# Indefinite pronouns 

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## 1

## Overview

The subject matter of this book are the formal and semantic properties of INDEFINITE PRONOUNS, expressions such as those highlighted in (1)-(4), in the languages of the world.
(1)English

Someone once said that anything goes.
(2)Italian

Nessuno ha mai detto questo.
nobody has ever said that 'Nobody has ever said that.'
(3)Russian

Kto ugodno možet prijti.
who INDEF can come
'Anyone can come.'
(4)Japanese

Dare-ka ni ki-ite mi-masyoo.
who-INDEF DAT ask-CONV try-POL:HORT
'Let's ask somebody.'
Indefinite pronouns have traditionally played only a minor role in descriptive linguistics, but the theoretical work in semantics, pragmatics and syntax of the last few decades has shown that the distribution of indefinite pronouns is highly complex and interesting in many ways. These theoretical discussions have often used the narrower terms QUANTIFIERS or NEGATIVE POLARITY ITEMS for certain sub-classes of indefinite pronouns.

This book gives a comprehensive overview of the main theoretical debates around the semantic and syntactic properties of indefinite pronouns. Its major original contributions are a large-scale cross-linguistic study of indefinite pronouns (see especially chapter 4 and Appendix A) and a detailed investigation of the diachronic sources of the markers of indefinite pronouns (chapters 6-8). This rich factual material is brought to bear on the issues that have been present in the literature. The new generalizations that emerge from the typological and diachronic study are discussed and explanations are provided. Throughout the book, particular emphasis is put on links between the formal properties of indefinite pronouns and their functional (semantic and syntactic) properties.

In chapter 2 after this overview, I give a brief introduction to the goals and methods of the typological approach that is applied in this book. Typological work presupposes cross-linguistically applicable concepts, so a definition of 'indefinite pronoun' that is independent of language-particular properties is provided. Another important precondition for typology is the availability of data from a wide range of languages, so the issue of sampling is also discussed in chapter 2. This study is based on quite detailed data from 40 languages, and on very limited data from another sample of 100 languages which comes close to being representative of the world's languages. The 40-language sample is
biased toward European languages, as is inevitable due to limitations on the availability of data.

Chapter 3 maps out the space of formal and functional variation that is found in indefinite pronouns. Formally, indefinite pronouns typically occur in several series, with each series comprising a set of indefinites referring to the major ontological categories (person, thing, place, time, manner,...). For instance, English has the some-series (somebody, something, somewhere, ...), the anyseries (anybody, anything,...), and the no-series (nobody, nothing,...); Russian has the -to-series (kto-to 'somebody', č to-to 'something', gde-to 'somewhere',...), the -nibud'-series (kto-nibud' 'anybody', č to-nibud' 'anything',...), and others. In terms of synchronic formal structure, languages are remarkably similar typologically, but extremely interesting cross-linguistic variation is observed in the different meanings or functions that these different series can express. In chapter 3, I identify nine core functions (i.e. meanings and/or contexts) that must be distinguished for the purposes of cross-linguistic comparion. Not all of these functions are distinguished formally in every particular language, but each function is justified by attested differences between the functional ranges of different indefinite pronoun series. These nine functions are as follows:
specific, known to the speaker
(5) Somebody called while you were away: guess who!
specific, unknown to the speaker
(6) I heard something, but I couldn't tell what kind of sound it was.
non-specific, irrealis
(7) Please try somewhere else.
polar question
(8) Did anybody tell you anything about it?
conditional protasis
(9) If you see anything, tell me immediately.
standard of comparison
(10) In Freiburg the weather is nicer than anywhere in Germany.
direct negation
(11) Nobody knows the answer.
indirect negation
(12) I don't think that anybody knows the answer.
free choice
(13) Anybody can solve this simple problem.

Some of these functions are well known and well established (e.g. 'free choice', 'negation'), while others are less known (e.g. 'known vs. unknown to the speaker', 'irrealis'). There is one distinction that is very often made in the literature but that does not appear in the above list: NEGATIVE POLARITY. 'Negative polarity items' are often said to be restricted to the functions in (8)(12), but the cross-linguistic data show that the notion of negative polarity is too
crude. In addition to indefinite pronoun series that are restricted to precisely these five functions, there are other indefinites that are restricted to a subset of these five functions, or to a set of functions that comprises some non-negative polarity functions in addition to some negative-polarity functions. The final section of chapter 3 then discusses alternative ways of expressing what many languages express by indefinite pronouns, including the rare but apparently attested case of a language that completely lacks indefinite pronouns.

Chapter 4 presents the principal typological generalizations that emerge from the data of the 40-language sample. These take the form of implicational universals concerning the distribution of indefinite pronoun series over the nine functions distinguished in chapter 3. While there are many differences in the distribution of indefinite pronoun series of different languages, the variation is not without limits. As elsewhere in typology, we find many regularities in the bewildering diversity that strikes us at first sight. This can be illustrated with examples from Russian, which differs in an interesting way from English. The sentences in (14)-(17) are the Russian equivalents of (6), (7), (9), and (10).

Russian
(14) Ja uslyšala čto-to, no ja ne ponjala, kakoj zvuk èto bylo. (=6) I heard what-INDEF but I not understood what sound it was
(15) Popytajtes', požalujsta, gde-nibud' v drugom meste. (=7) try:IMPV:PL please where-INDEF in other place
(16) Esli ty uvidiš č to-nibud', skaži mne srazu. (=9) if you see what-INDEF tell:IMPV me immediately
(17) Vo Frejburge pogoda lučše, čem gde-libo v Germanii. (=10) in Freiburg weather better than where-INDEF in Germany

Although above I glossed Russian kto-to, č to-to as 'somebody, something', and kto-nibud', č to-nibud' as 'anybody, anything', these examples are sufficient to demonstrate that the English some-series and the Russian to-series are by no means equivalent, and neither are the any-series and the -nibud'-series. The -toseries cannot be used in (15), and the any-series cannot be used in the English equivalent (7). Furthermore, the -nibud'-series cannot be used in (17), where English has the any-series, and Russian employs a third series, the -libo-series. But cross-linguistic variation of this kind is strongly constrained by a number of implicational universals which are summarized by the IMPLICATIONAL MAP in Figure 1.

Figure 1. The implicational map for indefinite pronoun functions
(7)
direct
negation

| (1) (2) | (3) |  |
| :--- | :--- | :--- |
| specific | specific | irrealis |
| known | unknown | non-specific |

conditional comparative
free choice
The map is to be read as follows: An indefinite pronoun series will always express a set of functions that are adjacent on the map. For instance, the English any-series covers functions (4)-(9), and the Russian -nibud'-series covers functions (3)-(5). Since adjacency on such an implicational map can only be explained by similarity of function or meaning, the implicational map may be considered as a geometric representation of its semantic or cognitive domain.

In chapter 5, I discuss a variety of theoretical approaches to the functions of indefinite pronouns, beginning with the tradition of structural semantics. Probably the best-known approach is that of logical semantics, where indefinites are seen as the counterparts of the existential or the universal quantifiers. While many important insights have been gained within this approach, there is one crucial problem that has remained unresolved: the existence of indefinite pronouns which appear to correspond to the existential quantifier in some contexts, and to the universal quantifier in others (for instance, English any- and Italian nessuno 'anybody; nobody'). Another interesting approach (Progovac 1994) tries to subsume the distribution of certain indefinites under the syntactic binding theory that was originally developed for reflexive and reciprocal pronouns. Next I present the mental-space-approach (Fauconnier 1985), which offers important insights into the nature of non-specificity and related phenomena. Finally Fauconnier's (1975a, 1975b) work on pragmatic scales and scalar implicatures is discussed, which provides a perspective for solving the puzzle of the double nature of any-and similar indefinites in other languages. On the basis of the various theoretical proposals I then attempt an explanation of the implicational map.

Chapter 6 begins the diachronic investigation of indefinite pronouns. Since very few in-depth studies of diachronic changes in indefinite pronouns are available, most of the typological generalizations in the diachronic parts of this book are based on etymological information. In chapter 6 I look at those indefinites that are best analyzed as having arisen by grammaticalization from a complex syntactic construction involving an interrogative pronoun (these constructions thus explain in part why indefinites are so often based on interrogatives). I identify four such constructions: 'I don't know wh-', 'wh- you want', 'wh- ever it may be', 'no matter wh-'. The main effects of grammaticalization, such as phonological erosion, desemanticization, reduced syntactic scope etc. can all be shown to be present in the attested grammaticalized indefinites. The semantic aspect of grammaticalization can be seen in the extension of an indefinite's range of functions from its original function to other functions along the implicational map.

Chapter 7 deals with a number of further sources of indefinite pronouns that cannot be easily subsumed under grammaticalization. These are indefinites marked by scalar additive focus particles ('also', 'even', 'at least'), reduplicated indefinite pronouns, indefinite pronouns derived from generic nouns ('person', 'thing', etc.), and others. A very important type of indefinite pronoun across languages is represented by the use of interrogative pronouns as indefinites without any additional markers. I argue that the indefinite use is always secondary in such instances. As in chapter 6, for each of the diachronic sources of indefinite pronouns I identify the original motivation and thereby contribute to explaining their formal properties.

In chapter 8, I single out one of the nine functions, the function of direct negation (as in (11) above), for further detailed discussion. I show that the cross-linguistic patterning of negative indefinite pronouns cannot be understood without placing them in the context of other indefinites and that the implicational map captures important aspects of their behavior. Negative indefinite pronouns are particularly interesting because they may or may not cooccur with the normal sentential negation marker on the verb. The situation in which negative indefinites and verbal negation cooccur has sometimes been called 'double negation', but in fact this situation is much more common crosslinguistically than negative indefinites of the standard European type which simultaneously act as sentential negators. I formulate a number of typological generalizations concerning the cooccurrence of negative indefinites and verbal negation and propose explanations for them. The chapter ends with an examination of the diachronic sources of negative evidence, which are quite parallel to those of other indefinites.

The concluding chapter 9 summarizes the typological generalizations of this book and briefly looks at wider typological and areal connections.

The book is concluded with two appendices: Appendix A gives detailed data on indefinite pronoun series and their distribution in the languages of the 40-language-sample, providing many examples of indefinite pronouns. Appendix B gives the data from the world-wide 100-language-sample.

With this book I hope to contribute to Wilhelm von Humboldt's program of investigating universal grammar through broad cross-linguistic comparison, which he formulated in his 1827 study of the dual:

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## 2

## A Typological Perspective on Indefinite Pronouns

### 2.1. Language Typology

This book approaches the topic of indefinite pronouns with the goals and methods of language typology as founded by Wilhelm von Humboldt (e.g. 1827), revived by Joseph Greenberg (1963) and summarized most recently in Croft (1990). A few general remarks on the typological approach are thus in order before we turn to a definition of indefinite pronouns in the next section. Language typology, as understood here, is the scientific study of variation and the limits to variation in the structure of languages. There are several reasons why typological research is of central importance to our understanding of human language.

Despite the bewildering diversity of their structure, different languages have always been regarded as roughly equivalent instantiations of the more abstract notion of 'human language', a unique and universal endowment of human beings. However, the question arises how language could be universal and at the same time be manifested in forms that show seemingly unlimited variation. Systematic cross-linguistic investigations of language structure, as conducted by typologists at least since Humboldt (1827), have made possible significant advances toward a resolution of the apparent contradiction between universality and diversity. Above all, typological studies have demonstrated that cross-linguistic variation is by no means random. On the contrary, the grammatical systems of languages around the world show such striking similarities that it seems not inconceivable to extract a common core, a 'universal grammar', out of the individual grammars.

On another level, linguistic typology is indispensable for our goal of explaining particular grammatical phenomena and of detecting significant generalizations. The fundamental problem that we are faced with is to state generalizations at the right level of generality. Linguists often fall into the trap of explaining a language-particular phenomenon by a high-level generalization (making reference e.g. to innate language structure or to general cognitive capacities), thus wrongly predicting that the phenomenon in question should be universal. And conversely, linguists also often explain a very general phenomenon by a low-level explanation (making reference e.g. to historical or other accidents in a particular language), thus wrongly predicting that the phenomenon in question should be restricted to the particular language they are dealing with. Cross-linguistic studies can help steer us through the Scylla of overgeneralization and the Charybdis of undergeneralization. If in a crosslinguistic study a phenomenon turns out to be universal, we know that it must be explained with reference to universal factors; if on the other hand a phenomenon turns out to be restricted to a single language or a small set of isolated cases, then a particular explanation is called for.

Now it turns out that many, if not most, interesting grammatical phenomena fall between these two extremes: They are not completely universal, but they are not restricted to a small random set of languages either. However, more sophisticated techniques have been developed by typologists that allow us to find universal generalizations even for non-universal phenomena. The central
notion is that of an IMPLICATIONAL UNIVERSAL, i.e. a property that holds in all languages that have some other property. In a way implicational universals are even more important than absolute universals because they give us some additional insight into the nature of grammar: If a property A is implied by a property B, then it is quite likely that the two are causally related. The major cross-linguistic generalizations of this work will take the form of implicational universals.

An important practical problem with typology is that typological studies can never reach the same depth of analysis as studies on individual languages. The more languages a typologist investigates, the less attention he or she can give to each individual language, so typological studies are of necessity more superficial than single-language studies, and this book is no exception. It is true that there is a certain danger that data from individual languages are isolated from their larger context in broad cross-linguistic studies. But on the other hand, single-language studies that do not consider the typological variation also isolate their data from the cross-linguistic context and thereby are in danger of misinterpreting the facts, however deep and fine-grained their analyses are. The obvious solution to the limitations of typological and singlelanguage work is to combine the two to the extent that this is possible. Both approaches to language are complementary, because necessarily one loses depth as one gains in breadth, and conversely, one loses breadth as one gains in depth. But neither depth nor breadth are inherently more important - what counts is the volume of the new knowledge which results from multiplying breadth and depth.

On the empirical side, the present work focuses more on breadth, because there are already a substantial number of in-depth studies of indefinite pronouns in individual languages which I have been able to make use of, whereas the typological perspective has not been elaborated sufficiently in previous research. This empirical breadth is used as a measure for theoretical approaches and thus hopefully leads to greater depth of explanation.

A typological study logically consists of four steps. First, the domain of phenomena to be compared across languages is delimited by formulating a definition that is cross-linguistically applicable. Second, the space of typological variation is mapped out by providing a complete taxonomy of the various means by which the phenomenon under discussion is expressed in different languages. Third, correlations between individual structural options and other parts of the grammar are identified and formulated as implicational universals. Fourth, explanations for these universals are sought. In this book, the first step (definition) is taken in the following section (§2.2), the second step (taxonomy) follows in chapter 3, the third step (correlations) is the topic of chapter 4, and the fourth step is the explanation of the implications in semantic terms that is proposed in § 5.6.

### 2.2. Indefinite Pronouns: Definition and Delimitation of the Domain of Inquiry

### 2.2.1. Mixed functional-formal definitions

This work applies the cross-linguistic perspective to INDEFINITE PRONOUNS like English somebody, something, somewhere, anything, anytime, or Japanese dareka 'somebody, anybody', dokoka 'somewhere, anywhere', daremo 'anybody,
nobody', nanimo 'anything, nothing'. Such indefinite pronouns generally occur in SERIES, e.g. the English some-series and the any-series, or the Japanese $-k a$ series and the -mo-series. The functional distinctions exhibited by such contrasting series will be the main object of my interest.

There is both a functional and a formal component to the definition of the subject matter of this study: From a functional point of view, the expressions investigated here can be characterized as INDEFINITE (in the sense discussed below), and from a formal point of view they can be characterized as PRONOUNS, i.e. grammatical elements.

