *try* and *attempt*), permissive verbs (e.g., *allow* and *enable*) or modal verbs (e.g., *can* and *must*), are also considered non-assertive (Hooper 1975; Sheehan and Hinzen 2011, a.o.). These predicates correspond to Farkas’ (1985, 1992) “strong intensional predicates” and to Giannakidou’s (1998, 1999a,b, 2009) “non-veridical predicates”, and they are generally known to license subjunctive mood in their complements in languages such as Romance and SMG (see especially Farkas 1985, 1992 and Giannakidou 2009). Farkas (1985, 1992) in particular argues that strong intensional predicates do not assert that their complements hold in any possible world.

¹⁵ I refer the reader to Roussou (1994, 2000, 2006) for further details on SMG complementizers.

Rather, with this type of predicate, the speaker attempts to shape the future (hence they are also sometimes referred to as future-oriented or future-referring verbs). Consider for example (27a).

- (27) a. Sam wanted/requested/tried/had [to read about Euler].

(27a) does not assert that the proposition ‘Sam has read/reads/read about Euler’ is true. The infinitival clause does not constitute an assertion in terms of Hooper and Thompson’s diagnostics (1973): the content of this infinitival clause cannot be targeted by a following negator or question tag (27b–c).

- (27) b. Sam wanted/requested/tried/had [to read about Euler], # though he does/did/has/will not.
 c. Sam wanted/requested/tried/had [to read about Euler]. # Does/did/has/will he?

In addition, (27a) does not presuppose the truth of Sam’s reading about Euler. These predicates, which neither presuppose nor assert a proposition, are subsumed under the general category of “non-assertive” predicates (Hooper and Thompson 1973; Hooper 1975).

Based on their assertoric, non-assertoric and factive nature, Hooper and Thompson (1973; see also Hooper 1975) classify clause-embedding predicates as in (28).

- (28) Class A – *strongly assertive predicates*, which have as their complements reported discourse, e.g., *say, report, claim* and *vow*.

Class B – *weakly assertive predicates*, which, beside asserting a proposition, also “qualify the assertion” (rather than report it). Some examples of this category provided by Hooper and Thompson (1973:473, 477–478) are *think, believe, suppose* and *guess*.

Class C – *non-assertive predicates*, which neither assert nor presuppose their complements. Representative examples are *doubt, deny* and *be possible*.

Class D – *factive predicates*, which express some emotion or subjective attitude about a presupposed complement. Relevant examples are *regret, resent, be sorry* and *be surprised*.

Class E – *semi-factive predicates*, which “assert the manner in which the subject came to know that the complement proposition is true” (Hooper and Thompson 1973:480). These predicates are intrinsically factive. Some examples for this category are *realize, know, see, learn* and *recognize*. Unlike factive predicates in Class D, which express a subjective attitude about the presupposed complement proposition and whose factive

property is constant, semi-factive predicates lose their factivity in certain contexts, such as in questions and conditionals, and under the scope of negation.

In relation to the classification in (28), Hooper and Thompson (1973) claim that assertive predicates are composed of only Class A, B and E predicates, the latter of which also function as factive predicates (I refer the reader to Hooper and Thompson 1973:480 for environments in which Class E predicates lose their factivity). According to the classification in (28), Class D predicates are presuppositional, i.e., factive, and Class C predicates neither presuppose nor assert. See also (Hooper 1975) for a similar conclusion.

Melvold (1991) argues that a further class that contains “communication semi-factive predicates”, which is labeled here as Class F for convenience, should be added to the list of (Hooper and Thompson 1973):¹⁶

- (28) Class F – *communication semi-factives*, which depict communicative acts and which are prototypically assertive. However, they also allow certain complement-types generally restricted to factive verbs; Melvold (1991:102) argues that, in this case, they become factive. Some examples given in Melvold (1991:100, ex. (5b)) are *disclose*, *divulge*, *concede* and *reveal* (see also Kiparsky and Kiparsky 1970).

Sheehan and Hinzen (2011) further expand class C of Hooper and Thompson (1973) to include Farkas’ (1985, 1992) strong intensional predicates (e.g., *wish*, *want* and *order*) and also interrogative predicates like *ask*. The latter addition is in line with Quirk et al.’s (1985:83), Palmer’s (2001[1986]:11–13) and Sheehan and Hinzen’s (2011) argument that questions are non-assertive because they do not denote a proposition. Sheehan and Hinzen (2011) propose the fine-grained classification of assertive and non-assertive predicates, given in Table 4.1. According to this classification, predicates belonging to classes A, B, E and F are assertive, whereas predicates belonging to classes C and D are non-assertive.

In the next section, adopting the classification by Sheehan and Hinzen (2011), I provide an overview of assertive and non-assertive verbs in PhG and the complement clauses they select.¹⁷

¹⁶ To my knowledge, the term “communication semi-factive predicates” and the label Class F were first used by Sheehan and Hinzen (2011) to characterize Melvold’s class of “communicative acts”. This is the convention I adopt in this dissertation.

¹⁷ Although the assertive/non-assertive distinction has been made for all types of predicates in the literature, hereafter I will discuss this distinction only in the context of verbs in PhG, because verbs constitute the only relevant predicate type for the current discussion.

	Communication semi-factive (Class F)	Non-factive communication (Class A)
Assertive	<i>disclose, divulge, reveal, admit ...</i>	<i>say, claim, assert, report, vow ...</i>
	Cognitive semi-factive (Class E)	Non-factive cognitive (Class B)
	<i>know, discover, realize, see, forget ...</i>	<i>think, believe, suppose, guess, imagine ...</i>
Non-assertive	Emotive factive Class (D)	Non-assertive (Class C)
	<i>regret, deplore, be glad, be surprised ...</i>	<i>doubt, wish, want, wonder, beg, ask ...</i>

Table 4.1: Assertive and non-assertive predicates (Sheehan and Hinzen 2011:436)

4.3.2.1.2 Assertive and non-assertive verbs in PhG Leaving aside cognitive semi-factive verbs (Class E), to which I will return momentarily, PhG verbs that are assertive according to Table 4.1 take complement clauses which are not marked by an overt complementizer (see sections 2.4.9.1.1 and 3.3.2.5.2), indicated by \emptyset below:

- (29) a. Piltúrta [Øčo xa nártun ta čoúxa].
report.PFV.PST.1SG not FUT.CF COME.PFV.NPST.3PL the.N.NOM.PL child.N.NOM.PL
'I reported (that) the children would not come.'
(Class A – Non-factive communication)
- b. Tušuntáu/pandéxu/léu ta kézi [Øčo éna nártun
think/suppose/assume.IPFV.NPST.1SG not FUT.INDF COME.PFV.NPST.3PL
ta čoúxa].
the.N.NOM.PL child.N.NOM.PL
'I think/suppose/assume (that) the children will not come.'
(Class B – Non-factive cognitive)
- c. Aynattúrta [Øčo xa nártun ta čoúxa].
reveal.PFV.PST.1SG not FUT.CF COME.PFV.NPST.3PL the.N.NOM.PL child.N.NOM.PL
'I revealed (that) the children would not come.'
(Class F – Communication semi-factive)

Certain cognitive semi-factive (Class E) verbs, such as *θoró* '(I) see', *αχνατίζυ* '(I) understand' and *γρικáu* '(I) realize', behave similarly to the assertive verbs exemplified in (29) and select complement clauses introduced by \emptyset (30a). However, other such verbs, such as *katéxu* '(I) know', *zelmóno* '(I) forget', *éršiti so axíli mu*

‘(I) recall’ (literally, ‘it comes to my mind’), *θumámi* ‘(I) remember’ and *antiéu* ‘(I) recollect’, differ from the other cognitive semi-factive verbs in that they may take either a complement clause without an overt complementizer or a complement clause introduced by the complementizer *tu* ‘that’. This is exemplified in (30b–c), with the verb *katéxu* ‘(I) know’.

- (30) a. *θoró/aynatízu/γrikáú* [Ø *čo éna nártun*
see/understand/realize.IPFV.NPST.1SG NOT FUT.INDF COME.PFV.NPST.3PL
ta čočúxa].
the.N.NOM.PL child.N.NOM.PL
‘I see/understand/realize (that) the children will not come.’
- b. *Katéxu* [Ø *čo a nártun ta*
know.IPFV.NPST.1SG NOT FUT.DEF COME.PFV.NPST.3PL the.N.NOM.PL
čočúxa].
child.N.NOM.PL
‘I know (that) the children are not coming.’
- c. *Katéxu* [*tu čo írtan ta čočúxa*].
know.IPFV.NPST.1SG that not COME.PFV.PST.3PL the.N.NOM.PL child.N.NOM.PL
‘I know that the children did not come.’
- (Class E – Cognitive semi-factive)

The presence of the complementizer has an interpretive effect. (30b–c) differ with respect to the speaker’s stance to the certainty of eventuality expressed in the embedded clause. In (30b), the speaker expresses that it is likely that the event expressed in the complement clause will take place in the (near) future, yet it has not taken place yet; therefore, there remains a possibility that it may not take place eventually. In this respect, the verb *katéxu* ‘(I) know’ in (30b) functions as a typical assertive predicate, and may be compared to *pistéu* ‘(I) believe’. In (30c), on the other hand, the embedded clause is presupposed: the speaker expresses her mental state about an event which, in her view, certainly took place.

Non-assertive emotive factive (Class D) verbs in PhG take complement clauses that are obligatorily introduced by the complementizer *tu* (see also section 2.4.9.1.2):

- (31) a. *Pušmánepsa* [**(tu) čo xítsa tarná so*
regret.PFV.PST.1SG that not run.PFV.PST.1SG quickly to.the.M.ACC.SG
Xáčefendí].
Háčiefendi.M.ACC.SG
‘I regretted that I did not go to Hacíefendi immediately.’

- b. Sævíntsa [*(tu) píka azáti to
 be.glad.PFV.PST.1SG that make.PFV.PST.1SG free.SG the.N.ACC.SG
 pulpúli].
 nightingale.N.ACC.SG
 ‘I was glad that I set the nightingale free.’

(Class D Emotive factive)

Broadly speaking, non-assertive (Class C) verbs—excluding *rotáu* ‘ask’ (see section 2.4.9.1.3 on the complement clauses that this verb takes)—select complement clauses introduced by the subjunctive particle *na* (see section 2.4.9.2):

- (32) a. Čapalátsa/nietléntsa [na tavrísu ta θálæ].
 try/intend.PFV.PST.1SG SUBJ pull.PFV.NPST.1SG the.N.ACC.PL stone.N.ACC.PL
 ‘I tried/intended to haul the stones.’
- b. yrévu [na fáu suuzyúta].
 want.IPFV.NPST.1SG SUBJ eat.PFV.NPST.1SG roasted.meat.N.ACC.PL
 ‘I want to eat roasted meat.’
- c. ěóka ta emíri [na sorépsun ta
 give.PFV.PST.1SG 3OBJ order.N.ACC.SG SUBJ collect.PFV.NPST.3PL the.N.ACC.PL
 meiváěa].
 fruit.N.ACC.PL
 ‘I ordered them to collect the fruit.’
- d. Parakáltsa ta [na mu mi salépsi].
 beg.PFV.PST.1SG 3OBJ SUBJ not 1SG.OBJ bother.PFV.NPST.3SG
 ‘I begged him not to bother me.’

(Class C – Non-assertive)

PhG modal verbs such as *poráu* ‘(I) can’ or aspectual verbs such as *pašlatízu* ‘(I) start’ and *pitiéu* ‘(I) finish’ also select a subjunctive complement clause. As is the case with other non-assertive (Class C) verbs, the complement clause of such verbs is not asserted. Therefore, I classify them together with non-assertive (Class C) verbs:

- (32) e. Poráu [na tavrísu ta θálæ].
 can.IPFV.NPST.1SG SUBJ pull.PFV.NPST.1SG the.N.ACC.PL stone.N.ACC.PL
 ‘I can haul the stones.’
- f. Pašlátsa [na kamnúnu son tópu].
 start.PFV.PST.1SG SUBJ work.IPFV.NPST.1SG in.the.M.ACC.SG field.M.ACC.SG
 ‘I started to work in the field.’

(Class C – Non-assertive)

The various PhG verb categories that have been exemplified in this section and the complementizers marking complement clauses selected by these verbs are summarized in Table 4.2, adapted from Sheehan and Hinzen (2011).

4.3.2.1.3 *Ki* and assertive verbs In general, only matrix clauses containing assertive verbs can accommodate the particle *ki* (but see below for an exception). When *ki* follows a (di)transitive assertive clause-embedding verb, the third person object clitic *ta* is obligatorily associated with the same verb. This clitic functions as the resumptive element of the complement clause; hence, it assumes the direct object function (see sections 2.4.2.2 and 2.4.9.1.1). For an illustration, compare (33a–b). (33a) exemplifies a PCC with an assertive matrix verb, *pandéxu* ‘(I) suppose’. In (33a), the object clitic as a resumptive element of the complement clause may be added to the matrix verb, but this is not obligatory, according to speaker judgments. (33b) differs from (33a) in two respects; first, *ki* is added to the PCC, and second, the object clitic *ta* that assumes the direct object function becomes obligatory.¹⁸ That *ta* is indeed a direct object, and nothing else, is evidenced by the fact that a verb like *pandéxu* ‘(I) suppose’ is mono-transitive, i.e., it does not have an indirect object argument.

- (33) a. Pandéxu (ta) [Ø čo éna nártun ta
 suppose.IPFV.NPST.1SG 3OBJ not FUT.INDF come.PFV.PST.3PL the.N.NOM.PL
 čočúxa].
 child.N.NOM.PL
 ‘I suppose (that) the children will not come.’
- b. Pandéxu *(ta)ki [Ø čo éna nártun ta
 suppose.IPFV.NPST.1SG 3OBJ PRT not FUT.INDF come.PFV.PST.3PL the.N.NOM.PL
 čočúxa].
 child.N.NOM.PL
 ‘I suppose (that) the children will not come.’
 (Class B – Non-factive cognitive)

In the context of the particle *ki* the object clitic *ta* is obligatory with all assertive verbs identified in Table 4.2. Further examples are provided in (34).¹⁹

¹⁸ This is again a very robust generalization. Similar to the case in quotative constructions, *ta* in a PCC with *ki* can be replaced by other resumptive elements (see also fn. 7). Adding all these variables to the present discussion would bring extra complication, since I am mainly focusing on the interpretive properties of *ki*. In section 4.5.4.3, I provide an extensive account of what these resumptive elements can be and what they serve for in a PCC with *ki*.

¹⁹ The only exception to the requirement that *ta* must be present after assertive verbs in a PCC with *ki* is the case of the complex predicate *léu ta kézi* ‘(I) assume’, hence *léu ta kézi* (**ta*) *ki*. However, as the gloss in (i) for this complex predicate shows, there is already an object clitic *ta* following the verb *léu* ‘(I) say’. Recall from section 2.4.2.3, that two identical clitics cannot co-occur.

Verb Class	Verb Type	Example	Complementizer
Assertive	Class A Non-factive communication	<i>léu</i> , '(I) say', <i>pilurítzu</i> '(I) report'	∅
	Class B Non-factive cognitive	<i>pandéxu</i> '(I) suppose', <i>pištéu</i> '(I) believe', <i>tušmítáu</i> / <i>nanámí</i> '(I) think', <i>léu ta kézi</i> '(I) assume'	∅
Class E Cognitive semi-factive	Class F Communication semi-factive	<i>katéxu</i> '(I) know', <i>zelmóno</i> '(I) forget', <i>éřšiti so axíli mu</i> '(I) recall', <i>θumámí</i> , '(I) remember', <i>aniéu</i> '(I) recollect' <i>θoró</i> '(I) see', <i>a ynátzú</i> '(I) understand', <i>yríkáu</i> '(I) realize'	∅ (also <i>tu</i> for <i>katéxu</i> '(I) know', <i>zelmóno</i> '(I) forget', <i>éřšiti so axíli mu</i> 'I recall', <i>θumámí</i> , '(I) remember', <i>aniéu</i> '(I) recollect').
		<i>A ynatturítzu</i> '(I) reveal'	∅
Non-assertive	Class C Non-assertive	<i>šupelertzu</i> '(I) doubt/suspect', <i>yrévu</i> '(I) want', <i>čapalattzu</i> '(I) try', <i>nietlenítzu</i> '(I) intend', <i>poráu</i> '(I) can', <i>pařlatítzu</i> '(I) start', <i>pištéu</i> '(I) finish', <i>đíu emíri</i> '(I) order', <i>rotáu</i> '(I) ask'	<i>na</i> (for <i>rotáu</i> '(I) ask', see section 2.4.9.2)
	Class D Emotive factive	<i>puřmanévu</i> '(I) regret', <i>sevinítzu/ řévu</i> '(I) am glad', <i>šařítéu</i> '(I) am surprised'	<i>tu</i>

Table 4.2: Assertive and non-assertive verbs in PhG and complementizers introducing the relevant embedded clauses

- (34) a. Piltúrta *(ta) *ki* [[Ø čo xa nártun ta
 report.PFV.PST.1SG 3OBJ PRT not FUT.CF come.PFV.NPST.3PL the.N.ACC.PL
 čočúxa].
 child.N.ACC.PL
 ‘I reported (that) the children would not come.’
 (Class A – Non-factive communication)
- b. yríkta *(ta) *ki* [Ø čo xa nártun ta
 realize.PFV.PST.1SG 3OBJ PRT not FUT.CF come.PFV.NPST.3PL the.N.NOM.PL
 čočúxa].
 child.N.NOM.PL
 ‘I realized (that) the children would not come.’
 (Class E – Cognitive semi-factive)
- c. Aynattúrta *(ta) *ki* [Ø čo xa nártun ta
 reveal.PFV.PST.1SG ta PRT not FUT.CF come.PFV.NPST.3PL the.N.NOM.PL
 čočúxa].
 child.N.NOM.PL
 ‘I revealed (that) the children would not come.’
 (Class F – Communication semi-factive)

All cognitive semi-factive (Class E) verbs can be followed by *ki*, provided that the complement clause which they select lack the overt complementizer (35a) (see also (34b)). In this case too, the object clitic *ta* must be present. When the overt complementizer *tu* ‘that’ is present, on the other hand, as in (35b), *ki* cannot follow the matrix verb. The ungrammaticality of *ki* with a complement clause introduced by *tu* ‘that’ does not depend on the presence or absence of the clitic *ta*. Whether this clitic is associated with the matrix verb or not, the example is uniformly judged as ungrammatical (35b).

- (35) a. Katéxu *(ta) *ki* [Ø čo a nártun ta
 know.IPFV.NPST.1SG 3OBJ PRT not FUT.DEF come.PFV.NPST.3PL the.N.NOM.PL
 čočúxa].
 child.N.NOM.PL
 ‘I know (that) the children are not coming.’

- (i) Léu ta kézi
 say.IPFV.NPST.1SG 3OBJ perhaps
 ‘I assume’

Although I gloss *kézi* as ‘perhaps’ in (i), this is not based on speaker judgments but rather on the information provided in Anastasiadis (1980b). *Kézi* is not recognized by my informants; however, Anastasiadis (1980b:120) includes *κέζι(λα)* [kézi(la)] in his list of PhG words of unknown origin, suggesting that it means *ἴσως* [ísos] ‘maybe, perhaps’ in SMG.

- b. Katéxu (ta) (*ki) [tu čo írtan ta
 know.IPFV.NPST.1SG 3OBJ PRT that not come.PFV.PST.3PL the.N.NOM.PL
 čočúxa].
 child.N.NOM.PL
 ‘I know that the children did not come.’
 (Class E – Cognitive semi-factive)

Non-assertive emotive factive verbs strongly disallow *ki*. The addition of the object clitic *ta* does not change this ungrammaticality:

- (36) a. Pušmánepsa (ta) (*ki) [tu čo xítsa tarná so
 regret.PFV.PST.1SG 3OBJ PRT that not run.PFV.PST.1SG quickly to.the.M.ACC.SG
 Xačefendí].
 Haciefendi.M.ACC.SG
 ‘I regretted that I did not go to Haciefendi immediately.’
 b. Sævíntsa (ta) (*ki) [tu píka azátí to
 be.glad.PFV.PST.1SG 3OBJ PRT that make.PFV.PST.1SG free.sg the.N.ACC.SG
 pulpúli].
 nightingale.N.ACC.SG
 ‘I was glad that I set the nightingale free.’
 (Class D – Emotive factive)

Non-assertive volitional, modal and aspectual verbs or verbs of endeavor, do not allow *ki*. Again, the addition of *ta* to these verb does not change the ungrammaticality:

- (37) a. Čapalátsa/nietléntsa (ta) (*ki) [na tavrísu ta
 try/intend.PFV.PST.1SG 3OBJ PRT SUBJ pull.PFV.NPST.1SG the.N.ACC.PL
 θálæ].
 stone.N.ACC.PL
 ‘I tried/intended to haul the stones.’
 b. yrévu (ta) (*ki) [na fáu suzyúíta].
 want.IPFV.NPST.1SG 3OBJ PRT SUBJ eat.PFV.NPST.1SG roasted.meat.N.ACC.PL
 ‘I want to eat roasted meat.’
 c. Poráu (ta) (*ki) [na tavrísu ta θálæ].
 can.IPFV.NPST.1SG 3OBJ PRT SUBJ pull.PFV.NPST.1SG the.N.ACC.PL stone.N.ACC.PL
 ‘I can haul the stones.’
 d. Pašlátsa (ta) (*ki) [na kamnónu son
 start.PFV.PST.1SG 3OBJ PRT SUBJ work.IPFV.NPST.1SG in.the.M.ACC.SG
 tópu].
 field.M.ACC.SG
 ‘I started to work in the field.’

(Class C – Non-assertive)

However, a subset of non-assertive verbs—directives in particular—do allow the particle *ki*. In this case, in the presence of *ki*, the third person object clitic *ta* assuming the direct object function becomes obligatory (observe the occurrence of two clitics: the indirect object *si* ‘(to) you’ and the direct object *ta* ‘it’ in (38a)):

- (38) a. Parakaló si *(ta) ki [na mu mi salépsis].
beg.PFV.PST.1SG 2sg.obj 3OBJ PRT SUBJ not 1SG.OBJ bother.PFV.NPST.2SG
‘I beg you not to bother me.’
- b. ěóka *(ta) emíri ki [na sorépsun ta
give.PFV.PST.1SG 3OBJ order.N.ACC.SG PRT SUBJ collect.PFV.NPST.3PL the.N.ACC.PL
meiváěa].
fruit.N.ACC.PL
‘I ordered them to collect the fruit.’

(Class C – Non-assertive)

Finally, the interrogative verb *rotáu* ‘(I) ask’, which may select a polar or a *wh*-embedded question, is incompatible with the particle *ki*, again regardless of whether the object clitic *ta* is added to the verb or not:²⁰

²⁰ The data clearly show that the occurrence of *ki* does not depend on the properties of a given complement clause, but rather on the assertoric nature of the matrix verb. This observation is further confirmed by the following fact: certain verbs may take a complement clause that is structurally interrogative but not semantically interrogative. Such complement clauses are discussed as “semi-questions” by Suñer (1993) and “unselected embedded questions” by Adger and Quer (2001), see also McCloskey (2006). Since I am not concerned with the internal structures of these complement clauses, I simply use the term semi-questions following Suñer (1993). Semi-questions are typically selected by Class A, E, F verbs such as *say*, *know*, *tell* and *admit*. This is also true in PhG: in (i), even though the complement clauses are formally interrogative complement clauses (section 2.4.9.2), due to the matrix verb that selects them, i.e., *ípin* ‘he said’ (ia) and *katéxu* ‘I know’ (ib), they do not function as interrogatives semantically. Rather, (ia) entails that ‘they did or they did not take the money, and he told me which one is correct’ and (ib) entails that ‘*x* took the money, and I know who *x* is’.

- (i) a. Ípin mi [æɾ na píran ta paráěa].
tell.PFV.PST.2SG 1SG.OBJ if SUBJ take.PFV.PST.3PL the.N.ACC.PL money.N.ACC.PL
‘He told me whether they took the money.’
- b. Katéxu [tis pírin ta paráěa].
know.IPFV.NPST.1SG who take.PFV.PST.2SG the.N.ACC.PL money.N.ACC.PL
‘I know who took the money.’

Verbs selecting semi-questions may also be followed by *ki*. If this is the case, the object clitic *ta* is obligatorily associated with the verb:

- (39) a. Rótsa (ta) (**ki*) [æɾ na írtan ta čočúxa].
 ask.PFV.PST.1SG 3OBJ *ki* if SUBJ come.PFV.PST.3PL the.N.NOM.PL child.N.NOM.PL
 ‘I asked him whether the children came.’
- b. Rótsa (ta) (**ki*) [tis írtin].
 ask.PFV.PST.1SG 3OBJ PRT who.nom come.PFV.PST.3SG
 ‘I asked him who came.’

From the above survey two patterns emerge. First, we see that matrix assertive verbs in PCCs can be followed by *ki* and that non-assertive verbs quite generally do not allow *ki*. The only exception to this generalization is constituted by non-assertive directive verbs, which do allow *ki*. In section 4.5.3.4 (especially fn. 57), I show that a PCC involving a directive matrix verb and *ki* is structurally similar to PCCs with *ki* which involve assertive verbs. Second, whenever *ki* is present in a PCC, the third person object clitic *ta*, which resumes the direct object complement clause, is obligatorily added to the matrix verb.²¹ The linear order within a PCC with *ki* is represented schematically in (40).²²

- (ii) a. Ípin mi *(ta) *ki* [æɾ na píran ta paráða].
 tell.PFV.PST.2SG 1SG.OBJ 3OBJ PRT if SUBJ take.PFV.PST.3PL the.N.ACC.PL money.N.ACC.PL
 ‘He told me whether they took the money.’
- b. Katéxu *(ta) *ki* [tis pírin ta paráða].
 know.IPFV.NPST.1SG 3OBJ PRT who take.PFV.PST.2SG the.N.ACC.PL money.N.ACC.PL
 ‘I know who took the money.’

Groenendijk and Stokhof (1982) relate the distinction between what Suñer (1993) refers to as semi-questions and genuine embedded questions to the assumption that a verb like *say* or *know* semantically takes a true proposition as a complement (i.e., the one denoted by the question) whereas a verb like *ask* takes a real question as its complement. Berman (1991) and Lahiri (1991) also argue that *wh*-complements of verbs like *know* are propositional. In order to be asserted, a complement has to be a true proposition; therefore, I conclude that in (i), there is an assertion linked to the matrix verb. As such, the fact that these PCCs can accommodate *ki*, as shown in (ii), should not come as a surprise.

²¹ Similar to the case in quotative constructions (section 4.3.1.1), *ki* does not have to be strictly right-adjacent to the object clitic *ta* in PCCs. I have not illustrated this so far because this is not crucial at this point, but notice the existence of the horizontal ellipsis character ‘...’ between *ta* and *ki* in the representation in (40). I return to this point in section 4.5.4. For now, it is sufficient to state that *ki* follows the object clitic linearly, as shown in (40).

²² In section 4.3.1.1, I showed that interrogative reporting verbs are not compatible with *ki* in quotative constructions either. This may suggest that the condition that a predicate has to be assertive in order to be able to be accompanied by *ki* also holds for quotative constructions. An immediate problem for this conclusion is the fact that verbs of mental state, e.g., *šérumi* ‘(I) rejoice’, emotion, e.g., *kléu* ‘(I) weep’, or bodily movement, e.g., *čirpiémi* ‘(I) flail’, can also report a quote and can also be followed by *ki*. Notice that this problem disappears if we assume in line with Rooryck (2001) that, when such verbs introduce quotes, an abstract *SAY*-meaning is superimposed upon them, hence they behave as assertive verbs. However, as the details of this proposal need to be worked out in and of itself, I refrain here from making the strong claim that in quotative constructions, the verb must be an assertive one so that the construction can host *ki*.

(40) [$V_{[+assertive]}$ + ta ... *ki* [Complement clause]]

Given that in PCCs with assertive predicates, the complement clause is not introduced by a complementizer, one may suggest that *ki* assumes such a function and that (40) should be revised so that the left-delimiting square bracket of the complement clause also hosts *ki*, i.e., ... [*ki* Complement clause]. In sections 4.5.2.2 and 4.5.2.3, however, I will show that such a view would be incorrect because in PCCs *ki* is not a constituent of the complement clause. In the next section, I focus on the interpretive properties of PCCs with *ki*.

4.3.2.2 The role of *ki* in a PCC

Similar to what was described for quotative constructions, speakers uniformly judge PCCs with *ki* to be “more emphatic” and “stronger in conveying the assertion” than their counterparts which do not involve *ki*. To provide a better understanding of this difference, consider the minimal pair in (41).

- (41) a. *γriká* [a ta skotósun até ta
realize.IPFV.NPST.3SG FUT.DEF 3OBJ kill.PFV.NPST.3PL this.PL the.N.NOM.PL
čočúxa].
child.N.NOM.PL
'She realizes (that) these children are going to kill her.'
- b. *γriká* ta *ki* [a ta skotósun até
realize.IPFV.NPST.3SG 3OBJ PRT FUT.DEF 1SG.OBJ kill.PFV.NPST.3PL this.PL
ta *čočúxa*].
the.N.NOM.PL child.N.NOM.PL
'She realizes (that) these children are going to kill her.'

In both examples in (41), two propositions are asserted by the speaker. The first one is encoded in the complement clause, i.e., ‘the children are going to kill her’, and the second one is encoded in the main clause in which the speaker describes the mental state of the subject with respect to the first assertion, namely ‘she realizes (it)’. *Ki* does not change the truth conditions of either of these assertions. (41a–b), however, differ with respect to the degree of speaker’s commitment to the truth of her assertion in the matrix clause and as an extension of this, the certainty of conjecture that the children will kill the subject as conveyed in the embedded clause. The informants consulted state that (41a) can be uttered by a speaker who thinks that the subject realizes that she will be killed but it remains to be seen whether this is indeed going to take place. In contrast, (41b) is used in a situation where the speaker intends to convey that she is certain that the matrix subject realizes that she is going to be killed. Therefore, according to the speaker, the subject is far more likely to die in (41b) in

comparison to (41a). The strong(er) speaker commitment to the truth of the assertion in (41b) implies that (41b) cannot easily be contradicted by the same speaker. For instance, while (41a) can felicitously be followed by (42), (41b) cannot, as there would be a clash between the speaker's certainty in (41b) and the doubt expressed in the following clause.

- (42) ... ja pérki éna γlitósi.
 but perhaps FUT.DEF escape.PFV.NPST.3SG
 '... but perhaps she will survive.'

Furthermore, since no (strong) commitment by the speaker to the truth of the assertion is involved in (41a), the whole construction can be uttered figuratively, whereas (41b) is pragmatically infelicitous with a figurative use. For instance, (41a) can be felicitously uttered in a context in which a mother with very naughty children is described while this mother is complaining to a neighbor or a colleague about the mess her children constantly make at home (43a). In the same context, (41b) is judged by the speakers as pragmatically inappropriate (43b).

- (43) Nerkíza doesn't know what to do with her children. She told them a million times to keep their room tidy, yet she still finds clothes in the toy box, toys in their wardrobe, food in their bed, socks on the computer. Ah, they also brought a stray puppy into their room yesterday, and it peed on Andrew's bed. The smell, she says, was awful. If they do not put an end to this behavior, ...
- a. γriká [a ta skotósun até ta
 realize.IPFV.NPST.3SG FUT.DEF 3OBJ kill.PFV.NPST.3PL this.PL the.N.NOM.PL
 čočúxa].
 child.N.NOM.PL
 'She realizes (that) these children are going to kill her.' (= (41a))
- b. # γriká ta ki [a ta skotósun até
 realize.IPFV.NPST.3SG 3OBJ PRT FUT.DEF 1SG.OBJ kill.PFV.NPST.3PL this.PL
 ta čočúxa].
 the.N.NOM.PL child.N.NOM.PL
 'She realizes (that) these children are going to kill her.' (= (41b))

The difference between (43a–b) is presumably related to the fact that the speaker uttering (43b) is strongly committed to the truth of what she asserts, which also entails that the assertion within the complement clause, i.e., 'the children are going to kill her', is evaluated by the speaker as highly probable, or indeed virtually certain. This interpretation, however, is not compatible with the figurative use of the verb *skotónu* '(I) kill'.

The above claim about the function of *ki* is further confirmed by the fact that a PCC with *ki* (such as (41b)) cannot be embedded under another verb:

- (44) Katéxun [ɣriká ta (*ki)[a ta
 know.IPFV.NPST.3PL realize.IPFV.NPST.3SG 3OBJ PRT FUT.DEF 1SG.OBJ
 skotósun até ta čočúxa]].
 kill.PFV.NPST.3PL this.PL the.N.NOM.PL child.N.NOM.PL
 ‘They know (that) she realizes (that) these children are going to kill her.’

(44) is grammatical as long as the verb *ɣriká* ‘(she) realizes’ is not followed by *ki*. The incompatibility of *ki* in an embedded PCC follows from the association of *ki* with the speaker, and not the grammatical subject. In (44), the embedded complex proposition ‘She realizes (that) these children are going to kill her’ is presented as an assertion not by the speaker but by a group of people excluding the speaker, who constitute the subject of the highest predicate *katéxun* ‘(they) know’. In this respect, *ki* in PCCs is a MCP (on MCP, see section 3.3.2.4).

4.3.3 Adverb + *ki* constructions

4.3.3.1 Setting the scene

Certain sentence-initial adverbs, such as *pellé/paú* ‘obviously’ (< T. *belli* ‘obvious’), *temék* ‘apparently’ (< T. *demek* ‘that is to say’ < *de-* ‘say’), *matém* ‘evidently’ (< T. *madem* ‘seeing (that)’), *élpætta* ‘certainly/surely’ (< T. *elbette* ‘certainly’), *tabí* ‘definitely’ (< T. *tabii* ‘definitely’) and *tamán* ‘undoubtedly’ (< Turkish dialect of central Anatolia, *taman* ‘surely’, TDK 1978; Yıldırım 2006), may be immediately followed by *ki*. The particle is optional in such contexts. A minimal pair which illustrates the optional presence of *ki* to the immediate right of these adverbs is provided in (45). The examples in (45) are given without context; I will return to the subtle interpretive differences between the two patterns in section 4.3.3.2.²³

- (45) a. Élpætta o Andriás a píči
 certainly the.M.NOM.SG Andrew.M.NOM.SG FUT.DEF make.PFV.NPST.3SG
 jartími.
 help.N.NOM.SG
 ‘Certainly, Andrew is going to help.’
 b. Élpætta *ki* o Andriás a píči
 certainly PRT the.M.NOM.SG Andrew.M.NOM.SG FUT.DEF make.PFV.NPST.3SG
 jartími.
 help.N.NOM.SG
 ‘Certainly, Andrew is going to help.’

²³ These adverbs are all borrowed from Turkish. However, given the fact that the number of borrowed elements from Turkish is immense across all lexical categories, this should not come as a surprise (section 2.3.4).

The claim that *ki* is optional rather than being an indispensable morphemic constituent of these adverbs is also suggested in the list of words in Anastasiadis (1980b), where (some of) these adverbs are provided as follows: *demèk(-ki)* B[αρασός], *τεμèκ(-ki)* [AΦ[σάρι] (*demèk(-ki)* V[arašos], *temèk(-ki)* AF[šari]), *ματèμ(-ki)* B[αρασός], *ματèμ(-ki)* AΦ[σάρι] (*matém(-ki)* V[arašos], *matém(-ki)* AF[šari], Anastasiadis 1980b:118). The parentheses around the various instances of *ki* clearly indicate that the relevant morpheme is not an obligatory part of these adverbs. Concerning *pelle/pau* ‘obviously’, it seems that there is confusion in the way it is cited in Anastasiadis (1980b). Anastasiadis (1980b:114) provides *pellé* ‘obviously’ in the same lemma with *pérki* ‘perhaps’: (*πέρκι και πέλκι, βελ-λεκι* B[αρασός], *πελ-λέκι* AΦ[σάρι] (*pérki and pélki, bel-leki* V[arašos], *pel-léki* AF[šari]). However, these two are distinct lexemes, as verified both in the texts and by my consultants. Anastasiadis (1980b) does not indicate whether *élpætta* ‘certainly/surely’, *tabí* ‘definitely’ and *tamán* ‘undoubtedly’ can be followed by *ki*, viz. *χέλπεται* B[αρασός], *άλπαιτ* AΦ[σάρι] (*xélpet-ta* V[arašos, *élpæt* AF[šari], Anastasiadis 1980b:115); *tabí* (*tabí*) and *ταμάν* (*tamán*, Anastasiadis 1980b:117). However, speakers of the dialect confirm that these adverbs can also be optionally followed by *ki*. *Contra* Anastasiadis (1980b:115), who claims that in peripheral villages the form of the adverb meaning ‘certainly/surely’ is *élpæt*, the form *élpætta* was also given by speakers from these villages.²⁴

As shown in (46), when *ki* follows an adverb, the two must be adjacent and they cannot be separated by any other lexical or functional material of the clause. The ungrammaticality in (46a) is due to the subject *o Andriás* ‘Andrew’ intervening between the adverb and *ki*, and in (46b) the fronted object *jartími* ‘help’ is the offending entity.