This double or hybrid definition is as it should be: The subject matter of a typological investigation cannot be defined either on an exclusively formal basis or on an exclusively functional basis. Purely formal definitions are impractical because there are extremely few if any structural (or formal) properties that can be identified and compared across languages. It is possible, for example, to study the Instrumental case in various Slavic languages on the basis of a purely formal definition (case forms which are the reflexes of ProtoSlavic *-mi, *-jo4, *-mi, etc.), but a definition of this kind cannot serve as the basis for a typological study, simply because most languages do not have suffixes of these shapes. On the other hand, purely functional definitions have the disadvantage that they tend to pick out quite heterogeneous expressions. For example, a typological study of temporal expressions that is not formally delimited would have to consider such diverse phenomena as verbal tense inflections, tense iconicity in coordinate structures (like I came, I saw, I conquered), and temporal adverbs and nouns like tomorrow and hour. Although it is rarely made explicit, typological investigations are usually based on a combined functional-formal definition of their domain of inquiry, e.g. Dahl's (1985) study of tense-aspect systems, Svorou's (1994) study of spatial adpositions, Koptjevskaja-Tamm's (1993) study of action nominal constructions, Nedjalkov's (ed.) (1988) study of resultative constructions, Stassen's (1985) study of comparative constructions, and many others.

### 2.2.2. The formal criterion: 'pronoun'

The formal criterion used here is the pronominal, i.e. grammatical na-ture of the expressions. In particular, I will not deal with lexical indefinite expressions like a woman, a tree, a meadow, or with general nouns which are not pronouns by any criterion, like a person, a thing, a place, etc. Since semantically there is almost no difference between an indefinite pronoun like someone and a lexical noun phrase like a person, this is a formal criterion.

It is true that it is not always immediately obvious whether an expression is a pronoun or not. Often pronouns are easily recognizable as such because of highly specific phonological and morphological properties, e.g. the Genitive singular suffix -go in Polish pronouns (je-go 'his', ko-go-s' 'someone's') vs. -y, -u, $-a$ in nouns (osoby 'a person's'). But in many other cases, formal pronominal features are harder to detect. The English indefinite pronoun something differs from the lexical phrase some thing only in its prosodic ('- - vs. ${ }^{\text {a }}{ }^{\text {' }- \text { ), }}$ morphological (*somethings vs. some things) and syntactic properties (something important vs. some important thing). The French pronoun quelque chose 'something' differs from the phrase quelque chose 'some thing' in its agreement properties: the pronoun takes masculine agreement (quelque chose s'est passé 'something happened'), whereas the noun chose 'thing' is feminine. In Turkish, bir s3ey 'something' formally resembles a phrase (bir 'one', s3ey 'thing'), but the
process of $m$-reduplication shows that we are dealing with a single word. This process applies to words, so kitap-mitap 'books and so on' is possible, while *bir kitap mir kitap is impossible. However, we do have bir s3ey mir s3ey 'something and so on', so bir s3ey must be a single word, and hence a pronoun.

But even if it were possible to obtain all the relevant data also for littleknown languages, it would still be futile to try to draw a clear-cut boundary between lexical expressions and grammatical, pronominal expressions that applies to all cases. When new pronouns are created in a language, they are often grammaticalized from nouns that have a very general meaning (cf. Lehmann 1982a: 38-56, Sugamoto 1989), and since grammaticalization is a gradual process, there must be plenty of cases in many languages that are somewhere in the middle on their way from the lexicon to the grammar.

It should furthermore be emphasized that the term pronoun is used here in its broad sense where it comprises not only PRO-NOUNS (i.e grammatical items that can replace nouns or noun phrases), but also PRO-ADVERBS like somewhere, sometime (which can replace adverbs or adverbial phrases), PRO-ADJECTIVES like Polish jaki-s' 'some kind of', and even PRO-VERBS. Thus the term pronoun (without a hyphen) should not be understood in its etymological sense ('replacing a noun'), but in its traditional sense. ${ }^{i}$ Since I am mainly interested in the differences between different series of indefinite pronouns, such as the English some-series (somebody, something, somewhere, etc.) and the any-series (anybody, anything, anywhere, etc.), it would not make any sense to exclude the non-nominal members of these series from my considerations.

Also included are indefinite determiners that clearly belong to a series of indefinite pronouns, such as English some and any, or German irgend-ein (which belongs to the irgend-series, cf. irgend jemand 'somebody', irgend etwas 'something', irgend-wo 'somewhere', etc.). Determiners are not pronouns because they do not replace anything, but in traditional grammar determiners are often treated as pronouns or at least together with pronouns, so including them here does not do too much violence to the term pronoun.

### 2.2.3. The functional criterion: 'indefinite'

We now turn to the functional part of the definition of INDEFINITE PRONOUN. Again, the definition is quite straightforward: I will regard as indefinite pronouns such pronouns whose main function is to express indefinite reference. While this terminological usage is highly transparent, it represents a certain departure from traditional terminology. In traditional Western grammar, the following types of pronouns are usually distinguished (e.g. Grevisse 1986: § 625-736, Braune 1961: § 282-300):
> (i) personal pronouns
> (ii) demonstrative pronouns
> (iii) relative pronouns
> (iv) interrogative pronouns
> (v) indefinite pronouns

Whereas the first four of these form relatively coherent sets, the category of indefinite pronouns seems to function as a sort of waste-basket category in many traditional descriptive grammars. In addition to indefinite pronouns in the narrow sense (in which the term is used throughout this work), the following four types of expressions are commonly put in this category:
(a) MID-SCALAR QUANTIFIERS like few, several, many. ${ }^{\text {ii }}$ These express quantity and have nothing to do with indefiniteness-many of them combine freely with the definite article (the few, the many). However, some mid-scalar quantifiers are incompatible with the definite article in various languages, e.g. English some (*the some), German einige 'several, some' (*die einigen), French maints 'many' (*les maints). And more importantly, some mid-scalar quantifiers are formally very similar to indefinite pronouns (and diachronically derived from them), e.g. English some [sm] (mid-scalar quantifier) vs. some [sUm] (indefinite pronoun), Russian ne-kotorye 'some' (mid-scalar quantifier, plural) vs. ne-kto 'someone' (indefinite pronoun). These facts may explain why mid-scalar quantifiers have often been lumped together with indefinite pronouns.
(b) GENERIC PRONOUNS like French on 'one', German man 'one', English one are also often called 'indefinite pronouns'. It is true that they are both pronominal and indefinite, so they would fall under the definition as stated above, but since generic pronouns have very different properties from words like someone, they are not further considered here. Moreover, formally distinct generic pronouns do not seem to be very widespread: most languages make do without them, whereas the large majority of languages seem to have indefinite pronouns like someone.
(c) UNIVERSAL QUANTIFIERS like all and every. The collective universal quantifier 'all' is quite compatible with the definite article in many languages (e.g. all the children, French tous les enfants, Hebrew kol ha-yeladim), and even the distributive universal quantifier 'every' can be combined with the definite article in some languages, e.g. Modern Greek $i$ káthe ghlósa 'every language'. As a rule, universally quantified noun phrases are semantically definite, even when not marked as such in languages that have a definite article.

That said, it must be acknowledged that there are close connections between distributive universal quantifiers ('every') and indefinite pronouns that express irrelevance of choice ('any'). Although universal quantifiers are not considered indefinite pronouns and are not the focus of my attention in the present study, they will be mentioned and discussed in connection with free-choice indefinites later (§ 6.5). (Cf. Gil 1991 for an excellent typological study of universal quantifiers.)
(d) IDENTITY PRONOUNS/DETERMINERS like other and same. These express identity and non-identity and do not show an affinity to indefiniteness at all.

After these negative statements, what kinds of pronouns are left for our investigation? Essentially, indefinite pronouns like those in (19a-c).
a. someone, something, somewhere, somehow,...
b. anyone, anything, anywhere, anyhow,...
c. no one, nothing, nowhere, never,...

It could be objected that the pronouns of the any-series mainly express free choice rather than indefiniteness (as in You may take anything), and that the pronouns of the no-series express non-existence rather than indefiniteness. This may be true, and perhaps the definition 'pronouns whose main function is to express indefinite reference' should be made more specific to include all of them.

However, the crucial point to note is that there are very close connections between different series of indefinite pronouns as in (19a-c), not just in English, but in many other languages as well, as I will show in the course of this work. In English, there are contexts where either the some- or the any-series can be
used, without a great meaning difference (If you see someone/anyone, tell me), and there are contexts where either the no-series or the any-series can be used without any meaning difference (I saw nobody/I didn't see anybody). Such close connections, which will be the focus of our attention in the main part of this work, justify the inclusion of all of these pronoun types in the typological investigation. The points of contact and overlap with other grammatical phenomena are minor compared to the internal coherence of indefinite pronouns like those in (19a-c).

### 2.3. Earlier Work

The in-depth study of indefinite pronouns does not have a long history in linguistics. To be sure, indefinite pronouns have generally been described in reference grammars. In the European tradition of grammaticography that goes back several centuries, there is always a separate section on pronouns, divided into sub-sections on different kinds of pronouns, usually in the following sequence: personal pronouns, demonstrative pronouns, relative pronouns, interrogative pronouns, indefinite pronouns. But the description of indefinites is very often restricted to the formal side in such works, i.e. to their derivational structure and their inflectional properties. Only reference grammars with a very complete syntactic component, such as Kühner and Stegmann (1914) (Latin), Paul (1916-20) (German), Schwyzer (1953) (Classical Greek) have had anything to say on the functions of indefinite pronouns. In these older grammars, much of the syntax component consists of the description of syntactic and semantic properties of grammatical categories and grammatical words, and the functions of indefinite pronouns are then described in the section on pronoun syntax. In more modern grammars, where the syntax is generally given more autonomy, the situation sometimes becomes worse: The functional properties of indefinite pronouns do not fit into any of the major parts of the syntax, and as a result of this, even voluminous grammars may be completely silent on the functions of indefinite pronouns, e.g. Š vedova (ed.) (1980) (Russian), Engel (1988) (German). In smaller reference grammars, especially grammars of little-known languages, indefinite pronouns are often completely ignored.

The first comparative studies of indefinite pronouns were conducted within the framework of historical-comparative linguistics of the older Indo-European languages (Brugmann 1911, Delbrück 1893), the Romance languages (Lombard 1938-39), and the Finno-Ugrian languages (Beke 1913-14). Since indefinite pronouns even in closely related languages often show quite different forms, these comparative studies are not very successful in meeting their own goals, but instead they tend to take on a typological character. Some later comparative studies by Indo-Europeanists such as Frei (1940), Gonda (1954-55) explicitly take into account typologically similar phenomena from non-Indo-European languages.

The first theoretically-oriented in-depth studies of the functions of indefinite pronouns of individual languages appear in the 1960 s, ${ }^{\text {iii }}$ motivated by the structuralist movement in semantics (Greimas 1963, Veyrenc 1964, ManoliuManea 1966, Kř íž ková 1971, Topolinska 1972), by logical semantics (Seliverstova 1964, Dahl 1970, Horn 1972, Grzegorczykowa 1972b, Levin 1973, Paduč eva 1974), or by transformational grammar (Lees 1960: 123-125, Klima 1964, Labov 1972, Ali 1970, 1972). Since the 1970s, there is also a steady flow of papers that deal contrastively with indefinite pronouns in two languages
(Rybák 1965, Donč eva 1970, Pálfy 1982, Stephanides 1983, 1985, Kirova 1986, Mostovska 1988).

While the present study is unique in the breadth of its scope, it is not the first typological study of indefinite pronouns. Valuable typological generalizations concerning the formal properties of indefinite pronouns have been made in Majtinskaja (1969), Coyaud and Aït Hamou (1972, 1976), and von Bremen (1983). Schmid (1980) is the only previous study that attempts to combine a world-wide typological comparison (involving a dozen languages) with a closer look at the environments (mainly negative, interrogative and conditional clauses) where different indefinite pronouns appear. Gil (1991), in his typological study of 'universal quantifiers', also looks at free-choice indefinites in some detail. Kahrel (1989) and Bernini and Ramat (1992) are large-scale typological studies of negative pronouns.

In the 1980s and the early 1990s, negative-polarity indefinites have again become the topic of studies within the Chomskyan syntactic framework (e.g. Aoun 1985, 1986, Mahajan 1990, Progovac 1992, Zanuttini 1991, Li 1992, Laka 1994), among them also an ambitious typologically-oriented proposal (Progovac 1994). Other theoretical approaches that have dealt with indefinite pronouns are Antoine Culioli's 'enunciative' approach (Culioli (ed.) 1980, 1984, Fisher and Franckel (eds.) 1983, Dhelverúdhi 1989, Le Goffic 1994, Mellet 1994), the Guillaumean approach (Hirtle 1982, 1988), Gilles Fauconnier's theories of pragmatic scales (Fauconnier 1975a, 1975b, 1977, 1979, 1980, Ladusaw 1980) and mental spaces (Fauconnier 1985, 1987), and Ronald Langacker's Cognitive Grammar (Langacker 1992: 103-41).

It is obviously far beyond the scope of this work to discuss all the previous work on indefinite pronouns. However, the major theoretical approaches will be discussed in chapter 5, and many other smaller contributions to the theoretical debate will be mentioned throughout this study. Many of the more descriptively oriented works on individual languages have served as useful sources of data (cf. Appendix A, where many of these studies are cited), without which the typological generalizations of this study would have been impossible.

Thus, I see the present work as firmly rooted in the unbroken tradition of previous generations of linguists. I hope that by collecting and comparing the insights and data accumulated in these earlier works, and by highlighting the cross-linguistic generalizations that emerge, this work will constitute a step forward in our knowledge and understanding of indefinite pronouns in human language.

### 2.4. The Language Samples

### 2.4.1. General problems of typological sampling

Even though its ultimate goal is generalizing over all the languages of the world, typological work can in practice only be based on a relatively small subset of languages. In selecting the languages to be compared, the three most important considerations are the size and the representativeness of the sample and the availability of data.

The choice of the best SIZE of the sample is easiest: One simply has to select the relation between breadth and depth (cf. § 2.1.1) that best suits one's goals. If the questions asked in a typological study are fairly superficial, a relatively
large sample of languages can be covered. The deeper the questions are, the fewer languages can be handled.

A more difficult problem is to find a compromise between representativeness and availability of data. A sample is REPRESENTATIVE of the world's languages to the extent that its internal diversity corresponds to the diversity of the whole set of languages. The most important factor limiting linguistic diversity is, of course, genetic relationship. Thus, the languages included in a representative sample should be as genetically distant from each other as possible. This in turn presupposes that we can determine genetic closeness and distance, and to the extent that our knowledge of the genetic relationships between languages is incomplete, a sample based on it is also problematic. Various ways of dealing with the problem of sampling genetic groupings have been proposed, each with their own advantages and disadvantages (Dryer 1989, Perkins 1980, Nichols 1992, Rijkhoff et al. 1993). Another potential problem is areal relatedness (Sprachbund phenomena), which can be mitigated by selecting languages that are areally as distant from each other as possible.

However, a factor that restricts typological research much more seriously than sampling problems is the AVAILABILITY OF DATA. Data from well-studied and widely spoken languages are usually much more easily accessible than data from little-studied languages spoken by small groups in 'remote' areas, and the widely spoken languages come from just a few genetic groups (10 of the world's 20 largest languages are Indo-European, 4 are Sinitic). This problem of potential genetic bias becomes worse the deeper the questions are that one wishes to investigate, because in-depth data are available for much fewer languages than superficial descriptions. But even if one limits oneself to questions that can be answered by an average reference grammar, it is not easy to obtain data of equal quality and depth from a balanced, unbiased sample that is truly representative of the genetic diversity of the world's languages. Thus, any typological study has to make a conscious compromise between the limiting factors of potential genetic bias and availability of data.