- (46) a. * *Élpætta* [o Andriás] *ki* a *píci*
 certainly the.M.NOM.SG Andrew.M.NOM.SG PRT FUT.DEF COME.PFV.NPST.3SG
 jartími.
 help.N.NOM.SG
- b. * *Élpætta* [*jartími*] *ki* a *píci* o
 certainly help.N.NOM.SG PRT FUT.DEF COME.PFV.NPST.3SG the.M.NOM.SG
 Andriás.
 Andrew.M.NOM.SG

²⁴ There is, however, one instance in which *ki* is an indispensable part of an adverb: *pérki* ‘perhaps’. **Per-* is not recognized as a separate adverb by speakers, so I do not include it into the current discussion. Another type of construction which is not addressed here involves conjunctions such as *xalpúki* ‘whereas’ or *čúnki* ‘because’, which seem to have *ki* incorporated into them. Similar to the case of *pérki*, the putative bases of these conjunctions are not recognized by speakers, i.e., **xalpú-* and **čún-*. All these words are also borrowed from Turkish, cf. *belki* ‘perhaps’, *halbuki* ‘whereas’ and *çünkü* ‘because’.

- (48) a. Čoxpír (*ki) rtiénkani ta jayníša mu.
rarely PRT correct.IPFV.PST.3PL the.N.ACC.PL mistake.N.ACC.PL my
'They would rarely correct my mistakes.'
- b. Táima (*ki) éxu čemémi so spíti.
always PRT have.NPST.1SG fenugreek.N.NOM.SG in.the.N.ACC.SG house.N.ACC.SG
'I always have fenugreek (paste) at home.'
- c. Tarná (*ki) xítsin son xoríu.
quickly PRT run.PFV.PST.3SG to.the.M.ACC.SG village.M.ACC.SG
'She ran to the village quickly.'

On the other hand, not all adverbs that are situated above the double vertical lines in (47) are compatible with *ki*. Let us look at each possible adverb in turn, starting from the highest adverbs, i.e., those that are situated in Mood_{speech act}P. Differently from English, PhG lacks monolectic speech act adverbs such as *honestly/frankly*, which “qualify the speaker’s act of declaration” (Cinque 1999:84). The relevant speech act adverbial function is always realized by a periphrastic construction *na ipó to órton tu* ‘honestly/frankly’. *Na ipó to órton tu* is a clause with a verb and it can be glossed and translated as in (49).

- (49) Na ipó to órton tu(.)
SUBJ tell.PFV.NPST.1SG the.N.ACC.SG truth.N.ACC.SG its
'honestly/frankly/to tell the truth'
lit.: 'I shall tell the truth of it.' / 'Let me tell the truth of it.'

In a construction in which *na ipó to órto tu* occurs, it is not entirely clear whether this periphrastic construction acts as a (semi-)lexicalized adverb (READING 1 in (50)) modifying its associate clause, or if this periphrastic construction and the rest of the sentence are just two bits of direct speech (READING 2 in (50)).

neither preverbally (48), nor postverbally (i):

- (i) a. Rtiénkani čoxpír (*ki) ta jayníša mu.
correct.IPFV.PST.3PL rarely PRT the.N.ACC.PL mistake.N.ACC.PL my
'They would rarely correct my mistakes.'
- b. Éxu táima (*ki) léiku čemémi so spíti.
have.NPST.1SG always PRT little fenugreek.N.NOM.SG in.the.N.ACC.SG house.N.ACC.SG
'I always have a little fenugreek (paste) at home.'
- c. Xítsin tarná (*ki) son xoríu.
run.PFV.PST.2SG quickly PRT to.the.M.ACC.SG village.M.ACC.SG
'She ran to the village quickly.'

- (50) Na ipó to órton tu čo ɣrikau
 SUBJ tell.PFV.NPST.1SG the.N.ACC.SG truth.N.ACC.SG its not understand.IPFV.NPST.1SG
 atáe ta šeja.
 this.PL the.N.ACC.PL thing.N.ACC.PL
 READING 1: ‘Honestly/frankly, I do not understand these things,’ or
 READING 2: ‘Let me tell the truth of it: I do not understand these things.’

In any event, *ki* may follow this periphrastic speech act modifier:

- (51) Na ipó to órton tu *ki* čo ɣrikau
 SUBJ tell.PFV.NPST.1SG the.N.ACC.SG truth.N.ACC.SG its PRT not understand.IPFV.NPST.1SG
 atáe ta šeja.
 this.PL the.N.ACC.PL thing.N.ACC.PL

However, because the status of the unit *na ipó to órton tu* as an adverbial is not entirely clear and (50–51) may be reanalyzed as a quotative construction, I will not consider this adverbial in the remainder of the discussion.

Evaluative adverbs (e.g., *(un)fortunately*, *sadly*, *regrettably*, *understandably* etc.) presuppose a positive truth value of a proposition and express how the speaker evaluates the propositional content as fortunate or unfortunate, satisfactory or unsatisfactory, strange or unexpected etc. (Schreiber 1971:88; Hoyer 1997:189; Cinque 1999:84–85). These adverbs occupy the second highest slot in Cinque’s (1999) hierarchy, namely in Mood_{evaluative}P (47). Evaluative adverbs in PhG are not compatible with *ki*, as shown in (52).

- (52) Allaxtán/expalá (**ki*) čo pítaksin to mextúpi.
 fortunately/luckily PRT not send.PFV.PST.3SG the.N.ACC.SG letter.N.ACC.SG
 ‘Fortunately/luckily, s/he did not send the letter.’

Evidential and epistemic adverbs, situated in Mood_{evidential}P and Mod_{epistemic}P respectively, are compatible with *ki* (53a–b).

- (53) a. Pau (*ki*) kečindáni mo to kundelíki.
 obviously PRT live.on.IPFV.NPST.3PL with the.N.ACC.SG daily.wage.N.ACC.SG
 ‘Obviously, they make a living on a daily wage.’
 b. Álpætta (*ki*) o Andriás a píči
 certainly PRT the.M.NOM.SG Andrew.M.NOM.SG FUT.DEF make.PFV.NPST.3SG
 jartími.
 help.N.NOM.SG
 ‘Certainly, Andrew is going to help.’

I will return to evidential and epistemic adverbs in detail in section 4.3.3.1.2.

Temporal adverbs such as *a forá* ‘once’ and *ačín tóti* ‘then’, which, according to (47), are located in TP_(Past) and TP_(Future), do not admit *ki*:

- (54) a. A forá (**ki*) írta sa čanavári irásta.
 once PRT come.PFV.PST.1SG to.a monster.N.NOM.SG coincidentally
 ‘Once I came across a monster.’
 b. Ačín tóti (**ki*) éna lieyósi.
 then PRT FUT.INDF be.tired.PFV.NPST.3SG
 ‘Then he will be tired.’

Finally, the lowest three categories of higher adverbs in (47) are incompatible with *ki*. This is illustrated in (55). (55a) shows the incompatibility of *ki* with adverbs that express irrealis mood and which are situated in Mood_{irrealis}P, e.g., *perki* ‘perhaps’. (55b–c) show the incompatibility of *ki* with adverbs that express alethic modality, i.e., the modality concerned with necessary and contingent truths of propositions (Lyons 1977:791; Cinque 1999:78), such as *mutlax* ‘necessarily’ (55b) and *xérxalta* ‘possibly’ (55c), which, according to Cinque (1999), occupy Mod_{necessity}P and Mod_{possibility}P, respectively.

- (55) a. Pérki (**ki*) éna nárti o Andriás.
 perhaps PRT FUT.INDF come.PFV.NPST.3SG the.M.NOM.SG Andrew.M.NOM.SG
 ‘Perhaps, Andrew will come.’
 b. Mutlax (**ki*) a íristin ksopísu.
 necessarily PRT FUT.DEF return.PFV.NPST.3PL back
 ‘She is necessarily going to return.’
 c. Xérxaltá (**ki*) čo írtan ta čočúxa.
 possibly PRT not come.PFV.PST.3PL the.N.NOM.PL children.N.NOM.PL
 ‘The children possibly did not come.’

To summarize the survey above: the only adverbs compatible with *ki* belong to the categories of evidential and epistemic adverbs. The next section briefly discusses these categories.

4.3.3.1.2 Evidential and epistemic adverbs In this section, I provide a brief description of evidential and epistemic adverbs, the only categories which can appear to the immediate left of *ki*.

Evidential adverbs are related to evidential mood (in the sense of Cinque 1999), which concerns the type of evidence (direct/indirect, visual, auditory, hearsay etc.) that the speaker has for her assertion (Chafe and Nichols 1986; Willett 1988; Palmer 2001[1986]:8–9, 35–52; Cinque 1999:85–86). Some examples of evidential adverbs proposed in Cinque (1999:86) are *allegedly*, *reportedly*, *apparently*, *obviously*, *clearly* and *evidently*. Epistemic adverbs are related to epistemic modality, which concerns the speaker’s degree of confidence about the truth of her proposition (Palmer

2001[1986]:8, 25; Cinque 1999:86) and which is strongly connected to the speakers' responsibility regarding their statements (Traugott 1989). Certain examples of epistemic adverbs provided in Cinque (1999:86 and elsewhere) are *probably*, *likely*, *undoubtedly*, *supposedly* and *certainly*.

Since the speaker's degree of confidence about the truth of her proposition is directly correlated with the immediate evidence she has for this inference (Cinque 1999:86), and since marking the source of information can be viewed as an indirect means of marking an epistemic attitude towards the information (Dendale and Tasmowski 2001:432), the notions of epistemic modality and evidentiality are in fact closely related. In their review of the notion of evidentiality, Dendale and Tasmowski (2001) document how previous researchers have characterized the relationship between evidentiality and epistemic modality as being one of inclusion, intersection and disjunction (in set theoretic terms). For Palmer (2001[1986]); Willett (1988) and Matlock (1989), the relation between the two notions is that of inclusion; for example, according to Matlock (1989:215) evidentials "[...] code both a speaker's source of information and some degree of certainty about that information." According to Chafe (1986); van der Auwera and Plungian (1998) and Mushin (2001), the relation between the two notions is that of intersection, where the intersection point is generally taken to be the evidential value "inferential" (Dendale and Tasmowski 2001:342). Finally, according to Nuyts (1993:945–951, 2001:35–36), the two notions should be kept separate. The latter position is also defended by de Haan (1999, 2000); Cinque (1999); Faller (2002); Ernst (2004[2001]); Speas (2004) and Cornillie (2009).

With respect to identifying evidential and epistemic adverbials, it should be noted that there is currently no consensus among scholars as to which adverbial expressions fall into which of the two categories under discussion. For example, adverbs such as *evidently*, *clearly* and *obviously* are discussed in Cinque (1999:86) as evidential adverbs (see also Chafe 1986; Palmer 2001[1986] and Fraser 1996 for the same argument), whereas Nuyts (1993); Ernst (2004[2001]:73–75) and Speas (2004:259) treat some or most of them as epistemic adverbs. In this context, Cinque (1999:174, fn. 37) too expresses doubt about the status of adverbs such as *allegedly*, *obviously*, *clearly* and *evidently* and suggests that "[e]vidential adverbs [...], which are sometimes assigned to the class of 'modal' (epistemic) adverbs, should perhaps be assigned to a distinct class."

Without further pursuing the distinction between the two categories, and while acknowledging the close link between the notions of evidentiality and epistemic modality, I assume that adverbs that can appear in an adverb + *ki* construction are evidential and epistemic adverbs which, in Cinque's (1999) hierarchy, are situated in $\text{Mood}_{\text{evidential}}\text{P}$ and $\text{Mod}_{\text{epistemic}}\text{P}$ respectively:²⁶

²⁶ There is but one adverb that can be categorized as evidential that does not freely allow *ki*, namely, *yojá*

- (56) a. Mood_{evidential}P *adverb* > (*ki*)
 b. Mod_{epistemic}P *adverb* > (*ki*)

4.3.3.2 The role of *ki* in an adverb + *ki* construction

Importantly, when an evidential or an epistemic adverb occurs in an adverb + *ki* construction, its interpretation is slightly different from when the adverb appears without *ki*. In order to explore this difference, I first introduce Lyons' (1977) concepts of "subjective" and "objective" epistemic modality in the next section (see also Halliday 1970 and Coates 1983, and for an overview, see Hengeveld 2004:1194–1195 and Papafragou 2006:1691–1699). Next, I show how these notions are relevant to the interpretation of evidential and epistemic adverbs (section 4.3.3.2.2). Finally, I return to adverb + *ki* constructions in section 4.3.3.2.3.

4.3.3.2.1 Subjective and objective (epistemic) modality According to Lyons (1977:797–804), two kinds of epistemic modality can be distinguished: subjective and objective. In order to illustrate the difference between the two, let us consider the following example:

- (57) Alfred may be unmarried. (Lyons 1977:797, ex. (14))

Under one interpretation of (57), the speaker may be "understood as subjectively qualifying [her] commitment to the possibility of Alfred's being unmarried in terms of [her] own uncertainty" (Lyons 1977:797). If this is the intended reading, the speaker may also continue her utterance with (58).

- (58) But I doubt it. (Lyons 1977:798, ex. (15))

However, this is not the only possible reading of (57). I quote a constructed situation from Lyons (1977:798), in which, rather than expressing a subjective possibility, the speaker utters (57) and then presents the possibility of Alfred being unmarried as an objective fact:

'supposedly' (< T. *gúya* 'supposedly'). Only two informants accept *ki* after this adverb:

- (i) yojá (?ki) éna ðeví i stráta so
 supposedly PRT FUT.INDF PASS.PFV.NPST.3SG the.F.NOM.SG road.F.NOM.SG in.the.M.ACC.SG
 xorúu pésu.
 village.M.ACC.SG inside
 'Supposedly, the road will pass through the village.'

It is unclear as to why this adverb does not behave like other evidential adverbs; I leave this topic for future research.

There is a community of ninety people; one of them is Alfred; and we know that thirty of these people are unmarried, without however knowing which of them are unmarried and which are not. In this situation, we can say that the possibility of Alfred's being unmarried is presentable, should the speaker wish so to present it, as an objective fact. The speaker might reasonably say that [she] knows, and does not merely think or believe, that there is a possibility (and in this case a quantifiable possibility) of Alfred's being unmarried; and, if [she] is irrational, [her] own subjective commitment to the truth or falsity of the proposition "Alfred is not married" might be quite unrelated to [her] knowledge of the objective possibility, or degree of probability ($\frac{1}{3}$), of its truth, in the way that a gambler's subjective commitment to the probability of a particular number coming up in roulette might be quite unrelated to the objective probabilities.

(Lyons 1977:798)

According to Lyons, subjective epistemic modality expresses a speaker's subjective guess as to the chances that a proposition is true or not. The subjective epistemic modality is part of the so-called "I-say-so" or "neustic" component of the utterance. Objective epistemic modality, on the other hand, expresses an objectively measurable chance that a proposition is true or not true, and it is part of what Lyons calls "it-is-so" or "tropic" component of utterance. When subjective epistemic modality is expressed, an I-say-so component is superimposed on the it-is-so component. These two components are notationally shown in Lyons (1977) as follows:

(59) . . p (Lyons 1977:802, ex. (34))

(59) is the notational representation of an assertion composed of three components: the first full stop stands for the unqualified I-say-so component, the second full stop stands for the unqualified it-is-so component, and p stands for proposition. To demonstrate his notation, Lyons shows that all three components of an assertion can independently be negated:

- (60) a. \neg . . p = "I don't say that it is the case that p " (non-commitment).
 b. . \neg . p = "I say that it is not the case that p " (denial).
 c. . . $\neg p$ = "I say that it is the case that not p " (context-free assertion of a negative proposition).

(Lyons 1977:802–803. ex. (35–37))

The first two components can also be modalized independently yielding what Lyons refers to as subjective and objective epistemic modality. Focusing on epistemic modals expressing possibility, Lyons uses the notation *poss(ibility)* operator.

The difference between subjective and objective epistemic modality is represented by substituting the *poss* operator for the first or the second full-stop, as in (61).

- (61) a. *poss . p* (subjective epistemic modality)
 b. *. poss p* (objective epistemic modality)
 (Lyons 1977:803–804. ex. (42–43))

(61a), which represents subjective modality, is read as ‘possibly/perhaps, it is the case that *p*.’ (61b), on the other hand, represents objective epistemic modality and should be read as ‘I say that it is possibly the case that *p*.’²⁷

Lyons (1977:798) claims that (epistemic) adverbs cannot express objective modality but are used only to express subjective modality; however, he does not provide any arguments for why this should be the case. Hengeveld (1988) similarly proposes that modal adverbs always express subjective modality, and that modal adjectives always express objective modality (but see also Nuyts 1993 who argues that several semantic and pragmatic factors contribute to the relevant modal reading). Contrary to Lyons (1977) and Hengeveld (1988), Perkins (1983:89–93, section 8) asserts that (modal) adverbs too can express objective modality. This claim has recently been taken up in the generative literature by Hill (2007a, 2010, 2012) and Cruschina (2015). More specifically, Hill (2007a, 2010, 2012) provides examples in which not only epistemic adverbs but also evidential and evaluative adverbs in Romanian can have both a “speaker-oriented” reading (which corresponds to Lyons’ subjective modal reading) and an “impersonal” reading (which corresponds to Lyons’ objective modal reading):

- (62) Sigur va veni.
 surely will-3SG come
 ‘Of course she is coming.’ = speaker-oriented (subjective modal) reading.
 ‘It is certain that she is coming.’ = impersonal (objective modal) reading.
 (Hill 2007a:61, ex. (1a))

Though Hill (2007a, 2010, 2012) provides some examples, she does not comment on how the two readings are obtained. I provide details of Hill’s account in section 4.5.1.2.

²⁷ The system also allows for utterances with both subjective and objective modality,

- (i) *poss poss p*

which is read as ‘possibly/perhaps, it is possibly the case that *p*.’, e.g., *perhaps, it may be raining*. Contexts like this are tangential to the current discussion.

4.3.3.2.2 Subjective and objective modal readings of adverbs in PhG Returning to PhG, we see that, given the right context, epistemic and evidential adverbs can receive an objective as well as a subjective modal reading. The fact that this also holds for evidential adverbs should not come as a surprise given the close link between evidential mood and epistemic modality (section 4.3.3.1.2). Consider the examples in (63).

- (63) A: a. Paú kečindáni mo to kundelíki.
 obviously live.on.IPFV.NPST.3PL with the.N.ACC.SG daily.wage.N.ACC.SG
 READING 1: ‘Obviously, they make a living on a daily wage.’
 = subjective: obviously, it is the case that p . = *poss . p*
 READING 2: ‘It is obvious that they make a living on a daily wage’
 = objective: I say that it is obvious that p . = *. poss p*
- b. Álpætta o Andriás pírin ta
 certainly the.M.NOM.SG Andrew.M.NOM.SG take.PFV.PST.3SG the.N.ACC.PL
 paráða.
 money.N.ACC.PL
 READING 1: ‘Of course, Andrew took the money.’
 = subjective: Certainly, it is the case that p . = *poss . p*
 READING 2: ‘It is certain that Andrew took the money.’
 = objective: I say that it is certain that p . = *. poss p*

Let us first look at (63Aa). Under READING 1, the speaker (A) expresses her subjective attitude towards the proposition ‘they are living on a daily wage’; the fact that they are living on a daily wage is assessed by the speaker as obvious based on the evidence she has at her disposal, for example, she sees that the subject of the statement (‘they’) is having financial problems. Under READING 2, the speaker (A) does not necessarily commit herself to the obviousness of the proposition ‘they are living on a daily wage’, but rather describes the existence of a state of affairs which can be objectively presented as obvious; for example, in a context in which the referents of the subject (‘they’) are a family among numerous numbers of war refugees who all are paid a daily wage.

Next, let us look at (63Ab). Under READING 1, the speaker commits herself to the truth of the proposition ‘Andrew took the money’ and expresses her subjective evaluation of this truth, similar to READING 1 in (63Aa). The speaker may simply have a negative attitude towards Andrew and as a result may believe strongly, without any tangible evidence, that it is Andrew who took the money. Under READING 2, on the other hand, the certainty of the event is presented independently from the speaker’s own commitment to it. For instance, if Andrew is the person who was interrogated and arrested, then everybody will take it for granted that it was Andrew who took the

money.²⁸

To make the above argument a bit more concrete, assume that speaker B challenges Speaker A's statements in (63Aa–b) with (63B).

- (63) B: *Ánna, čo íni liθótiku.*
 no, not be.NPST.3SG true.SG
 'No, it is not true.'

Utterances such as (63B) address the most important (i.e., focal) information conveyed in the preceding utterance (Bartsch 1972:35; Nuyts 1993:943): in our case, speaker A's utterances in (63A). In READING 1 in (63Aa–b), the most important information is the speaker's personal commitment to/assessment of the truth of the proposition. Then, if READING 1 is challenged by (63B), speaker B reacts to A's subjective assumption. In this case, speaker B may continue (63B) by saying 'they are simply extremely stingy' for (63Aa) and 'in fact he did not, but he could not defend himself' for (63Ab).

On the other hand, if READING 2 of (63Aa–b) is negated by (63B), speaker B targets speaker A's claim about the objective obviousness/certainty of the proposition. In this case, speaker B may continue (63B) by further saying 'it is even doubtful that they do' for (63Aa) and 'it is even improbable that he did' for (63Ab).

With this background information, i.e., that evidential and epistemic adverbs may be ambiguous between subjective (speaker-oriented) and objective (impersonal) readings, I now return to adverb + *ki* constructions.

4.3.3.2.3 Adverb + *ki* constructions: lack of objective modal reading As discussed in the previous section, evidential and epistemic adverbs may be ambiguous between an objective and a subjective reading. Crucially, however, when an evidential or an epistemic adverb occurs in an adverb + *ki* construction, the objective modal reading of the adverb becomes unavailable, as illustrated in (64).

- (64) a. *Paú ki kečindáni mo to kundelíki.*
 obviously PRT live.ON.IPFV.NPST.3PL with the.N.ACC.SG daily.wage.N.ACC.SG
READING 1: 'Obviously, they make a living on a daily wage.'
 = subjective: obviously, it is the case that *p.* = *poss . p*
 *READING 2: 'It is obvious that they make a living on a daily wage'
 = objective: I say that it is obvious that *p.* = *. poss p*

²⁸ The very close relation between the two readings also logically follows from the fact that if an attribute holds for everyone, it should also hold for the speaker.

- b. *Élpætta ki o Andriás pírin ta*
 certainly PRT the.M.NOM.SG Andrew.M.NOM.SG take.PFV.PST.3SG the.N.ACC.PL
paráða.
 money.N.ACC.PL
 READING 1: 'Of course, Andrew took the money.'
 = subjective: Certainly, it is the case that *p.* = *poss . p*
 *READING 2: 'It is certain that Andrew took the money.'
 = objective: I say that it is certain that *p.* = *. poss p*

Both (64a–b) convey only the speaker's personal assessment of certainty of the event as expressed by the proposition in her respective utterance and her commitment to the truth of this proposition. (64a–b) cannot be taken to convey that 'that they make a living on daily wage' (64a) and 'that Andrew took the money' (64b) are objective facts. The fact that *ki* is incompatible with an objective modal reading is confirmed by the following two observations.

First, even though judgments are subtle, generic statements, e.g., statements expressing laws of nature (section 3.3.2.3), which are valid at all times and for everyone, are compatible with evidential or epistemic adverbs but they are not compatible with the adverb+ *ki* pattern (65a). Notice that when the relevant adverb is present in generic statements, the only possible reading is an objective modal reading: As for (65a), for instance, the fact that the Sun revolves around the Earth is not a conclusion that one can plausibly arrive at by mere visual observation of the relevant celestial bodies. An adverb + *ki* construction is judged pragmatically inappropriate with a generic statement (65b). Assuming, as we have done, that the presence of *ki* imposes a subjective reading onto the modal adverb, which thus will be taken to modify the speaker's proposition, then the pragmatic oddness of (65b) follows naturally.²⁹

- (65) a. *Paú o kózmus tolantízi*
 obviously the.M.NOM.SG Earth.M.NOM.SG revolve.IPFV.NPST.3SG
son óilu jíru.
 in.the.M.ACC.SG Sun.M.ACC.SG around
 #READING 1: 'Obviously, the Earth orbits the Sun.'
 = subjective: Obviously, it is the case that *p.* = *poss . p*
 READING 2: 'It is obvious that the Earth orbits the Sun.'
 = objective: I say that it is obvious that *p.* = *. poss p*

²⁹ According to the consultants, in order for *ki* to be appropriate in a generic statement such as (65b), the speaker should be the person who discovers the fact expressed in the proposition for the first time. As one relatively younger informant said, it would be appropriate if Galileo had said this utterance during the Inquisition for his support of heliocentrism.

- b. # Paú ki o kózmus tolantízi
 obviously PRT the.M.NOM.SG Earth.M.NOM.SG revolve.IPFV.NPST.3SG
 son óilu jíru.
 in.the.M.ACC.SG Sun.M.ACC.SG around

Second, it has repeatedly been noted that epistemic point of view reported in an embedded clause concerns that of the referent of the matrix subject (Giorgi 2010:91, 2016:110:). In a declarative main clause, an epistemic adverb, such as *probably* most naturally conveys the speaker's evaluation of the truth of the proposition; however an objective modal reading is also available (66). On the other hand, if the same adverb occurs in a complement clause, as in (67), the adverb ceases to be able to express the point of view of the speaker. In this case, it can only express the epistemic point of view of the referent of the grammatical subject of the matrix predicate.

- (66) Probabilmente Gianni è partito.
 Probably Gianni left.
 = It is probable according to the speaker that Gianni left.
- (67) a. Maria ha detto [che probabilmente Gianni è partito].
 Maria said that probably Gianni left.IND.
- b. Maria crede [che probabilmente Gianni sia partito].
 Maria believes that probably Gianni left.SUBJ.
 =It is probable according to Maria that Gianni left.
 [Italian (Giorgi 2010:91, ex. (87–89))]

An adverb + *ki* construction cannot occur in a complement clause; hence it is a MCP (section 3.3.2.4). The ungrammaticality of *ki* in (68a–b) immediately follows from the assumption that *ki* only occurs in contexts where the relevant epistemic point of view is that of the speaker.

- (68) a. I Nerkíza le [paú (*ki)
 the.F.NOM.SG Nerkíza.F.NOM.SG say.IPFV.NPST.3SG obviously PRT
 kečindáni mo to kundelíki].
 live.ON.IPFV.NPST.3PL with the.N.ACC.SG daily.wage.N.ACC.SG
 'Nerkiza says (that) they obviously live on a daily wage.'
- b. I Nerkíza tušuntá [ælpætta (*ki)
 the.F.NOM.SG Nerkíza.F.NOM.SG think.IPFV.NPST.3SG certainly PRT
 o Andriás pírin ta paráða].
 the.M.NOM.SG Andrew.M.NOM.SG take.PFV.PST.3SG the.N.ACC.PL money.N.ACC.PL
 'Nerkiza thinks (that) certainly Andrew did not take the money.'

To sum up, when an evidential or an epistemic adverb co-occurs with *ki*, the adverb is necessarily speaker related, and hence it can only receive a subjective, speaker-oriented reading and it cannot convey the objective modal reading. In Lyons' (1977) notation, *ki* could be understood as an operator on an utterance, which necessarily invokes the I-say-so component:³⁰

(69) *poss_{ki} . p*

4.3.4 *Ki* in causal constructions

At first sight, in what I refer to as “causal constructions”, *ki* seems to act as a clausal coordinator combining two clauses, represented for convenience as CP1 and CP2 in (70). In this type of *ki*-construction, the proposition expressed in CP1 constitutes a justification of that expressed in CP2. In (70), the speaker expresses that according to her, the reason why ‘they scolded the man’ is the fact that ‘he hid the barley’.

(70) [_{CP1} O nomát múyusin to kθári]
 the.M.NOM.SG the.M.NOM.SG hide.PFV.PST.3SG the.N.ACC.SG barley.N.ACC.SG
ki [_{CP2} ḏókan ta an kačára]
 PRT give.PFV.PST.3PL 3OBJ an admonition.F.NOM.SG
 ‘The man hid the barley and (this is why) they scolded him.’

In principle the same meaning can be derived if CP1 and CP2 are coordinated with the prototypical coordinator *če* ‘and’ (71).

(71) [_{CP1} O nomát múyusin to kθári]
 the.M.NOM.SG the.M.NOM.SG hide.PFV.PST.3SG the.N.ACC.SG barley.N.ACC.SG
če [_{CP2} ḏókan ta an kačára]
 and give.PFV.PST.3PL 3OBJ an admonition.F.NOM.SG
 ‘The man hid the barley and (this is why) they scolded him.’

However, as I now proceed to argue, *ki* has a more limited distribution than *če* ‘and’.

³⁰ See also the following example from a written text.

- (i) Bellé *ki* gečindáme mo to kundelíki.
 obviously PRT live.on.IPFV.NPST.1PL with the.N.ACC.SG daily.wage.N.ACC.SG
 ‘Obviously, we live on daily wage.’

(Theodoridis 1964:322.2)

It is not clear in such examples from the written texts whether or not the adverb retains its objective modal reading as well.

4.3.4.1 *Ki* ≠ *če*

As noted in section 2.4.11.1.1, the coordinating conjunction *če* ‘and’ may establish temporal-sequential, causal or even adversative relations between two conjoined clauses (see especially the examples in (242) in the relevant section). In contrast, when two clauses are combined by *ki*, only the causal relation can be established. A temporal-sequential (72a) or an adversative (72b) reading is never available.

- (72) a. * [CP₁ Piáya so ruší] ki
 go.PFV.PST.1SG to.the.N.ACC.SG mountain.N.ACC.SG PRT
 [CP₂ sóripa čayláða].
 collect.PFV.PST.1SG green almond.N.NOM.PL
 int.: ‘I went to the mountain, and (then) I collected green almonds.’
 (cf. chapter 2, ex. (242a))
- b. * [CP₁ Enótun vraď] ki [CP₂ kanís páli
 become.IPFV.PST.3SG evening.N.NOM.SG PRT nobody.NOM PRT
 čo írtin].
 not come.PFV.PST.3SG
 int.: ‘It was getting dark but no one came.’
 (cf. chapter 2, ex. (242c))

Furthermore, while *če* may coordinate two DPs, this is not possible with *ki* (73).

- (73) [DP₁ O Andriás] { *če* } [DP₂ i Nerkíza]
 *ki }
 ‘Andrew & Nerkiza.’

Finally, coordinate structures formed by *ki* and *če* differ in the number of intonational phrases they form. As discussed in Nespor and Vogel (2007[1986]:189), the boundaries of a root clause, i.e., a clause that is not embedded inside a higher clause (Emonds 1970), delimit an intonational phrase (see also Downing 1970).³¹ Downing (1970); Nespor and Vogel (2007[1986]) and Truckenbrodt (2007:454, 2015:301) show that coordinated root clauses form intonational phrases and are separated by obligatory pauses (shown with a vertical bar), as in (74) (the examples in (74) are slightly modified for ease of exposition).³²

³¹ Provided that there are no units which constitute separate intonational phrases inserted into these root clauses (such as parentheticals, non-restrictive relative clauses, tag questions or vocatives).

³² On the other hand, if the coordinated clauses are embedded together, as in (i), the pause is no longer obligatory (Downing 1970; Nespor and Vogel 2007[1986]; Truckenbrodt 2007, 2015):

- (i) a. [I Billy thought his father was a merchant (|) and his mother was a secret agent].

- (74) a. [_I Billy thought his father was a merchant] | [_I and his father was a secret agent].
 (Nespor and Vogel 2007[1986]:189, ex. (3a))
- b. [_I Mary will sing] | [_I and Bob will play his banjo].
 (Truckenbrodt 2007:454, ex. (40))

This observation extends to PhG. As visible in the pitch track of example (71) in Figure 4.1, in a given root coordinate structure with *če* ‘and’, CP1 and CP2 are separated from each other by a minor prosodic break. On the other hand, two CPs related by *ki* form a single intonation phrase, as the pitch track of (70) in Figure 4.2 illustrates. For this reason, I conclude that even if *ki* could be characterized as a coordinator, it is essentially different from the *bona fide* coordinator *če* ‘and’.³³

4.3.4.2 The role of *ki* in a causal construction

As mentioned in section 4.3.4, *ki* establishes a causal relationship between two clauses, namely, the first one (CP1) is a justification of the proposition encoded in the second one (CP2). However, in these causal constructions, CP1 does not obligatorily express a reason for the propositional content of CP2. Rather, CP1 functions on the illocutionary level and expresses evidence for the claim expressed by the speaker in CP2. This point is illustrated (75).

- (75) [_{CP1} I θíra íni karakoménu] *ki* [_{CP2} pín
 the.F.NOM.SG door.F.NOM.SG be.NPST.3SG locked.SG PRT go.PFV.PST.3SG
 so šexéri o Andriás].
 to.the.N.ACC.SG city.N.ACC.SG the.M.NOM.SG Andrew.M.NOM.SG
 ‘The door is locked and (this is why) Andrew went to the city.’

(Nespor and Vogel 2007[1986]:189, ex. (3b))

- b. [_I I hope that Mary will sing |) and Bob will play his banjo].
 (Truckenbrodt 2007:454, ex. (41))

Embedded coordinate structures are not of central importance here and will therefore not be discussed any further.

³³ As a side note, unlike Dawkins (1916), Andriotis (1948) suggested that *ki* derives from the Ancient Greek coordinator *καί* [kaì] ‘and’ (Andriotis 1948:85), which survives in SMG as *ke/ki* and in PhG as *če* ‘and’. This view, however, should be rejected for two reasons. First, the morpheme *ki* does not undergo tsitakism (section 2.2.2.2), which targets only and all native words. If *ki* were etymologically related to *καί* [kaì] ‘and’, and were thus a native word, we would expect it to be phonologically realized as [t͡ɕi], in both written texts and spoken data, contrary to fact. Second, /k/ of *ki* is always aspirated, hence [k^hi]. The aspiration of /k/ is also observed by previous authors, who write the <k> of *ki* either in bold, *κi* (Theodoridis 1960, 1964), or with an acute accent, *ki* (Anastasiadis 1976, 1980b). As noted in section 2.2.1.2, aspiration of plosives is observed only in non-native words. Therefore, *ki* should not be associated with any native word.

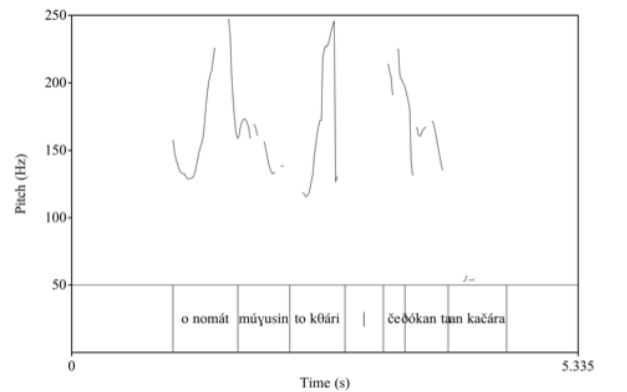


Figure 4.1: Pitch track of (71)

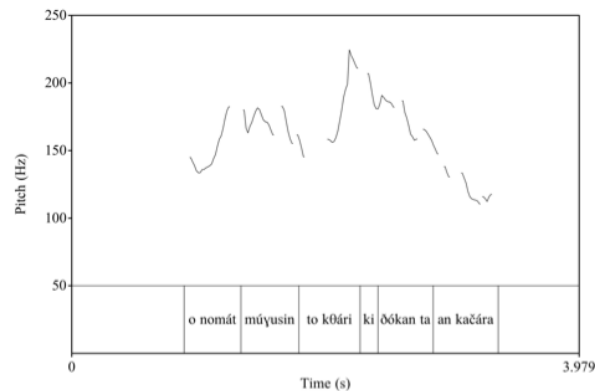


Figure 4.2: Pitch track of (70)

In (75), the reason why Andrew went to the city is not the fact that the door is locked. Rather, the speaker—who presumably had at her disposal the information that Andrew might go to the city—infers, on the basis of the observation that the door is locked, that Andrew had indeed gone to the city. In this example then, CP1 constitutes the justification not for the content/eventuality expressed in CP2 as such but rather for the speaker’s belief that the proposition in the second conjunct is true. Put

differently, *ki* establishes a causal relation between a proposition conveyed in CP1, and the speaker's epistemic attitude with respect to the proposition conveyed in CP2. This is further confirmed by the perceived awkwardness of the following example:

- (76) # [_{CP1} To temíri so neró čav
 the.N.NOM.SG iron.N.NOM.SG from.the.N.ACC.SG water.N.ACC.SG more
 varí íni] ki [_{CP2} pattiéi so neró].
 heavy.SG be.NPST.3SG PRT sink.IPFV.NPST.3SG in.the.N.ACC.SG water.N.ACC.SG
 'Iron is heavier than water and (this is why) it sinks in water.'

By using the connector *ki* in (76), the speaker presents the fact that 'iron is heavier than water' as a subjective reason for the argument that iron sinks in water. The example is judged by all informants as being pragmatically odd because it is a generally known fact that iron sinks in water due to the differences in density between the two substances. As such, it would be inappropriate for a speaker to present the fact that 'iron is heavier than water' as a subjective reason for the claim that iron sinks in water.

It can be deduced from the above observations that CP1 in a causal construction interpretively resembles so-called "peripheral" adverbial clauses introduced by the conjunctions *because*, *since* or *as* in English, or *da* 'because' in German (on peripheral adverbial clauses, see Haegeman 2003a, 2004b,c, 2006b, 2007, 2009[1991], 2009, 2010a,b, 2010b, 2012, 2013; for German peripheral *da* 'because', see Pasch 1989; Frey 2012). These clauses constitute a "causal/justifying clause" for the argument in the clause in which they are embedded (the relevant adverbial clauses are given in square brackets):³⁴

³⁴ Antomo (2012) similarly claims that an adverbial clause introduced by *weil* 'because' in German may express both the reason for the proposition in the main clause (ia) and be interpreted on the illocutionary level and express an evidence for the claim expressed in the main clause (ib).

- (i) a. Es hat einen Unfall gegeben, weil der Airbag aufgegangen ist.
 It has an accident given because the airbag deployed is.
 'An accident has happened because the airbag has opened.'
 = The sudden deployment of the airbag is the cause of the accident.
 b. Es hat einen Unfall gegeben, weil der Airbag ist aufgegangen.
 it has an accident given because the airbag is deployed.
 'An accident has happened because the airbag has deployed.'
 = The reason why the speaker believes that there must have been an accident is that the car's inflatable safety bag has deployed.

[German (Antomo 2012:32, ex. (17, 18a))]

As the reader may observe, there is a syntactic reflex of the interpretive difference between (ia–ib): in (ia), the finite verb *ist* 'is' is in sentence-final position, whereas in (ib) the finite verb is immediately after the subject of the adverbial clause; hence, the adverbial clause in (ib) involves V2, a root-like

- (77) a. This is not a list drawn up by people sitting night after night reading to babies and toddlers, [because then it would include books such as *Bo-ing!* by Sean Taylor (Walker Books) which expand the child’s experience along with his or her joy of reading].
(Haegeman 2012:162, ex. (28b))
- b. Es hat Frost gegeben, [da die Heizungsrohre geplatzt sind].
EXPL has frost been because the heating pipes burst have
‘There has been a frost because the heating pipes have burst.’
[German (Frey 2012:407, ex. (1a))]

The adverbial clauses in (77a–b) introduced by *because* and *da* ‘because’ respectively do not relate to the content of the clause which they modify; if this were the case, the result would be semantically odd. Rather, these adverbial clauses “provide the discourse frame against which the proposition expressed in the host clause is evaluated” (Haegeman 2004b:161). *Ki* in a causal construction, then, renders CP1 interpretively similar to *because* and *da* ‘because’ clauses in (77).

Because when used in a causal construction, *ki* mediates between the speaker’s attitude and a given proposition, these constructions cannot be embedded under a matrix clause in which CP1 should express the point of view of the grammatical subject of the matrix predicate, and not that of the speaker (see also section 4.3.3.2.3 for the claim that epistemic point of view reported in an embedded clause concerns that of the referent of the matrix subject; Giorgi 2010:91, 2016:110). Therefore, causal constructions constitute a MCP (section 3.3.2.4):

- (78) * I Nerkíza pilturtízi/pandéši [[CP1 i
the.F.NOM.SG Nerkíza.F.NOM.SG report/suppose.IPFV.NPST.3SG the.F.NOM.SG
θíra íni karakoménu] *ki* [CP2 píin so
door.F.NOM.SG be.npst.3sg locked.sg PRT go.PFV.PST.3SG to.the.N.ACC.SG
šexéri o Andriás]].
city.N.ACC.SG the.M.NOM.SG Andrew.M.NOM.SG
int.: ‘Nerkíza reports/supposes (that) the door is locked and (this is why) Andrew went to the city.’

The ungrammaticality of (78) contrasts with the grammatical example (79), in which CP1 and CP2 are coordinated with *če* ‘and’. In this case, however, the reading available is that in which the grammatical subject of the matrix clause *i Nerkíza* ‘Nerkíza’ reports on or supposes there to be a sequence of events.³⁵

phenomenon. For further structural differences between the two, see Antomo (2012) and Haegeman (2012:178–180, section 4.7). These structural differences are not relevant for this dissertation; the important point is that *ki* renders CP1 in a causal construction to be interpreted on the illocutionary level and to express an open evidence for the claim in CP2, precisely as in (ib).

³⁵ See also (i) from a written text which instantiates a causal construction:

- (79) I Nerkíza pilturtízi/pandéši [[_{CP1} i
the.F.NOM.SG Nerkiza.F.NOM.SG report/suppose.IPFV.NPST.3SG the.F.NOM.SG
θíra íni karakoménu] če [_{CP2} pín so
door.F.NOM.SG be.npst.3sg locked.sg and go.PFV.PST.3SG to.the.N.ACC.SG
šexéri o Andriás]].
city.N.ACC.SG the.M.NOM.SG Andrew.M.NOM.SG
'Nerkiza reports/supposes (that) the door is locked and Andrew went to the
city.'

4.3.5 Emphatic constructions

4.3.5.1 Setting the scene

As an illustration of the final pattern in which the particle *ki* is used in PhG, consider the examples in (80), in which *ki* is located in clause-final position. The particle is licit at the end of a declarative main clause (80a), but is ungrammatical in a true question (80b–c) or after an embedded clause (80d).³⁶

- (80) a. Xáθin (*ki*).
die.PFV.PST.3SG PRT
'She died.'

- (i) [_{CP1} Tría xrónes častéftam mo tin pína če
three year.F.NOM/ACC.PL torment.NACT.PFV.PST.1PL with the.F.ACC.SG hunger.F.ACC.SG and
to joxliéxi] *ki* [_{CP2} o θεός son tuśmáno
the.N.ACC.SG poverty.N.ACC.SG PRT the.M.NOM.SG God.M.NOM.SG to.the.M.ACC.SG enemy.M.ACC.SG
mas na mi ōksí t an to ta částe].
our SUBJ not show.PFV.NPST.3SG 3OBJ(?) like this.PL(?) the.N.ACC.PL torture.N.ACC.PL
'For three years, we were tormented by hunger and poverty, so may God not show such tortures
(even) to our enemy.'

(Zurnatzis 1950s:19.20)

³⁶ *Ki* can, however, follow a rhetorical question (i).

- (i) a. Tuz na ta katéxu (*ki*)?
how SUBJ 3OBJ know.IPFV.NPST.1SG PRT
'How could I know that? (≈ There is no way that I could know that.)
b. Čo ípa si ta (*ki*)?
not say.PFV.PST.2SG 2sg.obj 3OBJ PRT
'Did I not tell it to you? (≈ I told it to you.)

Rhetorical questions are understood as assertions of the opposite polarity to that of the surface string (Sadock 1971; Han 2002). The fact that *ki* is compatible with rhetorical questions suggests that its occurrence as a clause-final particle does not strictly depend on the form (type) of the clause but on its illocutionary force (meaning).

- b. Xáθin (*ki)?
die.PFV.PST.3SG PRT
'Did she die?'
- c. Tis xáθin (*ki)?
who.nom die.PFV.PST.3SG PRT
'Who died?'
- d. Katéxu čo a nártun (*ki).
know.IPFV.NPST.1SG not FUT.DEF come.PFV.NPST.3PL PRT
'I know (that) they are not coming.'

When located at the end of a declarative main clause, the particle *ki* is identified by speakers as lending emphatic force to the preceding clause; therefore, I refer to examples such as (80a) as “emphatic constructions”. The concept of emphasis intended here is elaborated on in the next section.

4.3.5.2 The role of *ki* in an emphatic construction

In order to clarify the concept of “emphatic force” intended by the speakers with respect to clause-final *ki*, I will first examine the example in (81).

(81) Two speakers, A and B, are discussing the task of cleaning the balcony.

A: Títi čo pársipsis to xajáti?
why not sweep.PFV.PST.2SG the.N.ACC.SG balcony.N.ACC.SG
'Why did you not sweep the balcony?'

B: Pársipsa ta *ki*! Iđé ta ka!
sweep.PFV.PST.1SG 3OBJ PRT look.PFV.IMP.2SG 3OBJ well
'I did sweep it! Look at it more closely!'

In (81), B's response contrasts with a previous (and implicit) presupposition in A's question: A presupposes that although this was his task, B has not swept the balcony, and with this presupposition in mind, A asks B for the reason why B did not do so. B's response, however, contradicts the presupposition in A's question: in fact B has swept the balcony. As such, *ki* can, at first glance, be identified as a marker of “counter-presupposition” (adopting a term from Gussenhoven 2007) involving a correction of information which the speaker detects in the hearer's discourse model. However, this counter-presuppositional interpretation is not available in every case involving the clause-final *ki*. Consider the minimal pair in (82B) in the constructed context. (82Ba–b) are identical with respect to everything else except for the occurrence of *ki* in the latter.

(82) Speaker A, the child of Speaker B, wants to go out to play.

- A: Onimá, a vgo óksu, a péksu.
 mom.voc FUT.DEF go.out.PFV.NPST.1SG outside FUT.DEF play.PFV.NPST.1SG
 ‘Mom, I am going outside, I am going to play.’
- B: a. Mi vgis! O tatá su a
 not go.PFV.NPST.2SG the.M.NOM.SG father.M.NOM.SG your FUT.DEF
 xoliestí.
 be.angry.PFV.NPST.3SG
 ‘Do not go! Your dad is going to be angry.’
- b. Mi vgis! O tatá su a
 not go.PFV.NPST.2SG the.M.NOM.SG father.M.NOM.SG your FUT.DEF
 xoliestí ki!
 be.angry.PFV.NPST.3SG PRT
 ‘Do not go! Your dad is going to be angry!’

Neither (82Ba) nor (82Bb) seem to counter a presupposition embedded in speaker A’s utterance. Speaker A may not be presupposing anything specific regarding her father’s attitude toward her going out. However, (82Ba–b) differ in one major respect: speaker B’s utterance in (82Ba), i.e., ‘Your dad is going to be angry!’ would receive something like a weak possibility reading (for weak and strong possibility see Turner 2005): it is probable but not completely certain that speaker A’s father is going to be angry. In fact, speaker A’s father may not even be at home or know of speaker A’s intention. In (82Bb), on the other hand, the same utterance would receive something like a strong possibility reading: it is highly likely—indeed, virtually certain—that speaker A’s father is going to be angry because of the fact that speaker A is going out. Concomitantly, it is also highly probable that speaker A’s father is going to learn about this fact. For another example, consider the minimal pair in (83).

- (83) A group of women, including the speaker, are cleaning the basement; therefore, none of them see what is going on outside.
- a. Piésin a vreší.
 catch.PFV.PST.3SG a rain.F.NOM.SG
 ‘It has started to rain.’
- b. # Piésin a vreší ki!
 catch.PFV.PST.3SG a rain.F.NOM.SG PRT
 ‘It has started to rain!’

In the context given above, (83a) can felicitously be uttered, and the clause may receive a weak evidential reading. The speaker may have indirect and unclear evidence for her assertion that it has started to rain: for example, she may have heard the sound of water drops, but the source might not necessarily be the rain, although she claims it

to be so. Since she is not sure of her assertion, she may also appropriately use hedges, such as a tag question (84a) to ask for her interlocutors' confirmation or an adverb, such as *xérxalta* 'possibly' (84b), to reduce the strength of her assertion.

- (84) a. Piésin a vreší, ma/xε/aúča čo íni?
 catch.PFV.PST.3SG a rain.F.NOM.SG not/yes/such not be.NPST.3SG
 'It has started to rain, hasn't it/right/isn't that so?'
 b. Xérxalta piésin a vreší.
 possibly catch.PFV.PST.3SG a rain.F.NOM.SG
 'Possibly, it has started to rain.'

In the same context, however, (83b) is judged as pragmatically inappropriate. According to consultants, for (83b) to be uttered felicitously, the speaker must be sure of her assertion. The speaker would be entitled to utter (83b) only if she were observing the rain from inside through a window, or—even better—if she were actually standing outside in the rain. In this respect, *ki* seems to simply reinforce the speaker's commitment to the evidence and to increase the certainty of her conjecture. For this reason, the hedges used in (84) are incompatible with an emphatic *ki*-construction:

- (85) a. Piésin a vreší *ki*, (*ma/*xε/*aúča čo íni?)
 catch.PFV.PST.3SG a rain.F.NOM.SG PRT not/ yes/ such not be.NPST.3SG
 'It has started to rain, (*hasn't it/*right/*isn't that so?)'
 b. (*Xérxalta) piésin a vreší *ki*!
 possibly catch.PFV.PST.3SG a rain.F.NOM.SG PRT
 '(*Possibly,) it has started to rain.'

Although the evidence in (81) might have initially suggested that emphatic *ki* conveys counter-presuppositionality, the uses of *ki* as in (82–83), and its function (84–85) suggest that this is not necessarily the case. Rather, in (81), too, the speaker merely employs *ki* to demonstrate to her interlocutor her high degree of commitment to the truth of her assertion.³⁷

³⁷ Unfortunately, I could not retrieve any instance of a clearly emphatic construction in the older written texts, but see the example in Papadopoulos (2011:31.18). It is possible that the lack of attestation is due to an accidental gap in the records. Anticipating the discussion coming up in sections 4.5.3.3–4.5.3.5, quotative constructions (and predicate-complement constructions) are structurally the same as emphatic clauses. Therefore, I cite the following example as an emphatic clause:

- (i) “Mo to θεό, τίποσ čo irévo,” léyo ti *ki*!
 By God, nothing not want.IPFV.NPST.1SG say.IPFV.NPST.1SG PRT PRT
 “‘By God! I want nothing,’ I say!’

(Theodoridis 1964:298.33)

4.3.6 Interim summary

In sections 4.3.1–4.3.5, I have presented five construction types in which the particle *ki* can legitimately be used. In my discussion, I have focused on the interpretive properties of these constructions tied to the very presence of the particle *ki*. The main interpretive properties of *ki* are summarized in Table 4.3. Note that the aim of section 4.3 was to determine—as clearly as possible—the interpretive functions of *ki*: the information in the second column concerning word order is presented only as an initial sketch. The exact structural location of *ki* in a clause and the syntactic properties of the constructions in which it occurs will be dealt with in detail throughout section 4.5.3.

On the basis of the data presented in Table 4.3, we can conclude that although the morpheme *ki* occurs in five—at first sight—seemingly unrelated constructions, in all these constructions, it somehow appears to have a unique function related to conveying the speaker’s attitude and mental state (question (i) in section 4.1). Therefore, it is tempting to hypothesize that the particle *ki* in all these construction types is actually the instantiation of one and the same morpheme (question (ii) in section 4.1), which would lead to a unified analysis of the use of *ki*. In the next section, I further elaborate on the function of *ki* (section 4.4.1). In an attempt to propose a unified analysis of *ki*, I will relate its function to the notion of epistemic vigilance (section 4.4.2).

4.4 Towards a unification of the interpretive properties of *ki*

The fact that *ki* was characterized as multifunctional by previous authors is probably related to the wide range of apparently diverse environments in which this element can occur. In addition, the observed difficulty of determining the precise interpretive properties of *ki* has undoubtedly contributed to its fragmented presentation in the previous literature (see section 4.2). The difficulties faced by previous authors can be understood if we take into account the fact that, interpretively, *ki* is a particle operating at the level of discourse rather than at the level the sentence; markers that are known to operate at this level, i.e., discourse markers, are well known to be multifunctional and their interpretive properties are hard to pin down, making them difficult to translate (Brinton 1996:34; Matei 2010:123; Furkó 2014; Soltic 2015:56).

4.4.1 *Ki* as a discourse marker

Discourse markers (henceforth DMs; also referred to as “discourse connectives”, “pragmatic markers” or “pragmatic connectives”) are linguistic items traditionally

Construction	Position of <i>ki</i>	Function of <i>ki</i>	Example
Quotative	a. (“Quote;”) [Rep. cl. V _[(di)r.] + ta (<i>ki</i>) (“Quote”)]	Signals the authority of the speaker on the event she is reporting and a strong commitment by her to the truth of her statement.	(10b, 11b), 12, 17b)
	b. (“Quote;”) [Rep. cl. V _[intr.] (<i>ki</i>) (“Quote”)]		
PCC	[CP/TP _(main)] ... V _[+asrt.] +ta ... ki, [CP _(embed)] ...]	Signals high degree of speaker commitment to the truth of her assertion and therefore the certainty of conjecture.	(23b, 33b, 34, 35a, 38, 41b)
Adverb + <i>ki</i>	[CP/TP _(main)] ADV _{epist./evid.} + <i>ki</i> ... V ...]	Loss of objective modal reading of the epist./evid. adverb. The adverb can only express speaker’s subjective evaluation of the proposition.	(45b, 53, 64)
Causal	[CP ₁ ...] <i>ki</i> [CP ₂ ...]	CP ₁ acts as a justifying/evidential clause for speaker’s assertion of the proposition in CP ₂ as true.	(70, 75)
Emphatic	[CP/TP _(main)] ... V ... <i>ki</i>]	Signals speaker’s commitment to the truth of her assertion.	(80a, 81B, 82Bb)

Table 4.3: Properties of *ki*-constructions (first approximation).

regarded as optional and non-truth-conditional connectives that occur between units of discourse, such as English *so* or *but* and German *ja*, among others (Schiffrin 1987; Fraser 1999; Schourup 1999; Blakemore 2002, 2004, a.o.; see also Zimmerman 2011 and Gutzmann 2015:215–230 for an overview of generative approaches to DMs). Various definitions of DMs have been proposed in the literature. According to one definition, a DM is “[...] a word or phrase [...] that is uttered with the primary function of bringing to the listener’s attention a particular kind of linkage of the upcoming utterance with the immediate discourse context” (Redeker 191:1168). According to another definition, DMs are “[...] expressions used to connect sentences to what comes before or after and indicate speaker’s attitude to what [she] is saying” (Ismail 2013:1260). Schiffrin (1987) identifies three possible functions for DMs: (i) they index the utterance to prior or forthcoming discourse, (ii) they function as contextual coordinates, i.e., points of reference from which the speaker or the listener depart in order to interpret a given message, and finally, (iii) they index an adjacent utterance to the speaker, hearer or both.

Ki, as presented in section 4.3, fits into the category of DMs, especially with respect to the last function identified by Schiffrin (1987): *ki* links an adjacent utterance to the speaker. Furthermore, *ki* shares (at least) three major properties with DMs as they have been presented in the literature. The following list is based on Haegeman (2014:120–121):

- (i) DMs are known to be non-truth-conditional, i.e., they are words but are not used to say something which can be judged as true or false. Rather than content meaning, DMs encode “pragmatic”, i.e., non-truth-conditional, meaning (à la Gazdar 1979; Watts 1988:246; Blakemore 2004:237; de Klerk 2005:1185, but see also Blakemore 2002:12–58, chapters 1–2). They can be deleted with no loss of meaning or change in the truth conditions even though the force of the utterance would be less clear. In none of the constructions it occurs in does the particle *ki* influence the truth condition of any adjacent proposition(s).
- (ii) DMs express “the mental state of the speaker” and the attitude of the speaker to what she is saying (Munaro 2006:7, 2010:77; also Ismail 2013). In quotative, predicate-complement and emphatic constructions, for example, *ki* conveys that the speaker of the utterance is committed to the authority over what she is reporting and therefore to the truth of her assertion. In causal constructions, *ki* mediates a causal relation between the speaker’s proposition and her attitude, and in adverb + *ki* constructions, it restricts the interpretation of an epistemic and evidential adverb to a subjective modal reading, where the relevant point of view is set as that of the speaker’s.
- (iii) DMs can be interactional; they involve explicit or implicit presence of the entities involved in the specific communicative situation, such as the speaker and hearer

(Munaro 2006:7, 2010:77). The interactional role of *ki* is quite clear, as its occurrence is strictly bound to the speaker and not to the grammatical subject, for example (recall its ungrammaticality in embedded contexts; see Munaro 2006, 2010 for the unavailability of DMs in embedded contexts; see also Miyagawa 2012). The relation to the speaker also implies a relation to a hearer in the discourse setting: the use of *ki* to express the speaker's authority over the reporting event and her commitment to the truth of her assertion suggests that *ki* globally has the function of not only expressing speaker's mental state, but also to manipulate the hearer's attitude toward the content of the speaker's assertion— more precisely the hearer's "epistemic vigilance".

In the next section, I will define epistemic vigilance and relate this concept to *ki*.

4.4.2 *Ki* and epistemic vigilance

Epistemic vigilance is a term introduced in the framework of Relevance Theory, a Neo-Gricean approach to conversational pragmatics, elaborated by Sperber and Wilson (1995[1986]). The notion of epistemic vigilance refers to a set of cognitive mechanisms which helps hearers to filter out misinformation coming from the speaker when transitioning from the state of "understanding" to the state of "believing" (a.o., Sperber et al. 2010; Wilson 2011, 2012). These mechanisms help the hearer to assess the reliability of communicated information and defend himself against mistakes of misguidance coming from the speaker.

Communication brings vital benefits, but carries a major risk for the audience of being accidentally or intentionally misinformed. Nor is there any failsafe way of calibrating one's trust in communicated information so as to weed out all and only the misinformation. Given that the stakes are so high, it is plausible that there has been ongoing selective pressure in favor of any available cost-effective means to least approximate such sorting.

(Sperber et al. 2010:369)

The search for a relevant interpretation by the hearer naturally gives rise to an epistemic vigilance check with which the hearer will make "inferences which may turn up inconsistencies or incoherencies relevant to epistemic assessment" (Sperber et al. 2010:376; Mazzarella 2015:197; Zakowski 2017:415).³⁸ To illustrate this, let us assume that during the break just before the final exam for the course *Math 103* –

³⁸ In Relevance theory, "relevance" is taken as a property of inputs to cognitive processes. An input is considered relevant to an individual if it is linked with available contextual assumptions to yield positive cognitive effects (Wilson and Sperber 2002:251; see also Ifantidou 2001:196). For example, an

History of Mathematics, two classmates are talking in front of the faculty, and one communicates the message in (86) to the other.

(86) The scientist who discovered the polyhedral formula is Leonhard Euler.

Clearly, any hearer with no mental or physical disability may derive an interpretation of (86). However, deriving an interpretation from the utterance is not sufficient: the hearer needs to construct a “relevant” interpretation, one which is worth processing and one from which the hearer will draw further inferences to update the common ground, i.e., “the presumed background information shared by participants in a conversation” (Stalnaker 2002:701; following Grice 1981:190, 1989:65).³⁹ While building such a “relevant” interpretation, i.e., while passing from the stage of understanding to the stage of believing, the interpretation derived from (86) will be subjected to an epistemic vigilance check. The hearer checks the assertion communicated in (86) against his encyclopedic knowledge and his belief that the discoverer was indeed Euler, rather than, say, Daniel Bernoulli or any other option that he may have accessible, depending on how much he knows about the polyhedron theory and its history (see Sperber et al. 2010:385–376). At the end of this check, the hearer may (i) trust the source and (hence) the content of the input assertion and accordingly update his previous belief(s), or (ii) filter out the speaker’s assertion via his epistemic vigilance if his own belief that Daniel Bernoulli is the discoverer of the formula weighs more than his confidence in the content of the communicated assertion and the qualities of the source. Two types of epistemic vigilance may interact or even conflict with each other (Mercier and Sperber 2011:60; Wilson 2012): (a) “argumentative mechanisms”, which allow the hearer to assess the consistency/coherence of communicated content and (b) “source monitoring mechanisms”, which allow the hearer to assess the competence, benevolence and trustworthiness of the speaker (Sperber 2001; Mercier and Sperber 2011; Wilson 2011, 2012). Source monitoring mechanisms are involved in what has been called trust calibration in the literature (Mercier and Sperber 2011:60).

The speaker of course does not come to the communication event unprepared: she naturally anticipates that the hearer will check what she is claiming and her credibility

utterance (i.e., the input) is more relevant to the hearer if it connects with background information that the hearer possesses to yield conclusions that matter to him with just the necessary amount of effort—for instance by answering a question he had, improving his knowledge on a topic, settling a doubt, correcting a mistaken impression etc.

³⁹ A number of alternative terms to “common ground” have been adopted in the literature, among which are “mutual knowledge*” (Schiffer 1972:30–41, section II.2), “common knowledge” (Stalnaker 1973) and “assumed familiarity” (Prince 1981:233). In Relevance Theory, the term “common ground” is replaced with the term “mutual cognitive environment” (Sperber and Wilson 1995[1986]:15–21). The motivations behind these different terms do not concern the purposes of this chapter; therefore, I continue to use the term “common ground”, which seems to be the most familiar one (see Allen 2013 for the assessment of various terms adopted in the literature).

on the matter against his store of encyclopedic knowledge—that is, she anticipates that the hearer will be epistemically vigilant. As a consequence of this anticipation, the speaker may choose to manipulate the hearer’s mechanisms deployed to check epistemic vigilance. Concerning the first type of vigilance, which monitors content, one strategy that may be employed by the speaker is to produce an argument showing that her proposition in (86) logically follows from or is strongly supported by other background information available to the hearer (Sperber 2001:410; Wilson 2011:23). For instance, the speaker may state, ‘The polyhedral formula is also called Euler’s polyhedral formula; *therefore*, (86).’ To ensure her proposition passes the second type of check for epistemic vigilance which are geared towards trust calibration (Mercier and Sperber 2011:60), the speaker may openly display how authoritative and reliable she is, what type of evidence she has and what the source of this evidence is. In our case, for example, she may say, ‘I just read in Professor James’ lecture notes that (86).’

DMs have also been analyzed as strategies related to influencing epistemic vigilance, rather than to the comprehension of content itself (see Wilson 2011 on Japanese DMs, Haegeman and Hill 2013 on Romanian and West Flemish DMs, Haegeman 2014 exclusively on West Flemish ones, and Zakowski 2017 on three Ancient Greek DMs in this context). As we can take the particle *ki* to be speaker-oriented, I propose that *ki* can be analyzed as a DM used to manipulate both types of epistemic vigilance mechanisms discussed above.

To elaborate on the role of *ki* in relation to the speaker’s anticipation of epistemic vigilance, let us consider first quotative constructions (section 4.3.1), PCCs (section 4.3.2) and emphatic constructions (section 4.3.5), which all clearly show the role of *ki* in anticipating epistemic vigilance. In all three constructions, *ki* is geared towards trust calibration: by using *ki* the speaker aims to underscore her authority in relation to the reporting event and/or her trustworthiness with respect to the assertion she makes. The fact that only assertive predicates are compatible with *ki* in PCCs is in line with this proposal, since epistemic vigilance checking is naturally expected to arise for propositions which function as assertions. Interrogatives do not give rise to assessment of a propositional content simply because a question does not denote an assertion (not even a proposition). Propositions as presuppositions are also exempted from epistemic vigilance; therefore, *ki* is not compatible with factive verbs. This follows from the fact that the truth of the (semantic) argument of such verbs is taken for granted (see section 4.3.2.1.1).⁴⁰ A proposition whose truth is taken for granted cannot update the common ground, and thus it does not satisfy the hearer’s expectation of relevance. Thus, in order to update the common ground, a proposition must be challengeable (Stalnaker 2002); in other words, the hearer should be

⁴⁰ Thanks to Liliane Haegeman (p.c.) for raising this issue.

able to assess whether to include it to the common ground or not. If a presupposed proposition is already part of the common ground, “the speaker fails to contribute a proposition which could achieve relevance, i.e., whose processing could modify the existing assumptions in the hearer’s cognitive environment” (Jagiella 2015:192). As with presupposed propositions no modification of the common ground is involved, *ki* with such propositions; therefore, with factive verbs selecting such propositions, functions as a stimulus that is not relevant and worthy enough for the hearer’s effort to process it.

Next, consider adverb + *ki* constructions (section 4.3.3). *Ki* seems to resolve a potential ambiguity between objective and subjective modal readings of evidential and epistemic adverbs in favor of the former: in an adverb + *ki* construction, the adverb only reflects speaker’s personal commitment to the truth of the proposition or to the commitment to the reliability of the source of evidence. It is thus again geared towards trust calibration.

In the causal construction, in which *ki* joins two propositions conveyed by two clausal constituents, CP1 and CP2 (section 4.3.4), the speaker asserts the proposition conveyed by CP2 as true and wants the hearer to believe that this is so. In the absence of additional cues about the source or type of the knowledge, however, she is not sure that the proposition will be conveyed properly to the hearer and hence that the proposition will be passed by the hearer’s epistemic vigilance check. One way for the speaker to try to get the proposition to be validated by the hearer’s epistemic vigilance is to openly monitor content calibration, i.e., to consolidate the basis for the content of the assertion by displaying the type of evidence she has for her assertion in CP2. In a causal construction, CP1 provides the evidence for the truth of the proposition expressed in CP2, and the relation between CP1 and CP2 is mediated by *ki*.

To conclude, I have so far assumed that the functions of *ki* in all the apparently unrelated construction types described in section 4.3 can actually be subsumed under one general function: *ki* is a DM used by the speaker to influence the epistemic vigilance mechanism of the hearer. From this conclusion, it becomes clear that the occurrence of *ki* is directly bound to the notions of speaker and hearer and the relation between them. The question that should now be addressed is whether and how such relations, which are clearly related to the discourse, can be represented syntactically, and more specifically, whether and how we can formulate a syntactic analysis for the discourse function of *ki* (question (iii) in section 4.1). In the next section, I offer a proposal that not only captures the interpretive property of *ki* summarized in this section but also accounts for various additional structural properties of *ki*-constructions that will be presented below.

4.5 Structural Analysis

I have so far argued that *ki* is a DM that modifies the relation between a speaker and a hearer. Based on the cartographic approach assumed in this dissertation, this relation should ideally be represented in the syntax, just like other discourse-related notions, such as topic and focus, were represented syntactically in chapter 3. In the next section (4.5.1), I will provide two related proposals, one by Speas and Tenny (2003) and the other by Hill (2007a, 2010, 2012), as to how this can be achieved.

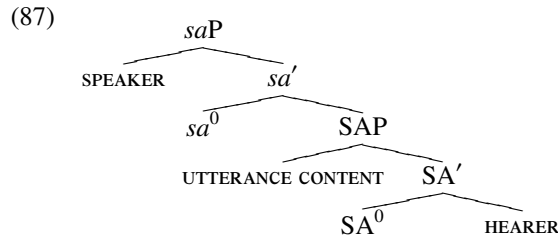
4.5.1 The Speech Act Phrase

4.5.1.1 Speas and Tenny (2003)

Speas and Tenny (2003; henceforth S&T, also Speas 2004; Tenny 2006) propose that different illocutionary acts, i.e., the realizations of different communicative goals enacted by the speaker through an utterance, such as an “assertion” (typically realized as a declarative clause), a “request for information” (i.e., interrogative), and an “order for action” (i.e., imperative), are syntactically represented in a pragmatic field as the top layer of the utterance, which they refer to as “Speech Act Phrase” (SAP) (inspired by Cinque 1999).⁴¹ S&T propose that SAP encodes the discourse-syntax interface, and it shows parallelisms with the so-called layered VP, in which information at the lexicon-syntax interface is encoded. More specifically, just like a VP with a ditransitive verb, SAP is predicational and is associated with arguments. For S&T, SA⁰ expresses a predication on the communicative intention of an utterance, and it selects three arguments: two pragmatic roles (P-roles); i.e., that of “speaker” and “hearer”, and the “utterance content”, i.e., the clause that constitutes the propositional content of the illocutionary act. Building on proposals by Hale and Keyser (1993 et seq.), S&T argue that the P-roles are saturated within SAP, in much the same way that θ -roles are saturated in the lexical domain (i.e., the layered verb phrase, see section 3.3.1.2).

Extending the *vP*-shell approach to SAP, S&T argue for a shell structure for SAP, namely, [_{saP} [_{SAP}]]. They take *saP* to be essentially similar to the projection of a ditransitive verb and identify the P-role “speaker” with the θ -role AGENT, “hearer” with GOAL and the “utterance content” with THEME. The structure S&T propose for *saP*-SAP is given below.

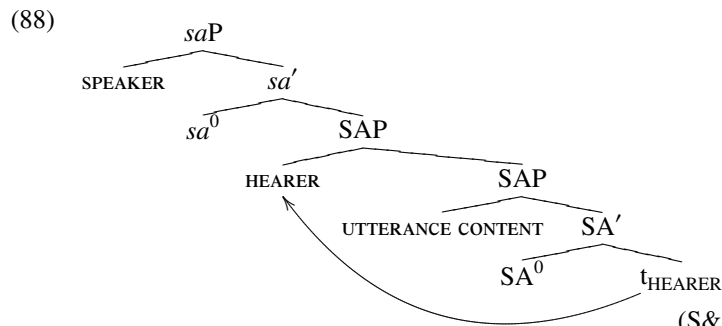
⁴¹ This proposal is in fact an attempt to revive and update Ross’ (1970) claim that every English assertion (i.e., declarative sentence) is a complement to a deleted performative such as “I say/declare to you that ____.” An early version of the proposal was also put forward by Banfield (1982).



(S&T:320, ex. (9))

According to S&T, the structure in (87) is the default configuration for representing the relations between “speaker”, “hearer” and the “utterance content”, and it corresponds to the structural representation of the illocutionary act of assertion (declarative). In this configuration, the P-role “speaker” is the highest argument and it c-commands the “utterance content”; put differently, this configuration indicates that the speaker has the authority on what she says.

In S&T’s approach, the illocutionary act of requesting information (i.e., an interrogative) is derived from the representation in (87) by movement of the “hearer” to a position from where it c-commands the “utterance content”. This is represented in (88): the P-role “hearer”, is attracted to a second specifier position of the lower SAP projection (S&T assume multiple-specifiers).



(S&T:321, ex. (10))

Although in (88) the “speaker” remains the highest argument of the speech act, in this representation the “hearer” has been promoted to a position in which it has become the closest c-commander of the “utterance content” (see section 3.3.1.4 on c-command), which entails that it is now the hearer who is interpreted as possessing the knowledge relevant to evaluating the “utterance content”. I refer the reader to S&T for the derivation of other types of illocutionary acts.⁴²

⁴² Alternative proposals which share with S&T the argument that discourse-syntax interface is mapped

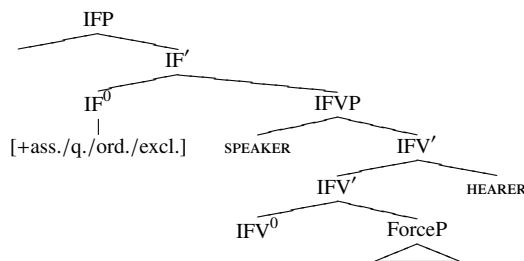
S&T's argument for postulating a layered projection above the utterance in which the discourse-syntax interface is encoded has been adopted by various scholars to account for a number of phenomena, most notable of which are vocatives and vocative markers (also analyzed as DMs; Hill 2006, 2007a,b, 2008, 2012, 2013; Haegeman and Hill 2013, 2014; Haegeman 2014; Akkuş and Hill to appear), allocutive agreement in Basque and politeness markers in Japanese (Miyagawa 2012) and, most crucial for our purposes, adverb + C (complementizer) constructions in Romanian (Hill 2007a et seq.). The point common to all the later approaches, which is also relevant for the structural analysis of *ki*, is that unlike S&T's original proposal, "utterance content" is identified as ForceP or CP and is taken to constitute the internal argument of SAP. In the next section, I will review Hill's (2007a; 2010; 2012) proposal for adverb + C constructions in Romanian, which will provide the background for the analysis of *ki*-constructions in PhG in sections 4.5.2 and 4.5.3.

onto syntax on a dedicated functional projection can be found in Hill (2006) and Puglielli and Frascarelli (2011). According to Hill (2006), the interface between a given clause and the discourse is mediated by PragP (i). According to Puglielli and Frascarelli (2011) *sa*P-SAP corresponds to Illocutionary Force Phrase (IFP) and Illocutionary Verb Phrase (IFVP) respectively. In this sense, the realization of ForceP is the expression of a piece of information that is located in IFP, in whose head position the illocutionary act is hosted (ii). Crucially, in both proposals, the syntax-discourse interface domain is situated high in the structure, above ForceP.

(i) [_{PragP} [_{ForceP} ...]]

(Hill 2006:180, app., ex. (v))

(ii)



where ass. = assertion, q. = question, ord. = order and excl. = exclamation.

(Puglielli and Frascarelli 2011:282, ex. (44))

See also Benincà (2001), who claims that ForceP is dominated by Disc(ourse)P. The question of to what extent these proposals are notational variants and to what extent they are substantially different is beyond the goal of the present chapter.

4.5.1.2 Hill (2007a et seq.)

In a series of papers, Hill (2007a, 2010, 2012) shows that items that belong to the classes of evidential, epistemic and evaluative adverbs (Cinque 1999; see section 4.3.3.1.1) in Romanian, such as *sigur* ‘surely’, *probabil* ‘probably’, *firește* ‘naturally’, and *bineînțeles* ‘of course’, may optionally be followed by the complementizer *că* ‘that’ (cf. (89a–b)). This complementizer is obligatory in complement clauses (90a) and is ungrammatical in matrix ones (90b). Adverbs that do not belong to these three categories, e.g., the lower adverb *mereu* ‘always’, cannot combine with this complementizer (91). Furthermore, this resulting pattern, which is referred to here as the adverb + C construction, is confined to matrix clauses. In embedded contexts, it becomes ungrammatical (92).

Crucially, when a higher adverb belonging to one of the three categories defined above is not followed by the complementizer *că* ‘that’ (89a), it is ambiguous between a speaker-oriented (subjective modal) reading and an impersonal (objective modal) reading (see section 4.3.3.2.1). When the complementizer follows the adverb (89b), this ambiguity is resolved and only the speaker-oriented (subjective modal) reading survives.