It is important to recognize that this choice is not entirely independent of the kind of question under investigation. The general goal of maximal genetic diversity of a typological sample is based on the assumption that genetic relatedness is by far the most important factor of bias. In general, this is probably true: For example, the fact that most Dravidian languages have retroflex consonants and postpositions (rather than prepositions) is certainly not an accident or evidence for a typological connection between the two, but is simply due to common inheritance from Proto-Dravidian, which also had these features. But not all structural features of a language have the same degree of DIACHRONIC STABILITY (cf. the discussion in Nichols 1992: ch. 5). Some features are very stable and change only very slowly, whereas others tend to change quite rapidly. This phenomenon has long been known in the domain of lexical change: There is no doubt that words belonging to the basic vocabulary (e.g. body part terms, kinship terms, numerals) are diachronically more stable than peripheral words. But in the domain of grammatical features, differential rates of change have only just begun to be investigated systematically (Nichols 1992). Nevertheless, the rate of change of the feature under study has important consequences for the selection of the sample (as noted in Croft 1990: 23). Highly unstable phenomena are much less likely to be common retentions from the parent language, and hence the problem of genetic bias is less severe when one studies grammatical features with low diachronic stability.

It turns out that the feature studied in this work, indefinite pronouns and their functions, shows a remarkably low degree of diachronic stability. Indefinite pronoun systems may differ substantially even in languages that are closely related, such as Polish and Russian, Dutch and German, Catalan and Portuguese, Latvian and Lithuanian (cf. the relevant data in Appendix A, especially the distribution of indefiniteness series). This impressionistic statement could easily be made more precise by introducing some measure of diversity and comparing indefinite pronouns to other, more stable features such as marking type (head marking vs. dependent marking), alignment type (ergative, accusative, etc.), or pronominal-argument type (independent pronouns vs. pronouns as verbal inflection). However, I trust that the impression is sufficiently robust to convince readers. This means that the problem of genetic bias is probably much less severe for this study than one might first have thought.

### 2.4.2. Selection of the samples for this study

After the general remarks of the preceding section, let me now explain the choices made in this work. To deal with the problem of sample size and the relation between breadth and depth, I have chosen a two-level-approach, i.e. I use two different samples showing different combinations of breadth and depth: First, a large sample of 100 languages is investigated with respect to very few superficial parameters that can even be found in a sketchy description (cf. Appendix B). Second, a smaller sample of forty languages is studied in some depth with respect to questions that can only be answered by excellent reference grammars or dictionaries, by specialized studies of indefinite pronouns in these languages, or by information obtained from native speakers (cf. the data in Appendix A).

The problem of representativeness has been solved satisfactorily only for the 100-language-sample, which is evenly distributed among the genetic groups of the world (for minor reservations, cf. the discussion in § 2.4.3.2). The 40-language-sample is very biased genetically toward Indo-European languages ( 22 of the 40 languages), and even more areally toward European languages ( 30 if the Caucasus is included in Europe, 27 if it is excluded). The reason for this bias is of course the limited availability of data for other languages. However, since a diachronically unstable phenomenon like indefinite pronouns is less affected by genetic bias (as discussed in the previous subsection), I hope that the 40-language-sample still gives a fairly good picture of the variation found in human languages in general.

It should perhaps also be noted here explicitly that this study is limited to spoken languages, i.e. that no sign languages have been taken into account. The cross-linguistic study of sign languages is still in its infancy, and my own competence does not allow me to say anything even about an individual sign language. But clearly, eventually linguistic theory will have to account for spoken languages and for signed languages in a unified way.

### 2.4.3. The two samples

2.4.3.1. The 40 -language sample. The 40 languages are listed in Table 1. See Appendix A for the data on these languages, as well as the sources for these data.

Table 1. The languages of the 40-language sample

| Indo-European |  |
| :---: | :---: |
| Germanic |  |
| West | 1. German |
|  | 2. Dutch |
|  | 3. English |
| North | 4. Swedish |
|  | 5. Icelandic |
| Italic |  |
| Latin-Romance | 6. Latin |
| Western | 7. Portuguese |
|  | 8. Catalan |
|  | 9. French |
|  | 10. Italian |
| Eastern | 11. Romanian |
| Greek12. Modern Greek |  |
| Slavic |  |
| South | 13. Bulgarian |
|  | 14. Serbian/Croatian |
| West | 15. Polish |
| East | 16. Russian |
| Baltic 17. Lithuanian |  |
|  | 18. Latvian |
| Celtic 19. Irish |  |
| Indo-Iranian |  |
| Iranian |  |
| Eastern | 20. Ossetic |
| Western | 21. Persian |
| Indic | 22. Hindi-Urdu |
| Turkic |  |
| Southern | 23. Turkish |
| Central | 24. Kazakh |
| Northern | 25. Yakut |
| Finno-Ugrian |  |
| Ugrian | 26. Hungarian |
| Finnic | 27. Finnish |
| Manchu-Tungusic | 28. Nanay |
| Nakh-Daghestanian | 29. Lezgian |
| Afro-Asiatic |  |
| Semitic | 30. Maltese |
|  | 31. Hebrew |
| Chadic | 32. Hausa |
| Niger-Congo | 33. Swahili |
| Kartvelian | 34. Georgian |
| Dravidian | 35. Kannada |
| Sino-Tibetan | 36. Chinese |
| Andean | 37. Ancash Quechua |
| affiliation unclear | 38. Japanese |
|  | 39. Korean |
|  | 40. Basque |

2.4.3.2. The 100-language sample. This sample was selected according to the sampling method proposed in Rijkhoff et al. (1993), which measures the internal diversity of genetic groupings by means of a simple calculation based on the algebraic structure of a genetic language tree. This method is adopted here because it has the advantage that no information in addition to a complete classification of the world's languages (as offered in Voegelin and Voegelin (1977), Ruhlen (1987), Bright (ed.) (1992)) is required, in contrast to the methods employed in Dryer (1989) and Nichols (1992), which presuppose a lot of
additional knowledge about the time depth of genetic groupings. As in the example samples in Rijkhoff et al. (1993), my sample is based on the classification in Ruhlen (1987) because it is the most readily available classification.

The actual procedure of selecting the languages is described in detail in Rijkhoff et al. (1993) and will not be repeated here. Note, however, that I deviate from their model in one respect: Whenever no data were available for any language of a grouping that should have been represented in the sample, rather than reducing the sample size I added another language elsewhere in the next higher grouping. In this way, my 100-language sample really contains 100 languages, not 76 as would have been the case if Rijkhoff et al.'s proposal had been followed. Thus, my 100-language sample may show some distortions, but since imprecision is present elsewhere in the procedure (Ruhlen's (1987) classification is far from perfect, and Rijkhoff et al.'s sampling method is only an approximation), I do not think that this is a serious problem. In any event, not too much hinges on the quality of the 100-language sample because the data that I have for these languages is quite restricted anyway. The main point of this sample is to provide an impression of the world-wide situation, making it plausible that the conclusions based on the heavily biased 40-language sample can be extrapolated to the world's languages. ${ }^{\text {iv }}$

For genetic groupings which contain a greater number of languages for which information is available (Indo-European, Altaic, Semitic, etc.), I selected the languages randomly. In many other cases, I had to be content if I found any data at all.

The languages of the 100 -language sample are listed in Table 2. A more detailed description of the sample, including the genetic classification of the languages is given in Appendix B, together with the data that I gathered for these languages.

Table 2. The languages of the 100-language sample

| Abkhaz | Ibibio | Ntomba |
| :--- | :--- | :--- |
| Ainu | Babungo | Harar Oromo |
| Akkadian | Indonesian | Paez |
| Amele | Ingrian | Paiwan |
| Amharic | Jaqaru | Palauan |
| Atayal | Kabyle | Panare |
| Bambara | Kaingang | Pashto |
| Bashkir | Kalkatungu | Eastern Pomo |
| Basque | Kanuri | Romantsch |
| Bobo | Ket | Samoan |
| Bugis | Khmer | Santali |
| Burmese | Kilivila | Seychelles Creole |
| Burushaski | Koasati | Slave |
| Cayuga | Kobon | Songhai |
| Chinese | Koromfe | Upper Sorbian |
| Djaru | Koryak | Sumerian |
| Dogon | Kwamera | Sumu |
| Dongolawi | Lak | Tagalog |
| Dyirbal | Lakhota | Takelma |
| Ancient Egyptian | Lango | Takia |
| Ewe | Logbara | Telugu |
| Fula | Malagasy | Thai |
| Gbeya | Mangarayi | Tok Pisin |
| Goajiro | Manipuri | Warndarang |
| Gooniyandi | Mapuche | Welsh |
| W Greenlandic | Margi | Yagua |
| Guarani | Maricopa | Yapese |
| Haruai | Masalit | Yoruba |
| Hausa | Mixtec | Yukaghir |
| Hittite | Khalkha Mongolian | Yuwaalaraay |
| Hmong Njua | Nahali | Xinh Mul |
| Hua | Classical Nahuatl | Xhosa |
| Huastec | Newari |  |
| Iatê | Nivkh |  |
|  |  |  |
|  |  |  |

[^2]
## 3

## Formal and Functional Types of Indefinite Pronouns

### 3.1. The Main Formal Types of Indefinite Pronouns

In the first section of this chapter, I give a survey of the formal types of indefinite pronouns. We first look at the types of markers that characterize morphologically complex indefinite pronouns, and then examine the kinds of bases to which these markers are attached.

### 3.1.1. Types of indefiniteness markers

Indefinite pronouns normally occur in SERIES ${ }^{i}$ which have one member for each of the major ONTOLOGICAL CATEGORIES ${ }^{\mathrm{ii}}$ such as person, thing, property, place, time, manner, amount, plus a few others. Some examples of different indefinite pronoun series in different languages are given in (20).
(20) a

| English | some-series | any-series | no-series |
| :--- | :--- | :--- | :--- |
| person: | somebody | anybody | nobody |
| thing: | something | anything | nothing |
| place: | somewhere | anywhere | nowhere |
| time: | sometime | anytime | never |
| manner: | somehow | anyhow | no way |
| determiner: | some | any | no |


| b. Polish | nie-series | $s$-series | -kolwiek-series | $n i$-series |
| :---: | :---: | :---: | :---: | :---: |
|  | ('somebody', etc.) | ('somebody', etc.) | ('anybody', etc.) | ('nobody') |
| person: | niekto | ktoś | ktokolwiek | nikt |
| thing: | nieco | cos' | cokolwiek | nic |
| property: | niejaki | jakiś | jakikolwiek | nijaki |
| place: | - | gdzieś | gdziekolwiek | nigdzie |
| time: | niekiedy | kiedys' | kiedykolwiek | nigdy |
| manner | niejako | jakoś | jakkolwiek | nijak |
| moun |  | ileś | ilekolwiek | - |
| determiner: | niektóry | którys' | którykolwiek | $z \%$ aden |


| c. Lezgian | sa ... jata'ni-series <br> ('somebody', etc.) | $\hat{x}$ ajit'ani-series <br> ('anybody', etc.) | sa ...-ni-series <br> ('nobody', etc.) |
| :---: | :--- | :--- | :--- |
| person: | sa wuž jat'ani | wuž $\hat{x}$ ajit'ani | sa kas-ni |
| thing: | sa wuč jat'ani | wuč ajit'ani | sa zat'ni |
| property: | sa hî̂ tin jat'ani | hî́x tin $\hat{x}$ ajit'ani | - |
| place: | sa hina jat'ani | hina $\hat{x}$ ajit'ani | sana-ni |
| time: | sa mus jat'ani | mus $\hat{x}$ ajit'ani | sadra-ni |
| manner: | sa hik' jat'ani | hik' $a j i t^{\prime} n i$ | sak'-ni |
| amount: | sa hiq'wan jat'ani | hiq'wan $\hat{x}$ ajit'ani | - |

In the most common case, indefinite pronouns consist of (i) a stem indicating the ontological category, plus (ii) a formal element shared by all members of an indefinite pronoun series, such as some- and any- in English, nie-, -s', -kolwiek and $n i$ - in Polish, and $s a \ldots$ jat'ani, $\hat{x}$ ajit'ani and sa ...-ni in Lezgian. This element will be called INDEFINITENESS MARKER ${ }^{\text {iii }}$ in the present work.

The indefiniteness marker is an affix or a particle which stands next to the pronoun stem. It may be a prefix, like English some-, any-no-, Polish nie-, ni-, or it may be a suffix, like Polish -ś, -kolwiek. The indefiniteness marker may consist of two or more parts, e.g. Lezgian sa ... jat'ani, where the first part is placed before and the second part is placed after the stem. Even indefiniteness markers consisting of three or four parts are not unheard of, e.g. French que ce soit (in qui que ce soit 'anybody', quoi que ce soit 'anything', etc.) or Russian by to ni bylo (in gde by to ni bylo 'anywhere', kak by to ni bylo 'anyhow').

When the indefiniteness marker is an affix, it is usually the outermost affix of an indefinite pronoun, i.e. it is an EXTRAFIX. ${ }^{\text {iv }}$ Case inflections are normally inside the indefiniteness marker. This is best illustrated with a postfixal indefiniteness marker like Latin -dam in qui-dam, or Georgian -me in ra-me.
(21) Latin ('somebody')

Nom. qui-dam
Gen. cujus-dam
Dat. cuj-dam
Acc. quem-dam
Abl. quo-dam
(22) Georgian ('anything')

Nom. ra-me
Dat. ras-me
Gen. ris(a)-me
Instr. rit(i)-me
Adv. rad-me

Case prefixes are rarer, but if one considers Russian 'prepositions' like s 'with', $u$ 'at', as case prefixes, then the extrafixal (more specifically, antefixal) nature of the Russian prefixal indefiniteness markers ni- and koe- can be illustrated:
(23) Russian

| Nom. | koe-kto | 'somebody' | ni-kto |
| :--- | :--- | :--- | :--- |
| u-case | koe u kogo |  | ni u kogo |
| s-case | koe s kem |  | ni s kem |
| ot-case | koe ot kogo |  | ni ot kogo |

However, like all extrafixes, extrafixal indefiniteness markers show a tendency to be rearranged. Thus, alongside forms like Georgian ra-d-me and Russian koe u kogo, there also exist forms like ra-me-d and $u$ koe-kogo. See further $\S 6.3 .3$ and Haspelmath (1993b).

When the indefiniteness marker is not an affix but a particle (or a sequence of particles), it may stand next to its derivational basis or at the margin of a phrase. These two positions are different only with indefinite determiners, which do not form a phrase of their own but combine with a noun phrase. Examples ( $24 \mathrm{a}-\mathrm{c}$ ) show such discontinuous indefinites, where the basis (which is always an interrogative determiner, 'which?') precedes the noun and the indefiniteness marker follows it.
a. Japanese $\begin{array}{lllll}\text { Yosikoo-ga } & \text { dono } & \text { tegami } & \text { mo } & \text { yom-ana-katta. } \\ \text { Yoshiko-NOM which } & \text { letter } & \text { INDEF } & \text { read-NEG-PAST } \\ \text { 'Yoshiko didn't read any letter.' } & \end{array}$
b. Dutch (Paardekooper 1978: 577)

Ik lees dat liever als wat voor boeken ook.

I read that preferably than what kind books INDEF
'I read that with more pleasure than any books.'
c. Lezgian (Nakh-Daghestanian; Haspelmath 1993a: 196)

Hi kac $\hat{x}$ ajit'ani hajwan ja.
which cat INDEF animal is
'Any cat is an animal.'
d. French

Tu n'es pas capable d'agir par quelque impulsion personnelle que ce soit. 'You are not able to act by any personal impulse.'

While indefiniteness markers are sequences of segments in most cases, this is not the only possibility. Like other grammatical morphemes, they can also be expressed by reduplication and by stem modification.

The signaling of indefinite pronouns by means of REDUPLICATION (mainly full reduplication) is rather common. Some examples are shown in (25) (see further § 7.4):
a. Latin $\begin{array}{ll}\text { quis-quis } & \text { 'anyone' } \\ \text { ubi-ubi } & \text { 'anywhere' } \\ \text { Malay } & \\ \text { apa-apa } & \text { 'something' }\end{array}$
c. Chinese Pidgin Russian (Nichols 1986)
čego-čego 'something, anything' kakoj-kakoj 'some, any'

Finally, the indefiniteness marker may consist in a STEM MODIFICATION. This type is extremely rare, but I have found an example in Chechen. In this language indefinite pronouns are formed from interrogative pronouns by lengthening the final consonant of the stem and adding the particle $a .^{\mathrm{V}}$

Chechen (Nakh-Daghestanian; Maciev 1961) interrogative indefinite person: Abs. mila milla a 'someone'


Thus the first important generalization that we can make is that indefinite pronouns are as a rule DERIVED forms. That this is not a trivial observation can be seen from the artificial language Esperanto, designed by Ludwik Zamenhof in 1887. As a rule, Esperanto grammar follows the typological design of Standard Average European, eliminating irregularities and 'useless' features like gender and agreement. There are two indefinite series in Esperanto, which are clearly related to interrogative pronouns, much as in many natural languages:

| (27) Esperanto | interrogative <br> ('wh-') | indefinite <br> ('some-') | negative <br> ('no-') |
| :--- | :--- | :--- | :--- |
| person: kiu | iui | neniu |  |
| thing: | kio | io | nenio |
| property: | kia | ia | nenia |
| place: | kie | ie | nenie |
| time: kiam | iam | neniam |  |
| manner: | kiel | iel | neniel |

A priori, it seems logical that the indefinite meaning should be expressed by a maximally unmarked form, as in the Esperanto series iu 'someone', io 'something', etc. After all, indefiniteness is not a concrete, positive meaning that can be easily described. Instead, indefiniteness seems to be very similar to the absence of any meaning at all, and from this point of view, it makes sense to give indefinite pronouns a maximally unmarked form.

However, natural languages that are structured like Esperanto in this respect are virtually unattested. I am not aware of a clear case in which an indefinite pronoun is formally unmarked with respect to a marked interrogative pronoun. With respect to its indefinite pronoun system, Esperanto is thus probably not a possible human language. The derived nature of indefinite pronouns is one of the cross-linguistic observations that call for an explanation.

Let us briefly examine possible exceptions to the rule that if there is a basicderived relation between interrogatives and indefinites, it is always the indefinites which are derived. In a large number of languages, indefinites and interrogatives are formally identical (see §3.1.2.1 and §7.3). Now some languages require a sentential interrogative marker in question sentences, and when this interrogative marker attaches to the interrogative pronoun, it might look as if it were derived from the unmarked indefinite pronoun. ${ }^{5 a}$ In the Australian language Ngiyambaa (Donaldson 1980: 148-50), interrogative/indefinite roots must be combined with special sentential markers both when used as interrogatives and when used as indefinites. Thus, minja- 'what/something' appears as minja-wa: ‘what?' or as minjaN-ga: 'something'. Thus Ngiyambaa has a system where indefinites are based not directly on interrogatives, but on the same base as interrogatives.

Exceptions to the general rule that indefinite pronouns are derived are rare, but occasionally we find indefinite pronouns or even whole series that are not synchronically related to anything else, as exemplified by the cases in (28).
a. German

| nichts | 'nothing' |
| :--- | :--- |
| nirgends | 'nowhere' |

b. Catalan ningú 'anybody'
res 'anything'
enlloc 'anywhere'
mai 'ever'
cap 'no'
c. Hindi/Urdu
koii 'someone'
kuch'something'
kahis 'somewhere'
kabhii 'sometime'
Such cases are not uncommon in the Indo-European languages of Europe, but outside of Europe they are rare. In my 100-language sample, I have found such indefinites only in five languages. Diachronically all the above indefinites are known to go back to interrogatives or generic nouns plus an indefiniteness marker (or negation).

### 3.1.2. The derivational bases of indefinite pronouns

In the previous subsection we saw that indefinite pronouns are generally marked as such by different kinds of indefiniteness markers. Thus, indefinite pronouns are generally derived forms. But what are they derived from?

There are two main types of derivational bases from which indefinite pronouns are derived in the world's languages: (i) INTERROGATIVE PRONOUNS, and (ii) GENERIC ONTOLOGICAL-CATEGORY NOUNS such as 'person', 'thing', 'place', 'time', 'manner', etc. In addition, indefinite pronouns may be based on the numeral 'one'.
3.1.2.1. Interrogative-based indefinites. Most of the examples of indefinite pronouns given in the preceding subsection illustrate interrogative-based indefinites: all four Polish series in (20b), two of the Lezgian series in (20c), as well as the Latin, Georgian, Russian, Japanese, Dutch, French, Malay and Chechen cases in (21-26) above. In descriptions of indefinites in individual languages or language families, we often find statements pointing to the seemingly remarkable fact that indefinite pronouns are based on interrogative pronouns (e.g. Frei (1940) on Indo-European, Beke (1913-14: 130) on FinnoUgrian). This fact may be surprising from the point of view of speakers of English or French (in which languages the words for 'somebody' and 'something' are not based on interrogative pronouns), but it is in fact an extremely common phenomenon in languages across the world, as has been shown by two studies of the Stanford universals project. According to Ultan (1978: 230), 'indefinite words are at least in part either formally identical with or related to question words... The only possible exceptions to this statement in the present sample appear to be Samoan and Rotuman...' (Ultan's sample consists of 79 languages, distributed world-wide.) And Moravcsik (1969) states: 'The indefinite pronoun has been found to be identical or similar, in most cases, to some question pronoun.' Moravcsik lists 26 languages (representing all continents) which exhibit this similarity. In my sample of 100 languages, 63 languages show this similarity. It is thus not as ubiquitous as Ultan's results suggested, but clearly the majority of the world's languages have interrogativebased indefinite pronouns.

As Ultan and Moravcsik observe, indefinite pronouns are sometimes not overtly derived from interrogative pronouns, but are identical to them. For example, in Khmer, the shapes of indefinite pronouns (ne'q-naa 'somebody', $q w$ ' 'something', etc.) are identical to those of interrogative pronouns (ne 'q-naa? 'who?', qw y? 'what?', etc.), as shown by the following examples:
(29) Khmer (Huffman 1967: 153, 155)
a. Look cON t $\tilde{n}$ qwíy?
you want buy what 'What do you want to buy?'

```
b. Kñom tiñ \(q w^{\prime} y \quad\) ha'y, trOlOp tow pte \(h\).
    I buy what:INDEF PRF return go house
    'After I buy something, I'm going back home.'
```

In such cases we can say that indefinite pronouns are zero-derived (derived by conversion) from interrogative pronouns. Here one might object that the direction of derivation could just as well be the opposite: Interrogative pronouns could be zero-derived from indefinite pronouns. However, this is unlikely because indefinite pronouns are usually expressed by more morphemes than, and usually derived from, interrogative pronouns. Hence, typologically indefinites are a marked category relative to interrogatives. Moravcsik (1969: 77) states this in even stronger terms: 'If [the indefinite pronoun and the question pronoun] are partially similar it is the indefinite pronoun whose shape includes morphologically that of the question pronoun.' Thus, there is a universal asymmetric markedness relation such that indefinite pronouns are usually more marked than and derived from interrogative pronouns. This asymmetry is sometimes neutralized (in languages like Khmer), but it is virtually never reversed. The semantic and diachronic relationship between indefinites and interrogatives will be further discussed below (§7.3).
3.1.2.2. Generic-noun-based indefinites. The other main type of derivational basis, general ontological-category nouns, can be exemplified by the Persian indefinite series in (30).

| Persian |  |  |  |
| :---: | :---: | :---: | :---: |
| kas-i | 'someone' | lit. | 'a person' |
| čiz-i | 'something' |  | 'a thing' |
| (dær) yek j$\hat{a}-y i$ | 'somewhere' |  | '(at) one place' |
| yek va $\boldsymbol{V}_{\text {t-i }}$ | 'sometime' |  | 'one time' |
| yek towr-i | 'somehow' |  | 'one manner' |

These indefinite pronouns are based on the general nouns kas 'person', č iz 'thing', y $\hat{a}$ 'place', etc. The indefiniteness marker $-(y) i$ also occurs in ordinary indefinite noun phrases (e.g. ketâb-i 'a book'), so it seems that there is nothing special about the expressions in (30): They are perhaps not indefinite pronouns at all, but ordinary indefinite noun phrases that Persian uses to express what many other languages express by means of indefinite pronouns.

It may well be that this is the correct analysis for some languages (cf. the discussion in § 3.3). However, there are many cases where combinations of a generic ontological-category noun plus an indefiniteness marker have been grammaticalized sufficiently to qualify as real pronouns. A good example is provided by English somebody, something, sometime, someplace, anybody, etc. These forms are clearly distinct from the indefinite NPs some body, some thing, some time, etc., both semantically and formally, and thus show that indefinite pronouns can be derived from general ontological-category nouns. ${ }^{\text {vi }}$

Another example is provided by Hebrew iš, discussed in Glinert (1982: 46061). This is both a noun ('man') and an indefinite pronoun ('anyone'), so one might ask whether these are really two different items (with iš 'anyone, no one' derived from iš 'man') The answer is yes: That iš 'anyone, no one' is a separate lexical item is shown by three syntactic facts: (i) iš 'anyone, no one' is restricted to negative-polarity contexts (cf. § 3.2.2), as shown in (31a-b); (ii) iš 'anyone, no one' allows a partitive phrase, like other pronouns, cf. (32); and (iii) iš 'anyone,
no one' cannot be modified by an adjective, cf. (33). In all these respects, iš 'man' behaves differently.

Hebrew (Glinert 1982: 461)
(31) a. Im yesapru zot le-iš,... if they:tell that to-man 'If they tell it to anyone / to a man,...'
b. Sipru zot le-iš . they:tell that to-man 'They will tell it to a man <*to anyone>.'
(32) Iš mehem lo hešiv.
anyone of:them NEG replied
'None of them replied.' <*A man of them didn't reply.>
(33) Lohaya šam iš meyulad.

NEG was there man special
'A special man was not there.' <*No one special was there.>
These syntactic differences show that the pronoun iš is a different lexical item and can be regarded as derived (at least diachronically) from the general noun iš 'man'.

In my 100-language sample, I registered 42 languages with generic-nounbased indefinites. It may be that many of these cases are not really indefinite pronouns, but represent languages that lack indefinite pronouns (cf. § 3.3). But my suspicion is that subtle differences like those cited above can be found in many of these languages. See $\S 7.5 .1$ below for further discussion of the use of generic nouns as indefinite pronouns.
3.1.2.3. 'One'-based indefinites. The two types of derivational bases discussed above are by far the most important ones for the overwhelming majority of indefinite pronouns in the languages that I have surveyed. However, a minor third type should also be mentioned: the numeral 'one'.

Most often this numeral is used in the sense 'somebody', and it is not uncommon in languages where indefinite pronouns are not based on interrogatives. For example, in Egyptian Arabic, 'someone' is waalid, and English someone is of course also a case in point. Since the numeral 'one' is usually the source for the grammaticalization of indefinite articles (cf. e.g. Givón 1981), it is hardly surprising that it should be used as the basis of an indefinite pronoun as well. Why it should consistently have the meaning 'someone' rather than 'something' is less obvious, but this must have to do with the unique importance of individuality for people. Very rare are cases like Lezgian (cf. (20c) above) where the numeral 'one' ( $s a$ ) is also the basis of adverbial indefinite pronouns such as sana 'somewhere', $\operatorname{sak}^{\prime}(a)$ 'somehow'. See below $\S 7.5 .2$ for further discussion of the role of 'one' in indefinite pronouns.

### 3.1.3. The ontological categories

It is an interesting question why indefinite pronoun series should consist precisely of words for ontological categories such as 'person', 'thing', 'property', 'place', 'time', 'manner', 'amount', 'reason'. For example, why are more concrete features like color and size or more abstract notions like concession systematically absent from lists of indefinite pronouns? Jackendoff 1983:48-56 argues that such ontological categories reflect the major constituents of conceptual structure. Still, one might want to know why conceptual structure
is made up precisely of these constituents (see Heine et al. (1991: 55-58) for some recent discussion).

Fascinating though this question is, I will not pursue it further here because it is not specific to indefinite pronouns. Independently of genetic and areal affiliation, languages express roughly the same ontological categories as interrogative and demonstrative pronouns, as well as several more specific pronoun types (e.g. relative pronouns) that are not universal. Since the different types of pronouns generally show parallels in the way they express the various ontological categories, traditional grammars of Indo-European languages often contain a table of 'correlative pronouns' (including pronominal adverbs), e.g. Table 3 for Classical Greek.

Table 3. 'Correlative pronouns' in Classical Greek (somewhat simplified)

| ontological category | interrogative pronouns | demonstrative pronouns | relative pronouns | indefinite pronouns |
| :---: | :---: | :---: | :---: | :---: |
| person tís | hou\$tos 'who?' | hós 'this' | tis 'which' | 'someone' |
| thing | tí 'what?' | - | - | ti 'something' |
| property | poi\$os 'what kind?' | toiósde 'this kind' | hoi\$os 'which kind' | poiós 'some kind' |
| place pou\$ | ekei\$ 'where?' | hou\$ 'there' | pou 'where' | 'somewhere' |
| time póte | tóte 'when?' | hóte 'then' | poté 'when' | 'sometime' |
| manner $p$ õs | hoútō $s$ 'how?' | $h o \bar{s}$ 'like this' | $p o \bar{s}$ | 'somehow' |
| amountpósos | tosósde 'how much?' | $\begin{aligned} & \text { hósos } \\ & \text { 'this much' } \end{aligned}$ | posós 'how much' | 'some amount' |

Such an organization of the various types of pronouns is not only typical of Indo-European languages but can be observed in languages of different types (cf. the analogous table for Lezgian in Haspelmath (1993a: 188)). The pronoun types are characterized by their stems (Greek ti-/po-: interrogative/indefinite, (hou-)to-: demonstrative, ho-: relative) and show similar affixes for the various ontological categories (in Greek, -ou for place, -ote for time, $-\bar{s} s$ for manner, etc.). There are various idiosyncrasies, as we expect for derivational morphology.

The seven ontological categories represented in Table 3 are the categories that are most often expressed by simple means in the languages of the world. Of course, it is always possible to create more specific complex expressions, e.g for color (interrogative what color?, indefinite of some color, etc.) or concession (interrogative: despite what?, indefinite despite something, etc.). This is what languages do which have fewer than these seven most common categories, e.g. English, where amount and property have to be expressed by a circumlocution (how much, what kind).

The distinction between human and non-human referents is made practically everywhere ('who' vs. 'what', 'somebody' vs. 'something'), even in languages where humanness is not very prominent elsewhere in the grammar. Languages that assign a prominent role to other gender distinctions in their grammar (e.g. sex-based gender) nevertheless usually make the human/non-
human distinction here, e.g. Classical Greek. Languages like Gothic which have a gender distinction here (hwas 'who (masc.)', hwo 'who (fem.)', hwat 'what') are rare, as are languages like Lithuanian which lack a human/non-human distinction (kas 'who, what').

The standard series of seven categories is most often enriched by the addition of further distinctions in the place category. Many languages have simple expressions for the directional notions 'whither' and 'whence', and sometimes also for the path notion 'along where' (e.g Polish te $\mathbf{4} d y$ 'this way'). Furthermore, many languages have a determiner ('which') that is different from both the substantival 'who' / 'what' and the adjectival 'what kind'. Another notion that is sometimes expressed by simple means is cause or reason ('why').