- (89) a. *Sigur va veni.*
 surely will-3sg come
 ‘Of course she is coming.’ / ‘It is certain that she is coming.’
 b. *Sigur că va veni.*
 surely that will-3sg come
 ‘Of course she is coming.’ / *‘It is certain that she is coming.’
 [Romanian (Hill 2007a:61, ex. (1))]
- (90) a. *A spus *(că) vine.*
 has said that comes
 ‘She said that she is coming.’
 b. *(*Că) bine am petrecut!*
 that well have partied
 ‘What a good time we had!’
 [Romanian (Hill 2012:279–280, ex. (2–3))]
- (91) *Mereu (*că) va veni.* [Romanian (Hill 2007a:71, ex. (15b))]
 always that will-3sg come
- (92) *Spunea că sigur (*că) va veni.*
 said-3sg that surely that will-3sg come
 ‘She said it is sure that she will come.’
 [Romanian (Hill 2007a:68, ex. (10))]

Hill (2007a et seq.) argues that adverb + C constructions are mono-clausal, i.e., the clause followed by the complementizer *că*, i.e., *va veni* 'she is coming' in (89b), is not subordinated to the adverb. Hill's main argument for the mono-clausal status of adverb + C constructions comes from the incompatibility of most such adverbs with a copula:

- (93) a. *E bineînțeles că Maria va primi banii.
is of-course that Maria will-3sg receive money-the
int.: 'Of course, Maria will receive the money.'
- b. Bineînțeles că Maria va primi banii.
of-course that Maria will-3sg receive money-the
'Of course, Maria will receive the money.'
- [Romanian (Hill 2007a:63, ex. (3a, 4a))]

The fact that adverbs that allow *că* 'that' do not allow a copula means that the adverb cannot be associated with predicate status in what would be the matrix clause, and in which function it could embed a complement clause. In this respect, such adverbs contrast with predicative adjectives, which do allow a copula. An indicative minimal pair is given in (94).

- (94) a. E firesc că ... (adjective)
is natural-ADJ that
'It is natural that ...'
- b. (*E) firește că ... (adverb)
is naturally-ADV that
Naturally, ...
- [Romanian (adapted from Hill 2007a:63, fn. 3. ex. (i))]

Furthermore, Hill (2007a) observes that when followed by *că* 'that', the relevant adverbs cannot be modified, unlike when there is no *că* 'that' following them:

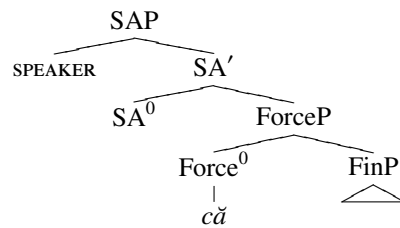
- (95) a. (*Mai) sigur că vine la ora 5.
more surely that comes at hour 5
'Certainly she will come at 5 o'clock.'
- b. Mai sigur vine la ora 5.
more surely comes at hour 5
'More precisely she will come at 5 o'clock.'
- [Romanian (Hill 2007a:73–74, ex. (17b–c))]

Based on the difference between (95a–b), Hill (2007a et seq.) concludes that whenever an adverb occurs in an adverb + C construction, this adverb does not project a specifier position where the modifier could be situated. She concludes that in these

cases then the adverbs are actually syntactic heads, rather than phrases. I refer the reader to Hill (2007a:74–77) for other observations to support her claim.

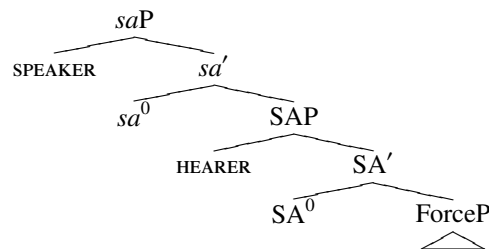
To derive the interpretive and structural differences between (89a–b), Hill (2007a et seq.) adopts a cartographic approach to the LP and further modifies S&T’s proposals for SAP. Instead of taking the P-role “hearer” as the internal argument of SA⁰, she proposes that SA⁰ selects the “utterance content”, i.e., ForceP, as its complement. ForceP is a projection of the complementizer *că* ‘that’. In her (2007a) paper, she uses a collapsed version of the *saP*-shell of S&T (96a), in which there is only one SAP projection related to the P-role “speaker”. However, her analysis is fully compatible with the *saP*-shell analysis of S&T, and in her subsequent work (e.g., Hill 2007b, 2013), Hill maintains the existence of *saP*-shell where the P-role “speaker” is associated with *saP* and the P-role “hearer” is associated with SAP (96b).

(96) a.



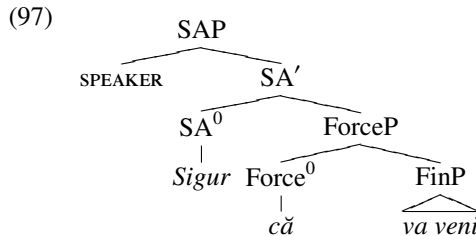
(adapted from Hill 2007a:78, ex. (20))

b.



(adapted from Hill 2007b:2099, ex. (39))

Hill further proposes that precisely the projection SAP is responsible for the subjective-modal interpretation of the adverbs involved. In particular, she argues that in (89b), the adverb is merged as the overt exponent of SA⁰ (97). This is in line with her observation that adverbs in adverb + C constructions function as heads (cf. (95a–b)). Therefore, the adverb is taken as a functional head in spec-head configuration with the P-role “speaker”. The evidentiality features of the “speaker” are checked through this configuration.



According to Hill, that the structure in (97) does not instantiate embedding ForceP under SAP—hence, that (97) is not a bi-clausal structure (see also (93–94) and the discussion around them)—follows from the selectional properties of SA⁰, which are based on Grimshaw’s (1979) distinction between “semantic selection” (s-selection) and “categorical selection” (c-selection).

The core idea of Grimshaw (1979) is that predicates selecting a finite complement clause have a semantic frame specifying which semantic (in her terms “interpretive”) types of complements they are compatible with. Finite complement clauses belong to one of the following semantic types: proposition (P), question (Q), or exclamation (E). In order for a complex sentence to be well formed, the finite complement must be of the correct semantic type(s) as specified by the matrix predicate. For instance, predicates such as *believe* or *think* select for complements of type P; predicates such as *ask* and *wonder* select for a complement of type Q, and predicates such as *be surprised* select for a complement clause of type E or P, etc. This type of selection, which is based on the semantic frame of the matrix predicate, is called “s-selection” by Grimshaw (1979). Crucially, the relevant semantic types (P, Q, E) do not necessarily have a one-to-one correspondence with syntactic categories. While all of the types may be associated with the syntactic category of CP, they may also be associated with NP (or, in more current terms, DP) or with nothing (null complement anaphora, \emptyset). For instance, in all the examples in (98), the s-selectional requirement that the matrix verb *ask* take Q is satisfied. However, in (98a), the complement of the matrix predicate is of the syntactic category CP; in (98b) it is a DP, and in (98c) it is a null complement anaphora.

- (98)
- a. Sam asked [_{CP} when the polyhedral formula was discovered].
 - b. Sam asked [_{DP} the date of the discovery of the polyhedral formula].
 - c. Sam wanted to know the date of the discovery of the polyhedral formula, so I asked \emptyset .

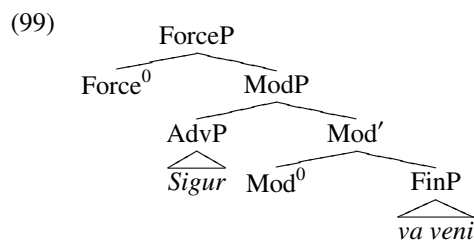
From examples similar to (98), especially those that involve null complement anaphora, Grimshaw (1979) concludes that, in addition to their s-selectional requirements, predicates also have an independent requirement to be paired with the correct syntactic

category. Grimshaw (1979) labels the latter requirement (that of requiring the complement clause to be of the correct syntactic category) as “c-selection”.

Returning back to Hill’s (2007a) explanation as to why embedding is unavailable for adverb + C configurations (97), she argues that, unlike complement-taking predicates, SA^0 , as a functional element, does not have a semantic frame that defines which semantic types of complements it is compatible with. This is so because she considers that functional elements only have c-selectional requirements, and thus they only take a c-selected complement (along the lines of Grimshaw 1979). As a result, no issue of embedding arises unlike when a complement-taking predicate selects a complement clause, which gives rise to s-selection. This means that the structure in (97) maintains the mono-clausal status of adverb + C constructions.

As to why adverb + C constructions cannot be embedded (see (92)), Hill (2007a) again proposes an explanation based on c-selection and s-selection. According to her, if SAP were a projection in embedded clauses, then a matrix predicate, such as *say*, would have to embed SAP rather than ForceP. This would mean that neither the c-selectional nor the s-selection requirements of the matrix verb would be satisfied because the matrix verb would be paired with SAP, which is not the syntactic category that the matrix predicate subcategorizes for, and, as an extension of this and assuming that clause-typing takes place in ForceP (on which see section 3.3.1.8), the matrix verb would not select the correct semantic type.

Recall that example (89a), in which the higher adverb *sigur* ‘surely’ is not followed by the complementizer *čă* ‘that’, is ambiguous between two readings: The adverb in this example can receive either a speaker-oriented (subjective modal) reading or an impersonal (objective modal) reading. Hill (2007a et seq.) proposes that the ambiguity in (89a) can be derived by assigning it two different phrase structures, with a “non-existing” and “non-overt” SAP respectively. She argues that in the version of (89a) where the impersonal (objective modal) reading is obtained, the SAP projection is absent; the structure is merely a ForceP, in which the adverb is merged in Spec, Mod(al)P:⁴³



⁴³ I refer the reader to Hill (2007a et seq.) for arguments supporting her claim that higher adverbs merge in ModP.

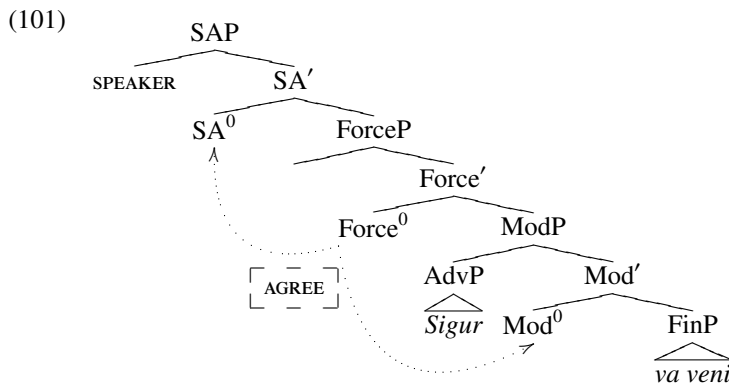
= (89a) ‘It is certain that she is coming.’

As SAP does not project in the version of (89a) where the impersonal (objective modal) reading is obtained (99), (89a) with the relevant impersonal (objective modal) reading can be embedded:

- (100) Spunea [că sigur va veni].
 said-3sg that surely will-3sg come
 ‘She said it is sure that she will come.’

[Romanian (adapted from Hill 2007a:68, ex. (10a))]

In the speaker-oriented (subjective modal) version of (89a), the syntactic projection encoding speaker-orientation (i.e., SAP) must be present. In this case, the evidentiality feature of SA^0 is checked against $Force^0$, which itself agrees with Mod^0 , establishing a “head-to-head” $Force^0$ - Mod^0 agreement:



= (89a) ‘Of course, she is coming.’

Hill (2007a) draws evidence for this Agree-relation from the fact that a *wh*-question and the speaker-oriented (subjective modal) reading of an adverb such as *sigur* ‘surely’ are in complementary distribution; in a *wh*-question, the adverb can only have the impersonal (objective) reading, rather than the speaker-oriented (subjective) reading:

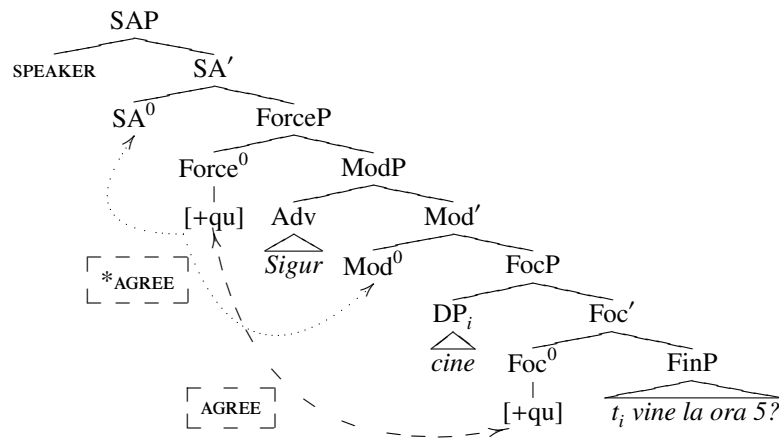
- (102) a. Sigur cine vine la ora 5?
 surely who comes at hour 5
 ‘Who exactly/*of course comes at 5?’

[Romanian (Hill 2007a:80, ex. (23b))]

According to (Hill 2007a), in Romanian, *wh*-phrases such as *cine* ‘who’, are hosted in Spec, FocP. The interrogative interpretation of (102a) arises because of the presence of the feature [+qu(estion)], which is instantiated both on $Force^0$ and Foc^0 . There is

then Force⁰-Foc⁰ agreement in *wh*-questions where the feature [+qu] is instantiated on Foc⁰ via agreement with Force⁰. This agreement between Force⁰ and Foc⁰ interferes with the locality of Force⁰-Mod⁰ agreement (Hill 2007a:81), which is shown schematically in (102b).

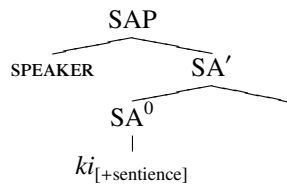
(102) b.



4.5.2 The syntax of *ki*: a proposal

The proposal I put forward for the analysis *ki* builds on the proposals for the representation of discourse relations as elaborated by S&T and by Hill (2007a et seq.), reviewed in the previous two sections. Following S&T, I assume that the notions of “speaker” and “hearer”, and the relations between the two, are represented in a dedicated *saP*-shell. In line with Hill (2007a), I simplify the shell projection and assume here just one SAP, although nothing hinges on this simplification. In principle, the proposed structure in (103) could also be represented in terms of the articulated [_{*saP*} [_{SAP}]]. Turning to PhG, I further propose that *ki* is the overt exponent of the head SA⁰, which is endowed with the [+sentience] feature setting the P-role “speaker” as the “sentient mind”:

(103)

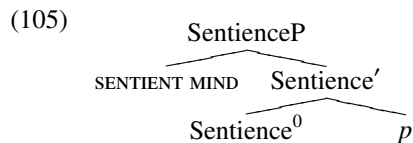


The [+sentience] feature is from S&T’s proposal, referring to the presence of a “sentient mind”, i.e., a pragmatically sentient individual whose point of view is reflected

in a given sentence and who “can evaluate, process, or comment on the truth of a proposition” (S&T:332). In other words, the “sentient mind” is the holder of an attitude toward the proposition encoded in an utterance. S&T’s proposal is based on previous work by Stirling (1993) and Smith (2002), according to which a wide range of grammatical phenomena make reference to some notion of point of view, or an attitude holder. Among the grammatical phenomena making reference to “sentient mind” is the use of speaker-evaluative adjectives, such as *damned* or epithets such as *the bastard*. As S&T show, these elements express an evaluation or judgment, which may be that of the speaker or of the subject of a verb of speech or propositional attitude, depending on whether they occur in matrix or in embedded clauses:

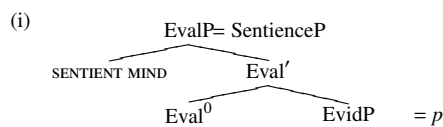
- (104) a. John phoned his *damned* cousin/*the bastard*. (damned by the speaker)
 b. John said he phoned his *damned* cousin/*the bastard*.
 (damned by the speaker, or by the subject)
 (S&T:328, ex. (25))

I refer the reader to S&T (pp. 326–331) for discussion of other grammatical phenomena implicating the existence of “sentient mind” (see also section 4.3.3.2.3 for its relevance to the interpretation of certain adverbs). In order to capture such grammatical phenomena, S&T develop an articulated structure that encodes matters “having to do with the point of view of a sentient entity” (S&T:332). They call this projection “Sentience Phrase” (SentienceP).⁴⁴ Like SAP, SentienceP has an argument structure: the P-role “sentient mind” is located in its specifier position, and the proposition is its internal argument:



According to S&T, the “sentient mind” in (105) can be co-indexed with the P-roles “speaker” and “hearer” defined above. If the speaker has evidence relevant to as-

⁴⁴ SentienceP, as proposed by S&T, is in fact a shell structure composed of Eval(uative)P and Evid(ential)P, similar to [_{SAP} [_{SAP}]]:

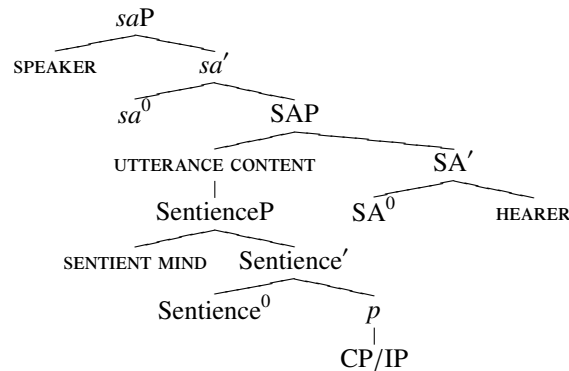


According to S&T (p. 332), EvidP constitutes the proposition itself. This topic is not immediately relevant to the current dissertation.

sessing the truth of the proposition, and she evaluates the information, then it is co-indexed with the P-role “speaker”. This typically occurs in declarative clauses. In questions, on the other hand, the “sentient mind” is co-indexed with the P-role “hearer” who “has the knowledge needed to determine which of the possible answers is the true answer [...]” (S&T:334–335; see especially Tenny 2006:361 for phrase markers).⁴⁵

As for how SAP and SentenceP are related, S&T do not provide a concrete phrase marker, but they claim that SentenceP is “within the scope of the SAP domain but has scope over the rest of the sentence” (S&T:333). In Tenny and Speas (2004), and Tenny (2006), however, the authors propose that SentenceP occurs within the “utterance content” of SAP, as tentatively given in (106).

(106)



(adapted from Tenny 2006:261, 263,ex. (41–42, 48–49))

Let us now apply this proposal to PhG *ki*. Diverging from S&T’s—and also Tenny and Speas’ (2004) and Tenny’s (2006)—original proposal, I will not postulate there is an independent SentenceP. Rather, I take *ki* to be a morpheme inherently endowed with a speaker-anchored [+sentience] feature, because, as discussed in sections 4.3–4.4, *ki* always conveys the speaker’s judgment of the propositional content of her utterance. I further propose, in line with S&T, Hill (Hill 2007a et seq.), Haegeman and Hill (2013, 2014) and Haegeman (2014), that SAP selects as its internal argument the “utterance content”, i.e., ForceP, which itself dominates the left-peripheral projections that I identified in chapter 3. The resulting articulated structure of the higher layers of the clause is given in (107).

⁴⁵ The “sentient mind” can be disjoint from these two P-roles as well, when the sentence conveys the point of view of someone other than the discourse participants. For illustration, I refer the reader to S&T’s original paper.

- B: * *Le/la/les*.
 him.CL/her.CL/them.CL
 ‘əm/‘ər/‘em.’
 [French (adapted from Kayne 1975:83, 85, 91, ex. (67, 75b, 97a))]
- (109) a. Ne tue qu’*eux* deux.
 NE kill than-them two
 ‘Kill two of them.’
- b. JEAN/LUI partira le premier.
 Jean/he will.leave the first
 ‘Jean/he will leave first.’
- c. A: Qui as-tu vu?
 who. have-you seen
 ‘Who did you see?’
- B: *Lui/elle/eux*.
 him/her/them
 ‘Him/her/them.’
 [French (adapted from Kayne 1975:83, 91, ex. (67,75a, 98a))]

The diagnostic tests illustrated above were adopted by Munaro (2010:71–72) to argue for the head status of certain DMs in Venetian dialects. When the same diagnostic tests are applied to the PhG particle *ki*, it emerges that *ki* should be taken to be a head, rather than a phrase. Similar to the DMs discussed by Munaro (2010), *ki* cannot be modified (110), focalized (111), or used in isolation (112).

- (110) a. Le ta [(*)*puḡá* *ki*], “Piták ta!”
 say.IPFV.NPST.3SG 3OBJ very PRT send.PFV.IMP.2SG 3OBJ
 ‘She says, “Send it!’
- b. *ḡrikáu* ta [(*)*puḡá* *ki*] [*a mi skotósun*
 realize.IPFV.NPST.1SG 3OBJ very PRT FUT.DEF 1SG.OBJ kill.PFV.NPST.3PL
atáe ta čočúxa].
 this.PL the.N.NOM.PL child.N.NOM.PL
 ‘I realize (that) these children are going to kill me.’
- c. [_{CP1} *I θíra íni karakoménu*] [(*)*puḡá* *ki*]
 the.F.NOM.SG door.F.NOM.SG be.NPST.3SG locked.SG very PRT
 [_{CP2} *pín so šexéri o Andriás*].
 go.PFV.PST.3SG to.the.N.ACC.SG city.N.ACC.SG the.M.NOM.SG Andrew.M.NOM.SG
 ‘The door is locked and (this is why) Andrew went to the city.’
- d. *Élpætta* [(*)*puḡá* *ki*] *a píči jartími*.
 surely very PRT FUT.DEF make.PFV.NPST.3SG help.N.NOM.SG
 ‘Of course, she is going to help.’

- e. Xáθin [(*pujá) ki].
die.PFV.PST.3SG very PRT
'She died.'
- (111) a. Le ta ki/*KI, "Piták ta!"
say.IPFV.NPST.3SG 3OBJ PRT send.PFV.IMP.2SG 3OBJ
'She says, "Send it!'
- b. yrikáu ta ki/*KI [a mi skotósun até
realize.IPFV.NPST.1SG 3OBJ PRT FUT.DEF 1SG.OBJ kill.PFV.NPST.3PL this.PL
ta čočúxa].
the.N.NOM.PL child.N.NOM.PL
'I realize (that) these children are going to kill me.'
- c. [_{CP1} I θíra íni karakoménu] ki/*KI [_{CP2}
the.F.NOM.SG door.F.NOM.SG be.NPST.3SG locked.SG PRT
píin so šexéri o Andriás].
go.PFV.PST.3SG to.the.N.ACC.SG city.N.ACC.SG the.M.NOM.SG Andrew.M.NOM.SG
'The door is locked and (this is why) Andrew went to the city.'
- d. Ělpætta ki/*KI a píči jartími.
surely PRT FUT.DEF make.PFV.NPST.3SG help.N.NOM.SG
'Of course, she is going to help.'
- e. Xáθin ki/*KI.
die.PFV.PST.3SG PRT
'She died.'
- (112) *ki.

The fact that *ki* cannot be modified, focused or used in isolation provides evidence for its status as a head. The diagnostic tests deployed here, however, do not as such suffice to establish that *ki* is the overt exponent of SA⁰, as was proposed in section 4.5.2. In fact, a number of cross-linguistic facts might be taken to suggest that if *ki* is to be taken as a head, it should rather be assigned a complementizer status; hence, it should be the overt exponent of C⁰ on par with Romanian *că* (section 4.5.1.2). In section 4.5.2.2.1, I present some relevant data from other languages that suggest that *ki* could be taken as a complementizer. However, based on empirical evidence, I refute this analysis in section 4.5.2.2.2.

4.5.2.2 Is *ki* a complementizer?

4.5.2.2.1 Cross-linguistic support for a complementizer analysis of *ki* In many languages, prototypical complementizers are not only used to introduce complement

clauses, but they also appear in a wide range of other environments. Crucially, the relevant construction types show striking resemblances to the *ki*-constructions described in section 4.2. Having established that *ki* is a syntactic head, these comparative data might lead us to conclude that, contrary to the proposal in section 4.5.2 according to which *ki* is a DM in SA⁰, *ki* should be analyzed as a complementizer realizing C⁰.

First, consider PCCs. In the representations in section 4.3.2, I presented *ki* as being placed outside the square brackets which delimit a complement clause in a PCC. I did not provide any motivation for this representation, and indeed, in principle, one might have proposed that the correct bracketing for the earlier example (40b), for instance, should have been as in (113), where *ki* marks the complement clause as an (optional) complementizer on par with *that* in English:

- (113) γ riká ta [_{CP} ki a ta skotósun atê ta
realize.IPFV.NPST.3SG 3OBJ PRT FUT.DEF 3OBJ kill.PFV.NPST.3PL this.pl the.N.NOM.PL
čočúxa].
child.N.NOM.PL
'She realizes (that) these children are going to kill her.'

Furthermore, recent work has revealed that in certain languages, complementizers may also have a modal function of coding the degree of certainty about the information of the complement proposition and/or source of the information in that clause (Boye et al. 2015 and references cited therein). Consider the Georgian examples in (114).

- (114) a. Vinane [(rom) ma-n ar mi-i- γ -o].
I.regretted.it COMP he-ERG not he-received-it-AOR
'I regret (the circumstance/fact) that he didn't receive it.'
- b. Nu ggoniat [vitom dedamic'aaze mšvidobis
not.PROH it.is.thought.by.you.PRS COMP on.earth peace.GEN
mosat'an-ad mo-ved-i].
to.bring.ADV I-came-AOR
'Don't think that I have come upon the earth to bring peace.'
- c. Xalx-mara i-c-od-a, [tu prinvelni čxik'vta korc'ilš'i
folk-ERG what it.knew.it.IPFV COMP birds.NOM of.jays.GEN at.wedding
iqvnen?].
they.were
'How were the folk to know that the birds were at the jays' wedding?'
[Georgian (Boye et al. 2015:10, ex. (20))]

According to Boye et al. (2015), *rom* in (114a) is an optional epistemically neutral complementizer. The complementizer *vitom* in (114b), on the other hand, is used to

introduce propositions that are “patently untrue in the view of the speaker [reference omitted]” (Boye et al. 2015:10). Finally, the complementizer *tu* in (114c) is employed to encode the speaker’s judgment of “the absurdity of the relevant thought [reference omitted]” (Boye et al. 2015:10). Given that there are languages, such as Georgian, in which complementizers assume an additional modal function, which is mostly related to the speaker’s stance on the proposition, PhG *ki* could also be hypothesized to be such a complementizer in PCCs.

Second, the idea that *ki* is a complementizer could also be extended to quotative constructions with *ki* on the grounds that it is cross-linguistically well-attested that the same (optional/obligatory) complementizer is used to introduce both complement clauses and quotes (Coulmas 1986b:18; Aikhenvald 2011:295). An illustrative example is provided in (115) from Ndyuka, an English creole language spoken in Suriname and French Guiana. As reported by Huttar and Huttar (1994:1–6), in Ndyuka one and the same optional complementizer—*taki*—introduces both complement clauses (115a) and quotes (115b).⁴⁷

- (115) a. Ne mi fii (taki) i e dwengi mi.
 CJ 1SG feel COMP 2SG CNT coerce 1SG
 ‘I feel that you were coercing me.’
- b. A_i e bali (taki): “Baala gi mi_i mi_i fesi.”
 3SG CNT call COMP brother give 1SG 1SG face
 ‘He was calling, “Brother, give me my face.”’
 [Ndyuka (adapted from Huttar and Huttar 1994:2–3, ex. (3, 6))]

Third, in many languages certain higher adverbs are reported to be optionally followed by a complementizer at the left-edge of a main clause (Ramat 1994; Ramat and Ricca 1998:212; Cinque 1999:18–19). This case was already exemplified by the Romanian data in section 4.5.1.2. Examples from other languages are given in (116).⁴⁸

- (116) a. Evidemment (qu)’il viendra.
 evidently that he will come
 ‘Evidently, he will come.’
 [French (Cinque 1999:177, fn. 53)]
- b. Vaevalt (et) sadama hakkab.
 hardly that rain.INF begin.3SG
 ‘It is improbable that it will rain.’

⁴⁷ CJ stands for “conjunction” and CNT stands for continuative aspectual marker (Huttar and Huttar 1994).

⁴⁸ The sources from which these examples are taken do not provide a semantic analysis of these constructions (excluding Hill 2007a et seq.). Therefore, adverb + *ki* constructions in PhG and adverb + C constructions in other languages may not be interpretively the same.

[Estonian (Ramat and Ricca 1998:213, ex. (38))]

- c. Kanir'e (še) le mazal-a Rina tenaceax.
 apparently that luckily Rina will win
 'Apparently, luckily Rina will win.'

[Hebrew (Cinque 1999:182, fn. 101)]

- d. Waarschijnlijk da Kris komt.
 Probably that Kris comes.
 'It is probably the case/probable that Kris comes.'

[Flemish dialects (Aelbrecht 2006:4, ex. (13))]

The same complementizers are used to introduce (certain types of) complement clauses in the respective languages. Compare (116–117).

- (117) a. Marie voit [_{CP} que les chats ont faim].
 Marie sees that the cats are hungry
 'Marie sees that the cats are hungry.'

[French]

- b. Ma kuulsin [_{CP} et sa oled haige].
 I hear.IPFV.3SG that you.2SG be.2SG ill
 'I heard that you were ill.'

[Estonian (Keevallik 2008:128, ex. (1b))]

- c. Dan xašav [_{CP} še hu gamar].
 Dan think(PST).3M.SG that he finish(PST).3M.SG
 'Dan thinks that he finished.'

[Hebrew (Ouhalla and Shlonsky 2002:18, ex. (32a))]

- d. Het is logisch [_{CP} da Reiner ook komt]!
 It is logical that Reiner also comes
 'It is logical that Reiner also comes!'

[Flemish dialects (Aelbrecht 2006:5, ex. (19a))]

In the adverb + *ki* construction, then, *ki*, which follows certain epistemic and evidential adverbs, could also be argued to be a complementizer, on par with *que*, *et* and *še*, *da* (and the Romanian complementizer *că*) (116–117).

Fourth, in many languages, complementizers that typically introduce complement clauses may also occur in main clauses—a phenomenon referred to as “insubordination” by Evans (2007).⁴⁹ Consider the minimal pairs in (118–119) from Italian and Finnish respectively.

⁴⁹ An insubordinated clause is a formally subordinate clause that is conventionalized as a main clause (Evans 2007:367).

- (118) a. Non voglio [CP che venga domani].
 not want.1SG that come.SUBJ.3SG tomorrow.
 ‘I don’t want him to come tomorrow.’
 b. Che venga domani.
 that come.SUBJ.3SG tomorrow
 ‘(It’s possible/likely/I hope/believe etc.) that he’ll come tomorrow.’
 [Italian (Evans 2007:379, ex. (12))]
- (119) a. Poliisi tietää, [CP että poika on alaikäinen].
 police.NOM know.PRS.3SG that boy.NOM be.PRS.3sg underage.NOM
 ‘The police know that the boy is underage.’
 b. Että onkin kaunis paita!
 that be.PRS.3SG.CL beautiful.NOM shirt.NOM
 ‘(And so) it is a beautiful shirt!’
 [Finnish (Kehayov 2016:450, 473, ex. (1, 53))]

As discussed in Evans (2007), insubordinated clauses, such as (118b, 119b) are often associated with some modal reading. For example, as reported by Kehayov (2016:437–438), Finnish (119b) is a case of evidential insubordination, which could be based on visual evidence, report or inference. Ignoring the linear position of *ki* for the moment, one could in principle claim that *ki* in emphatic constructions is a complementizer, similar to the Italian and Finnish case (118b, 119b).⁵⁰

Finally, there are certain cases in which a complement clause introduced by a complementizer functions as a justifying clause for an argument to which it is linked. One indicative example of this pattern is the so-called *free-daß* clause in German. Reis (1997:132) reports that a *free-daß* clause (120) “gives reasons for some presumption or assessment expressed in the preceding clause based on the fact that they denote”.

⁵⁰ In English (i) or in German (ii), too, insubordinated that-clauses may be used to express evaluation (Evans 2007:403):

- (i) That I should live to see such ingratitude!

(Evans 2007:403, ex. (76b))

- (ii) Daß ich dich hier treffen würde!
 that I you here meet.INF would.SUBJ
 ‘[I didn’t expect] that I would meet you here!’

[German (Evans 2007:404, ex. (77b))]

- (120) Er muß im Garten sein, [daß er nicht aufmacht].
 He must in garden be that he not opens
 ‘He must be in the garden because he is not opening the door’
 [German (Reis 1997:132, ex. (36a))]

The interpretive function of free-*daß* clauses discussed by Reis (1997) is very similar to the interpretation that we attributed to the use of *ki* in the causal construction: in this pattern, one of the clauses (CP1) provides the justification of the argument in another clause (CP2). Due to this interpretive similarity, the particle *ki* as used in a casual construction could also be understood as a complementizer, on par with *daß* ‘that’ in (120).

4.5.2.2.2 Empirical evidence to reject a complementizer analysis Though the cross-linguistic evidence presented in the preceding section might be taken to suggest that *ki* is a complementizer, i.e., the overt exponent of C^0 , employed in a wide range of constructions, empirical evidence, mainly from PCCs, casts serious doubt on such an argument. As the hypothesis elaborated in this chapter is that *ki* is one and the same morpheme in all the configurations it occurs in, as evidenced by its unified interpretive function (see section 4.4.2), the conclusion that *ki* is not a complementizer should then be extended to its use in the other constructions presented in section 4.3 as well.

First, in a PCC, *ki* clearly does not form a maximal projection with the embedded clause since postverbal phrasal constituents belonging to the matrix clause may occur after *ki*. This is in stark contrast to *bona fide* complementizers in PhG, such as *tu* ‘that’ or *ær* ‘if’. These points are illustrated in (121–122). As shown by the parentheses, the postverbal subject *yo* ‘I’ of the matrix clause in (121a), and the postverbal indirect object *ti néka* ‘(to) the woman’ of the matrix clause in (121b), can occur either between the ‘matrix verb + clitic’ complex and *ki*, or between *ki* and the complement clause. The two positions are both uniformly judged as acceptable. In (122a), the matrix subject *yo* ‘I’ is placed immediately after the ‘matrix verb + clitic’ and to the right of the complementizer *tu* ‘that’. In this case, however, the subject is only judged as acceptable in the former position. Similarly, in (122b), the indirect object *ti néka* ‘(to) the woman’ of the matrix clause is shown to occur grammatically only between the ‘matrix verb + clitic’ and the complementizer *ær* ‘if’, and not to the right of *ær* ‘if’.⁵¹

⁵¹ In Pontic Greek, a variety closely related to PhG, a morphologically identical *ki* is reported to function as a focus marker (Sitaridou and Kaltsa 2014). According to Drettas (2000:128–129; see also Sitaridou and Kaltsa 2014), the Pontic Greek *ki* is suffixed to the verb, whereas *ki* in PhG does not have to be attached to the verb, as the examples in (121) show, where the subject or the indirect object of the matrix clause can occur between the ‘verb (+clitic)’ and *ki*. Therefore, I assume that *ki* in Pontic Greek and *ki*

- (121) a. Piltúrtsa ta (yo) ki (yo) xa mi píkun
 report.PFV.PST.1SG 3OBJ I.NOM PRT I.NOM FUT.CF 1SG.OBJ make.PFV.NPST.3PL
 jartími.
 help.N.NOM.SG
 ‘I reported (that) they would help me.’
- b. Piltúrtsa ta (ti néka) ki (ti néka) xa
 report.PFV.PST.1SG 3OBJ the.F.ACC.SG woman.F.ACC.SG PRT the woman FUT.CF
 mi píkun jartími.
 1SG.OBJ make.PFV.NPST.3PL help.N.NOM.SG
 ‘I reported to the woman (that) they would help me.’
- (122) a. Pušmánepsa (ta) (yo) tu (*yo) si píka
 regret.PFV.PST.1SG 3OBJ I.NOM that I.NOM 2SG.OBJ make.PFV.PST.1SG
 jartími.
 help.N.NOM.SG
 ‘I regretted that I helped you.’
- b. Rótsa (ta) (ti néka) ær (*ti néka) na
 ask.PFV.PST.1SG 3OBJ the.F.ACC.SG woman.F.ACC.SG if the woman SUBJ
 mi píkun jartími.
 1SG.OBJ make.PFV.NPST.3PL help.N.NOM.SG
 ‘I asked the woman if they would help me.’

I will return to matrix constituents that occur to the right of *ki* in section 4.5.4.3. For now, these data show that, unlike the *bona fide* complementizers *tu* ‘that’ and *ær* ‘if’, *ki* does not form a maximal projection with the clause it is followed by, and hence they suggest that *ki* should not be taken to occupy the C^0 -position of the embedded clause.

In quotative constructions as well, some constituents of the reporting clause can both linearly precede and follow *ki*. This is shown in (123), where the subject of the reporting clause, *o nomát* ‘the man’, can grammatically occur both between the ‘reporting verb + clitic’ and *ki* and to the right of *ki*.