In general, there do not seem to be great differences between different types of pronouns with respect to which ontological categories they have. True, there are sometimes specific gaps for indefinite pronouns: For example, while English and German have simple cause interrogatives, why and warum, both languages lack the corresponding indefinites (*somewhy, *irgendwarum). However, Russian does have a regularly formed pronoun that expresses precisely this idea: рос̌ eти-to 'for some reason', from рос̌ eти 'why'. Thus, the English and German gaps may well be accidental.

These few remarks on ontological categories should suffice. We now turn to a first overview of the functional distinctions expressed by indefinite pronouns, a topic of central concern to this work.

### 3.2. The Main Functional Types of Indefinite Pronouns

This section gives an informal description and exemplification of the most important functional distinctions that are expressed by different series of indefinite pronouns. Most of these distinctions are discussed again in later parts of this work.

### 3.2.1. Negation: negative indefinite pronouns

Many languages have special indefinite pronouns that are only used in negative sentences where the scope of negation extends over the indefinite. For example, Latin nemo, English nothing, Bulgarian nikoj, and Lezgian sada-ni always express negation. Some of these indefinites contain a formally negative formative synchronically (Bulgarian ni-) or at least diachronically (English no-, Latin ne-), but many do not.
a. Latin Nemo venit. nobody came 'Nobody came.'
b. English I noticed nothing.
c. Bulgarian

Ni-kojne se obadi. NEG-who NEG REFL phoned 'Nobody phoned.'
d. Lezgian

Sada-ni za-z am žğa-na-č. one.place-even I-DAT it:ABS find-AOR-NEG
'I did not find it anywhere.'
Notice that in some languages, an indefinite pronoun by itself is sufficient to express sentential negation, e.g. in Latin and English, while in others the negative pronouns cooccur with verbal negation, e.g. in Bulgarian and Lezgian.

Other languages do not have any special negative indefinites, but employ indefinites that are also used for other, non-negative functions. For instance, Swedish naigon (ex. 35) and Bambara $f E n$ (ex. 36) are not interpreted negatively when used in questions. In some cases, a sentence may even be ambiguous, interpretable as negative or non-negative, as exemplified by Hindi/ Urdu (37).
(35) Swedish
a. Fick du någon?
got you some
'Did you get any?'
b. Jag har inte sett någon av dem.

I have not seen any of them
'I have not seen any of them.'
Bambara (V.F. Vydrin, p.c.)
a. í yéfEn yé wà?
you PERF thing see Q
'Did you see anything?'
b. $n$ tE fEn fO

I NEG:FUT thing say
'I will not say anything.'
Hindi/Urdu
a. Aaj koii aayaa.
to.day someone came
'Today somebody came.'
b. Aaj koii nahi\$ aayaa.
today someone NEG came
'Today somebody didn't come.' Or: 'Today nobody came.'
An important subclassification of negation concerns the syntactic position of the negative element. In the cases that we have seen so far in this section, the negated indefinite pronoun is an argument of the negated clause. But the negated indefinite pronoun may also be in a subordinate clause, in particular in situations of negative raising (i.e. when the negation in the superordinate clause logically belongs to the subordinate clause). In such situations of SUPERORDINATE NEGATION, some languages use the same indefinite series as in direct negation (cf. 38-39), but others require a different series (40-41).
(38) Italian
a. Non è venuto nessuno.
not has come anybody
'Nobody has come.'
b. Non è necessario che venga nessuno.
not is necessary that come anybody 'It is not necessary that anybody come.'
(39) Basque
a. Ez naiz i-noiz etorri-ko. NEG I:AUX INDEF-when come-FUT 'I will never come.'
b. Ez dut uste gizon hori i-noiz ikusi dud-anik. NEG I:it:AUX believe man that INDEF-when seen I:him:AUX-COMP 'I don't believe that I've ever seen that man.'
German
a. Niemand ist gekommen.
nobody is come 'Nobody came.'
b. Es ist nicht nötig, dass jemand kommt. it is not necessary that someone comes 'It is not necessary that anybody come.'
Hungarian
a. Nem lát-t-am sem-mi-t.

NEGsee-PAST-1SG NEG-what-ACC
'I did not see anything.'
b. Nem hisz-em, hogy vala-kilát-t-a volna.

NEGthink-1SG that INDEF-who see-PAST-3SG SBJV 'I don't think that anybody has seen it.'

Many languages also require special indefinites with implicitly negative expressions like the preposition 'without' or the verbs 'deny' and 'refuse', e.g. Russian nikakaja pomošč 'no help', but bez kakoj-libo pomošč i 'without any help' (*bez nikakoj pomošč i). Indefinites in such contexts of implicitly negative expressions and indefinites in the context of superordinate negation are usually the same, so they are treated together as INDIRECT NEGATION here. Van der Wouden (1994: ch. 1) shows that superordinate negation and implicit negation share the semantic property of anti-additivity (a Boolean property). Thus, the function of indirect negation as defined here is ultimately based on meaning.

Topics related to indefinite pronouns and negation will be treated in detail in chapter 8.

### 3.2.2. Negative polarity (or scale reversal)

Some series of indefinite pronouns in some languages are also associated with negative environments (like the negative pronouns in the previous section), but are not restricted to the expression of non-existence. In addition to negative clauses, they can also be used in conditional and interrogative clauses, in the standard of comparison, and in some further environments. Expressions that show this distribution are generally called NEGATIVE POLARITY ITEMS. ${ }^{\text {vii }}$

One type of negative polarity items are lexical minimal-unit expressions of the type (lift) a finger, (see) a living soul, which probably exist in all languages. But some languages also have indefinite series that show the same properties. The best-known negative-polarity indefinite is of course the English any-series, but similar indefinites can be found in many other languages (cf. Schmid 1980: ch. 3).

In the following, I will exemplify the various conditions under which negative polarity items are licensed mainly on the basis of examples from English (see Linebarger (1981, 1987), von Bergen and von Bergen (1993) for detailed studies of negative polarity in English). The (a) examples show minimal-unit negative-polarity items, and the (b) examples show indefinite pronouns.

In declarative affirmative sentences, negative-polarity items are ill-formed:
a. *He lifted a finger to help her.
b. *He did anything to help her.

The central context where negative polarity items are licensed is direct (or clausemate) negation.
a. He didn't lift a finger to help her.
b. He didn't do anything to help her.

Next, negative-polarity items are licensed in (especially polar) questions (i.e. interrogative sentences),
a. Would she lift a finger for you?
b. Have you heard anything new about the ozone hole?
and in the protasis of a conditional sentence:
a. If you budge an inch, I'll hit you.
b. If you tell anybody, we'll punish you.

Both questions and conditional protases are compatible with the truth of the corresponding negative clause, so might conceivably be interpreted as natural extensions of the prototypical licensing context (cf. Progovac 1994).

Negative-polarity items may also occur in quite a few non-negative contexts that only carry a negative implication od some kind. These include negative quantifiers like 'few',
a. Few people give a damn about the rain forest.
b. Few people show any interest in global issues.
the restrictive focus particle 'only',
a. Only Mira has a hope in hell of passing.
b. Only Luozhu has anything substantial to report.
the purposive complement of an excessive comparative ('too'),
(48) a. Khadija is too tired to give a damn.
b. Ayse is too occupied to invite anyone else.
complements of implicitly negative verbs like 'doubt',
(49) a. I doubt that Ronald gave a red cent to charity.
b. We doubt that Juan applied anywhere.
and arguments of implicitly negative adpositions like 'without':
(50) a. Noriko is getting by without lifting a finger.
b. Hannu is getting by without doing anything.

A context where the connection to negation is less obvious is the standard of comparison of inequality or equality:
a. Cows fly more often than John lifts a finger to help Louise.
b. The boy can run faster than anyone in his class.
(52) The boy runs as fast as anyone in his class.

Finally, negative-polarity items are licensed in relative clauses headed by a universal quantifier:
a. Everyone who knows a damn thing about Dyirbal knows that it's syntactically ergative.
b. Everyone who likes any kind of seafood will like our new seafood sticks.

To give some examples of negative-polarity indefinites from a less wellknown language, consider the Catalan indefinite series ningú 'anybody', res 'anything', cap 'any', mai 'ever' etc.:
(54) Catalan (Lleó 1983)
a. (direct negation)
No et demano res.
not you I:ask anything
'I do not ask you anything.'
b. (interrogative) Hi
ha res de nou?
there has anything of new
'Is there anything new?'
c. (conditional) Si el veus mai,...
if him you:see ever
'If you ever see him,...'
d. (implicit negation) Sense dir res, va menjar la sopa.
without say anything did eat the soup
'Without saying anything, she ate the soup.'

However, in-depth research on negative polarity has shown that the various contexts that are usually regarded as negative-polarity contexts behave by no means uniformly (see especially van der Wouden 1994). The most important subtypes of negative-polarity contexts are questions, conditionals, the standard of comparison, indirect negation, and direct negation.

We already saw in the preceding section that direct negation and indirect negation are two functions that must be distinguished. In addition to indefinites that can only be used in the scope of (direct or indirect) negation, there are also indefinites that are used in the other negative-polarity contexts but cannot be used in the contexts of direct negation. Such a case is the Russian -libo-series:

> Ja ne videla $\quad$ *kogo-libo/ I ni-kogo. Inot saw whom-INDEF/ INDEF-whom 'I didn't see anyone.'
a. Znajut li oni čto-libo ob ozonnoj dyre? know $Q$ they what-INDEF about ozone hole 'Do they know anything about the ozone hole?'
b. Esli ty skažeš' komu-libo, my tebja nakažem. if you tell whom-INDEF we you punish 'If you tell anyone, we'll punish you.'
d. Malo kto pokazyvaet kakoj-libo interes $v$ ètom. few who shows which-INDEF interest in this
'Few people show any interest in it.'
Indefinite pronouns very often behave in the same way in questions and conditionals, but there are also indefinites that are restricted to questions and cannot be used in conditionals, e.g. the Persian hič-series (cf. 57), and indefinites that are restricted to conditionals and cannot be used in questions, e.g. the Modern Greek -dhípote-series (cf. 58).
(57) Persian
a. Âyâ hič č čiz-imi-šanav-i?
'Can you hear anything?'
b. *Agar hič čiz-i šanid-i, be man begu. if INDEF thing-INDEF hear-2SG to me tell:IMPV 'If you hear anything, tell me.'
(58) Modern Greek
a. An dhis oti-dhípote, pés mu. if you:see what-INDEF tell:IMPV me 'If you see anything (at all), tell me.'
b. *Ídhes oti-dhípote?
you:saw what-INDEF
'Did you see anything (at all)?'
The standard of comparison stands apart from questions and conditionals in that very often an indefinite series that can be used in questions and conditionals is inadmissible in the standard of comparison, e.g. etwas in German (cf. 59). Conversely, indefinites that occur in the comparative context may not be possible in conditionals and questions, e.g. the Romanian ori-series (cf. 60).
(59) German
a. Hast du etwas gesehen?

Did you see anything?
b. *Das steht dir besser als etwas anderes. ${ }^{\text {viii }}$
'This suits you better than anything else.'
(60) Romanian (Beatrice Primus, p.c.)
a. Niculina fuge mai repede decît ori-ce fata* din clasa*.

Niculina runs more fast than INDEF-what girl in class 'Niculina runs faster than any girl in her class.'
b. *Daca* auzi ori-ce, trezes3te-ma*.
if hear:2SG INDEF-what wake-me
'If you hear anything, wake me up.'

### 3.2.3. Specificity and non-specificity

In some languages, different indefinite series are used depending on whether the indefinite NP is SPECIFIC or NON-SPECIFIC. The concept of specificity is a key concept in the semantics of reference and has been discussed extensively in the literature (cf., among many others, Seliverstova 1964, Fodor 1970, Jackendoff 1972a: ch. 7, Ioup 1977, Croft 1983, Galmiche 1983, Fauconnier 1985, Paduč eva 1985, Lavric 1990, Enç 1991). There is no universal agreement on what
phenomena fall under this concept, but there seems to be a broad consensus that it is best illustrated by a sentence such as (61). In this sentence, the NP $a$ native speaker of Ainu is ambiguous between a specific reading and a nonspecific reading. On the specific reading, (61) could be continued by (62a), and on the non-specific reading it could be continued by (62b).
(61) Nobuko wants to marry a native speaker of Ainu.
(62) a. (specific) ...She fell in love with him during fieldwork sessions.
b. (non-specific) ...because she is Ainu herself, and she wants her children to acquire her ancestors' language.

In the specific reading, the existence of a uniquely identified Ainu speaker is presupposed, whereas in the non-specific reading, the identity of the Ainu speaker has not been established. I will say (preliminarily) that an expression is specific if the speaker presupposes the existence and unique identifiability of its referent.

Several overt correlates of the specific/non-specific distinction have been cited in the literature, especially (i) 'discourse referents', (ii) paraphrasability by an existential sentence, and (iii) disambiguation by specific determiners.
(i) Only a specific NP can have a 'discourse referent', i.e. can be referred to by an anaphoric pronoun in a present indicative clause (Karttunen 1976: 366).
(63) a. Cheolbai bought a bicycle [specific]. It is black.
b. Cheolbai wants to buy a bicycle [non-specific]. *It is black. ${ }^{\text {ix }}$
(ii) A paraphrase with an existential sentence is only possible with a specific NP (Heringer 1969: 90).
(64) a. (specific) There is a native speaker of Ainu who Nobuko wants to marry. She fell in love with him during fieldwork sessions.
b. (non-specific) *There is a native speaker of Ainu who Nobuko wants to marry because she is Ainu herself...
(iii) There are determiner-like expressions in some languages which seem to force a specific reading, especially English a certain and its equivalents in other languages (e.g. German ein bestimmter, Dutch zeker, Russian opredelennyj, etc.)
(65) English
(only specific) Nobuko wants to marry a certain native speaker of Ainu.
(66) German
(only specific) Murat möchte ein bestimmtes Gemälde kaufen. Murat wants a certain painting buy 'Murat wants to buy a certain picture.'

These three tests positively identify only specific NPs. However, once we bring indefinite pronouns into the picture, we also get a positive criterion for non-specific NPs. It is not uncommon for languages to have two different indefinite series for specific and non-specific NPs. I will give some examples from Russian, Lithuanian, Modern Greek, Georgian, and Kannada. The specific and non-specific indefiniteness markers are shown in (67). (The interrogative pronoun on which the indefinites are based is symbolyzed by 'WH'.)
(67)

Russian
Lithuanian
Modern Greek
Georgian
Kannada

| specific | non-specific |
| :--- | :--- |
| WH-to | WH-nibud' |
| kaž-WH | WH nors |
| kápjos etc. | kanénas etc. |
| WH-Vac | WH-me |
| WH-oo | WH-aadaruu |

The following sentences illustrate the prototypical context with 'want':
(68) Russian (Paduč eva 1985: 211)
a. Ivan xoč et spet' kakoj-to romans. Ivan wants sing which-INDEF romance 'Ivan wants to sing some [specific] romance.'
b. Ivan xočet spet' kakoj-nibud'romans. Ivan wants sing which-INDEF romance 'Ivan wants to sing some [non-specific] romance.'
(69) Lithuanian (Pilka 1984: 57)
a. Ji nore\%jo i4sigyti kaž-kokia4 preke4 (bet jos negavo). she wanted acquire INDEF-which thing but it not:got 'She wanted to acquire some [specific] object (but she didn't get it).'
b. Ji nore\%jo i4sigyti kokia4 nors preke4 (*bet jos negavo). she wanted acquire which INDEF thing but it not:got 'She wanted to acquire some [non-specific] object (*but she didn't get it).'
(70) Modern Greek
a. Théli na pandreftí me kápja Elinídha. wants SBJV he:marry with some Greek 'He wants to marry some [specific] Greek woman.'
b. Théli na pandreftí me kamjá Elinídha. wants SBJV he:marry with any Greek 'He wants to marry some [non-specific] Greek woman.'

The specific/non-specific contrast is relevant in many other contexts. In some contexts, only specific NPs are possible. Such is the case, in particular, in affirmative declarative sentences in the perfective past or in the ongoing present. In such prototypical realis sentences, the speaker is committed to the existence and identifiability of the entity, and indefinites of the non-specific series are simply unacceptable.
(71) Lithuanian (Pilka 1984: 29, 56)
a. ${ }^{*}$ Kas nors ate\%jo.
whoINDEF came
'Somebody came.'
b. *Ž̌ iū re\%-k, kas norsbe\%ga.
(OK: Kaž-kas be\%ga.)
look-IMPV who INDEF runs INDEF-who runs
'Look, somebody is running.'
(72) Modern Greek
*Kanénas írthe.
anyone came
(OK: Ká-pjos írthe.)
'Somebody came.'
(73) Kannada (Bhat 1981: 7)
*Yaar-aadaruu bandaru. who-INDEF came
(OK: Yaar-oo bandaru.) who-INDEF came
'Someone came.'
The same ambiguity as in 'want' contexts is observed in various types of other IRREALIS contexts (cf. Croft (1983) for this use of the term irrealis). One such irrealis context is in future sentences. Since the event is in the future and is not realized yet, the speaker is not committed to the existence of the referent.
(74) Russian
a. $V$ subbotu oni uedut kuda-to.
in Saturday they go whither-INDEF
'On Saturday they will go somewhere [specific].'
b. $V$ subbotu oni uedut kuda-nibud'.
in Saturday they go whither-INDEF
'On Saturday they will go somewhere [non-specific].'
Other irrealis contexts are created by various kinds of non-indicative modality, e.g. the verb 'can'.
(75) Lithuanian (Pilka 1984: 29)
a. Gali kaž-kasateiti.
can INDEF-who come
'Someone [specific] can come.'
b. Gali kas nors ateiti.
can who INDEF come
'Someone [non-specific] can come.'
(76) Kannada (Bhat 1981: 4)

Raamu ellig-aadaruu hoodaanu.
Ramu whither-INDEF go:may
'Ramu may go somewhere [non-specific].'
Non-specific NPs are also admitted in a perfective past and ongoing present sentence when the sentence is qualified by some indication of epistemic modality.
(77) Lithuanian (Pilka 1984: 50)

Matyt, kas nors juo buspasiskunde4s.
apparently who INDEF her was complaining
'Apparently someone [non-specific] complained about her.'
(78) Russian (Kobozeva 1981)

Kaž etsja, kto-nibud' približ aetsja.
seems who-INDEF approaches
'Apparently someone [non-specific] is approaching.'
Although these sentences are set in the past and present, respectively, the speaker's uncertainty makes them qualify as irrealis, and indefinites may be non-specific.

In addition to irrealis contexts, ambiguity can also be found in distributive contexts, for example in the indefinite object NP when the subject is marked as distributive-key:
(79) Lithuanian (Pilka 1984: 127)
a. Visi kaž-ka4 skaite\%.
all INDEF-what read
'Everybody is reading something [specific].'

```
b. Visi ka4 nors skaite%.
    all what INDEF read
    'Everybody is reading something [non-specific].'
```

The difference here is that in (79a), everybody reads the same thing, whereas in (79b), different people may be reading different things. The event in (79b) is taking place at the moment of speech, so the speaker must presuppose the existence of the reading material, but since it is distributed over the referents of the subject NP ('everybody'), it is not a UNIQUE object and therefore also qualifies as non-specific.

In another type of distributive context, the indefinite NP is distributed over a plural event rather than a plural argument, e.g. a habitual event (cf. Giannakidou 1994c).
(80) Russian
a. Po subbotam sjuda priezžaet kto-to iz Derbenta.
on Saturdays hither comes who-INDEF from Derbent
'On Saturdays someone [specific] from Derbent comes here.'
b. Po subbotam sjuda priezžaet kto-nibud' iz Derbenta.
on Saturdays hither comes who-INDEFfrom Derbent
'On Saturdays someone [non-specific] from Derbent comes here.'
(81) Modern Greek (Veloudis 1982: 181)

Érxete póte-póte kanís ipopsífios.
comes when-when any candidate
'Now and then a candidate comes.'
So far we have seen contexts where only specific indefinites are allowed (realis contexts) and contexts where either specific or non-specific indefinites may occur (irrealis contexts). In addition, there are also contexts where only non-specific indefinites may occur. These are irrealis contexts where the specific meaning is excluded for pragmatic reasons.

First of all, let us consider imperatives. Imperatives describe an unrealized event, hence non-specific indefinites are admissible, as in (82-85) (a). In this context, specific indefinites do not have another meaning (as in the other irrealis contexts), but are excluded, as shown by (82-85) (b).
(82) Lithuanian (Pilka 1984: 56)
a. Aplanky-kite mana kada nors.
visit-IMPV.2PL mewhen INDEF
'Visit me sometime [non-specific].'
b. *Aplanky-kite mana kaž-kada.
visit-IMPV.2PL me INDEF-when 'Visit me sometime [specific].'
(83) Russian
a. Kирі mne kakuju-nibud' gazetu. buy me which-INDEF paper 'Buy me some [non-specific] newspaper.'
b. *Kupi mne kakuju-to gazetu. buy me which-INDEF paper 'Buy me some [specific] newspaper.'
(84) Modern Greek (Dhelverúdhi 1989: 413)
a. Píjene ke vres kanéna náfti. go and find any sailor 'Go and find some [non-specific] sailor.'
b. *Píjene ke vres kápjo náfti.
go and find some sailor
'Go and find some [specific] sailor.'
Kannada (Bhat 1981: 6)
a. Ellig-aadaruu hoogu.
whither-INDEF go:IMPV
'Go somewhere [non-specific].'
b. *Ellig-oo hoogu. whither-INDEF go:IMPV 'Go somewhere [specific].'

Specific indefinites in imperatives are inadmissible because they would violate Grice's cooperative principle (this was observed in Kobozeva (1981) and Croft (1983)). On the one hand, the speaker asks the hearer to do something, but on the other hand he or she withholds some crucial information from the hearer. For instance, by uttering a sentence like (83b), the speaker would make it clear that he presupposes a unique newspaper that the hearer should buy, but does not say which one. Thus, the hearer cannot be expected to be able to fulfill the request. By contrast, if the speaker uses a non-specific NP (kakuju-nibud' gazetu in (83a)), he thereby signals to the hearer that the identity of the newspaper is immaterial. It is left to the hearer to select a newspaper, and he is therefore in a position to fulfill the request.

A very similar account can be given for questions. In questions, too, indefinite phrases can only be non-specific. Some examples are given in (86-89).
(86) Russian (Paduč eva 1985: 212)
a. Uvidel li vy kogo-nibud'? saw $Q$ you whom-INDEF 'Did you see anyone?'
b. *Uvideli li vy kogo-to? saw $Q$ you whom-INDEF
(87) Kannada (Bhat 1981: 6)
a. Raamu ellig-aadaruu hoodan-oo? Ramuwhither-INDEF go:he:did-Q 'Did Ramu go anywhere [non-specific]?'
b. *Raamu ellig-oo hoodan-oo? Ramuwhither-INDEF go:he:did-Q 'Did Ramu go somewhere [specific]?'
(88) Lithuanian (Pilka 1984: 58)

Tu skaitei ka4 nors apie maju4 kultura4?
you read what INDEF on Mayas' culture
'Did you read anything [non-specific] about the culture of the Mayas?'
(89) Modern Greek (Dhelverúdhi 1989: 411)

Sinándises kanénan ekí pu píjes?
you.met anyone there where you.went
'Did you meet anyone [non-specific] at the place where you went?'
Pragmatically, questions are closely related to imperatives: They are requests by the speaker to the hearer to supply missing information. By using a specific indefinite phrase in a question, the hearer would again withhold some crucial information from the hearer, thereby violating Grice's cooperative principle.

Questions in many ways behave similarly to conditional protases. Like questions, conditional protases admit only non-specific indefinite phrases, no specific indefinite phrases (cf. Croft 1983). Examples:
(90) Kannada (Bhat 1981: 7)
a. Yaar-aadaruu bandare heel5utteene. who-INDEF come:COND tell:FUT:1SG 'I will tell you if anyone [non-specific] comes.'
b. *Yaar-oo bandare heel5utteene. who-INDEF come:COND tell:FUT:1SG 'I will tell you if anyone [specific] comes.'
(91) Modern Greek (Dhelverúdhi 1989: 413)

An me dhí kanís pu dhe me kséri,...
if me sees anyone that not me knows
'If anyone [non-specific] sees me who doesn't know me...'
The explanation for this fact is less straightforward, but it seems possible to extend the account given for imperatives and questions if we recall that a conditional can be thought of as an instruction to the hearer: 'Suppose someone sees me who doesn't know me...'. Again, we have the basic imperative structure that leads to pragmatic unacceptability when it contains a specific indefinite phrase.

Now that we have seen questions and conditional protases among the contexts for non-specific indefinites, I should point out that there is an overlap with negative-polarity contexts here: Questions and conditionals are also negative-polarity contexts (see the previous section). This fact has received little or no attention in the literature, but it is important in the present context. As we will see in chapter 4, there are quite a few languages in which the same indefinite pronoun is used both in irrealis non-specific environments (i.e. imperatives, future, modality, 'want', etc.) and in negative-polarity environments.

The overlap between non-specificity and negative-polarity contexts extends further to the core cases of negative polarity: Any indefinite phrase that is in the scope of negation is non-specific. However, unlike questions and conditionals, negative sentences also allow specific indefinite phrases. Consider the examples in (92-93).
(92) (non-specific) Niklas couldn't see anything. (*Everyone else saw it.)
(93) (specific) Niklas didn't see something. (Everyone else saw it, only Niklas missed it)

A specific indefinite pronoun in a negative sentence (as in 93) is a rare phenomenon (cf. Givón 1978), but it is by no means impossible. The context provided in (93) shows that such sentences are plausible in appropriate circumstances. In (93), the indefinite phrase is not in the scope of negation, as can be shown by the paraphrase in (94).
(94) There was something that Niklas didn't see.

When an indefinite phrase is in the scope of negation, it is necessarily nonspecific. Some languages use their usual non-specific indefinites in negative contexts as well, e.g. Greek.

Modern Greek
a. Direct negation
Dhen ídha kanéna.

```
    not I:saw anyone
    'I didn't see anybody.'
b. Implicit negation
    Xorís na dhó kanéna...
    without SBJV I:see anyone
    'Without seeing anybody...'
c. Superordinate negation
Dhen pistévo pos kanénas irthe.
not I:believe that anyone came
'I don't think that anyone came.'
```

However, many other languages use special indefinites in negative contexts, either special negative pronouns ( $\S$ 3.2.1), or other specialized indefinites. Thus, Russian -nibud'-indefinites cannot be used in sentences like (95a-c), and Lithuanian nors-indefinites cannot be used for direct negation as in (95a).

We can now summarize the contexts where specific and non-specific indefinite phrases are allowed as in Figure 2. In one type of contexts, only specific indefinites are possible, in another type both are possible but there is a meaning difference, and in a third type, only non-specific indefinite phrases are allowed. Negative polarity overlaps only partially with this third type, because imperatives are not negative-polarity contexts.

Figure 2. Contexts for (non-)specific phrases and negative polarity

| perfective <br> past, <br> ongoing <br> present | 'want', <br> future, <br> distributive | imperative | question, <br> conditional | in the <br> scope of <br> negation |
| :--- | :--- | :--- | :--- | :--- |
| specific possible |  | (specific impossible) |  |  |
| (non-specific <br> impossible) | non-specific possible |  |  |  |
| no negative polarity |  |  | negative polarity |  |

Based on these semantic distinctions, we can already identify one important parameter of cross-linguistic variation: In some languages, different indefinite series distinguish between negative polarity and no negative polarity (e.g. English, Catalan, § 3.2.2.), in other languages different indefinite series distinguish between specificity and non-specificity (e.g. Russian, Modern Greek, Kannada).

### 3.2.4. Knowledge of the speaker

Another semantic factor that is sometimes relevant in choosing between different indefinite series is the knowledge of the speaker: The speaker may or may not be able to identify the referent of the indefinite pronoun. This classification applies only to specific phrases, in which the identifiability of their referents is presupposed. With non-specific phrases, whose referents are not identifiable in principle, the question of identifiability by the speaker does not even arise - such expressions are necessarily unknown to the speaker. The possibilities can be summarized as in Figure 3.

Figure 3. (In-)definiteness, (non-)specificity and knowledge of the speaker

| indefinite |  | definite |
| :---: | :---: | :---: |
| non-specific | specific <br> to the speaker | (known to <br> speaker and <br> hearer) |
| unknown <br> to the speaker |  |  |

In Russian, for example, the -to-series can only be used if the referent cannot be identified by the speaker. Thus, in (96a) the speaker does not know who it was that Maš a met, and in (96b) the speaker has forgotten what she wanted to tell the hearer.
a. Maša vstretilas's kem-to okolo universiteta. Mašamet with who-INDEF near university 'Maš a met with somebody near the university.'
b. Čto-to ja tebe xotela skazat'. (Paduč eva 1985: 211) what-INDEF I you wanted tell
'I wanted to tell you something.'
Example (97a) implies that the speaker has already forgotten who she met with, which makes the sentence somewhat odd, and (97b) is completely deviant, because it is incoherent to utter a desire about something specific that one cannot identify.
a. ?Ja vstretilas' s kem-to segodnja $\begin{array}{llll} & 19 & \text { časov. }\end{array}$

I met with who-INDEF today at 19 hours
'I met with someone [unknown to me] today at 19 hours.'
b. "Ja xoču spet' kakoj-to romans. (Paduč eva 1985: 211)

I want singwhich-INDEF romance
'I want to sing some [specific, unknown] romance.'
If the referent can be identified by the speaker but the speaker chooses to withhold the information about its identity from the hearer, the koe-series or the determiner odin 'one' is used in Russian:
a. Ja vstretilas's odnim čelovekom segodnja v 19 časov.

I met with one person today at 19 hours
'I met with someone [known to me] at 19 hours.'
b. Maša vstretilas' koe s kem okolo universiteta. Maša met INDEFwith who near university 'Masa met with someone [known to me] near the university.'

The semantic distinction of (lack of) knowledge of the speaker is not nearly as important as the two factors discussed in the previous sections, negative polarity and (non-)specificity. It has received very little attention in the theoretical literature. However, it can be found in quite a few languages. In my 40-language sample, I found evidence for such a distinction in ten languages.