- (123) Ípin ta (o nomát) ki (o nomát),
 say.PFV.PST.3SG 3OBJ the.M.NOM.SG man.M.NOM.SG PRT the man
 “Eðó aǎé!”
 come.PFV.IMP.2SG here
 ‘The man said, “Come here!”’

in PhG are not the same. Furthermore, according to Drettas (2000), *ki* in Pontic Greek is derived from the Georgian particle *k'i*, which functions as a contrastive disjunction (Pourtskhvanidze 2011:178–182; H el ene G erardin, p.c.), whereas I relate *ki* in PhG to Turkish *ki*.

However, the subject of the reporting clause cannot be placed inside the quote or after the quote:

- (124) Ípin ta *ki*, “Eðó (*o nomát) aðæ!” (*o nomát)
 say.PFV.PST.3SG 3OBJ PRT come.PFV.IMP.2SG the man here the man
 int.: ‘The man said, “Come here!”’

The fact that the subject of the reporting clause can occur to the right of *ki* (123) suggests that, whatever its categorial status, *ki* does not form a maximal projection with the quote.

The second piece of evidence against assigning complementizer status to *ki* comes from its distribution in relation to left peripheral complement clauses. PhG complement clauses can appear as left-dislocated topic expressions, similarly to DP complements (see section 3.3.3.2.5). This is illustrated in (125); within the matrix clause, the left-dislocated complement clauses are resumed obligatorily by the object clitic *ta*.

- (125) a. [Tu mi píkán jartími]_i, pušmánepsa *(ta)_i.
 that 1SG.OBJ make.PFV.PST.3PL help.N.NOM.SG regret.PFV.PST.1SG 3OBJ
 ‘That they helped me, I regretted it.’
 b. [Ær na mi píkun jartími]_i, rótsa *(ta)_i.
 if SUBJ 1SG.OBJ make.PFV.NPST.3PL help.N.NOM.SG ask.PFV.PST.1SG 3OBJ
 ‘If they would help me, I asked it.’

A complement clause in a fronted position must contain the complementizers *tu* ‘that’ or *ær* ‘if’. If these complementizers are stranded to the right of the matrix verb, the result is ungrammatical: cf. (125–126).

- (126) a. * [Mi píkán jartími]_i, pušmánepsa ta_i tu.
 1SG.OBJ make.PFV.PST.3PL help.N.NOM.SG regret.PFV.PST.1SG 3OBJ that
 b. * [Na mi píkun jartími]_i, rótsa ta_i ær.
 SUBJ 1SG.OBJ make.PFV.NPST.3PL help.N.NOM.SG ask.PFV.PST.1SG 3OBJ if

When a complement clause in a PCC with *ki* is topicalized, the judgments are reversed. A complement clause can become a left peripheral topic expression only as long as the particle *ki* remains stranded in the vicinity of the matrix verb, i.e., to the right of *ta* ((127a) vs. (127b)).

- (127) a. [Xa mi píkun jartími]_i, piltúrta ta_i
 FUT.CF 1SG.OBJ make.PFV.NPST.3PL help.N.NOM.SG report.PFV.PST.1SG 3OBJ
ki.
 PRT
 ‘(That) they would help me, I reported it.’

- b. * [*Ki* xa mi píkun jartími], piltúrta
 PRT FUT.CF 1SG.OBJ make.PFV.NPST.3PL help.N.NOM.SG report.PFV.PST.1SG
 ta,
 3OBJ

The difference between the complementizers *tu/ær* on the one hand and *ki* on the other, as illustrated in (125–127), follows if we assume that *ki* is not a complementizer of the embedded clause and thus does not form a maximal projection with the complement clause.

Third, when complement clauses headed by the complementizer *tu* ‘that’ or *ær* ‘if’ are coordinated, these complementizers must obligatorily be instantiated in both conjunct clauses (128a–b). *Ki*, however, can occur only once, to the left of the first conjunct complement clause (128c). In this respect too, *ki* differs from *bona fide* complementizers in PhG.

- (128) a. Pušmánepsa [**(tu)* írta] če [**(tu)* ta píkka].
 regret.PFV.PST.1SG that come.PFV.PST.1SG and that 3OBJ do.PFV.PST.1SG
 ‘I regretted that I came and that I did it.’
- b. Rótsa [**(ær)* na írtis] če [**(ær)* na ta
 ask.PFV.PST.1SG if SUBJ come.PFV.PST.2SG and if SUBJ 3OBJ
 píčis].
 do.PFV.PST.2SG
 ‘I asked if you came and if you did it.’
- c. Piltúrta (*ki*) írta če (**ki*) píkka ta.
 report.PFV.PST.1SG PRT come.PFV.PST.1SG and PRT do.PFV.PST.1SG 3OBJ
 ‘I reported (that) I came and I did it.’

Given that *ki* does not behave as a complementizer in the environment in which *a priori* it might be most strongly expected to do so, e.g., in PCCs, it is reasonable to deduce that *ki* does not have a complementizer function in the other construction types either, simply because *ki* has the same interpretive function in all construction types in which it occurs.

In the next section, exploring the evidence from the adverb + *ki* constructions, I show that, although *ki* is not a complementizer, it must be situated high in the LP, which provides evidence for the proposal I put forward in section 4.5.2.

4.5.2.3 Locating *ki*: evidence from adverb + *ki* constructions

Recall from section 3.3.2.5.2 that higher adverbs in PhG declarative main clauses may precede modal particles and cannot follow finite verbs. From this, I concluded that

their merge position should be situated at least above C_{OPP}; I labeled this position as XP:

- (129) ... [_{XP} higher adverbs [_{C_{OPP}} na/s [_{N_{EGP}} čo/ma/mi [_{C_{MP}} a/éna/xa/t_{na/s} [_{TP} clitic + V [_{VP} t_V]]]]]]]

The adverbs compatible with *ki*, i.e., evidential and epistemic adverbs, are subsumed under the broad category of “higher adverbs” in Cinque’s (1999) hierarchy (section 4.3.3.1.1). The structure in (129) is therefore valid for these adverbs as well: these adverbs are most natural when they precede modal particles (130a, 131a), and they are ungrammatical when situated between the verb (in T⁰) and a postverbal DP subject (occupying Spec, VP; see section 3.3.3.1) (130b, 131b).

- (130) a. *Élpætta na mi ta iđí o nomát.*
 certainly SUBJ not 3OBJ see.PFV.NPST.3SG the.M.NOM.SG man.M.NOM.SG
 ‘It is certain that the man should not see it.’
 ‘Of course, the man should not see it.’
- b. **Na mi ta iđí élpætta o nomát.*
 SUBJ not 3OBJ see.PFV.NPST.3SG certainly the.M.NOM.SG man.M.NOM.SG
- (131) a. *Temék čo a vri to éši tu.*
 evidently not FUT.DEF find.PFV.NPST.3SG the.N.ACC.SG match.N.ACC.SG his
 ‘Evidently, he is not going to find his match (i.e., partner)’
 ‘It is evident that he is not going to find his match (i.e., partner).’
- b. **Čo a vri temék to éši tu.*
 not FUT.DEF find.PFV.NPST.3SG evidently the.N.ACC.SG match.N.ACC.SG his

These adverbs also most naturally precede preverbal subjects receiving a neutral, non-topic/non-focal reading (132a). When a preverbal subject precedes such an adverb, the subject receives a topic reading (132b)—in which case it is separated from the adverb with a minor prosodic break—or alternatively, it receives a contrastive focus reading (132c).

- (132) a. *Élpætta o Andriás a píči*
 certainly the.M.NOM.SG Andrew.M.NOM.SG FUT.DEF make.PFV.NPST.3SG
jartími.
 help.N.NOM.SG
 ‘Certainly Andrew is going to help.’
 ‘It is certain that Andrew is going to help.’

- b. O Andriás |álpætta a píči
 the.M.NOM.SG Andrew.M.NOM.SG certainly FUT.DEF make.PFV.NPST.3SG
 jartími.
 help.N.NOM.SG
 ‘Andrew, certainly, is going to help.’
 ‘It is certain that Andrew is going to help.’
- c. O ANDRIÁS álpætta a píči
 the.M.NOM.SG Andrew.M.NOM.SG certainly FUT.DEF make.PFV.NPST.3SG
 jartími.
 help.N.NOM.SG
 ‘ANDREW, certainly, is going to help(, not Nerkiza).’
 ‘It is certain that ANDREW is going to help(, not Nerkíza).’

(132) tentatively suggests that the merge position of higher adverbs should be above the dedicated subject position, SubjP. Therefore, hereafter I will assume that higher adverbs are merged above SubjP. Furthermore, I will decompose the projection XP in (129) into (at least) two projections: Mood_{evidential}P, which hosts evidential adverbs, and Mod_{epistemic}P, which hosts epistemic adverbs (following Cinque 1999).

- (133) ... [Mood_{evidential}P [Mod_{epistemic}P [SubjP [C_{OP}P na/s [NegP čo/ma/mi [C_MP a/éna/xa/t_{na/s} [TP clitic + V [V_P t_V]]]]]]]]]

Support for the functional sequence Mood_{evidential}P > Mod_{epistemic}P in (133) comes from the fact that when an evidential and an epistemic adverb co-occur in a single clause, the evidential adverb linearly precedes the epistemic adverb (see also section 4.5.3.1 on this issue):⁵²

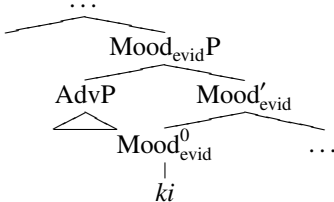
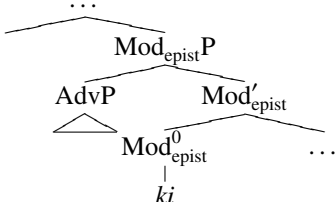
- (134) a. Paú tamán o Andriás a
 obviously undoubtedly the.M.NOM.SG Andrew.M.NOM.SG FUT.DEF
 nárti.
 come.PFV.NPST.3SG
 ‘Obviously, undoubtedly, Andrew is going to come.’
- b. *Tamán paú o Andriás a
 undoubtedly obviously the.M.NOM.SG Andrew.M.NOM.SG FUT.DEF
 nárti.
 come.PFV.NPST.3SG

⁵² The contrast in (134) also suggests the order *Mod_{epistemic}P > Mood_{evidential}P cannot be derived by the movement of the lower (epistemic) adverb past the higher (evidential) adverb, presumably because the higher (evidential) adverb induces an intervention effect and the movement of the latter thus violates RM (see sections 3.3.1.5 and 3.3.3.2.7).

It should be noted that in principle other modal projections hosting different types of higher adverbs could also be included in the hierarchy in (133) (see Giorgi 2010 for a proposal along these lines). However, since the precise adverbial hierarchy is tangential to the current discussion, for expository reasons I will include only Mood_{evidential}P and Mod_{epistemic}P in the representations given here. Enriching (133) with the sequence of projections in the LP of the clause that I identified in chapter 3, we obtain the series in (135).

- (135) [TopP_[Shifting] [ContrastP* páli [TopP_[Familiar] [FocP [TopP_[Familiar] [Mood_{evidential}P [Mod_{epistemic}P [SubjP
[C_{OP}P na/s [NegP čo/ma/mi [C_{MP} a/éna/xa/ta/na/s [TP clitic+V [VP t_V]]]]]]]]]]]]]]]]]]]]

In the light of (135), and given the fact that *ki* follows the evidential or epistemic high adverb, we need to consider whether *ki* might optionally spell out the relevant functional heads, Mood_{evidential}⁰ or Mod_{epistemic}⁰, as in (136).

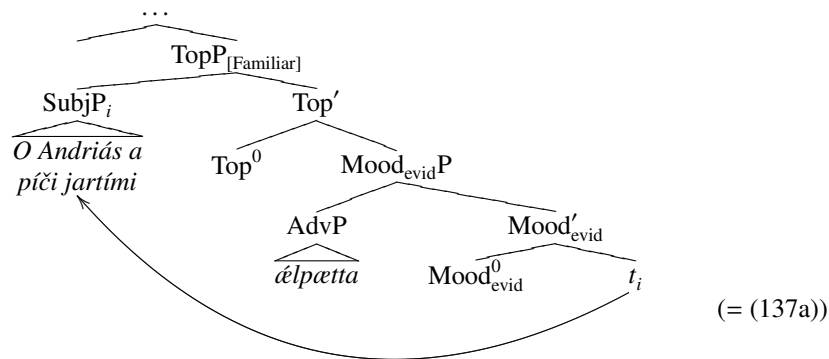
- (136) a. 
- b. 

Two pieces of evidence suggest that (136a–b) are not appropriate phrase markers. First, although epistemic and evidential adverbs cannot occur between the verb and its complement object (see (130b, 131b)), they can occur in clause-final position. In this context, the clause itself is separated from the adverb to its right by a minor prosodic break, which I will take to mean that the clause preceding these adverb receive a topic reading:

- (137) a. O Andriás a píči jartími, |
 the.M.NOM.SG Andrew.M.NOM.SG FUT.DEF make.PFV.NPST.3SG help.N.NOM.SG
 álpætta.
 certainly
 ‘Andrew is going to help, certainly.’
 ‘Andrew is going to help, it is certain.’
- b. Čo a vri to éši tu, | temék.
 not FUT.DEF find.PFV.NPST.3SG the.N.ACC.SG match.N.ACC.SG his evidently
 ‘He is not going to find his match (i.e., partner), evidently’
 ‘He is not going to find his match (i.e., partner), it is evident.’

The examples in (137) can then be argued to be derived from a structure in which the complement of $\text{Mood}_{\text{evidential}}^0$ or $\text{Mod}_{\text{epistemic}}^0$ has moved to a topic position above $\text{Mood}_{\text{evidential}}\text{P}$ or $\text{Mod}_{\text{epistemic}}\text{P}$, e.g., $\text{Spec, TopP}_{[\text{Familiar}]}$, dragging along (or more technically “pied-piping”) all the maximal projections it dominates. The phrase marker in (138) provides the (partial) derivation of (137a).

(138)

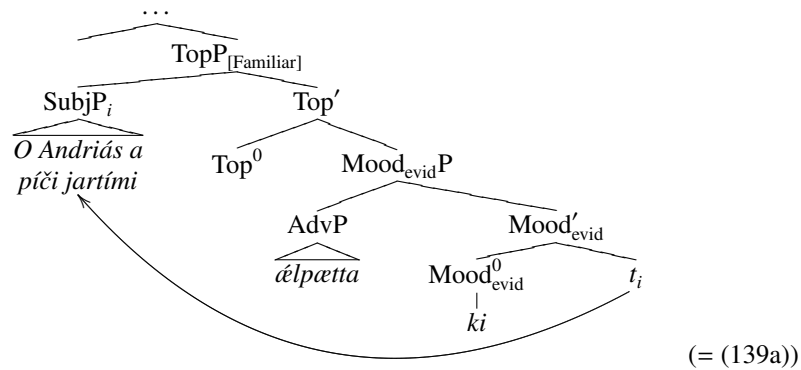


Now observe that when such adverbs occur in clause-final position, they cannot be followed by *ki*:

- (139) a. O Andriás a píči jartími, |
 the.M.NOM.SG Andrew.M.NOM.SG FUT.DEF make.PFV.NPST.3SG help.N.NOM.SG
 élpætta (**ki*).
 certainly PRT
 int.: ‘Andrew is going to help, certainly.’
- b. Čo a vri to ěši tu, | temék
 not FUT.DEF find.PFV.NPST.3SG the.N.ACC.SG match.N.ACC.SG his evidently
 (**ki*).
 PRT
 int.: ‘He is not going to find his match (i.e., partner), evidently’

The difference between (137, 139) suggests that a clause with an adverb + *ki* construction in final position cannot be represented as in (140), in which *ki* is the optional overt exponent of $\text{Mood}_{\text{evidential}}^0$ and $\text{Mod}_{\text{epistemic}}^0$.

(140) *



Second, bare epistemic/evidential adverbs and epistemic/evidential adverbs in the adverb + *ki* construction differ in terms of their location with respect to other left peripheral elements. Recall from section 3.4.2.3 that phrases that receive an array of contrastive readings are hosted in Spec, ContrastP, a projection headed by the contrast marker *páli*. In a clause with both a *páli*-phrase and a bare epistemic/evidential adverb, the adverb most naturally follows the *páli*-phrase (141), instantiating the linear order of functional projections given in (135).

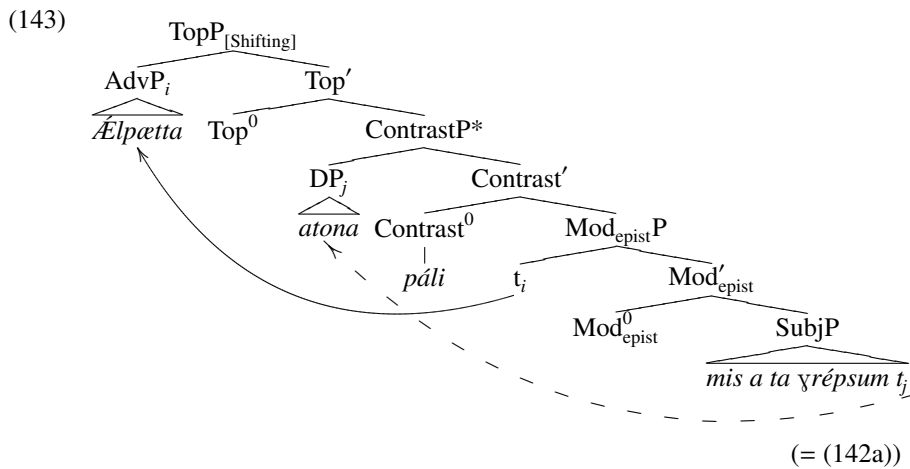
- (141) a. [Atona páli] élpætta mis a ta yrépsum.
 he.ACC PRT certainly we.NOM FUT.DEF 3OBJ look.after.PFV.NPST.1PL
 ‘Of course, we are going to look after him.’
 ‘It is certain that we are going to look after him.’
- b. [Si páli] tamán a nártis.
 you.NOM.SG PRT undoubtedly FUT.DEF come.PFV.NPST.2SG
 ‘Undoubtedly, you are going to come.’
 ‘It is without doubt that you are going to come.’

Bare epistemic/evidential adverbs may also precede *páli*-phrases; however, in this case, they are separated from the rest of the clause by a minor prosodic break, suggesting that they are dislocated as topic expressions:

- (142) a. Élpætta, | [atona páli] mis a ta yrépsum.
 certainly he.ACC PRT we.NOM FUT.DEF 3OBJ look.after.PFV.NPST.1PL
 ‘Of course, we are going to look after him.’
 ‘It is certain that we are going to look after him.’
- b. Tamán, | [si páli] a nártis.
 undoubtedly you.NOM.SG PRT FUT.DEF come.PFV.NPST.2SG
 ‘Undoubtedly, you are going to come.’

‘It is without doubt that you are going to come.’

The examples in (142) can be assigned a representation in which the adverbs are located in a left peripheral topic position—namely, $\text{TopP}_{[\text{Shifting}]}$ —above ContrastP^* (see (143) which is the proposed structure of (142a)). Rizzi (2004:241) argues that “[...] preposed adverbs can also be moved to a genuine topic position, with the familiar characteristics of ordinary topics [...]”



Crucially, an adverb + *ki* sequence cannot follow a *páli*-phrase (144): it must precede it (145):

(144) * *pál(i)*-phrase > adverb + *ki*

- a. * [Atóna páli] [ælpætta ki] mis yreftínkam ta.
 he.ACC PRT certainly PRT we.NOM look.after.IPFV.PST.1PL 3OBJ
 int.: ‘Of course, we would look after him.’
- b. * [Si páli] [tamán ki] a nártis.
 you.NOM.SG PRT undoubtedly PRT FUT.DEF come.PFV.NPST.2SG
 int.: ‘Undoubtedly, you are going to come.’

(145) adverb + *ki* > *pál(i)*-phrase

- a. * [Ælpætta ki] [atóna páli] mis yreftínkam ta.
 certainly PRT he.ACC PRT we.NOM look.after.IPFV.PST.1PL 3OBJ
 ‘Of course, we would look after him.’

- b. [Tamán *ki*] [si páli] a nártis.
 undoubtedly PRT YOU.NOM.SG PRT FUT.DEF COME.PFV.NPST.2SG
 int.: ‘Undoubtedly, you are going to come.’

The requirement that an adverb + *ki* construction precede the *páli*-phrase reveals that *ki* must be located higher than ContrastP*, not lower. It entails that *ki* cannot be taken to optionally spell out the functional heads Mood⁰_{evidential} and Mod⁰_{epistemic}, which are located lower than ContrastP (see (135)).

Taking into account these considerations and specifically the fact that *ki* cannot be analyzed as the spell-out of the functional head associated with the high modal adverbs, the representation in (135) leaves us with only one possible location for this particle: *ki* is the (optional) overt exponent of Top⁰_[Shifting]. However, if this were the correct analysis, the precise reason for realizing Top⁰_[Shifting] overtly in (145) but not in (142) would remain unclear. Furthermore, *ki* is ungrammatical to the right of fronted DP-constituents, which are undoubtedly located in the left-dislocated Spec, TopP_[Shifting] position (146). On the basis of this evidence, we must conclude that *ki* is also not the (optional) overt exponent of Top⁰_[Shifting].

- (146) Ta kuzugopéka_i (**ki*) [mis pal] éxum ta_i.
 the.N.ACC.PL sponge.morel.N.ACC.PL PRT WE.NOM PRT have.NPST.1PL 3OBJ
 ‘The sponge morels, we have them.’

This conclusion leads us to again modify the LP proposed in (135) so as to allow us to provide a structural representation in which *ki* can be hosted by an appropriate functional head.

Observe that there are distributional similarities between *ki* and *bona fide* complementizers when we consider their position relative to topics. Specifically, the interrogative complementizer *ær* ‘if’ is grammatical if it precedes a shifting topic and a *páli*-phrase sequence (147a), but ungrammatical if it follows them (147b).

- (147) a. Rótsa [ær [ta kuzugopéka] [até páli] na
 ask.PFV.PST.1SG if the.N.ACC.PL morel.N.ACC.PL they.NOM PRT SUBJ
 ta éxun].
 3OBJ have.NPST.3PL
 ‘I asked if the sponge morels, they have them.’
- b. *Rótsa [[ta kuzugopéka] [até páli] ær na
 ask.PFV.PST.1SG the.N.ACC.PL morel.N.ACC.PL they.NOM PRT if SUBJ
 ta éxun].
 3OBJ have.NPST.3PL

One possibility to modify (135) would then be to assume that *ki* is a complementizer and occupies the head Force⁰ (see section 3.3.2.5.2), but this is a possibility which

4.5.3 Derivation of *ki*-constructions

In this section, I elaborate on the unified analysis of *ki* and discuss how the five construction types listed in (1) (repeated in (151) for convenience) all derive from representation (150). I show that any apparent difference between these constructions is the outcome of whether the [+sentience] feature on *ki* is checked by an internally or an externally merging category in Spec, SAP. The order of the examples in (151) differs from that in (1), since they are ordered according to the following discussion.

(151) a. Adverb + *ki* construction

Ælþætta/temék *ki* čo a nárti o Andriás.
 surely/apparently PRT not FUT.DEF come the.M.NOM.SG Andrew.M.NOM.SG
 ‘Certainly/apparently, Andrew is not going to come.’

b. Causal construction

O nomát múyusin to kþári
 the.M.NOM.SG man.M.NOM.SG hide.PFV.NPST.3SG the.N.ACC.SG barley.N.ACC.SG
ki ðókan ta an kačára.
 PRT give.PFV.PST.3PL 3OBJ an admonition.F.NOM.SG
 ‘The man hid the barley and (this is why) they scolded him.’

c. Quotative construction

Lénkin ta *ki*, “Čipérkin mis sa
 say.IPFV.PST.3SG 3OBJ PRT all take.IPFV.PST.3SG 1PL.OBJ in.the.N.ACC.PL
 šéræ tu.”
 hand.N.ACC.PL his
 ‘[My grandmother] used to say, “[The guard] would take us all in his hands.”’

d. PCC

Nanósta ta *ki* xa píkum to
 think.IPFV.PST.1SG 3OBJ PRT FUT.CF make.PFV.NPST.1PL the.N.ACC.SG
 kačí penendáu mas.
 promise.N.ACC.SG among our
 ‘I thought (that) we were going to reach an agreement among us.’

e. Emphatic construction

Típus čo ípa *ki*!
 nothing not say.PFV.PST.1SG PRT
 ‘I did not say anything!’

More specifically, in section 4.5.3.1, I show that the adverb + *ki* construction in (151a) has a derivation in which the [+sentience] feature is checked by the epistemic or evidential adverb attracted to Spec, SAP. In section 4.5.3.2, I argue that in the causal

construction illustrated in (151b), the [+sentience] feature is checked by a full clause, ForceP, which is first-merged in Spec, SAP. As I show in section 4.5.3.3, a quotative construction with *ki* (151c) involves a derivation in which the reporting clause, i.e., ForceP, is attracted to Spec, SAP to check the [+sentience] feature on *ki*. In section 4.5.3.4, I extend the same analysis to PCCs (151d), where I show that in this case, what appears to be a complement clause is not actually embedded under the matrix verb; rather, it is a dislocated element. I delay explaining the exact nature of this dislocation until section 4.5.4. Finally, I show in section 4.5.3.5 that an emphatic clause (151e) also involves movement of ForceP to Spec, SAP, just as in quotative constructions and PCCs. The difference between quotative constructions and PCCs on one hand and emphatic clauses on the other is shown to be that there is a quote or a complement clause linked to the matrix verb in the former set of constructions but not in the latter.

4.5.3.1 Adverb + *ki* constructions

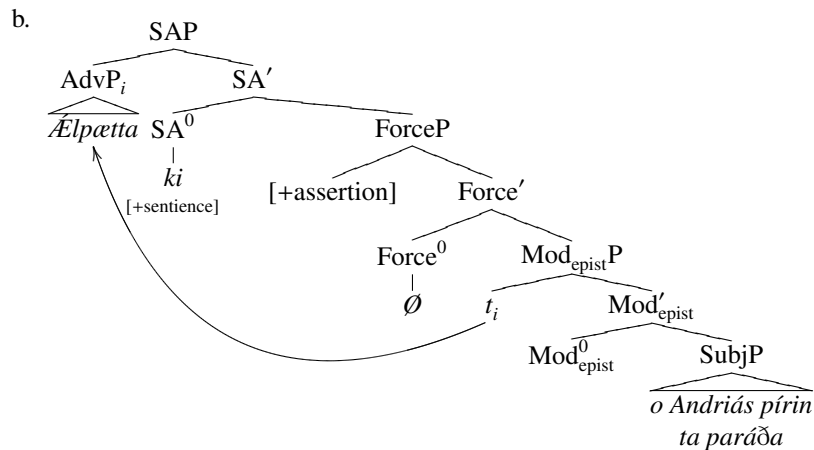
Although *ki* can legitimately be taken as the overt exponent of SA⁰ (see section 4.5.2.3), *ki* cannot be sentence initial, even if the clause contains an evidential or an epistemic adverb lower down in Mood_{evidential}P or Mod_{epistemic}P. The proposed structure of the ungrammatical examples in (152a, 153a) are given in (152b, 153b) respectively.

- (152) a. * *Ki* álpætta čo a nárti o
 PRT certainly not FUT.DEF COME.PFV.NPST.3SG the.M.NOM.SG
 Andriás.
 Andrew.M.NOM.SG
 int.: ‘Of course, Andrew is not going to come.’
- b. * [_{SAP} [_{SA⁰} *Ki* [_{Mod_{epistemic}P} álpætta [_{NegP} čo [_{C_{MP}} a [_{TP} nárti o Andriás]]]]]]].
- (153) a. * *Ki* temék čo a nárti o
 PRT apparently not FUT.DEF COME.PFV.NPST.3SG the.M.NOM.SG
 Andriás.
 Andrew.M.NOM.SG
 int.: ‘Apparently, Andrew is not going to come.’
- b. * [_{SAP} [_{SA⁰} *Ki* [_{Mod_{evidential}P} temék [_{NegP} čo [_{C_{MP}} a [_{TP} nárti o Andriás]]]]]]].

From (152–153), I conclude that when *ki* spells out SA⁰, Spec, SAP must be overtly filled at all times; in other words, *ki* in SA⁰ triggers movement of a relevant category to Spec, SAP so that its [+sentience] feature can be overtly checked. In an adverb + *ki* construction, the category targeted by *ki* is the epistemic and evidential adverbs which are speaker-oriented (Ernst 2004[2001]). Therefore, in an adverb + *ki* construction

(154a), the evidential or epistemic adverb is attracted by *ki* in SA⁰ to Spec, SAP from its merge position, Spec, Mood_{evidential}P or Mod_{epistemic}P, respectively. This attraction allows for the “speaker’s” sentience feature to be checked by entering in a spec-head configuration with *ki* (154b). The presence of *ki* serves to identify the P-role “speaker” as the only “sentient mind”; the movement of the adverb results in the unavailability of the objective modal reading of the adverb.

- (154) a. *Ālpætta ki o Andriás pírín ta*
 certainly PRT the.M.NOM.SG Andrew.M.NOM.SG take.PFV.PST.3SG the.N.ACC.PL
paráða.
 money.N.ACC.PL
 READING 1: ‘Of course, Andrew took the money.’
 = subjective: Certainly, it is the case that *p.* = *poss . p*
 *READING 2: ‘It is certain that Andrew took the money.’
 = objective: I say that it is certain that *p.* = *. poss p*



The derivation in (154b) is largely based on Hill’s (2007a et seq.) analysis of adverb + C constructions in Romanian (see section 4.5.1.2). However, it diverges from her proposal in three ways. First, I propose that *ki* in PhG is the overt exponent of SA⁰ and that it is endowed with a [+sentience] feature, which restricts the “sentient mind” to the P-role “speaker”. In Hill’s account, on the other hand, in an adverb + C construction, SA⁰ is realized by an adverb that is first-merged there. In her account, the speaker-oriented reading of this adverb obtains because the Spec, SAP hosts the P-role “speaker”. Second, unlike Hill (2007a et seq.), who argues that adverbs in the adverb + C constructions are first-merged in SA⁰ (and thus they are functional heads), I propose that an evidential or an epistemic adverb moves to Spec, SAP from

its first-merge position in the adverb + *ki* construction. Evidential or epistemic adverbs therefore retain their phrasal status in an adverb + *ki* construction, which is confirmed by the fact that adverbs in the adverb + *ki* constructions can be modified (155a), just as they can outside of the adverb + *ki* construction (155b).

- (155) a. Čav tamán ki o Andriás a
 all the more undoubtedly PRT the.M.NOM.SG Andrew.M.NOM.SG FUT.DEF
 nárti.
 come.PFV.NPST.3SG
 ‘All the more undoubtedly, Andrew is coming.’
- b. Čav tamán o Andriás a
 all the more undoubtedly the.M.NOM.SG Andrew.M.NOM.SG FUT.DEF
 nárti.
 come.PFV.NPST.3SG
 ‘All the more undoubtedly, Andrew is coming.’
 ‘It is beyond doubt that Andrew is coming.’

Finally, as Hill extensively discusses, Romanian *că* ‘that’ is the overt exponent of Force⁰. However, since declarative main [+assertion] clauses in PhG are not introduced by any overt complementizer, and adverb + *ki* constructions are confined to declarative main clauses, I argue that Force⁰ in a declarative main clause with (or without) *ki* remains empty. Clauses which are not typed as [+assertion], e.g., questions (156a) or orders (156b) are not compatible with adverb + *ki* constructions.

- (156) a. Temék (*ki) a nárti o Andriás?
 apparently PRT FUT.DEF come.PFV.NPST.3SG the.M.NOM.SG Andrew.M.NOM.SG
 ‘Is Andrew apparently coming?’
- b. Tabí (*ki) eđó!
 definitely PRT come.PFV.IMP.2SG
 ‘Definitely come!’

The structure in (154b) captures the fact that an adverb + *ki* construction cannot occur in clause-final position. The ungrammatical example in (139a) is reproduced in (157a).

- (157) a. *O Andriás a píči jartími,
 the.M.NOM.SG Andrew.M.NOM.SG FUT.DEF make.PFV.NPST.3SG help.N.NOM.SG
 | álpætta ki.
 certainly PRT
 int.: ‘Andrew is going to help, certainly.’

This ungrammaticality follows from the fact that in the structure elaborated here, there is no topic position above SAP that could potentially host constituents that create movement chains, e.g., ForceP in (157a) (see also section 4.5.4.5, especially fn. 72):

- (157) b. $[\text{TopP } [\text{ForceP } \text{O Andriás a píči jartími}]_i \text{ } [\text{SAP } \text{élpætta } [\text{SA}^0 \text{ ki } t_i]]]$.

If an evidential and an epistemic adverb co-occur in a single clause where SAP projects, only the evidential adverb can licitly precede *ki* (cf. (158a–b)).

- (158) a. Mood_{evid.} adverb > *ki* > Mod_{epist.} adverb
 Paú *ki* tamán o Andriás a
 obviously PRT undoubtedly the.M.NOM.SG Andrew.M.NOM.SG FUT.DEF
 nárti.
 come.PFV.NPST.3SG
 ‘Obviously, undoubtedly, Andrew is going to come.’
- b. *Mod_{epist.} adverb > *ki* > Mood_{evid.} adverb
 *Tamán *ki* paú o Andriás a
 undoubtedly PRT obviously the.M.NOM.SG Andrew.M.NOM.SG FUT.DEF
 nárti.
 come.PFV.NPST.3SG
 int.: ‘Undoubtedly, obviously Andrew is going to come.’

The ungrammaticality of (158b) follows from the assumption that the evidential adverb *paú* ‘obviously’, which is situated higher than the epistemic adverb *tamán* ‘undoubtedly’, counts as an intervener; thus the movement of the latter to Spec, SAP becomes illicit since it violates RM (see section 3.3.1.5 and 3.3.3.2.7). This is represented in (158c).

- (158) c. $[\text{SAP } \text{Tamán}_i \text{ } [\text{SA}^0 \text{ ki } [\text{Mood}_{\text{evid.}} \text{P } \text{paú } [\text{Mod}_{\text{epist.}} \text{P } t_i \text{ } [\text{SubjP } \text{o Andriás a nárti}]]]]]$.

When the relevant epistemic and evidential adverbs do not occur in an adverb + *ki* construction, and thus can receive either the subjective or the objective reading, I diverge from Hill’s (2007a et seq.) original proposal for similar contexts in Romanian. Recall from section 4.5.1.2 that a higher adverb without the complementizer *că* in Romanian is ambiguous between an impersonal (objective) and a speaker-oriented (subjective) reading. The relevant example is provided in (159).

- (159) Sigur va veni.
 surely will-3SG come
 ‘Of course she is coming.’ / ‘It is certain that s/he is coming.’

[Romanian (Hill 2007a:61, ex. (1))]

To capture this ambiguity, Hill (2007a et seq.) assigns two distinct structures to cases such as (159). More specifically, she argues that the speaker-oriented reading of (159) derives from a non-overt SAP above ForceP, whereas in the impersonal reading, SAP does not project at all.

Concerning cases in which the relevant evidential or epistemic adverbs do not occur in an adverb + *ki* construction, I propose, contra Hill (2007a et seq.), that such adverbs in their first-merge position, i.e., Spec, Mood_{evidential}P or Spec, Mod_{epistemic}P respectively, are inherently ambiguous between a subjective and objective modal reading. This means that when such an adverb is not followed by *ki*, the most immediate individual, which may be the subject, the “hearer” or the “speaker”, is set as the “sentient mind” in the discourse. Consider for example the examples in (160):

- (160) a. I Nerkíza tuşuntá [ǎlpætta o
the.F.NOM.SG Nerkiza.F.NOM.SG think.IPFV.NPST.3SG certainly the.M.NOM.SG
Andriás pírín ta paráđa].
Andrew.M.NOM.SG take.PFV.PST.3SG the.N.ACC.PL money.N.ACC.PL
‘Nerkiza thinks (that) Andrew certainly took the money.’
- b. Temék a nárti o Andriás?
apparently FUT.DEF come.PFV.NPST.3SG the.M.NOM.SG Andrew.M.NOM.SG
‘Is Andrew apparently coming?’

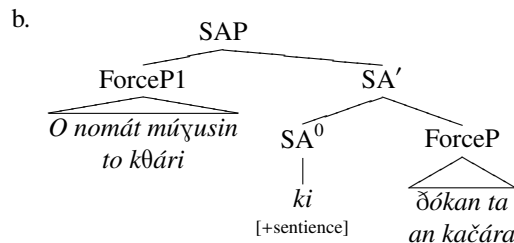
In (160a), the “sentient mind” that evaluates the certainty of the assertion in the embedded clause is the matrix subject Nerkiza. In (160b), the P-role “hearer” occupies the seat of knowledge, and the “hearer” is interpreted as the “sentient mind” evaluating the apparentness of Andrew’s coming. Crucially, as shown in (68b, 156a), which are resumed below as (161a–b) respectively, *ki* cannot follow the adverbs in (160). This is expected according to the analysis proposed here because the occurrence of *ki* yields an interpretive clash between two “sentient minds”: the “speaker” and the grammatical subject of the matrix clause in (161a), and the “speaker” and the “hearer” in (161b).