In Kannada, indefinites of the WH-oo-series are always specific and imply that the speaker cannot identify the referent (see Bhat (1981), who calls this
'physical identification'). Thus (99) is unambiguously specific, and the speaker does not know which book Ramu wants.
(99) Kannada (Bhat 1981: 3)

Raamu-vige yaavud-oo ondu pustaka beekaagide.
Ramu-DAT which-INDEF one book want:having:is
'Ramu wants a [specific, unknown] book.'
In Lithuanian, the kai-series is restricted to indefinites whose reference is known to the speaker, while the $k a z z$-series is used when the reference is unknown to the speaker (this is not surprising since the original meaning of $k a z ̌$ - is 'the speaker does not know', see § 6.2.1):
(100) Lithuanian (Pilka 1984: 97,29)

```
    a. Turiu kai ka4 <?*kaž-ka4> tiktai tauvienaipasakyti.
    I:have INDEF what INDEF-whatonly to:you alone to:say
    'I've got something to say that's for your ears alone.'
    b. Kaž-kas ate%jo.
    INDEF-who came
    'Somebody came (I don't know who).'
```

In German, the indefinites jemand 'someone' and etwas 'something' may be expanded by the prefixed indefiniteness marker irgend only if the referent cannot be identified by the speaker. Thus, in (101a) the speaker may or may not know who called, and the hearer could ask who it was. By using irgend in (101b), the speaker makes it clear that he is ignorant about the caller's identity, so the hearer cannot ask who it was.
(101) German
a. Jemand hat angerufen. (-Wer war es?)
'Someone called. (-Who was it?)'
b. Irgend jemand hat angerufen. (*-Wer war es?)
'Someone (I don't know who) called. (*Who was it?)'
In English, too, the (lack of) knowledge of the speaker is relevant, as was pointed out in Warfel (1972) (cf. also Wierzbicka 1980b: 325, Croft 1983). The determiner some (pronounced [sUm], stressable), when used with a singular count noun, implies that the speaker cannot identify the referent. In (102a-c), the continuations in parentheses presuppose identifiability by the speaker and are therefore excluded.
(102) English (Warfel 1972: 43-4)
a. John is looking for some book on reserve (*and I know which one).
b. Hortense is watching for some sailor who's due in port today. (*He is a friend of mine.)
c. Ralph is worried because he lost some letter he was supposed to mail (*but I have it right here).

Note that some behaves differently in this respect from the most frequent members of the some-series: someone and something can be used irrespectively of whether the speaker can identify the referent or not.

### 3.2.5. Free-choice indefinite pronouns

Many languages have a special series of indefinite pronouns to express the meaning of free choice, as illustrated in (103). Such indefinites are often prosodically prominent in the sentence.
(103) a. English

After the fall of the Wall, East Germans were free to travel anywhere.
b. Russian

Ty možeš' sdelat' č to ugodno.
you can do what INDEF
'You can do anything.'
c. Lezgian (Haspelmath 1993a: 195)

Mac'a-laj wuč $\hat{x}$ ajit'ani alaq'-zawa-j-di ja.
Mac'-SUPERDIR what INDEF be.able-IMPF-PTCP-SBST is
'Mac' can do anything.'
d. Hungarian (Stephanides 1985: 80)

A cikk-ek-et meg-ir-hat-ombár-hol, bár-milyen
the article-PL-ACC PREV-write-POT-1SG INDEF-where INDEF-which körülmény-ek között.
circumstance-PL under
'I can write the articles anywhere, under any circumstances.'
e. Tagalog (Schachter and Otanes 1972: 532)

Ang kahit na sinu-mang piyanista ay
TOP INDEF LK who-INDEF:LK pianist PT
makakatugtog $n g$ ganyang piyesa.
can:play GEN such:LK piece
'Any pianist can play a piece like that.'
Free-choice indefinites are semantically similar to universal quantifiers like 'every' ('everyone', 'everything', etc.). In many environments, free-choice indefinites can be replaced by universal quantifiers without a noticeable change in the truth conditions.

However, there is always a difference in meaning between free-choice indefinites and universal quantifiers, and in many contexts there is also a significant difference in the truth conditions, as pointed out by Vendler (1967) (who also coined the now widespread term free choice). For example, (104a) is quite different from (104b).
(104) a. (free choice) You can take any apple.
b. (universal) You can take every apple.

The precise characterization of the meaning of free-choice indefinites has proved to be a difficult task. I discuss various theoretical approaches to freechoice indefinites below in $\S 5.2 .1, ~ § 5.5$.

In this section, I will concentrate on presenting and characterizing the contexts where free-choice indefinites may occur. There seems to be very little cross-linguistic variation in the conditions under which free-choice indefinites are possible, and the examples from different languages in the following should be taken as illustrating the uniformity of free-choice indefinites, not as pointing to typological differences.

The first thing to note is that free-choice indefinites are semantically nonspecific, so they cannot occur in contexts which do not allow non-specific indefinites, i.e. in perfective past and ongoing present contexts:
a. English
*Anyone lived in a pretty town.
b. Russian
*Ona kupila čto ugodno.
she bought what INDEF
'She bought anything.'
However, free-choice indefinites are much more restricted than non-specific indefinites. The most typical environment for them are sentences that express possibility, be it objective possibility or permission (as illustrated in (103a-e) above). In most other typical non-specific contexts, free-choice indefinites are awkward, although they are somewhat better in these contexts than in specific contexts.
a. 'want'
?*Nobuko wants to marry any man who speaks Ainu.
b. imperative
?*When you go to town tomorrow, please buy me anything.
c. future
?*Next week Mahmut will go anywhere.
In particular, free-choice indefinites are bad in contexts of necessity, which is in striking contrast to their acceptability in contexts of possibility (cf. Horn 1972: 143).
a. You can <*must> marry anybody.
b. I allow <*require> you to marry anybody.

However, free-choice indefinites are allowed in imperatives if the imperative is interpreted as a permission rather than as a command. As was pointed out by Strickland (1982: 19-20), out of context an utterance like (108) sounds odd, but in a context such as (109) or (110), imperatives with any are quite acceptable.
(108) ??Bring me any chair.
(109) A - What chair do you want?
$B$ - Oh, bring me any chair. It doesn't matter.
(110) A - Bring me a chair.

B - Which one?
A - Oh, any one.
The reason for the acceptability of the free-choice indefinite in (109) is that although the sentence is structurally an imperative sentence, its communicative force is not that of a command. In the context it is already clear to A that B wants A to bring a chair, and B's utterance in (109) is functionally equivalent to 'You can bring me any chair'. Similarly, in (110) A's elliptical utterance any one can be completed not only by the corresponding parts of A's previous utterance (bring me), but one could also say that the non-elliptical version of any one would be any one is possible (or similar). Compare also the analogous example from Lithuanian (ka4 nors 'something', bet ka4'anything (free choice)').
(111) Lithuanian (Pilka 1984: 140)

Nupir-k man ka4 nors <*bet ka4> paskaityti. - O ka4? -buy-IMPV for:me what INDEF INDEF what toread and what
Bet ka4.
INDEF what
'Buy me something to read. - And what? - Anything.'
A related case are imperatives that function in a way similar to conditional antecedents. In the sentences in (112), where in each case a free-choice indefinite is used, the imperative clauses are not commands, but challenges by the speaker that serve to emphasize the speaker's argument. Again, a paraphrase with 'can' is always possible.

```
a. English (Strickland 1982: 33)
    Go ask anyone. You'll see that I'm right.
    b. French (Strickland 1982: 33)
    Demande à n'importe qui.
    'Ask anyone.'
    c. Yakut (Ubrjatova (ed.) 1982: 207)
    Kim-ten baVarar yjyt-y \(\mathbf{N}\), itinniketiextere.
    who-ABL INDEF ask-iMPV.2PL everybody will:say
    'Ask anyone, everybody will say so.'
d. Italian
Domanda-lo a chi-unque.
    ask(IMPV)-it to who-INDEF
    'Ask anybody.'
```

Thus, imperatives are no exception to the generalization that free-choice indefinites are allowed in contexts of possibility, but not in other non-specific contexts.

There is, however, one further important type of contexts in which freechoice indefinites may occur, which is not easily subsumed under the notion of possibility: contexts in which a sentence may be interpreted generically. Consider the examples in (113-114).
(113) English

Any doctor will tell you that Stopsneeze has dangerous side effects.

```
a. Russian (Paduč eva 1974: 80)
Petja reš it ljubuju zadaču.
Petja solves any problem
'Petja will solve any problem.'
b. Italian
Qualunque costituente di categoria X X che viene spostato lascia
any constituent of category }\mp@subsup{\textrm{X}}{}{n}\mathrm{ that is moved leaves
dietro di sé una categoria vuota dello stesso tipo.
behind of itself a category empty of.the same type
'Any constituent of category }\mp@subsup{\textrm{X}}{}{\textrm{n}}\mathrm{ that is moved leaves behind an
empty category of the same type.'
c. Lithuanian (Pilka 1984: 141)
Betkuri kate - žirduolis.
INDEF which cat mammal
```

'Any cat is a mammal.'
d. Lezgian (Haspelmath 1993a: 196)

Hi kac र̂ ajit'ani hajwan ja.
which cat INDEF animal is
'Any cat is an animal.'
Generic sentences are often in an imperfective present tense, but they may also be in a perfective future tense, as (113a) and (114a) show.

A further context where free-choice indefinites are licensed are hypothetical (cf. 115) and counterfactual (cf. 116) sentences:
(115) a. English, French (Strickland 1982:37)

I would give anything to see that.
Je donnerai n'importe quoi pour voir ça.
b. Italian

Lei parlerebbe dei suoi problemi amorosi con chi-unque.
she would:talk of her problems love.related with who-INDEF 'She would talk to anyone about her love problems.'
(116) English, French (Strickland 1982: 36)
a. At that point, I think I would have accepted anything.
b. Je crois qu'à ce moment là, j'aurais accepté n'importe quoi.

And finally, as König (1991: 104) observes, contexts expressing sufficient conditions license free-choice indefinites, independently of the tense or modality of the clause:
(117) Any amount is adequate/ sufficient.
(*Any amount is required/necessary.)

### 3.2.6. Summary: the main functional distinctions

We can summarize the main semantic and pragmatic distinctions that recur cross-linguistically as in Figure 4 (cf. Croft (1983) for a similar list).

Figure 4. The main functional distinctions

| specific | known to speaker |  |  |
| :---: | :---: | :---: | :---: |
|  | unknown to speaker |  |  |
| non-specific | irrealis contexts |  |  |
|  | negative polarity | conditionals |  |
|  |  | questions |  |
|  |  | standard of comparison |  |
|  |  | indirect negation |  |
|  |  | direct negation |  |
|  | free choice |  |  |

These are the functional distinctions that I have investigated systematically in the 40 languages of the smaller sample. Several further semantic, syntactic and pragmatic distinctions to which indefinite pronouns may be sensitive are treated in $\S 4.7$ and $\S 8.1-2$.

### 3.3. Alternatives to Indefinite Pronouns

Before going on to study systematically the differences between the systems of indefinite pronouns in the world's languages, let us ask whether indefinite pronouns are necessary, or whether a language could do without them, either for all their functions or for only some of them. It appears that the majority of languages do have indefinite pronouns, and that all the different functions discussed in $\S 3.2$ are most often expressed by indefinite pronouns. However, for all these functions, alternative strategies of expressing them are attested, and probably quite a few languages lack indefinite pronouns altogether. The alternative strategies will not be discussed later in this study, but they are noted in this section.

There are four main ways of expressing what other languages express by means of indefinite pronouns: (i) generic nouns, (ii) existential sentences, (iii) non-specific free relative clauses, and (iv) universal quantifiers.

### 3.3.1. Generic nouns

We saw in § 3.1.2 that indefinite pronouns are sometimes derived from generic ontological-category nouns such as 'person', 'thing', 'place', 'time', 'manner'. These generic nouns are very similar in meaning to indefinite pronouns like 'somebody', 'something', 'somewhere', 'sometime', 'somehow', and languages may make use of indefinite noun phrases consisting only of such generic nouns to express what other languages express by means of indefinite pronouns.

It appears that this is the most common way of replacing indefinite pronouns, and it is quite widespread. The following is a small sample of languages that show this feature, with two examples for each language.

```
a. Khalkha Mongolian
    (neg) xün 'someone' = '(one) person'
    (neg) jum 'something' = '(one) thing'
b. Irish
    duine (éigin) 'someone' = 'a (certain) person'
    rud (éigin) 'something' = 'a (certain) thing'
c. Somali (Berchem 1991: 79-84)
    nin 'someone' = 'man'
    wax 'something' = 'thing'
```

As I observed in §3.1.2, it is not always easy to distinguish generic nouns from indefinite pronouns based on generic nouns. But it does seem that there are a substantial number of languages that replace indefinite pronouns in this way. Whenever a grammar that is otherwise quite complete is silent about indefinite pronouns, it may be assumed that the language does not use grammatical means, but the lexical means of general nouns. ${ }^{x}$

It is also not uncommon for some members of an indefinite series to consist of a non-grammaticalized expression involving a general noun. Consider the German and Italian negative series in (129).

|  | German | Italian |
| :--- | :--- | :--- |
| 'nobody' | niemand | nessuno |
| 'nothing' | nichts | niente |
| 'nowhere' | nirgends | in nessun luogo |
| 'noway' | aufkeine Weise | in nessun modo |
| 'no' | kein | nessun(o) |

The German expression auf keine Weise and the Italian expressions in nessun modo (lit. 'in no manner'), in nessun luogo (lit. 'in no place') are very weakly grammaticalized if at all and should probably not be regarded as indefinite pronouns. Rather, the corresponding indefinite pronoun series are defective in their places. However, as I made clear earlier (§ 3.1.3), I am not interested here in which ontological categories are represented in each series, so I will not always take pains to distinguish grammaticalized generic-noun-derived indefinites from non-grammaticalized expressions like auf keine Weise. What counts is that both German and Italian undeniably have an $n$-series.

A series may even be said to exist when only a determiner exists. For example, Russian ljuboj 'any' is an indefinite determiner of the type studied in this work, but all its combinations with generaic nouns are non-grammaticalized (ljuboj č elovek 'any person' = 'anyone', v ljubom meste 'anywhere' = 'at any place', etc.). Nevertheless these expressions fall under the scope of the present study.

### 3.3.2. Existential sentences

In Tagalog (and other Philippine languages, e.g. Cebuano), existential sentences are used where other languages use specific indefinite pronouns. A sentence like (120) can perhaps literally be translated as 'There is (one) having come yesterday'.
(120) Tagalog (Schachter and Otanes 1972: 276-8)

May dumating kahapon.
exist come:AG yesterday
'Someone came yesterday.'
Tagalog expresses indefinites in this way not only in agent position. For indefinites that are patients or places, the patient- and place-oriented verb forms are used:
(121) May ginawa ang Americano.
exist do:PAT TOP American
'The American did something.'
(Lit. 'As for the American, there exists something that was done.')
Mayroon siya-ng pupuntahan.
exist she:TOP-LK go:LOC
'She is going somewhere.'
(Lit. 'As for her, there exists a place where (she) went.')
The same strategy is also used when other languages use negative indefinite pronouns, as in (123) (Schachter and Otanes 1972: 521).
(123) Wala-ngdumating kahapon. not.exist-LK come:AG yesterday
'No one came yesterday.'
However, the existential strategy does not work when there are two indefinites in the same clause - unlike the predicate calculus, natural languages do not allow a sequence of two 'there is' expressions in one clause. In such cases, Tagalog must make use of an indefinite pronoun of its -man-series (interrogative pronoun plus -man) for one of the two indefinites.
(134) a. At kung ako 'y may nadayang sinu-man,... (NT, Lk 19.8)
any if I PT exist swindle what-INDEF
'And if I have swindled anyone out of anything,...'
b. Wala sila-ng sinabi kaninu-man. (NT, Mk 16.8)
not.exist they:TOP-LK say who-INDEF
'They did not say anything to anybody.'
Tagalog also uses its -man-series for the free-choice function (Schachter and Otanes 1972: 532):
(125) Matatapos namin ito kailan-man.
finish we this when-INDEF
'We can finish this at any time.'
So not even Tagalog, which uses its existential strategy quite extensively, lacks indefinite pronouns completely - they are merely restricted in the range of functions they fulfill.