- (161) a. I Nerkíza tuşuntá [ǎlpætta (*ki)
the.F.NOM.SG Nerkiza.F.NOM.SG think.IPFV.NPST.3SG certainly PRT
o Andriás pírín ta paráđa].
the.M.NOM.SG Andrew.M.NOM.SG take.PFV.PST.3SG the.N.ACC.PL money.N.ACC.PL
‘Nerkiza thinks (that) Andrew certainly took the money.’
- b. Temék (*ki) a nárti o Andriás?
apparently PRT FUT.DEF come.PFV.NPST.3SG the.M.NOM.SG Andrew.M.NOM.SG
‘Is Andrew apparently coming?’

4.5.3.2 Causal constructions

In anticipation of the discussion later in this section, I propose that in a causal construction with *ki* the relationship between the two independent clauses, CP1 and CP2, is mediated by SA⁰, which is occupied by *ki*. More specifically, CP1 is merged in Spec, SAP, where it is interpreted in much the same way as an adverbial clause (for a similar proposal in which a full-blown clause is first-merged as ForceP in a spec position, see Haddican et al. 2014). This amounts to saying that: (i) CP1 and CP2 are not in a typical symmetric coordination relation, and hence *ki* is not a coordinator on par with *če* ‘and’, (ii) *ki*—as in adverb + *ki* constructions—is the overt exponent of SA⁰, and (iii) SAP, the projection which is headed by *ki*, is a functional projection of the constituent labeled “CP2”. On the basis of this claim, CP2 will hereafter be referred to as the “main clause” and the CP1 be referred as the “adverbial clause”; in the representations, I will relabel each clausal constituent as ForceP. The structure of the causal construction in (162a) is given in (162b).

- (162) a. [_{ForceP1} O nomát múyusin to
 the.M.NOM.SG man.M.NOM.SG hide.PFV.NPST.3SG the.N.ACC.SG
 kθári] ki [_{ForceP2} đókan ta an kačára].
 barley.N.ACC.SG PRT give.PFV.PST.3PL 3OBJ an admonition.F.NOM.SG
 ‘The man hid the barley and (this is why) they scolded him.’



As argued in section 4.3.4.2, ForceP1, i.e., the adverbial clause, conveys the speaker’s justification for the assertion expressed in ForceP2, i.e., the main clause. Recall our assumption that in the communicative process, the speaker aims to have her assertion validated via the epistemic vigilance mechanism of the hearer. The speaker may believe that in the absence of any additional cue about the source or type of evidence for the assertion, her assertion will be challenged by the hearer’s epistemic vigilance. One obvious way to overcome the listener’s epistemic vigilance mechanism is to openly display some of evidence she has for her argument (Wilson 2011). In the absence of additional cues regarding the source or type of evidence, e.g., evidential or epistemic adverbs, I argue that the speaker’s source of confidence can be conveyed by a full-blown clause which is directly merged in Spec, SAP, where it checks the

[+sentience] feature of *ki*. Although there is no adverbial conjunction to introduce ForceP1, in this configuration, ForceP1 will be interpreted as an adverbial clause.

This analysis is corroborated by the fact that in the causal construction any evidential or epistemic adverb in the main clause (ForceP2) can only receive the objective reading:

- (163) [_{ForceP1} O nomát múyusin to kþári]
 the.M.NOM.SG man.M.NOM.SG hide.PFV.NPST.3SG the.N.ACC.SG barley.N.ACC.SG
ki [_{ForceP2} ælpætta/paú ðókan ta an kačára].
 PRT certainly/obviously give.PFV.PST.3PL 3OBJ an admonition.F.NOM.SG
 ‘The man hid the barley and (this is why) it is certain/obvious that they scolded him.’

Recall that in section 4.3.4.2 I argued that, in a causal construction, ForceP1 is interpretively similar to peripheral adverbial clauses introduced by the conjunction because in English (Haegeman 2003a, 2004b,c, 2006b, 2007, 2009[1991], 2009, 2010a,b, 2010b, 2012, 2013). Haegeman (2004b) in particular shows, with a number of tests, that a peripheral adverbial clause, such as that in (77a) (repeated in (164)) is merged with its associate clause after the latter is fully projected, i.e., it is merged with a CP. She argues that, in this way, the resulting structure (165) is a pattern similar to coordination:

- (164) This is not a list drawn up by people sitting night after night reading to babies and toddlers, [because then it would include books such as *Boing!* by Sean Taylor (Walker Books) which expand the child’s experience along with his or her joy of reading].

(Haegeman 2012:162, ex. (28b))

- (165) Peripheral adverbial clauses:
 [_{CP1} Adverbial clause [_{CP2} associated clause]]

(Haegeman 2004b:71, ex. (20))

The structure I propose in (162b) instantiates what Haegeman (2004b) analyzes as the structure of a peripheral adverbial clause in (165).⁵⁴

In addition to providing an explanation for the interpretive property of a causal construction, the structure in (162b) also accounts for a certain structural idiosyncrasy of this construction, which was originally noted for coordinate structures.

It has been known since Ross (1967:98–99) that in a coordinate structure, conjuncts or any constituent contained in a conjunct, cannot be moved. This constraint

⁵⁴ In section 4.3.4.1, I showed that causal constructions form an intonational phrase, but coordinate structures do not. See also Frey and Truckenbrodt (2015), who argue that certain peripheral adverbial clauses in German can in fact act prosodically as part of the host clause.

is referred to as the “Coordinate-Structure Constraint” (hereafter, CSC) after Ross (1967) and is exemplified in (166). The precise nature of the CSC, and in particular, the question as to whether it should be characterized as a proper syntactic constraint, is the subject of debate in the literature (a.o., Lakoff 1986; Na and Huck 1992; Munn 1993; Kayne 1994:57–68; Postal 1998; Kehler 2002:103ff; Zwart 2005).

- (166) * Whose tax_i did the nurse polish her trombone and the plumber compute t_i ?
(Ross 1967:98, ex. (4.82f))

At first sight, a causal *ki* construction also appears to be subject to the CSC. For instance, in (167), ungrammaticality arises because the *páli*-phrase is moved from within ForceP2.

- (167) * [An kačára páli]_i [_{ForceP1} o nomát
an admonition.F.NOM.SG PRT the.M.NOM.SG man.M.NOM.SG
múyusin to kθári] ki [_{ForceP2} ḏókan
hide.PFV.NPST.3SG the.N.ACC.SG barley.N.ACC.SG PRT give.PFV.PST.3PL
ta t_i].
3OBJ
int.: ‘An admonition, the man hid the barley and (this is why) they give him.’

However, according to the structure proposed in (162b), the ungrammaticality in (167) in fact follows without making direct reference to the CSC: there is no ContrastP* above SAP (or more generally, there is no possible landing site above SAP), which could potentially host A'-moved constituent *an kačára* ‘an admonition’, as shown in (168).

- (168) *
-
- (= (167))

The proposed derivation in (171b) makes a number of correct predictions about the linear position of *ki* with respect to the verb of the reporting clause as well as about the semantic contribution of *ki* in a quotative construction.⁵⁵ Under this analysis, *ki* does not have to be immediately right adjacent to the ‘verb + clitic’ of the reporting clause. A postverbal VP-internal constituent of the reporting clause, such as the subject or the indirect object, is expected to occur in between the ‘verb + clitic’ and *ki*. As shown in section 4.5.2.2.2, this prediction is borne out. The subject *o nomát* ‘the man’ in (172a) and the indirect object *ti néka* ‘the woman’ in (172b), both of which are presumably inside VP of the reporting clause (see chapter 3 for subject and object positions), are grammatical in this position.

- (172) a. Ípin ta o nomát *ki*, “γο čo a
 say.PFV.PST.3SG 3OBJ the.M.NOM.SG man.M.NOM.SG PRT I.NOM not FUT.DEF
 nártu.”
 come.PFV.NPST.1SG
 ‘The man said, “I am not coming.”’
- b. O nomát ípin ta ti néka
 the.M.NOM.SG man.M.NOM.SG say.PFV.PST.3SG 3OBJ the.F.ACC.SG woman.F.ACC.SG
ki, “γο čo a nártu.”
 PRT I.NOM not FUT.DEF come.PFV.NPST.1SG
 ‘The man said to the woman, “I am not coming.”’

The structure in (171b) does not offer an answer to the question of how the quote, which can precede or be wrapped around the reporting clause (see section 4.3.1), is connected to the reporting verb. This connection is represented with the symbol \Rightarrow in (171b). According to some earlier views (Ross 1973; Hooper 1975), quotes are complements to the reporting predicate. When the quote precedes the reporting clause, it has been proposed that the quote moves around the reporting clause (a phenomenon called “Slifting”, i.e., “sentence-lifting”, by Ross 1973). When the quote is wrapped around the reporting clause, Ross (1973, 1984) argues that the reporting clause is moved leftwards into the quote (a phenomenon Ross calls “Niching”). According to another view (Jackendoff 1972:94ff; Reinhart 1983), reporting clauses are adverbial clauses that are attached to the quote at a higher structure, for instance, the E(xpression)-level of Banfield (1973). Recently reporting clauses have often been considered as parentheticals in relation to the quote, and the relation between the

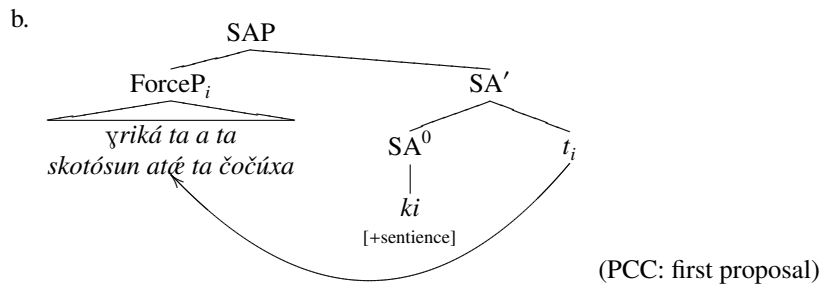
⁵⁵ There is one potential problem with this “movement of the (matrix) ForceP” analysis: At first glance, it violates the anti-locality constraint as formulated by Grohmann (2003) (for anti-locality, see section 3.3.3.2.7). However, notice that my proposal is compatible with the shell-hypothesis of SAP (Speas and Tenny 2003): In principle it could be argued that *ki* is the overt realization of *sa*⁰ and that ForceP is attracted to Spec, *sa*P; hence, the anti-locality constraint is adhered to. See also section 4.5.4.3.

reporting clause and the quote is argued to be mediated by an operator inside the reporting clause (Collins and Branigan 1997; Collins 1998; Suñer 2000; de Vries 2006, 2008). The choice of a precise analysis for the connection between the quote and the reporting clause goes beyond the scope of this thesis; I will remain agnostic as to the precise nature of this connection and continue to represent it as \rightleftharpoons .

4.5.3.4 PCCs

The structure proposed for quotative constructions seamlessly extends to PCCs. Recall that in these constructions, *ki* has been shown to function as a DM that influences and counteracts the hearer's epistemic vigilance by underlining the speaker's confidence and commitment to the assertion. This is very much in line with the fact that *ki* can occur only in PCCs in which the matrix predicate is an assertive one. Therefore, as a first derivation, I suggest that in a PCC with *ki* (173a), the matrix ForceP to which the embedded clause is subordinate is attracted to Spec, SAP, where it checks the [+sentence] feature on *ki* (173b).

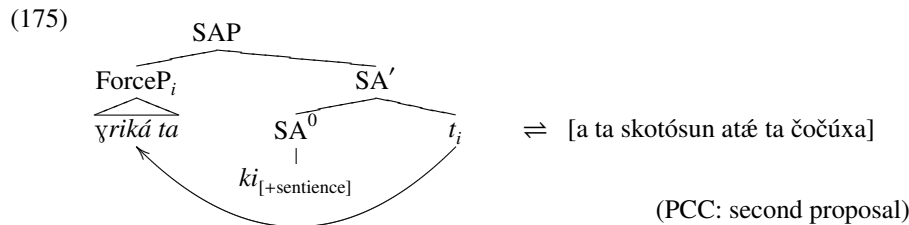
- (173) a. γ riká ta *ki* [a ta skotósun até
 realize.IPFV.NPST.3SG 3OBJ PRT FUT.DEF 3OBJ kill.PFV.NPST.3PL this.PL
 ta čočúxa].
 the.N.NOM.PL child.N.NOM.PL
 'She realizes (that) these children are going to kill her.'



However, the proposed structure in (173b) does not derive the expected word order in (173a) since the matrix ForceP pied-pipes the embedded clause, resulting in the ungrammatical sentence in which *ki* is sentence final (174). We need to have a derivation in which *ki* sets off the matrix domain from the complement domain.

- (174) * γ riká ta [a ta skotósun até ta
 realize.IPFV.NPST.3SG 3OBJ FUT.DEF 3OBJ kill.PFV.NPST.3PL this.PL the.N.NOM.PL
 čočúxa] *ki*.
 child.N.NOM.PL PRT

This problem is circumvented if we attribute to the embedded clause in (173a) a structural status akin to that assumed for the quote in section 4.5.3.3. In that section, I represented the link between a quote and its reporting clause by the symbol \Rightarrow without attempting to specify the precise nature of the relationship \Rightarrow . We can hypothesize that embedded clauses are linked to their matrix clauses by the same linking operation \Rightarrow and revise the structure in (173b) as in (175). As a result of this move, the structure postulated here would in fact set PCC patterns without *ki* apart from the analogues with *ki*. In particular, while for the regular pattern we adopt the standard view that the complement clause is embedded fully in a matrix domain, this would not be the case with PCCs with *ki*, in which, according to the view elaborated here, the complement clause has more of an independent status.



I will eventually replace the structure in (175) with a slightly modified version in section 4.5.4.⁵⁶ However, for the time being, I retain the representation in (175) and present evidence suggesting that (some version of) (175) is on the right track. The relevant evidence comes from the lack of connectivity—interpreted as the absence of a c-command relation—between the matrix and embedded clauses in a PCC with *ki*.

Let us consider extraction facts first. In regular PCC patterns, extraction of an argument from a complement clause is possible. When the particle *ki* is present in a PCC pattern, however, extraction from the complement clause into the matrix clause becomes ungrammatical. This is illustrated in the minimal pair in (176a–b). In the PCC without *ki* in (176a), the *wh*-phrase *tis* ‘who’ is licitly extracted from a position inside the embedded clause. On the other hand, in (176b), which is a PCC with *ki*, the extraction of the same *wh*-phrase results in ungrammaticality.

- (176) a. Tis_i yriká ta [a ta skotósi t_i]?
 who.NOM realize.IPFV.NPST.3SG 3OBJ FUT.DEF 3OBJ kill.PFV.NPST.3SG
 ‘Who does she realize is going to kill her?’
- b. * Tis_i yriká ta *ki* [a ta skotósi t_i]?
 who.NOM realize.IPFV.NPST.3SG 3OBJ PRT FUT.DEF 3OBJ kill.PFV.NPST.3SG

⁵⁶ Independently, based on certain facts beyond the scope of this paper, Bennis (1987) and Grange and Haegeman (1989) also suggest that, extraposed complement clauses in Dutch and West Flemish are not genuinely embedded to the matrix predicate but rather function as adjuncts. This is also the assumption behind the representation in (175).

The difference between regular PCCs and those containing *ki* also emerges from scope effects. For instance, a BNQ (e.g., *típus* ‘nothing’) which is located within the embedded clause of a PCC without *ki* can be licensed by the negation marker in the matrix clause (*čo* ‘not’) (177a). However, when *ki* is added to the construction, the sentence becomes ungrammatical (177b).

- (177) a. *Čo* *pandéxu* [*típus* *pómini*].
 not think.IPFV.NPST.1SG nothing remain.PFV.PST.3SG
 ‘I don’t think that anything remained, i.e., is left.’
 b. * *Čo* *pandéxu* *ki* [*típus* *pómini*].
 not think.IPFV.NPST.1SG PRT nothing remain.PFV.PST.3SG

(177b) can be rescued only when a negation marker occurs in the same clause as *típus* ‘nothing’.⁵⁷

- (178) *Pandéxu* *ki* [*típus* *čo* *pómini*].
 think.IPFV.NPST.1SG PRT nothing not remain.PFV.PST.3SG
 ‘I think that nothing remained, i.e., is left.’

Under the assumption that c-command is required for polarity licensing (see section 3.3.1.4 on c-command), the fact that a BNQ is licensed in (177a, 178) but not in (177b) can be taken to suggest that in the presence of *ki* the c-command relationship cannot be established between the negator in the matrix clause and the BNQ in the (apparently) embedded clause.⁵⁸ Similarly, in the absence of *ki*, a pronoun contained

⁵⁷ Both the blocking of extraction and bare negative quantifier licensing by *ki* are also observed when the matrix predicate is a non-assertive one that exceptionally admits *ki*, i.e., a directive predicate (see section 4.3.2.1.3) (i–ii).

- (i) a. *Pos_i* *parakáltsa* *ta* [*na* *mi* *pitáksun* *t_i*]?
 what beg.PFV.PST.1SG 3OBJ SUBJ 1SG.OBJ send.PFV.NPST.3PL
 ‘What did I begged him to send me?’
 b. * *Pos_i* *parakáltsa* *ta* *ki* [*na* *mi* *pitáksun* *t_i*]?
 what beg.PFV.PST.1SG 3OBJ PRT SUBJ 1SG.OBJ send.PFV.NPST.3PL
- (ii) a. *Čo* *parakáltsa* *ta* [*típus* *na* *mi* *pitáksun*].
 not beg.PFV.PST.1SG 3OBJ nothing SUBJ 1SG.OBJ send.PFV.NPST.3PL
 ‘I did not beg him to send me anything.’
 b. * *Čo* *parakáltsa* *ta* *ki* [*típus* *na* *mi* *pitáksun*].
 not beg.PFV.PST.1SG 3OBJ PRT nothing SUBJ 1SG.OBJ send.PFV.NPST.3PL

Despite this structural homogeneity, the reason why these verbs exceptionally allow *ki* should be addressed in detail in future research.

⁵⁸ Recall from section 3.3.3.2.6 that BNQ direct objects are licensed in a position where they are c-commanded by the negation and they often further raise to FocP in the LP. The example in (178), where the BNQ linearly precedes its licenser, should be considered in the light of this information.

in the complement clause can be bound by a universally quantified DP inside the main clause: as shown in (179), *s* ‘her’ can be bound by the universally quantified DP *xer i néka* ‘every woman’ and thus receive a distributive reading (see also section 3.3.3.1.2 on bound variable pronouns). This follows since the universally quantified DP c-commands the pronoun.

- (179) Xer i néka_i le ta kézi [o
 every the.F.NOM.SG woman.F.NOM.SG assume.IPFV.NPST.3SG the.M.NOM.SG
 Andriás yapá tin kóri s_{ijj}].
 Andrew.M.NOM.SG love.IPFV.NPST.3SG the.F.ACC.SG daughter.F.ACC.SG her
 ‘Every woman_i assumes that Andrew loves her_{ijj} daughter.’

On the other hand, when *ki* is present, the distributive reading of the pronoun is lost, and the only possible reading is that in which the pronoun refers to a third person (180). This fact further illustrates that there is no c-command relationship between what would be the binder in the main clause and the pronoun in the embedded clause in a PCC with *ki*.

- (180) Xer i néka_i le ta kézi ki [o
 every the.F.NOM.SG woman.F.NOM.SG assume.IPFV.NPST.3SG PRT the.M.NOM.SG
 Andriás yapá tin kóri s^{*}_{ijj}].
 Andrew.M.NOM.SG love.IPFV.NPST.3SG the.F.ACC.SG daughter.F.ACC.SG her
 ‘Every woman_i assumes that Andrew loves her^{*}_{ijj} daughter.’

The facts in (176–180) suggest that whenever *ki* occurs, i.e., whenever SA⁰ projects, the complement clause is not actually embedded in the matrix clause in any conventional way, which makes the representation in (175) plausible. I will return to this point in sections 4.5.4.4–4.5.4.5.

4.5.3.5 Emphatic constructions

Recall from section 4.3.5.2 that, in emphatic constructions as well, *ki* encodes a speaker’s high degree of confidence and commitment to the truth of her assertion. We have seen that *ki* occurs only in assertions; in real questions, *ki* is ungrammatical. The fact that *ki* is tolerated only after assertive verbs is captured if we extend the structure proposed for quotative constructions and PCCs to emphatic constructions: *ki* heads SAP, it is subcategorized for a ForceP and it attracts the complement ForceP to its specifier. The proposed structure of the emphatic clause in (181a) is given in (181b).

- (181) a. Piésin a vreší ki!
 catch.PFV.PST.3SG a rain.F.NOM.SG PRT
 ‘It has started to rain!’

of the matrix clause, *ti néka* ‘(to) the woman’, occurs to the right of the particle *ki*; in the quotative construction in (184), the subject of the reporting clause, *o nomát* ‘the man’, appears in the same position.

(183) PCC

Piltúrta ta *ki* ti néka xa mi
 report.PFV.PST.1SG 3OBJ PRT the.F.ACC.SG woman.F.ACC.SG FUT.CF 1SG.OBJ
 píkun jartími.
 make.PFV.NPST.3PL help.N.NOM.SG
 ‘I reported to the woman (that) they would help me.’

(184) Quotative construction

Ípin ta *ki* o nomát, “Eðó aðæ!”
 say.PFV.PST.3SG 3OBJ PRT the.M.NOM.SG man.M.NOM.SG come.PFV.IMP.2SG here
 ‘The man said, “Come here!”’

This pattern is also found in emphatic constructions: a constituent of the clause can appear linearly after *ki*, as in (185): in this example the direct object of the emphatic clause, *ti nistía* ‘the fire’, appears to the right of the particle *ki*.

(185) Emphatic construction

Nápsa ta *ki*, ti nistía.
 light.PFV.PST.1SG 3OBJ PRT the.F.ACC.SG fire.F.ACC.SG
 ‘I lit the fire!’

The occurrence of such constituents to the right of *ki* comes as a surprise because, according to the structures given in sections 4.5.3.3–4.5.3.5, any constituent originating within ForceP would be expected to move (i.e., to be pied-piped) to Spec, SAP, and therefore they would be expected to linearly precede the particle *ki* in SA⁰. In what follows, I will show how the patterns in (183–185) can be captured with the proposed structures provided that we expand the LP of PhG to accommodate an additional topic position with specific properties. This analysis will also allow us to account for the precise nature of apparent complement clauses in PCCs with *ki*.

A first important observation is that the constituents following *ki* in cases such as (183–185) are not contained within the same intonation contour as the clause preceding them; they are set apart from *ki* by a prosodic break, see. Figures 4.3–4.5, which show the pitch tracks of (183–185).

As a second component of the analysis, observe that in (185), the object, *ti nistía* ‘the fire’, in post-*ki* position is resumed within the clause itself by the coreferential clitic *ta*.

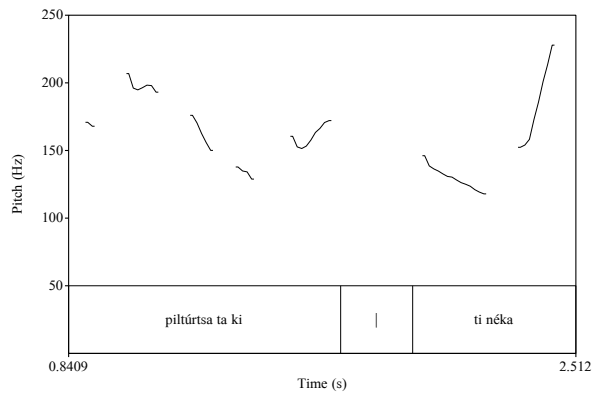


Figure 4.3: Pitch track of (183)

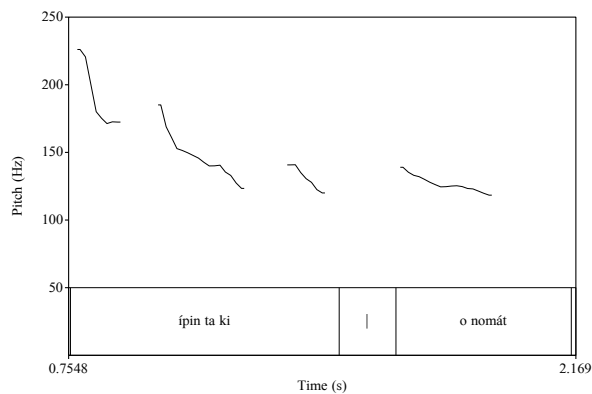


Figure 4.4: Pitch track of (184)

Finally, constituents that cannot be (left-)dislocated as topics but can only move as foci, such as BNQs (see section 3.3.3.2.6), are not acceptable in post-*ki* position; cf. (183–185) to (186–188).

(186) PCC

* Čo piltúrta ta ki kanína xa mi píkun
 not report.PFV.PST.1SG 3OBJ PRT no.one.ACC FUT.CF 1SG.OBJ make.PFV.NPST.3PL

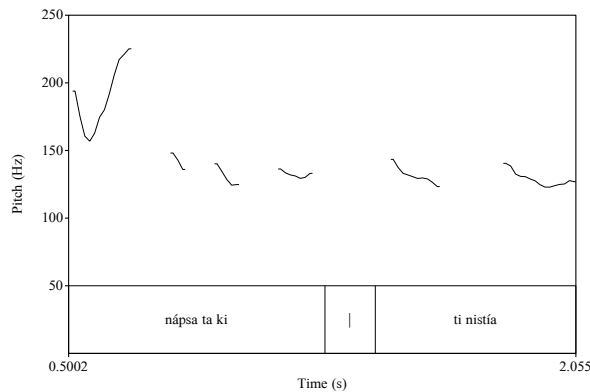


Figure 4.5: Pitch track of (185)

jartími.

help.N.NOM.SG

int.: 'I reported to no one (that) they would help me.'

(187) Quotative construction

* Čo ípa ta ki kanína “γo čo a nártu.”

not say.PFV.PST.1SG 3OBJ PRT no.one.ACC I.NOM not FUT.DEF come.PFV.NPST.1SG

int.: 'I said to no one, "I am not coming."'

(188) Emphatic construction

* Čo nápsa ki, típus.

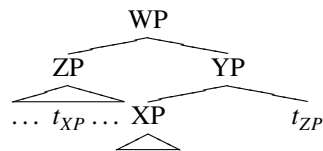
not light.PFV.PST.1SG PRT nothing

int.: 'I did not light anything!'

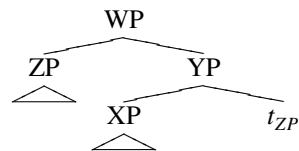
These three observations jointly suggest that the constituents to the right of *ki* should be characterized as right-dislocated topic expressions. However, within the theoretical framework assumed in this dissertation, according to which right-hand specifiers are banned as a consequence of LCA (see section 3.3.1.7), the phenomenon of right-dislocation raises some questions. There have been mainly two proposals in the literature for right-dislocated elements, which also take into consideration LCA: (i) either a phrasal constituent XP is moved from within ZP to a position above ZP, i.e., Spec, YP, and the remaining ZP further remnant-moves to a position above YP, i.e., Spec, WP (see Kayne 1994) (189a); or alternatively (ii) a phrasal constituent XP is first-merged in Spec, YP, and ZP moves to a position above YP, i.e., Spec, WP

(189b).

(189) a.

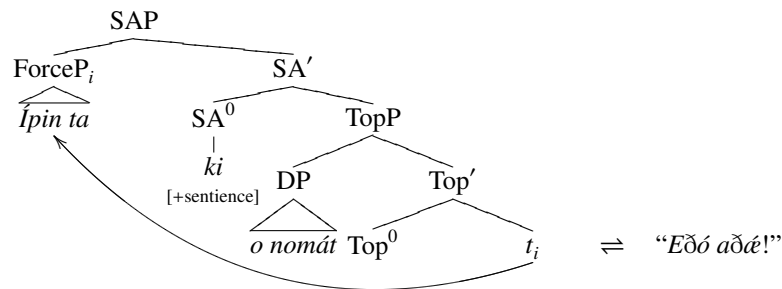


b.



Postponing until section 4.5.4.3 further discussion of which representation in (189a–b) is the most appropriate representation of the right-dislocated topic expressions in (183–185), let us for the moment assume that these right-peripheral constituents to the right of *ki* are hosted in a TopP above ForceP, which itself is attracted to Spec, SAP. To illustrate this point, the representation of the quotative construction in (184) is given in (190).

(190)



This move entails that we now also have to postulate a topic position dominating ForceP, i.e., that we further extend our structure.

Independent support for postulating a topic projection dominating ForceP comes from topic expressions above the interrogative complementizer *ær* in interrogative complement clauses. The relevant constituents are also separated from the following complementizer *ær* ‘if’ by a prosodic break. In addition, if the fronted constituent is a DP (in)direct object, it is obligatorily resumed within the interrogative complement clause by the resumptive clitic element *ta*:

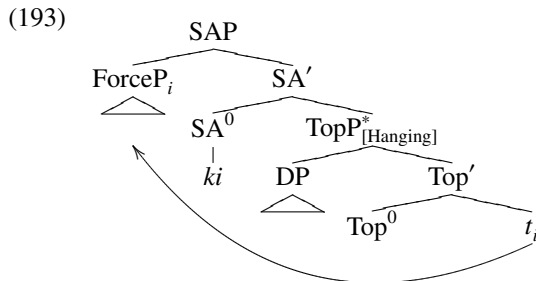
(191) Rótsa [[ton paxlá], ær na *(ta_i) katéxun].
 ask.PFV.PST.1SG the.M.ACC.SG fava.bean.M.ACC.SG if SUBJ 3OBJ know.IPFV.NPST.3PL
 (lit.) ‘I asked if the fava bean, they know it.’

BNQs, which cannot function as topic expressions are excluded from the position preceding the complementizer *ær* ‘if’ (192), supporting the conclusion that the DP constituent *ton paxlá* ‘the fava bean’ in (191) is indeed a topic.

- (192) * Rótsa [[típus], ær na mi katéxun].
 ask.PFV.PST.1SG nothing if SUBJ not know.IPFV.NPST.3PL
 int.: ‘I asked if they do not know anything.’

On the assumption that the interrogative conjunction *ær* ‘if’ occupies Force⁰ (as in section 3.3.2.5.2), example (191) can be taken as evidence in favor of postulating a topic position above ForceP.

Having shown that there is independent motivation for postulating a TopP dominating ForceP, I will first explore the nature of that TopP preceding the complementizer *ær* ‘if’ more carefully. In what follows, I propose that this specialized topic position is identified as the position for first-merged “hanging topics” in Cinque (1977, 1990:57–60). Furthermore, I argue that it is a recursive topic position; hence, TopP*_[Hanging]. Then, I address the question of whether the constituents following *ki* involve movement or first-merge; in other terms, I answer the question of which structure in (189a–b) is the correct representation of right-dislocated topic expressions in *ki*-constructions. As a preview to the discussion, the constituents following *ki*, which are hypothesized to be hosted in a high topic position, manifest the same properties as hanging topics; this similarity suggests that the constituents following *ki* are first-merged in Spec, TopP*_[Hanging] above ForceP. ForceP that these hanging topics are associated with moves around them to Spec, SAP. This is schematically shown in (193).



The structure proposed in (193) also allows the analysis of apparent complement clauses in PCCs with *ki* to be refined. These apparent complement clauses are also merged in Spec, TopP*_[Hanging], which explains why they show no connectivity with their superordinate clauses.

In the next section (4.5.4.1), I first provide the general properties proposed in the literature to distinguish CILD-ed topics (extensively discussed in chapter 3) from hanging topics. In section 4.5.4.2, I return to PhG CILD-ed topics and topics that are hosted above the complementizer *ær* ‘if’. This comparison demonstrates that the latter category should be formally distinguished from the former; moreover, they should be characterized as hanging topics. In section 4.5.4.3, I return to constituents that are

right dislocated in *ki* constructions. I show that these constituents behave exactly like hanging topics; hence, I conclude that they are also merged in Spec, TopP*_[Hanging]. In section 4.5.4.4, I take up apparent complement clauses in PCCs with *ki*, proposing that these clauses are also merged in Spec, TopP*_[Hanging]. Finally, in section 4.5.4.5, I show with evidence mainly from adverb + *ki* constructions that another recursive TopP*_[Hanging] should be recognized above SAP.

4.5.4.1 CILD-ed topics vs hanging topics

Cinque (1977, 1979, 1990:chapter 2, especially 55–60) illustrates with data from Italian and French that two types of topicalization processes involving the LP should be identified: CILD, (see sections 3.3.3.2.1, 3.3.3.2.5 and 3.4.2) and “hanging topic left dislocation” (hereafter HTLD).⁵⁹ While both topic types encode, in some sense, pragmatic “aboutness” (Reinhart 1981), they show different interpretive and structural properties, which I present in this section in turn.

CILD is a topicalization strategy in which an entity that has already been mentioned in the discourse—hence an entity that constitutes “old information” (Cinque 1977:406)—is reintroduced back into the discourse (for further characterization of CILD, see sections 3.3.3.2.1, 3.3.3.2.5 and 3.4.2). As an illustrative case, consider the discourse fragment in Italian in (194), more specifically (194B).

- (194) A: Sai che *tuo cugino* mi ha telefonato ieri per dirmi che ha trovato un bell'appartamento a Roma?
 ‘Do you know that your cousin called me up yesterday to tell me that he found a nice apartment in Rome?’
(*tuo cugino* ‘your cousin’ is topic)
 B: ... *Giorgio*, sapevo che voleva andare a stare in campagna.
 ‘... *Giorgio*, I used to know that he wanted to go and live in the country.’
[Italian (adapted from Cinque 1977:407, ex, (28))]

The speaker’s question in (194A) is about *tuo cugino* ‘your cousin’; the referent of this topic DP is established as old information. In speaker B’s response (194B), the left-dislocated topic is the embedded subject, *Giorgio*. Crucially, *Giorgio* in (194B) and *tuo cugino* ‘your cousin’ in (194A) refer to the same individual in the discourse. The referent of *Giorgio* in (194B), which is also old information, is a CILD-ed topic denotation, according to Cinque.

⁵⁹ To be exact, Cinque (1977) uses the term “left-dislocation proper” to characterize CILD (see also Cinque 1979). In Cinque (1990), this is referred to as “C[]LD” and hanging topics are referred to as “left-dislocation” (“LD”). Nothing hinges on these terminological distinctions for the purpose of this dissertation.

HTLD differs from CILD in that the topic expression in a HTLD “[...] mainly serves to promote an NP to a topic status at a point in the discourse when it was not a topic” (Cinque 1977:406). The example in (195B) illustrates a hanging topic (hereafter HT). Structurally, (195B) differs minimally from (194B): the subject pronoun *lui* ‘he’ is present in (195B) but absent in (194B). I will return to this point below.

- (195) A: Sai che *Maria* è andata a stare da Giorgio a Roma?
 You know that Maria has gone to live with Giorgio in Rome?
(*Maria* is topic)
- B: ... *Giorgio*, sapevo che lui voleva andare a stare in campagna.
 ‘... *Giorgio*, I used to know that he wanted to go and live in the country.’

Question (195A) introduces the entity *Maria* as a topic; *Maria* is what the question is about. In (195B), however, the nominal *Giorgio* is promoted to topic status and replaces the original topic *Maria* that was introduced in question (195A). The topic expression in (195B), *Giorgio*, was mentioned in (195A), but it was not the topic of this question. In this respect, the nominal *Giorgio* functions as a hanging topic in (195B).

In parallel with the interpretive differences, CILD and HTLD show a number of formal differences. In what follows, I first provide three asymmetries between CILD and HTLD pertinent to the category of topic expression and resumptive elements. Later, I show that CILD and HTLD show (at least) four formal differences with respect to the connectivity diagnostics as discussed in the literature. These differences lead to the conclusion that CILD-ed topics show connectivity effects, but HTs do not. Therefore, the proposal is that while CILD is the result of a movement operation of the left-dislocated constituent, HTLD involves a nominal category that is externally merged in the LP, i.e., the hanging topic (Cinque 1977, 1979; Anagnostopoulou 1997; Aboh 2004:303–306; Alexopoulou et al. 2005:331–335; Grohmann 2003; Boeckx and Grohmann 2004, a.o.).

The first asymmetry between CILD-ed topics and HTs concerns the category of the copy (or resumptive element) that occurs TP-internally. CILD requires a weak (clitic) pronoun in TP-internal position as a resumptive element—if clitic pronouns are available in the language. In HTLD, on the other hand, a strong (tonic) pronoun can also resume the topic expression. (196a–b) illustrates CILD in Italian (Cinque 1977). The clitic pronoun *gli* ‘him’ resumes the topic expression *a Giorgio* ‘to Giorgio’ (196a), whereas the strong (tonic) pronoun *lui* ‘him’ cannot (196b). On the other hand, in (197), which illustrates HTLD, both the clitic *gli* ‘him’ (197a) and the strong pronoun *lui* ‘him’ (197b) can resume the HT, *Giorgio*.

(196) CILD

- a. [A Giorgio]_i, sono sicuro che non gli_i ho mai scritto.
‘To Giorgio, I am sure that I have never written to him.’
- b. * [A Giorgio]_i, sono sicuro che non ho mai scritto a lui_i.
int.: ‘To Giorgio, I am sure that I have never written to him.’

(197) HTLD

- a. [Giorgio]_i, sono sicuro che non gli_i ho mai scritto.
‘Giorgio, I am sure that I have never written to him.’
- b. [Giorgio]_i, sono sicuro che non ho mai scritto a lui_i.
‘Giorgio, I am sure that I have never written to him.’

[Italian (adapted from Aboh 2004:304, ex, (31))]

The difference in (194B–195B) with respect to the absence (194B) and presence (195B) of the strong subject pronoun *lui* ‘he’ follows from the fact that only HTs can be resumed by a strong pronoun: since there are no subject clitics in Standard Italian, the CILD-ed subject topic *Giorgio* in (194B) cannot be resumed by overt material within the clause.⁶⁰ On the other hand, since strong pronouns can resume HTs, the occurrence of the subject pronoun *lui* ‘he’ in (195B) as a resumptive element of the HT *Giorgio* is possible.

Second, CILD and HTLD differ with respect to the syntactic category of the constituent that can function as topic expression: In CILD, virtually any maximal projection can occur as a topic expression. On the other hand, only a DP, i.e., some extended projection of a nominal, can serve as a HT (see especially Cinque 1977:58 and Cinque 1990). This is shown in the contrast between (198a–b) and (199a–b) where CILD and HTLD are illustrated respectively. (198a, 199a) have a DP, *Giorgio*, as a topic, while (198b, 199b) have a PP, *a Giorgio* ‘to Giorgio’, as a topic. While the DP constituents are tolerated as topics in both constructions, the PP constituent can function only as a CILD-ed topic; cf. (198b) and (199b).⁶¹

(198) CILD

- a. [_{DP} Giorgio], sapevo che voleva andare a stare in campagna
‘Giorgio, I used to know that he wanted to go and live in the country.’
- b. [_{PP} A Giorgio]_i, sono sicuro che non gli_i ho mai scritto.
‘To Giorgio, I am sure that I have never written to him.’

[Italian (adapted from Cinque 1977:407, ex. (28), fn. 12, ex. (i))]

⁶⁰ It may, nevertheless, be the case that this topic is resumed by a *pro*, according to Cardinaletti’s (1994 et seq) proposal.

⁶¹ Cinque (1990:57–58) shows that APs, CPs and VPs are also tolerated as CILD-ed topics but not as HTs.

(199) HTLD

- a. [_{DP} Giorgio]_i, sapevo che lui_i voleva andare a stare in campagna . . .
 ‘Giorgio, I used to know that he wanted to go and live in the country.’
- b. * [_{PP} A Giorgio]_i, sono sicuro che non ho mai scritto a lui_i.
 int. : ‘To Giorgio, I am sure that I have never written to him.’
 [Italian (adapted from Cinque 1977:406–407, ex. (27–28))]

Third, CILD and HTLD differ with respect to whether or not the topic expression can be resumed by an epithet, i.e., a phrase, usually derogatory, which conveys a quality or an attribute pertinent to the topic expression. CILD-ed topics cannot be resumed by an epithet, whereas HTs can (Benincà 2001; Benincà and Poletto 2004; Cruschina 2016:600, a.o.). This is shown in examples (200–201), which illustrate a CILD construction and a HTLD respectively. As shown in (200), the epithet *quell’imbecille* ‘that idiot’ is not grammatical as the resumptive element of the CILD-ed topic *a Mario* ‘to Mario’. In (201), on the other hand, the same epithet can resume the HT, *Mario*.

(200) CILD

- * A Mario_i, non darò più soldi a quell’imbecille_i.
 to Mario, not will give more money to that idiot

(201) HTLD

- Mario_i, non darò più soldi a quell’imbecille_i.
 Mario, not will give more money to that idiot
 [Italian (Benincà and Poletto 2004:65, ex. (37))]

Beside these formal asymmetries, CILD topics and HTLD differ with respect to at least four “connectivity criteria”, i.e., “[...] instances where the XP seems to be able to reconstruct and by doing so license otherwise illicit configurations [...] or destroys an otherwise available reading [...]” (Grohmann 2003:154; see especially Cinque 1977; Anagnostopoulou 1997 and Grohmann 2003:149–152 for an extensive list of these differences). These differences lead to the conclusion that, of the two topic types, only CILD involves movement.

First, in languages where nominals and/or resumptive pronouns bear overt case, CILD and HTLD differ in terms of whether or not the case of the resumptive pronoun and the topic expression must match. In CILD constructions, the case expressed on the topic expression and on the resumptive pronoun must match, whereas in HTLD, case mismatches are tolerated. For example, in SMG, the topic expression in CILD must bear the same case (and ϕ -features) as the resumptive clitic it is associated with. In (202), the resumptive clitic *tin* ‘her’ is in accusative case; the only CILD-ed topic

expression tolerated is *tin Maria* ‘Mary’ with accusative case, but not *i Maria* ‘Mary’ with nominative. In HTLD, on the other hand, the topic expression standardly bears nominative morphology irrespective of the case of the resumptive pronoun. Thus, in the HTLD construction in (203), the case mismatch between the resumptive pronoun *tin* ‘her’ in accusative and the topic expression *i Maria* ‘Mary’ in nominative is allowed.⁶²

(202) CILD

Ipe oti *[i Maria]_i / [tin Maria]_i, tin_i emathe kala tosa
 said-3sg that the Mary_{nom} the Mary_{acc} CL_{acc} knew-3sg well so many
 xronia.
 years
 ‘He said that he had figured out Mary after so many years.’

(203) HTLD

[I Maria]_i, tin_i ematha kala tosa xronia ...
 the Mary_{nom} CL_{acc} knew-1sg well so many years
 ‘Mary, I have figured her out after so many years ...’
 [SMG (Anagnostopoulou 1997:154, ex. (6))]

On the assumption that clitics spell out the features of a moved constituent, the fact that case match is required in CILD but not in HTLD suggests that only the former involves movement of the topic expression.

Second, while CILD is sensitive to “strong island” constraints, HTLD is not (Cinque 1977, 1990; Boeckx and Grohmann 2004). According to Ross (1967), an island can be defined as a syntactic domain that is opaque to extraction. For instance,

⁶² At first glance, the examples in (202–203) do not form a (near) minimal pair; the topic expression is in an embedded clause in (202), but in a main clause in (203). For Anagnostopoulou (1997), from whom the relevant examples are taken, there is a principled reason for this. In line with Cinque’s (1977; 1990) initial observation for Italian, Anagnostopoulou also argues that HTs in SMG are confined to main clauses, whereas CILD-ed topics may appear both in embedded and main clauses. I refer the reader to Cinque (1977:410, 1990:58) and Anagnostopoulou (1997:154) for the relevant discussion on Italian and SMG respectively.

Notice, however, that contra Cinque (1977), Benincà (2001) and Benincà and Poletto (2004) argue that HTs in embedded clauses in Italian are allowed as long as they precede complementizers:

- (i) Sono certa, [questo libro]_i, che non ne_i ha mai parlato nessuno.
 I am certain, this book, that nobody (of.it) has spoken.’

[Italian (Benincà 2001:48, ex. (17b))]

Alexopoulou et al. (2005) refines Benincà’s (2001) and Benincà and Poletto’s (2004) argument and claim that HTs may appear in embedded clauses which independently license MCP.

compare the bracketed *that*-complement clause in (204a) with the bracketed complex nominal in (204b), in which the head noun is modified by a restrictive relative. The *that*-complement clause in (204a) is not an island: the *wh*-phrase is licitly extracted out of it; in contrast, in (204b), the complex noun phrase constitutes an island for the *wh*-phrase: movement of the *wh*-phrase what out of the relative clause is ungrammatical.

- (204) a. What_{*i*} did Sam say [_{CP} that Euler discovered *t_i*]?
 b. * What_{*i*} did Sam know [_{DP} the scientist [who discovered *t_i*]]?

Islands can be “strong” or “weak” depending on the relative degree of unacceptability caused by extraction (Cinque 1990; Rizzi 1990; Szabolsci 2006 for details). Complex noun phrases (204b) constitute strong islands (Cinque 1990).

CILD-ed and HTLDs differ in terms of their compatibility with strong islands, that is to say, the acceptability of such patterns when the resumptive element is inside an island and the topic expression is outside. As (205) shows, the resumptive pronoun associated with a CILD-ed topic cannot occur in a strong island, whereas the resumptive pronoun associated with a HT is grammatical in the same island construction (206).

- (205) CILD
 * [A Giorgio]_{*i*}, ieri ho conosciuto [_{DP} la ragazza che gli_{*i*} ha scritto
 ‘To Giorgio, yesterday I met the girl who wrote those
 quelle insolenze].
 insolent words to him.’

- (206) HTLD
 [Giorgio]_{*i*}, ieri ho conosciuto [_{DP} la ragazza che gli_{*i*} ha scritto
 ‘Giorgio, yesterday I met the girl who wrote those
 quelle insolenze].
 insolent words to him.’

[Italian (Cinque 1977:408, ex. (29, 33))]

Given that strong island sensitivity is a diagnostic for movement (cf. (204a–b)), the contrast in (205–206) indicates that only CILD-ed topics involve movement.

Third, in the context of a V+O idiom, CILD and HTLD differ with respect to the retention of the idiomatic reading when the DP object is left dislocated.⁶³ In the CILD pattern, the DP part of a V + O idiom can function as a CILD-ed topic

⁶³ Perhaps these constructions should be better referred to as “V + O collocations”, rather than V+O idioms, since genuine idioms cannot be split (see de Vries 2002:78, fn. 13 for this claim in the context of relativization). I will nevertheless continue to use the more widespread term “idiom”.

with retention of the idiomatic reading. This, however, is not possible in the HTLD pattern, where the DP constituent is an HT. This is exemplified in (207–208) with the SMG idiom *kani tin tixi tu* ‘(she) makes her fortune’. The nominal part of this idiom, i.e., *tin tixi tu* ‘her luck/fortune’ is CILD-ed in (207), and the idiomatic reading is preserved. In (208), on the other hand, the same part of the same idiom functions as a HT (observe the nominative case on *i tixi tu* ‘his fortune’), and the idiomatic reading is not maintained.

(207) CILD

[Tin tixi tu] kathe ftochos tin ekane pigenontas stin Ameriki.
 the luck_{acc} his every poor cl_{acc} made going to-the States
 ‘The poor made their fortune by going to the States.’

(208) HTLD

* [I tixi tu] kathe ftochos tin ekane pigenontas stin Ameriki.
 the luck_{nom} his every poor cl_{acc} made going to-the States
 [SMG (Anagnostopoulou 1997:155, ex. (7))]

DPs in V + O idioms are not semantically autonomous (Cinque 1977:402): the meaning of the idiom cannot be predicted from the meanings of its parts. This means that a V + O idiom is retrieved from the vocabulary as a chunk. The fact that the idiomatic meaning can be reconstructed in a CILD pattern but not in a HTLD pattern suggests that in the former the DP part of the idiom has been moved from its merge position, whereas in the latter construction it is merged in the position in which it occurs.

The final difference between CILD and HTLD to be reviewed in this section involves the possibility of a bound variable reading of a pronoun contained in the topic expression (for bound variable pronouns, see section 3.3.3.1.2). While a variable pronoun in a CILD-ed topic can be bound by its quantified antecedent within TP, a variable pronoun in a HT cannot be bound by a TP internal quantifier. This pattern is shown in the contrasting examples from SMG given in (209–210). The bound variable pronoun *tu* ‘his’ in the CILD-ed topic *tin mitera tu* ‘his mother’ in (209) can be bound by the quantified DP *kathenas* ‘everyone’ and thus can receive a distributive reading. In (210), which illustrates a HTLD, the distributive reading of the bound variable pronoun in the HT *i mitera tu* ‘his mother’ does not emerge, suggesting that it is not bound by the quantified DP *kathenas* ‘everyone’.

(209) CILD

[Tin mitera tu_{ij}], kathenas_i tin agapai.
 the mother_{acc} his everyone cl_{acc} love-3sg
 ‘Everyone_i loves his_{ij} mother.’

(210) HTLD

[I mitera tu_{i/j}], kathenas_i tin agapai.
 the mother_{nom} his everyone_{CL_{acc}} love-3sg
 ‘Everyone_i loves his_{i/j} mother.’

[SMG (Anagnostopoulou 1997:155, ex. (9))]

The fact that the distributive reading of the bound variable pronoun is available in (209) but not in (210) suggests that in (209), the left-dislocated topic reconstructs to a position within the TP, from where it is c-commanded by the quantified DP subject *kathenas* ‘everyone’. In contrast, the topic expression in (210) is taken to be externally merged in the position in which it appears.

The differences between CILD and HTLD are summarized in Table 4.4. Based on

		CILD	HTLD
General asymmetries	Lexical category of the resumptive element	only clitics	clitics, strong (tonic) pronouns, epithets
	Syntactic category of the topic expression	any maximal category	only DP
Connectivity criteria	Case match between the topic expression and the resumptive element	obligatory	not obligatory
	Strong island sensitivity	YES	NO
	Topicalization of O in a V + O idiom chunk	YES	NO
	Bound variable reading of a pronoun in the topic expression	YES	NO

Table 4.4: Differences between CILD and HTLD

the properties presented above and summarized in Table 4.4, Cinque (1977) argues that CILD-ed topics involve movement, whereas HTs are instances of first-merged topics (see also Anagnostopoulou 1997; Grohmann 2003; Boeckx and Grohmann 2004, a.o.).⁶⁴ This hypothesis is further elaborated by Benincà (2001) and Benincà

⁶⁴ See, however, Cinque (1990:chapter 2), for a refinement of the argument that CILD involves A'-movement of the topic expression. In the main body of the text, I abstract away from this refinement and assume that CILD instantiates movement. Cinque (1990) argues that the relation between HT and its resumptive element in HTLD is established via a kind of binding relation.

and Poletto (2004), who argue that hanging topics are hosted in a functional projection above ForceP.⁶⁵

- (211) [Hanging topic [_{ForceP} che [Left-dislocated topic(s) ... [_{TP} ...]]]]
(Benincà and Poletto 2004:65, ex. (40))

In the next section, I return to the PhG topic expressions that occur to the left of the complementizers, and based on Table 4.4, I argue that these topic expressions can at best be characterized as hanging topics.

4.5.4.2 CILD and HTLD in PhG

In section 4.5.4, I provided independent evidence for postulating a topic position above the complementizer *ær* ‘if’. I referred to these topics in that section as “higher topics”. The relevant example is reproduced from (191) below in (212), in which *ton paxlá* ‘the fava bean’ is a higher topic.

- (212) Rótsa [[ton paxlá]_i, ær na *(ta_i) katéxun].
ask.PFV.PST.1SG the.M.ACC.SG fava.bean.M.ACC.SG if SUBJ 3OBJ KNOW.IPFV.NPST.3PL
(lit.) ‘I asked if the fava bean, they know it.’
(higher topic construction)

Recall from section 3.3.3.2.5 that topics can also occur lower than the complementizer *ær* ‘if’. I identified these “lower topics” as CILD-ed topics, and in section 3.4.2 I further classified them into two subtypes: shifting topics and familiar topics. Abstracting away from the precise subtype here, (213) is an example of a CILD pattern in which the topic expression *ton paxlá* ‘the fava bean’ follows the complementizer *ær* ‘if’. The fact that this topic expression linearly precedes the subjunctive marker *na* indicates that it is definitely a left peripheral topic.

- (213) Rótsa [ær [ton paxlá]_i, na *(ta_i) katéxun].
ask.PFV.PST.1SG if the.M.ACC.SG fava.bean.M.ACC.SG SUBJ 3OBJ KNOW.IPFV.NPST.3PL
(lit.) ‘I asked if the fava bean, they know it.’
(CILD)

The classification of both (212) and (213) as topic constructions is once again clear from the obligatoriness of a resumptive element, *ta*, inside the comment part of the clause in both instances. The question that arises is whether both CILD-ed topics and higher topics instantiate the same topic type, i.e., CILD, or if they belong to distinct types. In this section, based on the criteria provided in the literature to distinguish

⁶⁵ Benincà (2001) labels this functional projection Disc(ourse)P.

CILD-ed topics from HTs (summarized in section 4.5.4.1), I argue that higher topics should be best characterized as HTs, which are first-merged in the position they appear. This conclusion has certain ramifications on the analysis of dislocated constituents in *ki* constructions, as I show in sections 4.5.4.3–4.5.4.5.

First, let us look at what types of elements can resume the topic expression in CILD and higher topic constructions. CILD-ed (in)direct object topics are obligatorily resumed by a(n in)direct object clitic (see section 2.4.2.2 and chapter 3). They cannot be resumed by a strong (tonic) pronoun. This is illustrated by the examples in (214). (214a) exemplifies the obligatory nature of the clitic, *ta*, which resumes the CILD-ed direct object topic, *ton páxla* ‘the fava bean.’ (214b) illustrates a nominal topic with an adjunct function within the associate clause. Being weak elements, PhG clitics cannot be complements of prepositions. Therefore, in this example, inserting the clitic *ta* as the resumptive element selected by the preposition *mo* ‘with’ is ungrammatical. Similarly, although a strong pronoun such as *t itóna* ‘him’ can be a complement of a preposition, such a strong pronoun cannot resume the CILD-ed topic (214c).⁶⁶ In effect, then, a CILD-ed DP topic assuming an adjunct function inside its associate clause is ungrammatical in PhG. The adjunct related CILD-ed topic becomes acceptable if the topic expression itself takes the form of a PP, as shown in (214d) with the PP topic expression *mo ton paxlá* ‘with the fava bean’.⁶⁷

(214) CILD

- a. Rótsa [ær [ton paxlá]_i], na *(ta)_i
 ask.PFV.PST.1SG if the.M.ACC.SG fava.bean.M.ACC.SG SUBJ 3OBJ
 katéxun].
 know.IPFV.NPST.3PL
 (lit.) ‘I asked if the fava bean, they know it.’
- b. *Rótsa [ær [ton paxlá]_i], na
 ask.PFV.PST.1SG if the.M.ACC.SG fava.bean.M.ACC.SG SUBJ
 psísi faí mo ta_i].
 cook.PFV.NPST.3SG dish.N.NOM.SG with 3OBJ
 int.: ‘I asked if, the fava bean, she would make a dish out of it.’

⁶⁶ In fact, the strong pronoun is *atóna* (see section 2.4.2.2, Table 2.26). Recall from section 2.4.2.4, fn. 61, that when pronouns are complements to certain prepositions, including *mo* ‘with’ an epenthetic [t] is inserted between the preposition and the pronoun. Here, the initial vowel of the pronoun is further changed to [i] for reasons unclear to me, i.e., *mo t atóna* > *mo t itóna*.

⁶⁷ There are no clitics corresponding to PPs in PhG; therefore, in (214d), there is no overt resumptive element. In this instance, the fact that the PP is not a contrastive focus expression is evidenced by the fact that it is associated neither with contrastive reading nor with focal stress (see section 3.2.4 and 3.3.3.2.6 for the formal properties of left peripheral focus in PhG).

- c. *Rótsa [ær [ton paxlá]_i, na
ask.PFV.PST.1SG if the.M.ACC.SG fava.bean.M.ACC.SG SUBJ
psísi faí mo t itóna_i].
cook.PFV.NPST.3SG dish.N.NOM.SG with him
int.: ‘I asked if, the fava bean, she would make a dish out of it.’
- d. Rótsa [ær [mo ton paxlá]_i, na
ask.PFV.PST.1SG if with the.M.ACC.SG fava.bean.M.ACC.SG SUBJ
psísi faí].
cook.PFV.NPST.3SG dish.N.NOM.SG
‘I asked if, out of the fava bean, she would make a dish.’

Higher topics are most naturally resumed by a clitic pronoun if they assume (in)direct object function inside the clause (see (215a)). However, unlike with CILD, this is not obligatory. For instance, when the topic expression in a higher topic construction corresponds to an adjunct function within the associated clause, they should be resumed by a strong pronoun because, as stated above, clitics cannot be complements to prepositions. This is shown in (215b–c). In (215b), the complement of the preposition *mo* ‘with’ is the clitic, and the structure is ungrammatical, on par with (214b). Crucially, in the same construction, the strong pronoun *t itóna* ‘him’ is grammatical as the resumptive pronoun (215c).

(215) Higher topic construction

- a. Rótsa [[ton paxlá]_i, ær na *(ta)_i
ask.PFV.PST.1SG the.M.ACC.SG fava.bean.M.ACC.SG if SUBJ 3OBJ
katéxun].
know.IPFV.NPST.3PL
(lit.) ‘I asked if the fava bean, they know it.’
- b. *Rótsa [[ton paxlá]_i, ær na psísi
ask.PFV.PST.1SG the.M.ACC.SG fava.bean.M.ACC.SG if SUBJ cook.PFV.NPST.3SG
faí mo ta_i].
dish.N.NOM.SG with 3OBJ
int.: ‘I asked if, the fava bean, she would make a dish out of it.’
- c. Rótsa [[ton paxlá]_i, ær na psísi
ask.PFV.PST.1SG the.M.ACC.SG fava.bean.M.ACC.SG if SUBJ cook.PFV.NPST.3SG
faí mo t itóna_i].
dish.N.NOM.SG with him
int.: ‘I asked if, the fava bean, she would make a dish out of it.’

Especially the contrast between (214c) and (215c) reveals that while a CILD-ed topic cannot be resumed by a strong pronoun, a higher topic can.

Second, a CILD-ed topic cannot but a higher topic can be resumed by an epithet. This is shown with the contrast in (216–217). (216) illustrates a CILD construction in which the topic expression is *ton Andriá* ‘Andrew’ and the resumptive element is the epithet *aúča an avanáxi* ‘such an simpleton’. The sentence is uniformly judged as unacceptable. In contrast, (217) which illustrates a higher topic resumed by the same epithet as in (216), is acceptable.

(216) CILD

* Rótsa [æɾ [ton Andriá]_i, na iðin
ask.PFV.PST.1SG if the.M.ACC.SG Andrew.M.ACC.SG SUBJ see.PFV.NPST.3SG
aúča an avanáxi]_i.
such a simpleton.N.NOM.SG
int.: ‘I asked if, Andrew, she saw such an simpleton.’

(217) Higher topic construction

Rótsa [[ton Andriá]_i, æɾ na iðin aúča
ask.PFV.PST.1SG the.M.ACC.SG Andrew.M.ACC.SG if SUBJ see.PFV.NPST.3SG SUCH
an avanáxi]_i.
a simpleton.N.NOM.SG
(lit.) ‘I asked if, Andrew, she saw such an simpleton.’

Third, CILD and higher topic constructions also differ as to which syntactic categories can serve as topic expression. For instance, as CILD-ed topics both a DP and a PP are uniformly judged as acceptable. This is illustrated in (218a), where the topic expression is a DP: *ton paxlá* ‘the fava bean’, and in (218b), where it is a PP: *so saxáti tría* ‘at three o’clock’:

(218) CILD

- a. Rótsa [æɾ [_{DP} ton paxlá]_i, na *(ta)_i
ask.PFV.PST.1SG if the.M.ACC.SG fava.bean.M.ACC.SG SUBJ 3OBJ
katéxun].
know.IPFV.NPST.3PL
(lit.) ‘I asked if the fava bean, they know it.’
- b. Rótsa [æɾ [_{PP} so saxáti tría]_i, na
ask.PFV.PST.1SG if at.the.N.ACC.SG hour.N.ACC.SG three SUBJ
nártun].
come.PFV.NPST.3PL
(lit.) ‘I asked if at three o’clock, they would come.’

In contrast, a higher topic can only be of the category DP, e.g., (219a) with the DP *ton paxlá* ‘the fava bean’. A PP, such as *so saxáti tría* ‘at three o’clock’ is unacceptable as a higher topic (219b).

(219) Higher topic construction

- a. Rótsa [[_{DP} ton paxlá]_i, ær na *(ta_i)
ask.PFV.PST.1SG the.M.ACC.SG fava.bean.M.ACC.SG if SUBJ 3OBJ
katéxun].
know.IPFV.NPST.3PL
(lit.) ‘I asked if the fava bean, they know it.’
- b. *Rótsa [[_{PP} so saxáti tría], ær na
ask.PFV.PST.1SG at.the.N.ACC.SG hour.N.ACC.SG three if SUBJ
nártun].
come.PFV.NPST.3PL
int.: ‘I asked if at three o’clock, they would come.’

These three differences between CILD-ed topics and what I called “higher topics” already suggest that they may represent distinct topic types. In what follows, I will show that these topics differ with respect to connectivity effects as well: Only CILD-ed topics show connectivity effects, whereas higher topics do not. These differences should be interpreted as follows: CILD involves the movement of the topic expression; in higher topic constructions, on the other hand, the topic is merged in its surface position. This surface position occupied by the higher topic corresponds to the position that hosts hanging topics, identified in section 4.5.4.1.

First, a CILD-ed topic and its resumptive clitic must match in case. In a higher topic construction, on the other hand, case mismatches are tolerated. Consider first (220), a CILD with the dislocated topic expression *o paxlás* in nominative case. The clitic in the clause that resumes this topic expression is *ta* in accusative case. The sentence is uniformly judged as unacceptable. In contrast, (221), which illustrates a higher topic construction with a nominative topic expression and an accusative resumptive clitic, is acceptable for speakers.

(220) CILD

- *Rótsa [ær [_{DP} o paxlás]_i, na ta_i
ask.PFV.PST.1SG if the.M.NOM.SG fava.bean.M.NOM.SG SUBJ 3OBJ
psísi].
cook.PFV.NPST.3PL
int.: ‘I asked if the fava bean, she would cook it.’

(221) Higher topic construction

Rótsa [[_{DP} O paxlás]_i, ær na ta_j
ask.PFV.PST.1SG the.M.NOM.SG fava.bean.M.NOM.SG if SUBJ 3OBJ
psísi].
cook.PFV.NPST.3PL
(lit.) ‘I asked if the fava bean, she would cook it.’

Second, CILD in PhG is subject to island effects. This is shown in (222) where the resumptive clitic *ta* is in the relative clause *to faí tu ta éši* ‘the dish which has’em’, which constitutes a strong island (section 4.5.4.1), while the topic expression *ta paxláða* ‘the fava beans’ is outside it. The sentence is ungrammatical. On the other hand, a higher topic construction is immune to strong island effects. This is illustrated in the grammatical example (223), where the resumptive strong pronoun *até* ‘them’ is in the relative clause *to faí tu éši até* ‘the dish which has them’, while the topic expression *ta paxláða* ‘the fava beans’ is outside of it.

(222) CILD

* Rótsa [æR [_{DP} ta paxláða]_i, na katéši
ask.PFV.PST.1SG if the.N.ACC.PL fava.bean.N.ACC.PL SUBJ know.PFV.NPST.3SG
[_{DP} to faí tu ta_j éši]].
the.N.ACC.SG dish.N.ACC.SG that 3OBJ have.NPST.3SG
int.: ‘I asked if, the fava beans, he knows the dish which has’em.’

(223) Higher topic construction

Rótsa [[_{DP} ta paxláða]_i, ær na katéši
ask.PFV.PST.1SG the.N.ACC.PL fava.bean.N.ACC.PL if SUBJ know.PFV.NPST.3SG
[_{DP} to faí tu éši até]].
the.N.ACC.SG dish.N.ACC.SG that have.NPST.3SG them
int.: ‘I asked if, the fava beans, he knows the dish which has them.’

Third, CILD and higher topic constructions differ as to whether or not the topic expression can be the DP part of V + O idioms. In CILD, this is possible, whereas in a higher topic construction it is not. The contrast between the two constructions is shown in (225–226) with the V + O idiom in (224). In (225), the DP *ftálmi* ‘eye’ of the idiom chunk in (224) serves as a CILD-ed topic. The sentence is acceptable for the majority of the speakers consulted (13 out of 15). In (226), the DP part of the idiom chunk in (224) is the topic expression in a higher topic construction. For all speakers consulted, the sentence is unacceptable.

(224) fténu (an) ftálmi
make.IPFV.NPST.1SG a eye.N.NOM.SG
‘(I) cause someone to be touched by an evil eye’
lit.: ‘I make an eye’

(225) CILD

? Rótsa [æɾ [DP an ftálmi]_i, na ta_i píkan
 ask.PFV.PST.1SG if an eye.N.NOM.SG SUBJ 3OBJ make.PFV.NPST.3SG
 so čočúxi].
 to.the.N.ACC.SG child.N.ACC.SG
 ‘I asked if they caused the child to be touched by an evil eye.’

(226) Higher topic construction

* Rótsa [[DP an ftálmi]_i, æɾ na ta_i píkan
 ask.PFV.PST.1SG an eye.N.NOM.SG if SUBJ 3OBJ make.PFV.NPST.3SG
 so čočúxi].
 to.the.N.ACC.SG child.N.ACC.SG
 int.: ‘I asked if they caused the child to be touched by an evil eye.’

Finally, PhG CILD allows for a bound variable reading of a pronoun contained within the topic expression. A higher topic construction, on the other hand, does not allow the bound variable reading of a pronoun contained inside it. These results are similar to the SMG facts given in (209–210). In (227), a CILD example, the pronoun *tu* ‘his’ inside the DP topic expression *ti ma tu* ‘his mother’ may receive a distributive reading, suggesting that it is bound by the quantified DP subject of the clause, *xer to čočúxi* ‘every child’. In (228), on the other hand, which is an example of a higher topic construction with the DP topic expression *i ma tu* ‘his mother’, a distributive—bound variable—reading is unavailable.

(227) CILD

Rótsa [æɾ [DP ti ma tu_{ij}], na ta_i
 ask.PFV.PST.1SG if the.F.ACC.SG mother.F.ACC.SG his SUBJ 3OBJ
 γapá [xer to čočúxi]_i].
 love.IPFV.NPST.3SG every the.N.NOM.SG child.N.NOM.SG
 ‘I asked if every child_i loves his_{ij} mother.’

(228) Higher topic construction

Rótsa [[DP ti ma tu_{ij}], æɾ na ta_i
 ask.PFV.PST.1SG the.F.ACC.SG mother.F.ACC.SG his if SUBJ 3OBJ
 γapá [xer to čočúxi]_i].
 love.IPFV.NPST.3SG every the.N.NOM.SG child.N.NOM.SG
 ‘I asked if every child_i loves his_{ij} mother.’

The summary of the differences between CILD constructions and higher topic constructions in PhG is found in Table 4.5.

		CILD	Higher topic constr.
General asymmetries	Lexical category of the resumptive element	only clitics	clitics, strong (tonic) pronouns, epithets
	Syntactic category of the topic expression	any maximal category	only DP
Connectivity criteria	Case match between the topic expression and the resumptive element	obligatory	not obligatory
	Strong island sensitivity	YES	NO
	Topicalization of O in a V + O idiom chunk	YES	NO
	Bound variable reading of a pronoun in the topic expression	YES	NO

Table 4.5: Differences between CILD and Higher topic construction

These differences are identical to the differences between CILD and HTLD discussed in the literature (see section 4.5.4.1, especially Table 4.4). Based on the following similarities: (i) case matching between the topic expression and its resumptive pronoun is not required, (ii) there is no island sensitivity, (iii) topicalization of the nominal part of a V + O idiom is not possible, and (iv) the bound variable reading of a pronoun inside the topic expression is not available, I conclude that topic expressions in what I labeled “higher topic” constructions are HTs hosted in $\text{TopP}_{[\text{Hanging}]}$, i.e., topics that do not involve movement but rather that are merged in the dislocated position labelled Spec, $\text{TopP}_{[\text{Hanging}]}$.

Before presenting a structural representation of $\text{TopP}_{[\text{Hanging}]}$, one further issue relevant to PhG HTs needs to be addressed. Examples such as (229), where two DP topic constituents, *i néka* ‘the woman’ and *ta paxláða* ‘the fava beans’, precede the complementizer *ær* ‘if’, suggest that more than one hanging topic is allowed in PhG.

- (229) Rótsa [[_{DP} i néka], [_{DP} ta
ask.PFV.PST.1SG the.F.NOM.SG woman.F.NOM.SG the.N.ACC.PL
paxláða]_i, ær na psísi faí mo ti tá_i].
fava.beans.N.ACC.PL if SUBJ COOK.PFV.NPST.3SG dish.N.NOM.SG with them
‘I asked if, the woman, the fava beans, she would make a dish out of them.’

This pattern differs from the one discussed by Cinque (1990:58); Benincà (2001) and Benincà and Poletto (2004), who all consider multiple HTs to be ungrammatical in

Italian, this in contrast with CILD. For example, in (230), two CILD-ed topic expressions, *a Gianni* ‘to Gianni’ and *di questo libro* ‘about this book’, can co-occur. In (231), on the other hand, the co-occurrence of what would be two HTs, *Gianni* and *questo libro* ‘this book’, in the same sentence is ungrammatical (recall from section 4.5.4.1 that in Italian, HTs can only be DPs, but CILD-ed topics can also be PPs).

(230) CILD

[_{PP} A Gianni], [_{PP} di questo libro], non gliene hanno mai parlato.
to Gianni of this book they of it haven’t talked to him
‘They did not talk to Gianni about this book.’

(231) HTLD

* [_{DP} Gianni], [_{DP} questo libro], non gliene hanno mai parlato.
Gianni this book they of it haven’t talked to him
int.: ‘They did not talk to Gianni about this book.’

[Italian (Benincà and Poletto 2004:64, ex. (35))]

However, the restriction on multiple HTs within a single clause present in Italian (230–231) is not universal. There are also languages in which more than one HT in a single clause is tolerated. One such language is German, as reported by Grohmann (1997, 2000, 2003) and Boeckx and Grohmann (2004). This is illustrated in (232), in which three HTs in nominative case, i.e., *der Alex* ‘Alex’, *der Wagen* ‘the car’ and *seine Mutter* ‘his mother’, which do not match in case with their respective resumptive pronouns *ihm* ‘he.DAT’, *den* ‘he.ACC’ and *sie* ‘she.NOM’, occur in the same clause.

(232) [Der Alex]_j, [der Wagen]_j, [seine Mutter]_k, gestern hat
the Alex.M.NOM.SG the car.M.NOM.SG his mother.F.NOM.SG yesterday had.3SG
*sie*_k *ihm*_i *den*_j geschenkt.
she.NOM he.DAT he.ACC given
‘Alex, his mother, the car, yesterday she gave (it) to him.’

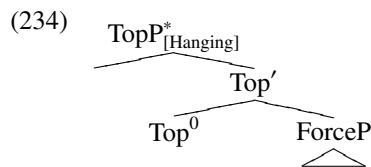
[German (adapted from Grohmann 2003:162, ex. (59a))]

Another such language is Czech, as reported by Sturgeon (2008:61). More specifically, Sturgeon (2008) argues that multiple HTs in this language may co-occur completely licitly in a single clause provided that they agree with their respective resumptive elements in case (I refer the reader to Sturgeon 2008:47–50 for the lack of connectivity effects in HTLD in Czech). In (233a), the resumptive elements of the hanging topics *Honzovi* ‘to Honza’ and *knížku* ‘the book’ are the clitic pronouns *mu* ‘he.DAT’ and *ji* ‘it.ACC’. In (233b), the resumptive elements are the demonstrative

pronouns *tomu* ‘that.DAT’ and *tu* ‘that.ACC’.⁶⁸

- (233) a. [Honzovi]_i [knížku]_j, chci mu_i ji_j dát zítra večer.
 Honza.DAT book.ACC want him.DAT.CL it.ACC.CL give.INF tomorrow night
 ‘Honza, the book, I want to give it to him tomorrow night.’
- b. ? [Honzovi]_i [kníhu]_j, tu_j jsem tomu_i chtěla koupit.
 Honza.DAT book.ACC that.ACC AUX.1SG.CL that.DAT wanted buy.INF
 ‘Honza, the book, I wanted to buy him one.’
 [Czech (adapted from Sturgeon 2008:60–61, ex. (44), fn. 11, ex. (i))]

In terms of availability of multiple HTs, PhG is similar to German (232) and Czech (233), not Italian. Based on the discussion above, I propose a structure with a recursive projection to host HTs in PhG (234).



In the next section, I will show that apparently right-dislocated constituents in *ki*-constructions are merged in $\text{TopP}^*_{[\text{Hanging}]}$ in (234).

4.5.4.3 *Ki* and HTLD

Recall from section 4.5.4 that in *ki*-constructions, constituents of the clause which has itself moved to Spec, SAP can occur as topic expressions in a position that linearly follows *ki*. I reproduce the relevant example (185) of an emphatic construction in (235). For other *ki*-constructions with similar right-dislocation phenomenon, see examples (183–184).

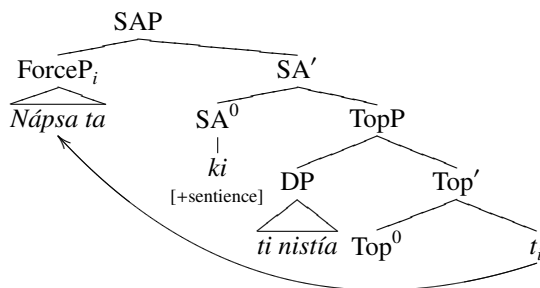
⁶⁸ To be exact, according to Sturgeon (2008), (233a–b) belong to two types of HTLD: HTLD II and HTLD I respectively. I refer the reader to Sturgeon (2008:39–41) for the formal differences between these two types. See especially Sturgeon (2008:47–55), where the author argues that neither HTLD I nor HTLD II involves movement of the topic expression. Although in the examples in (233) from Sturgeon (2008), the resumptive elements and HTs match in case, the author states that this is only a tendency by the speakers, not a grammatical requirement. The difference *knížku* vs. *knihu* ‘book.ACC’ between (233a–b) is due to a diminutive suffix on the former variant.

(235) Emphatic construction

Nápsa ta ki, ti nistía.
 light.PFV.PST.1SG 3OBJ PRT the.F.ACC.SG fire.F.ACC.SG
 ‘I lit the fire!’

In the same section, against the LCA assumed in this thesis, I proposed that the topic expressions such as *ti nistía* ‘the fire’ in (235), are hosted in a topic position above ForceP, and that ForceP moves to Spec, SAP. Therefore, the proposed derivation for (235) is as (236) (see also (190)).

(236)



Furthermore, in section 4.5.4.2, I also argued that a $\text{TopP}_{[\text{Hanging}]}$ immediately dominating ForceP should be postulated in PhG. A possible extension of this argument would be that topic expressions following *ki* in *ki*-constructions are HTs (conforming to the structure in (189b)). In what follows, I will show that this extension is indeed legitimate; put differently, topics following *ki* are directly merged in Spec, $\text{TopP}_{[\text{Hanging}]}$. The forthcoming discussion involves only the emphatic constructions, but the conclusions naturally extend to other *ki*-constructions as well.

First, as shown in (235), the resumptive element of the topic expression following *ki* can be a clitic, but this is not obligatory. If required—for instance when the topic expression assumes an adjunct function within the clause, i.e., its resumptive element is a complement to a preposition—the resumptive element can also be a strong pronoun. Moreover, the topic expression can also be resumed by an epithet. These properties are illustrated in (237a) and (237b) respectively. In (237a) the constituent which resumes the DP topic expression *ton Andriá* ‘Andrew’ is the strong pronoun *t itóna* ‘him’, and in (237b) the resumptive element is an epithet, *aúča an avanáxi* ‘such a simpleton’.

- (237) a. Čo a ipáu [PP mo t itóna_i] ki, [DP ton
 not FUT.DEF GO.PFV.NPST.1SG with him PRT the.M.ACC.SG
 Andriá]_i!
 Andrew.M.ACC.SG

- 'I am not going with him, Andrew (that is)!'
- b. Čo a ipáu [pp mo aúča an avanáxi] ki,
 not FUT.DEF go.PFV.NPST.1SG with such a simpleton.N.NOM.SG PRT
 [DP ton Andriá]_i!
 the.M.ACC.SG Andrew.M.ACC.SG
 'I am not going with such an simpleton, Andrew (that is)!'

Second, only DPs are acceptable as post-*ki* topics (cf. (237–238)). Other categories are judged unacceptable in this position. This is shown in (238a–b), both of which are ungrammatical due to the PP nature of the post-*ki* topics: *mo ton Andriá* 'with Andrew' (238a) and *so saxáti tría* 'at three o'clock' (238b).

- (238) a. *Čo a ipáu ki, [pp mo ton Andriá]!
 not FUT.DEF go.PFV.NPST.1SG PRT with the.M.ACC.SG Andrew.M.ACC.SG
 int.: 'I am not going, with Andrew!'
- b. *Čo írtin ki, [pp so saxáti tría]!
 not come.PFV.PST.3SG PRT at.the.N.ACC.SG hour.N.ACC.SG three
 int.: 'She did not come, at three o'clock!'

Third, there is no strict case-match requirement between the topic expression to the right of *ki* and the resumptive element within its associated clause (at least according to 11 speakers out of 15). In (239), for instance, while the DP topic expression *o Andriás* is in the nominative case, its associate clitic *ta* is in the accusative.

- (239) ?Čo a ta_i stríngsu ki, [DP o Andriás]_i!
 not FUT.DEF 3OBJ invite.PFV.NPST.1SG PRT the.M.NOM.SG Andrew.M.NOM.SG
 'I am not going to invite him, Andrew (that is)!'

Fourth, topic constructions in which the topic expression occurs to the right of *ki* seem to be immune to strong island effects. This is shown in (240) where the resumptive element (the demonstrative *čina* 'them') of the topic expression *ta paxláða* 'the fava beans' is in the (Complex NP) relative clause; yet the sentence is acceptable.

- (240) Čo katéxum [DP faí tu na éši čína]_i ki,
 not know.IPFV.NPST.1PL food.N.NOM.SG that SUBJ have.NPST.3SG they.NOM PRT
 [DP ta paxláða]_i!
 the.N.NOM.PL fava.bean.N.NOM.PL
 'We don't know (any) food which has them, the fava beans (that is)!'

Fifth, if the topic expression after *ki* is the DP part of a V + O idiom chunk, the idiomatic meaning is not retained, which is in line with previous observations pertinent to HTLD (see section 4.5.4.2). In (241), the DP, *an fálmi* 'an eye', of a V

+ O idiom, *fténu (an) ftálmi* ‘(I) cause someone to be touched by an evil eye’ (see (224)), functions as a topic to the right of the particle *ki*. In this case, the idiomatic reading is not retained: the intended reading, i.e., ‘they caused us to be touched by an evil eye’ is not obtained.

- (241) * Píkan mis ta_i ki, [_{DP} an ftálmi]_i!
 make.PFV.PST.3PL 1PL.OBJ 3OBJ PRT an eye.N.NOM.SG
 int: ‘They caused us to be touched by an evil eye!’

Finally, a pronoun inside the topic expression is not easily bound by a clause internal quantified DP antecedent.⁶⁹

- (242) [_{DP} Xer to čočúxi]_i fílsin ta ki, [_{DP} i
 every the.N.NOM.SG child.N.NOM.SG kiss.PFV.PST.3SG 3OBJ PRT the.F.NOM.SG
 ma tu_{ij}]_i!
 mother.F.NOM.SG his
 ‘Every child_i kissed her, his_{ij} mother (that is)!’

The observations above reveal that constituents that occur to the right of *ki* bear the properties of HTs defined in sections 4.5.4.1–4.5.4.2. On the basis of these properties I conjecture that they are also directly merged (conforming to (189b) as HTs in Spec, TopP*_[Hanging] above ForceP.

As a final note, recall from section 4.5.4.2, that multiple HTs are allowed in PhG. In the context of *ki*-constructions, this means that multiple HTs would be predicted to be able to co-occur in a post-*ki* position. As (243) shows, this prediction is borne out. In this example, there are two HTs: the direct object, *ta paxláða* ‘the fava beans’, and the indirect object, *ti néka* ‘(to) the woman’. The sentence is grammatical for all speakers.

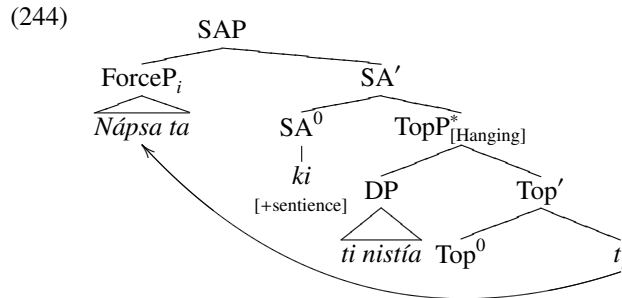
- (243) Ma ðóka ta ki, [_{DP} ta paxláða] [_{DP} ti
 not give.PFV.PST.1SG 3OBJ PRT the.N.ACC.PL fava.beans.N.ACC.PL the.F.ACC.SG
 néka]!
 woman.F.ACC.SG
 ‘I did’t give them to her, the fava beans to the woman (I mean)!’

⁶⁹ The example in (242) slightly improves if the topic expression is in the accusative case. (i) was judged as acceptable by four speakers out of nine.

- (i) [_{DP} Xer to čočúxi]_i fílsin ta ki, [_{DP} ti ma
 every the.N.NOM.SG child.N.NOM.SG kiss.PFV.PST.3SG 3OBJ PRT the.F.ACC.SG mother.F.ACC.SG
 tu_{ij}]_i!
 his
 ‘Every child_i kissed her, his_{ij} mother (that is)!’

Why this is accepted by four speakers remains a question for future research.

In the light of the information provided so far with respect to the nature of post-*ki* topic expressions, I replace the structure of (235), which was given in (236), with the final structure in (244).



By postulating the projection $\text{TopP}^*_{[\text{Hanging}]}$ immediately dominating ForceP we can formulate an analysis of apparent complement clauses in PCC constructions with *ki*. Recall from section 4.5.3.4 that when SAP projects in a PCC construction, the complement clause is not embedded under the matrix verb by conventional complementation. For this reason, I have thus far showed the relation between a complement clause and its associate matrix clause in a PCC with *ki* as \Rightarrow . In the next section, I propose that in such PCC constructions, the apparent embedded clause is in fact first-merged in $\text{TopP}^*_{[\text{Hanging}]}$. This proposal is supported by characteristics that these clauses share with DP HTs.

4.5.4.4 Apparent complement clauses as HTs

In this section, I adopt the hypothesis that complement clauses in PCCs that are accompanied by a matrix particle *ki* are hanging topics first-merged in Spec, $\text{TopP}^*_{[\text{Hanging}]}$. The matrix verb's THEME θ -role is assigned to the resumptive element, which is obligatorily present in the PCCs with *ki* and which assumes the direct object function (see section 4.3.2.1.3). Given these assumptions, the PCC with *ki* in (173a), repeated here as (245a), can be structurally represented as in (245b).

- (245) a. $\gamma\text{riká}$ ta ki [a ta $skotósun$ $até$
 realize.IPFV.NPST.3SG 3OBJ PRT FUT.DEF 3OBJ kill.PFV.NPST.3PL this.PL
 ta čočúxa].
 the.N.NOM.PL child.N.NOM.PL
 'She realizes (that) these children are going to kill her.'

- b. Ípa *(ató_i) *ki*, [Øčo xa nártun ta
say.PFV.PST.1SG this.ACC PRT not FUT.CF come.PFV.NPST.3PL the.N.NOM.PL
čočúxa]_i.
child.N.NOM.PL
(lit.) ‘I said this: that the children would not come.’
- c. Ípa *(aúča an pséma_i) *ki*, [Øčo xa nártun
say.PFV.PST.1SG such a lie.N.NOM.SG PRT not FUT.CF come.PFV.NPST.3PL
ta čočúxa]_i.
the.N.NOM.PL child.N.NOM.PL
(lit.) ‘I said such a lie; namely, that the children would not come.’

The facts presented in (250) suggest that an apparent complement clause in a PCC with *ki* should be regarded as a ForceP directly merged in Spec, TopP*_[Hanging], as represented in (245b).⁷⁰ This representation also immediately accounts for the lack of connectivity between the apparent complement clause and its associate main clause in PCCs with *ki*, which is otherwise available in relevant PCCs. Recall from section 4.5.4.3 that when *ki* is present in a PCC, long-distance *wh*-extraction from the complement clause and BNQ licensing within the embedded clause by a licenser in the main clause both become unavailable. The relevant examples are repeated from (176–177) in (251–252).

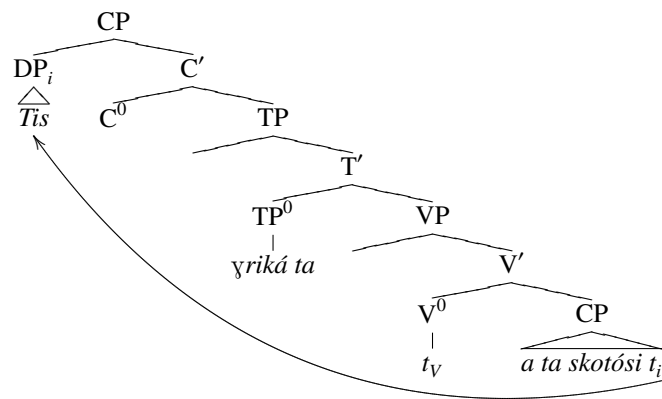
- (251) a. Tis_i γriká ta [a ta skotósi t_i]?
who.NOM realize.IPFV.NPST.3SG 3OBJ FUT.DEF 3OBJ kill.PFV.NPST.3SG
‘Who does she realize is going to kill her?’
- b. *Tis_i γriká ta *ki* [a ta skotósi t_i]?
who.NOM realize.IPFV.NPST.3SG 3OBJ PRT FUT.DEF 3OBJ kill.PFV.NPST.3SG
- (252) a. Čo pandéxu [típus pómimi].
not think.IPFV.NPST.1SG nothing remain.PFV.PST.3SG
‘I don’t think that anything remained, i.e., is left.’
- b. *Čo pandéxu *ki* [típus pómimi].
not think.IPFV.NPST.1SG PRT nothing remain.PFV.PST.3SG

The differences between PCCs with and without *ki* in (251–252) are the result of two distinct structures. In a PCC without *ki*, SAP does not project, and when SAP does not

⁷⁰ One property of HTs proposed in the literature is that they can only be (extended projections of) nominal categories (see section 4.5.4.1). However, the conclusion I reach here, according to which ForceP, an extended projection of VP, is directly merged in TopP*_[Hanging], is not in line with the literature. Although I have no explanation for this divergence at this time, it is interesting to note that left-dislocated complement clauses (subjects or topics) have been analyzed in the literature as embedded under a nominal category (say a D⁰; see a.o., Davies and Dubinsky 2009; Takahashi 2010; Moulton 2015).

project, the PCC constitutes a genuine complementation pattern, where the complement clause is c-commanded by (the material in) the main clause. Thus, long distance *wh*-movement or BNQ licensing are freely available, as the structure of (251a) given in (253) shows.⁷¹

(253)



In a PCC with *ki*, on the other hand, SAP projects. The apparent complement clause in this case is merged directly in Spec, TopP*_[Hanging], as shown in the representation in (245b). This is to state that the complement clause is in fact an adjunct of the main clause. In the literature, adjuncts are understood to block extraction out of themselves (Ross 1967), as the illicit extraction of *what* from the adverbial adjunct clause in (254) shows.

(254) * What_i did you go home [_{CP_{adverbial}} after cleaning *t_i*]?

Since this type of extraction gives rise to complete ungrammaticality, adjunct clauses have been categorized as strong islands (see section 4.5.4.1; Cinque 1990; Szabolsci 2006 and much subsequent work). Returning to *ki*, the complement clause in a PCC with *ki*, merged in Spec, TopP*_[Hanging] as an adjunct (245b), is most naturally expected to block extraction, as illustrated in (251b). Similarly, the lack of BNQ licensing can be reduced to the adjunct nature of this complement clause. A BNQ in an adjunct clause cannot be licensed by a licenser in its associate clause. In the ungrammatical sentence in (255), for instance, it is the BNQ *anything*, which cannot be licensed by the matrix negation, which causes the ungrammaticality.

(255) * I did not go home [_{CP_{adverbial}} after I cleaned anything].

⁷¹ In (253), I do not specify the precise landing position of the moved *wh*-phrase, nor any intermediary positions. I simply indicate the final position of this movement as Spec, CP. This point, however, is not essential to the current discussion.

If we accept the apparent complement clause to be an adjunct clause, then the lack of BNQ licensing follows from the same mechanism as the one that blocks BNQ licensing in (255).

4.5.4.5 HTs above SAP: extending the structure further

The representation I have given so far predicts that apparent complement clauses in *ki*-constructions should always follow *ki*, since they are merged in Spec, TopP*_[Hanging] below SAP, where the associated main clause is hosted. Such cases are acceptable, as already discussed in section 4.5.4.4; (256) below is repeated from (245a).

- (256) γ riká ta ki [a ta skotósun até
 realize.IPFV.NPST.3SG 3OBJ PRT FUT.DEF 3OBJ kill.PFV.NPST.3PL this.PL
 ta čočúxa].
 the.N.NOM.PL child.N.NOM.PL
 ‘She realizes (that) these children are going to kill her.’

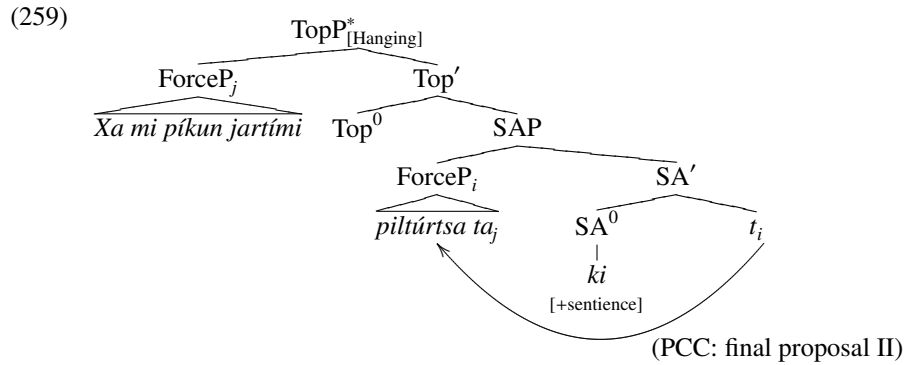
According to the analysis presented here, the apparent complement clause [*a ta skotósun até ta čočúxa*] in (256) is in Spec, TopP*_[Hanging], and the main clause [*γriká ta*] ‘I realize (it)’ moves to Spec, SAP around [*a ta skotósun até ta čočúxa*]. (257) is repeated from (245b).

- (257) [_{SAP} [_{ForceP} γ riká ta] [_{SA⁰} ki [_{TopP*_[Hanging]} [_{ForceP} a ta skotósun até ta čočúxa]
 [_{Top⁰_[Hanging]} <{ γ riká ta}>]]]]].

The analysis also predicts that an example like (258) should be unacceptable because the projection TopP*_[Hanging], which hosts the apparent complement clause, projects below SA⁰ in my proposal. This prediction, however, is not borne out. PCCs with *ki*, in which the apparent complement clause precedes its associated main clause (258), are attested in the corpus and also judged acceptable by speakers.

- (258) [\emptyset Xa mi píkun jartími]_i piltúrta ta_i ki.
 FUT.CF 1SG.OBJ make.PFV.NPST.3PL help.N.NOM.SG report.PFV.PST.1SG 3OBJ PRT
 (lit.) ‘(That) they would help me, I reported it.’

In the light of acceptability of examples such as (258), we are led to postulate another HT position above SAP, in line with the argument in Hill (2007a et seq.). It is in that position that the complement clause is first-merged:



Therefore, a complement clause in a PCC with *ki* can be merged either in the lower $\text{TopP}^*_{[\text{Hanging}]}$, i.e., between SAP and ForceP (245b), or in the higher $\text{TopP}^*_{[\text{Hanging}]}$, i.e., above SAP (259).

Evidence for postulating an additional $\text{TopP}^*_{[\text{Hanging}]}$ above SAP comes from adverb + *ki* constructions. In these constructions, it is often the case that a constituent of the clause is found in a position that linearly precedes *ki*. For instance, in (260), the indirect object *ton Andriá* ‘to Andrew’ occurs to the left of the adverb + *ki* sequence.

- (260) [Ton Andriá]_j, álpætta *ki* čo a ta_i ðóku
 the.M.ACC.SG Andrew.M.ACC.SG certainly PRT NOT FUT.DEF 3OBJ give.PFV.NPST.1SG
 tin kóri mu.
 the.F.ACC.SG daughter.F.ACC.SG my
 Andrew, of course, I am not going to give my daughter to him.’

Constituents that are to the left of the adverb + *ki* sequence show precisely the same properties as HTs defined in section 4.5.4.1–4.5.4.2. First, these constituents can be resumed by a strong pronoun or an epithet. This is shown in the grammatical example (261), where both the strong pronoun *atóna* ‘him’ and the epithet *aúča san avanáxi* ‘to such a simpleton’ are grammatical as resumptive elements.

- (261) [_{DP} Ton Andriá]_j, álpætta *ki* čo a ðóku
 the.M.ACC.SG Andrew.M.ACC.SG certainly PRT NOT FUT.DEF give.PFV.NPST.1SG
 atóna_i/aúča san avanáxi_i tin kóri mu.
 him/such to.a simpleton.N.NOM.SG the.F.ACC.SG daughter.F.ACC.SG my
 ‘Andrew, of course, I am not going to give my daughter to him/such a simpleton.’

Second, only DPs are allowed as topic expressions preceding an adverb + *ki* sequence. A PP in this position, such as *mo ton Andriá* ‘with Andrew’ in (262), is uniformly judged unacceptable (cf. (261–262)).

- (262) * [DP Mo ton Andriá]_i, álpætta ki a ipáu
 with the.M.ACC.SG Andrew.M.ACC.SG certainly PRT FUT.DEF go.PFV.NPST.1SG
 so rmáni mo t itóna_i.
 to.the.N.ACC.SG forest.N.ACC.SG with him
 int.: With Andrew, of course I am going to the forest with him.'

Third, no strict case-matching requirement between the topic expression and its resumptive element exists when the topic expression precedes the adverb + *ki* sequence. In (263), for instance, the topic expression is in nominative, but its resumptive element is in accusative. The sentence is well formed for all speakers consulted.

- (263) [DP O Andriás]_i, álpætta ki čo a ðóku
 the.M.NOM.SG Andrew.M.NOM.SG certainly PRT NOT FUT.DEF give.PFV.NPST.1SG
 atóna/aúča san avanáxi_i tin kóri mu.
 him/such to.a simpleton.N.NOM.SG the.F.ACC.SG daughter.F.ACC.SG my
 'Andrew, of course, I am not going to give my daughter to him/such a simpleton.'

Fourth, topic constructions involving a topic expression that linearly precedes the adverb + *ki* sequence are immune to strong island effects. This is shown in (264), where the resumptive element *ta* is inside the relative clause (complex NP island) *ti néka tu ta pítaksin aúča a kámi mextúpi* 'the woman who sent him such a bad letter'. Its associate topic expression *ton Andriá* 'to Andrew', however, is outside this strong island and it precedes the adverb + *ki*. The sentence is judged acceptable by all speakers.

- (264) [Ton Andriá]_i, álpætta ki katéxu [DP ti
 the.M.ACC.SG Andrew.M.ACC.SG certainly PRT know.IPFV.NPST.1SG the.F.ACC.SG
 néka tu ta_i pítaksin aúča a kámi mextúpi].
 woman.F.ACC.SG that 3OBJ send.PFV.PST.3SG such a bad.SG letter.N.NOM.SG
 'Andrew, of course I know the woman who sent him such a bad letter.'

Fifth, if it functions as a topic expression preceding an adverb + *ki* sequence, the DP part of a V + O idiom never reconstructs. In (265), for instance, *an ftálmi* 'an eye' of the V + O idiom *fténu (an) ftálmi* '(I) cause someone to be touched by an evil eye' (see (224)) functions as a topic preceding an adverb + *ki*. The idiomatic reading, however, cannot be recovered.

- (265) * [An ftálmi]_i álpætta ki píkan ta_i sa
 an eye.N.NOM.SG certainly PRT make.PFV.PST.3PL 3OBJ to.the.N.ACC.PL
 čočúxa.
 child.N.ACC.PL
 int.: Of course, they caused the children to be touched by an evil eye.'

Finally, a pronoun within the topic expression preceding the adverb + *ki* sequence cannot be bound by the quantified DP antecedent within the clause. This is illustrated in (266), where the pronoun *tu* ‘his’ inside the topic expression *i má tu* ‘his mother’ cannot be bound by the quantified subject DP *xer to čočúxi* ‘every child’; therefore, a distributive reading of the pronoun does not arise.

- (266) [_{DP} I ma tu-_{i/j}] *élpætta ki* [_{DP} *xer to*
 the.F.NOM.SG mother.F.NOM.SG his certainly PRT every the.N.NOM.SG
čočúxi]_i *fłsin ta.*
 child.N.NOM.SG kiss.PFV.PST.3SG 3OBJ
 ‘Of course, every child_i kissed his-_{i/j} mother.’

Since the topic expressions preceding an adverb + *ki* sequence show all the properties that have been identified for HTs in section 4.5.4.2, I conclude that these topic expressions are HTs. Moreover, similar to the lower $\text{TopP}_{[\text{Hanging}]}$, the higher HT position is also recursive ($\text{TopP}_{[\text{Hanging}]}$), as illustrated in (267), which is grammatical with two HTs: *o Andriás* ‘Andrew’ and *ató to kámi to mexnúpi* ‘this bad letter’.

- (267) [O Andriás], [ató to kámi to mexnúpi]_i,
 the.M.NOM.SG Andrew.M.NOM.SG this.SG the.SG bad.SG the.N.ACC.SG letter.N.ACC.SG
élpætta ki čo xa pitáksi aúča a zíáni si
 certainly PRT not FUT.CF send.PFV.PST.3SG such a harm.N.NOM.SG to.the.F.ACC.SG
Nerkíza.
Nerkiza.F.ACC.SG
 lit.: ‘Andrew, this bad letter, of course, he would not send such a harm to Nerkiza.’

The hypothesis that there is a higher $\text{TopP}_{[\text{Hanging}]}$ position above SAP entails that in PCCs with *ki* what seem to be complement clauses that precede their associate main clauses should be analyzed as HTs directly merged in the higher $\text{TopP}_{[\text{Hanging}]}$ (as in (259)). One piece of evidence that supports this claim is that these apparent complement clauses can be resumed by a strong pronoun or an epithet, similar to DPs that assume HT function (see (263) for DP HTs). In (268) for instance, the apparent complement clause can be legitimately resumed by both the strong pronoun *ató* ‘this’ and the epithet *aúča an pséma* ‘such a lie’.⁷²

⁷² According to this analysis, the ungrammaticality of *ki* in (139a/157), resumed in (i), should be a result of the fact that the topicalized ForceP should have been moved across SAP, creating a movement chain, rather than having been directly merged in Spec, $\text{TopP}_{[\text{Hanging}]}$.

- (i) O Andriás a pčí jartími, | *élpætta (*ki).*
 the.M.NOM.SG Andrew.M.NOM.SG FUT.DEF make.PFV.NPST.3SG help.N.NOM.SG certainly PRT
 int.: ‘Andrew is going to help, certainly.’

- (268) [Ø čo xa nártun ta čočúxa]_i ípa
 not FUT.CF come.PFV.NPST.3PL the.N.ACC.PL child.N.ACC.PL say.PFV.PST.1SG
 ató_i/aúča an pséma_i ki.
 this.SG/such a lie.N.NOM.SG PRT
 ‘I said this/such a lie; (that) the children would not come.’

4.6 Conclusions

This chapter has focused on the distribution and interpretation of one specific morpheme, the particle *ki*, which was borrowed into PhG from Turkish.

Based on synchronic data, I have shown that *ki* may be employed in five construction types that, at first sight, all appear different in nature. Moreover, the particle also seems to be optional in all the relevant environments. However, closer scrutiny has revealed that the use of *ki* in these constructions is not unmotivated; rather its occurrence is uniformly related to the participant roles of “speaker” and “hearer” and to their discourse relation. In particular, I have argued that in every construction in which it appears, *ki* assumes one general function: by using *ki* the speaker shows to the hearer her personal commitment to the strength of the truth of her assertion and the confidence (and therefore reliability) of her conjecture. Based on these interpretive properties, I have identified *ki* as a discourse marker geared toward influencing the epistemic vigilance mechanism of the hearer (in the sense of Sperber et al. 2010; Wilson 2011, 2012).

Starting from the assumptions (i) that the notion of discourse marker does not constitute a theoretical primitive and (ii) that discourse markers should be classified either as maximal projections or as heads, I have argued that *ki* should be characterized as a functional head. Following Speas and Tenny (2003), who argued that the pragmatic roles of “speaker” and “hearer” and the relation between them are encoded in the Speech Act Phrase (SAP), a predicative structure above ForceP, I have identified *ki* as the overt exponent of SA⁰. I further proposed that *ki* is endowed with the [+sentience] feature indexing the “speaker” as the “sentient mind”.

I have proposed an account according to which all the apparently unrelated constructions that instantiate the particle *ki* can be derived from a single underlying structure, [_{SAP} *ki* [_{ForceP}]]. The surface differences between the construction types stems from whether Spec, SAP is filled by an internally or externally merging category that checks the [+sentience] feature on *ki*. More specifically, I have elaborated a number of different instantiations of this pattern corresponding to the uses of *ki*. In one, the [+sentience] feature on *ki* may be checked by movement of an evidential or an epistemic adverb to Spec, SAP, which gives rise to an adverb + *ki* construction. The [+sentience] feature on *ki* can also be checked by a clause first-merged in Spec, SAP,

5

Conclusion and issues for further research

5.1 Summary of the dissertation

In this dissertation, I analyzed aspects of the grammar of PhG from both a descriptive and theoretical perspective. My first aim was to provide a concise descriptive grammar of PhG based on both natural data from an oral corpus and on data elicited from native speakers via elicitation tasks. My second aim was to offer a detailed study of the structure of different word orders in declarative main clauses, where a distinction was made between pragmatically neutral and pragmatically marked patterns. My final aim was to provide a structural analysis of a discourse marker borrowed from Turkish. Throughout this dissertation, theoretical hypotheses were tested on the basis of data produced or judged by native speakers. The theoretical discussion was couched in the framework of generative syntax in the Chomskyan tradition—in particular, the cartographic approach to clause structure, with special reference to the left periphery.

In chapter 1, I introduced PhG and the socio-historical status of its speakers. I also introduced the AMG dialect group and presented two opinions on the exact genealogical affiliation of PhG with the other members of this language family. Finally,

information regarding the collection and the nature of the data used in this dissertation was reported in this chapter.

Chapter 2 provided an overview of the grammar of PhG, with information about the phonological, morphological, syntactic and lexical properties of the present-day dialect. At this stage, no specific theoretical assumptions were made, so that the information would be accessible to non-linguists who are interested in the basic grammatical properties of PhG. A comparison of the data presented in this chapter with data in earlier grammars of PhG (e.g., Dawkins 1916; Andriotis 1948 and Anastasiadis 1976) revealed certain discrepancies, which were noted throughout the chapter.

Chapter 3 was the core analysis of word order variation in declarative main clauses with nominal arguments and mono-transitive verbs. PhG was shown to allow all six permutations of S(ubject), V(erb) and O(bject): SVO, SOV, VSO, VOS, OVS and OSV. The two main research questions of this chapter are summarized as follows:

- (i) What are the pragmatically neutral and non-neutral word orders of the dialect?
- (ii) What is the syntactic structure underlying all different word order patterns?

The first question was answered through a descriptive survey of all of the word orders in the spoken corpus. I took a pragmatically neutral clause to be one in which no element had a special discourse interpretation of focus or topic. According to this definition, answers to wide-focus questions, introductory clauses to narratives and generic statements were singled out as clauses without topic or focus material. The conclusion of the survey was that VSO and SVO orders can be characterized as discourse-neutral. This conclusion was further corroborated by the observation that these two word orders are delivered with a default intonation. An analysis of the SOV, O-initial and VOS orders in the spoken corpus further revealed that in these environments at least one nominal constituent is associated with the pragmatically marked property of topic or focus. Furthermore, it was revealed that a sub-class of clauses with SVO order is also best viewed as pragmatically non-neutral. To be more precise, in certain SVO contexts, it is actually the case that the preverbal subject fulfills the pragmatic role of topic or focus. Therefore, SVO was identified as ambiguous between being neutral and non-neutral.

The answer to the second research question was developed in a generative framework, according to which linguistic utterances are made up of constituents, which are hierarchically organized to form syntactic structures that can be represented by means of phrase markers (i.e., tree diagrams or labeled brackets). For the general purpose of my analysis of the clausal left periphery in PhG, I adopted the cartographic approach to the left periphery of the clause proposed in Rizzi (1997), according to which the CP is split up into an array of different projections. The basic template from Rizzi (1997) is given in (1).

- (1) [_{ForceP} [_{TopP*} [_{FocP} [_{TopP*} [_{FinP} [_{TP} ...]]]]]]]

ForceP in (1), which constitutes the upper boundary of the left periphery, encodes the illocutionary force of a clause, while FinP, which constitutes the lower boundary of the left periphery, is related to (non-)finiteness, tense or mood; FinP also reflects certain properties of the verbal system of the clause. In between these two projections we find two recursive TopPs and a single FocP, which host topic and focus expressions respectively. In this system, scope-discourse properties of topic and focus are argued to take part in the syntactic derivation, just like tense, negation, mood etc.

I further adopted subsequent findings within the cartographic approach, according to which discourse-related projections of TopP and FocP can also occur inside the clause, specifically, above VP (Belletti 2001, 2004).

Against the background of these theoretical assumptions, I took the derivation of a neutral clause to be one in which no element is moved to FocP or TopP. According to this definition, the word orders that were identified as neutral—VSO and a sub-set of SVO orders—are expected to involve no application of discourse-driven movement, whereas SOV, O-initial and VOS clauses are expected to involve movement of at least one constituent to a functional projection associated with scope discourse properties of focus or topic. In order to test whether or not this is correct, I first analyzed the position of the verb and the subject in neutral VSO and SVO clauses. Based on theoretical considerations, such as the correlation between rich inflection and V⁰-to-T⁰, which were further supported by empirical evidence from adverb placement, I concluded that verbs in PhG systematically move out of the VP to the inflectional domain. Following Roussou (2000), I took preverbal modal particles and negation markers in PhG to mark the lower boundary of the left periphery, which I qualified as a modal complementizer position (C_MP)—corresponding to Rizzi's FinP (Rizzi 1997)—and Neg(ation)P respectively. I concluded that the terminal landing site of the verb should be below this point in the structure—thus, the highest inflectional head in the inflectional domain, namely T⁰. The fact that verb movement terminates when the verb reaches T⁰ was corroborated by the fact that VSO is available in declarative embedded clauses as well as in main clauses.

I then turned to the position of subjects in VSO and SVO clauses. Based on the relative ordering of VP-level adverbs and subjects in VSO clauses, I concluded that in VSO clauses, the subject remains in its first-merge position, i.e., Spec, VP. Evidence from VOS clauses also suggests that postverbal subjects are always hosted in Spec, VP. In particular, in this type of clause the object receives a focus reading and can therefore be assumed to move to a VP-level FocP across the subject, which remains *in situ* and receives a pragmatically neutral reading.

I then turned to pragmatically neutral and non-neutral SVO clauses, which I argued can involve a subject constituent hosted in a number of different A'-positions,

(iii) How is *ki* integrated in the clausal syntax of the various construction types?

A closer survey of these five construction types revealed that *ki* is a main clause phenomenon, in the sense that it features only in asserted declarative main clauses. Furthermore, empirical evidence suggested that the use of *ki* in these constructions is not unmotivated, but rather its occurrence is related to the pragmatic roles “speaker” and “hearer”. More specifically, I argued that in every construction in which *ki* appears, it assumes one general function: it is used by the speaker to show the hearer her personal commitment to and confidence in the truth of her assertion, and therefore the reliability of her conjecture. Because of this interpretive property, I identified *ki* as a discourse marker geared toward influencing the epistemic vigilance mechanism of the hearer (in the sense of Sperber et al. 2010; Wilson 2011, 2012).

I started from the assumption that the notion of discourse marker cannot be considered a primitive in the theory assumed in this dissertation; rather, discourse markers should be classified as either maximal projections or heads lexicalizing some functional projection in the clause. The fact that *ki* cannot be modified, focalized or used in isolation—standard diagnostic tests to separate heads from phrases (Kayne 1975)—suggests that *ki* should be characterized as a syntactic head. Following Speas and Tenny (2003), according to whom the pragmatic roles “speaker” and “hearer” and the relation between them are encoded in a Speech Act Phrase (SAP), a predicative structure above ForceP, I identified *ki* as the overt exponent of SA⁰. I further proposed that *ki* is endowed with a [+sentience] feature indexing the speaker as the sentient mind, i.e., the sentient individual in the discourse who evaluates or comments on the truth of a proposition. All of the apparently unrelated constructions featuring the particle *ki*, I claimed, are derived from the underlying structure in (3).

(3) [_{SAP} *ki*_[+sentience] [_{ForceP} ...]]

I argued that the surface differences between these five construction types stem from whether Spec, SAP in (3) is filled by an internally or externally merging category that checks the [+sentience] feature on *ki*. More specifically, I proposed a number of different instantiations of this pattern. In one, the [+sentience] feature on *ki* is checked by movement of an evidential or an epistemic adverb to Spec, SAP, giving rise to an adverb + *ki* construction. In another, the [+sentience] feature on *ki* is checked by base generation of a clause in Spec, SAP, giving rise to causal constructions. Finally, the relevant feature can be checked by movement of ForceP to Spec, SAP, yielding quotative, predicate-complement and emphatic constructions.

The conclusions of this chapter also have repercussions for the architecture of the PhG clause. Evidence from dislocated constituents in *ki* constructions indicated that two recursive topic positions, one above SAP and one between SAP and ForceP, should be postulated. Certain differences between topic expressions hosted in these

mind”. In the original proposal by Speas and Tenny (2003), however, the pragmatic role “speaker” is structurally dissociated from the pragmatic role “sentient mind”. In particular, these authors argue that while the pragmatic role “speaker” is encoded in SAP, the pragmatic role “sentient mind” is encoded in a distinct functional projection below SAP, which the authors label as SentienceP. The pragmatic roles “sentient mind” and “speaker,” however, can be co-indexed if the speaker is the sentient mind who evaluates or comments on the truth of her proposition. How the simplified structure I propose in this dissertation can be reconciled with Speas and Tenny’s (2003) original proposal should therefore also be addressed.

Finally, how *ki* was borrowed into PhG in the first place and how it came to be accommodated into PhG syntax as the overt exponent of SA⁰ are also interesting questions that should be addressed in further research.

I hope that this dissertation, despite all its weaknesses, will spark further research on different aspects of the syntax of PhG, and of the AMG dialect group in general, both from intra-linguistic and comparative perspectives. I believe that such research is crucial to arrive at a better understanding of the currently controversial issue of the genealogical taxonomy of AMG, and to provide some explanatory depth to the issue of Turkish influence on these dialects.

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