### 3.3.3. Non-specific free relative clauses

The free-choice meaning is often expressed most naturally by means of a nonspecific free relative clause whose subject is identical to the subject of the main clause and whose predicate is an expression of free choice (e.g. 'want'). In some languages, this is the only way of expressing the free-choice function. For example, in Maltese one would normally use a relative clause with ried 'want', as in (126a-b).
(126) Maltese (Haspelmath and Caruana, forthcoming)
a. Tista'tièu liema tuffiela trid. you:can:IMPF you:take:IMPF which apple you:want:IMPF 'You may take any apple.'
(Lit. 'You may take which(ever) apple you want.')
b. Setglet tmur fejnriedet. she:can:PERF she:go:IMPF where she:want:PERF 'She was allowed to go anywhere.' (Lit. 'She could go where she wanted.')

Theoretically one could also use the free-choice determiner kwalunkwe, but this sounds very artificial because kwalunkwe (from Italian qualunque 'any') has not been assimilated sufficiently yet.

### 3.3.4. Universal quantifiers

Some languages use universal quantifiers with meanings 'every' and 'all' instead of indefinite pronouns to translate free-choice indefinites in other
languages. Since the meanings of 'every' and 'any' are very similar and forms meaning 'every' and 'any' are almost interchangeable in some contexts, this is not unexpected. An example comes again from Maltese, a language lacking special free-choice indefinites. When the free-choice expression is in subject position, Maltese uses kull 'every' or a related complex expression, e.g.

Maltese (Haspelmath and Caruana, forthcoming)
Kulliadd jista' jsolvija din il-problema.
everyone he:can:IPF he:solve:IPF this the-problem
'Anyone/everyone can solve this problem.'
In several languages, speakers are also uncomfortable with indefinites in the standard of comparison and prefer to use a universal quantifier instead, for example in Swedish.

Swedish (Kersti Börjars, Martin Tamm, p.c.)
Pojken kan springa fortare än alla $i$ sin klass.
the:boy can run faster than all in his class
'The boy can run faster than anyone/ everyone in his class.'

### 3.3.5. Languages without indefinite pronouns

While it is easy to find cases in which indefinite pronouns are noz used and alternative strategies are preferred, it is not easy to find a language that completely lacks indefinite pronouns. All the languages cited above in this section replace indefinites in some functions, but do use them for others. Thus, Tagalog uses an alternative strategy when specific reference is intended but employs indefinite pronouns for the free-choice function, and in Maltese the reverse situation obtains.

When a description of a language does not mention indefinite pronouns, we cannot of course be sure that they do not exist - the author may simply have failed to include them for some reason. Grammar books do not often say explicitly that indefinite pronouns do not exist in the language, and even when they do, this may only be true for a subset of the functions that indefinite pronouns may have. ${ }^{\mathrm{xi}}$ Unless a grammar is both explicit about the lack of indefinite pronouns and says what alternative means are used for the functions that indefinite pronouns typically fulfill, we cannot be sure that they are really absent.

A good candidate for an example of a language lacking indefinite pronouns is Lango, a Nilo-Saharan (Western Nilotic) language for which we have the excellent description of Noonan (1992). For the specific functions, Lango uses generic nouns (Nat 'person', gin 'thing') combined with the indefinite suffix mOrO (Noonan 1992: 161-62), e.g.
(129) Lango (Noonan 1992: 153)


The suffix $-m \boldsymbol{O} \mathbf{O}$ is not restricted to a few generic nouns but can be used with any noun ( $t$ twol-l $\mathbf{O} \mathbf{O} \mathbf{O}$ 'a snake'). Noonan is also quite explicit that negative pronouns are non-existent in Lango (1992: 242). Instead, an existential
construction (not unlike the Tagalog construction above in §3.3.2, but involving generic nouns) is employed:
(130) Lango (Noonan 1992: 242)
a. gên-nOrO amE acamo pe
thing-INDEF REL 1SG:eat:PERF NEG 'I ate nothing.' (Lit. 'A thing I ate doesn't exist.')
b. Nat-tOrO amE ocamo dEkko pe
person-INDEF REL 3SG:eat:PERF stew:that NEG
'No one ate that stew.'
(Lit. 'A person who ate that stew doesn't exist.')

Although Noonan's grammar is quite comprehensive, he does not say how the meaning of free-choice indefinites is expressed in Lango, so even in this well-documented case we cannot be completely sure. But what a case like Lango does show is that it is quite likely that we will find true cases of languages lacking indefinite pronouns as we learn more about little-known languages.

Thus, the subject matter of this study is probably not universal, although it is very widespread in the world's languages. Of course, this lack of universality does not mean that this work is irrelevant to language universals. If universals research were concerned only with universal features, not much would be left to investigate: Very few linguistic features that had once been assumed to be absolute universals have stood the test of time - linguists have discovered languages lacking subjects, numerals, nasals, and even vowels. All this only means that the generalizations formulated in this work apply only to languages that have indefinite pronouns. Technically, they are all implicational universals whose initial antecedent is 'If a language has indefinite pronouns, then...'. In the next chapter, the main implicational generalizations will be presented.
${ }^{i}$ The term series was taken from Veyrenc (1964).
${ }^{\text {ii }}$ Another equivalent term is epistemological category (Durie 1985: ch. 6). Ontological category is from Jackendoff (1983: 51). Jackendoff's list of major ontological categories is: thing, place, direction, action, event, manner, amount. The main difference between Jackendoff's list and the lists in (20) is that Jackendoff does not distinguish between person and thing. It may well be that this distinction is located at a lower conceptual level, but practically all languages make the person/thing distinction in their indefinite pronouns at the same level as the other distinctions, so it is best to regard person and thing as two separate ontological categories.
iii The term was taken from Veyrenc (1964) (indicateur d'indétermination).
${ }^{\text {iv }}$ The term extrafix is a cover term for postfixes (suffixes that follow inflectional suffixes) and antefixes (prefixes that precede inflectional prefixes). The term postfix is well-established in the literature (e.g. to refer to the Russian reflexive suffix -sja which follows verbal aspect, tense, and person-number inflections); the neologisms antefix and extrafix were first used in Haspelmath (1990: 29, 63).
${ }^{v}$ A similar phenomenon has been observed for Japanese: The negative indefinite nanimo 'nothing' (from nani 'what?') has the variant nanni-mo. However, this seems to be an isolated case in Japanese.
${ }^{5 a}$ This seems to be the situation in Luiseño (Uto-Aztecan), as pointed out to me by Mark Durie.
${ }^{\text {vi }}$ English is somewhat peculiar in that it has both interrogative-based and generic-nounbased indefinite pronouns, even within the same series: somebody, something, someplace (based on generic nouns) exists alongside somewhere, somehow and somewhat in the some-series (similarly in the any-series). It is much more common for all members of an indefinite series to be derived from the same kind of basis.
vii Since negative polarity items are not restricted to negative contexts, as described in more detail below, this term (which was coined by Baker 1970) is not particularly felicitous. As the discussion in $\S 5.5$ will show, a term like scale reversal would be much more appropriate than negative polarity (and negative polarity items should be called scale reversal items) However, I continue to use the terms negative polarity, negative polarity item because they are so entrenched in the linguistic literature.
viii This sentence is grammatical on the irrelevant reading 'This suits you better than something else.'
${ }^{\text {ix }}$ In (63b), a bicycle can also be interpreted specifically, and on this reading the minidiscourse is fine. A discourse referent is also possible in a sentence with non-indicative modality or future tense, e.g. Pedro wants to buy a new bicycle [non-specific]. It must/will be black.

[^3]
## 4

# An Implicational Map for Indefinite Pronoun Functions 

### 4.1. Multifunctionality

In the preceding chapter we have seen various syntactic and semantic conditions under which languages may use different series of indefinite pronouns. These are the distinctions that were found relevant for languages in general, but this does not of course mean that all languages reflect all these functional distinctions in the phonological form of the indefinite pronouns. On the contrary, there is probably no language that makes all the possible distinctions, and many languages make only very few distinctions (two series of indefinite pronouns seems to be the minimum for languages that do not make extensive use of avoidance strategies as discussed in $\S 3.3$ ). What we have, therefore, is MASSIVE MULTIFUNCTIONALITY. The majority of the series of indefinite pronouns are used to express more than one of the functions distinguished in $\S 3.2$, as illustrated by the examples in (131-33).
(131) English any-series
a. negative polarity: conditional

If anybody left us, we are lost.
b. free choice

Anybody could have left us.
(132) Hebrew š chu-series
a. specific (ongoing state)

Balšan ze elad še-mesabex ma-šehu kal.
linguist that one that-complicates what-INDEF easy
'A linguist is someone who complicates something easy.'
b. negative polarity: question

Ha? im tafs-u ma-š ehu?
Q catch:PERF-3PL what-INDEF
'Did they catch anything?'
(133) Yakut $d a$-series
a. negative polarity: standard of comparison (Ubrjatova (ed.) 1982: 209)

Kün annyVar tuox-tan da min bu oloVu taptyy-byn.
this world what-ABL INDEF I this life love-1SG
'In this world I love life more than anything.'
b. direct negation (Afanas'ev and Xaritonov 1968:335)

Kini kim-i da kör-bö-tö.
he who-ACC INDEF see-NEG-PAST
'He did not see anyone.'
A more traditional term for such a situation is polysemy, but in many cases there is no obvious meaning difference between the different functions - these often seem to be just different CONTEXTS rather than different MEANINGS. In order not to prejudice the analysis, I will use the neutral term

MULTIFUNCTIONALITY, which unlike the term polysemy does not imply the presence of multiple meanings, but subsumes polysemy as a special case. Moreover, even where an indefinite series clearly expresses more than one semantically distinguishable function, one could maintain that from the point of view of the individual language, there only is one general meaning (Gesamtbedeutung) that happens to correpond to several more specific meanings in other languages. My strategy of investigating multifunctionality allows me to remain neutral on this issue - I need take no stand on whether multifunctionality should be analyzed in terms of polysemy or in terms of a general meaning. All that is necessary is the possibility of identifying the functions in any language.

### 4.2. The Semantic Map Methodology

One of the central proposals of this book is to account for cross-linguistic variation in indefinite pronouns in terms of a semantic map, a strategy that has been applied successfully to other grammatical categories. In this section I argue that indefinite pronouns are best understood if they are approached similarly.

### 4.2.1. Indefiniteness markers as grammatical categories

The multifunctionality of indefinite pronoun series is hardly a surprising phenomenon, as we are used to multifunctionality elsewhere in the semantics, pragmatics and syntax of grammatical items, or GRAMMATICAL CATEGORIES. For instance, nominal cases are notoriously multifunctional. Thus, the Classical Greek Dative case may express indirect object, beneficiary, instrument, agent, cause, and time, and the Russian Instrumental case may express instrument, agent of passive, time, and predicate nominal. ${ }^{1}$ Or take the example of the English Future tense, which may express pure future time reference (but not in conditional and temporal clauses), intention, and generic situations, or the German Present tense, which may express progressive, habitual, and generic situations and future time reference. Similarly for voice categories: the Latin Passive may express passive, anticausative, and reflexive, and the Modern Greek Middle may express reflexive, reciprocal, anticausative, passive, and potential passive. With such typical grammatical categories as case, tense and voice categories, exactly the same problems of description, analysis and crosslinguistic generalization arise as we noted above for indefinite pronouns. This means that we can make use of the experience, the methodology and the theoretical approaches that have been developed for the study of the prototypical grammatical categories.

One might even go as far as to claim that the different indefiniteness series ARE grammatical categories. The main difference between prototypical grammatical categories like case categories or tense categories is that these apply to an open set of words (nouns, verbs), whereas indefinite markers combine with a rather small set of words denoting ontological categories (interrogative pronouns, or generic ontological-category nouns, cf. § 3.1.2). Even 'normal' grammatical categories like number do not necessarily apply to an open class of words, e.g. in languages where number is only marked on pronouns. Anyway, this is ultimately a terminological issue, and my main reason for mentioning this possibility here is to highlight the similarities
between indefiniteness markers and more prototypical grammatical markers like case and tense markers.

Several kinds of grammatical categories have been the object of systematic large-scale cross-linguistic investigations in the last two decades: tense, aspect and mood markers (e.g. Dahl 1985, Bybee 1985, Bybee et al. 1994), spatial relation markers (e.g. Svorou 1994), voice categories (e.g. Geniuš iene\% 1987, Haspelmath 1990, Kemmer 1993), case markers (Croft 1991). All these studies have shown clearly that universal patterns can be found in grammatical categories. In language after language, independently of genetic affiliation and areal location, we find similar grammatical meanings (or functions, or uses), similar patterns of multifunctionality, and similar expression types. Of course, there are also significant differences between languages of different types, but this does not detract from the overall universal pattern. These cross-linguistic studies of grammatical categories have made a considerable contribution to our knowledge about human languages, and it is in their spirit that the present work is written.

### 4.2.2. The use/function-based approach

The typological studies of grammatical categories just cited employ the same basic research strategy followed in the present work. The strategy was outlined already in Ferguson's (1970) programmatic paper. Using the example of multifunctional case markers, Ferguson showed that the structuralist approach, which tries to formulate highly abstract general meanings (Gesamtbedeutungen) for grammatical categories in individual languages (following Jakobson 1936), is incapable of describing and explaining cross-linguistic similarities and differences. Consider the dative case in German, Lezgian, and Classical Greek. In German, the Dative case is mainly used for indirect objects and beneficiaries, so one might propose a general meaning like 'recipient'. In Lezgian, the Dative expresses direction and experiencer in addition to these functions, so one might try some vague abstract notion of 'goal' to encompass all three functions. In Classical Greek, the functions include indirect object, beneficiary, instrument, agent, and cause (but not direction), and it seems difficult to come up with anything more concrete than 'oblique'. But however ingenious and perhaps insightful the general meanings may be, they cannot be compared to each other. What could the relation be between 'recipient', 'goal' and 'oblique'? There is no answer - not surprisingly, there is very little cross-linguistic work that has come out of the research on general meanings. ${ }^{\text {ii }}$

As an alternative to this extreme semasiological or bottom-up approach, one might propose an extreme onomasiological or top-down strategy. This would involve setting up an exhaustive list of all imaginable functional distinctions in a domain - probably an impossible task in most cases. It appears that human cognitive resources are in priniple sufficiently rich to allow for the creation of an indefinite number of (complex) subtle conceptual distinctions.

Thus, the only possible route left is the middle road between the two extremes, and this is what Ferguson (1970) proposed and the typologists have practiced. The functional distinctions to be recognized must be at an intermediate level, the level of USES (or FUNCTIONS). Every grammatical category can have several uses. Whenever two roughly comparable categories in two languages turn out to differ in one type of environment or meaning, this is sufficient for setting up a separate use. Consider the case of the German Dative and the Lezgian Dative again. These are roughly comparable in that the core
uses of the German Dative, indirect object and beneficiary, are also central uses of the Lezgian Dative. But the Lezgian Dative can also be used in direction expressions like Derbent-di-z 'to (the city of) Derbent', which is not possible in German (where a preposition has to be used: nach Derbent). In order to describe the difference between the German and the Lezgian Datives, we need at least the function or use 'direction'. By applying this strategy to more and more languages in the domain of inquiry, the list of different, cross-linguistically relevant uses is gradually enlarged.

Now it could turn out that this strategy leads to the same unconstrained proliferation of functional distinctions as the top-down (or onomasiological) approach, and then it would be of no more use. But experience tells us that languages do not differ from each other in unlimited ways. Cross-linguistic variation is tightly constrained also in the area of grammatical meanings. While the human mind can conceive of an indefinitely large number of ideas, only a small recurring subset of possible concepts are conventionalized in grammatical categories. The practice of typology has shown consistently that as more languages are drawn into the investigation, fewer and fewer new uses turn up, and the uses that have already been established turn out to be relevant even for new languages that have never been studied before.

Indefinite pronouns are no exception to this general pattern, as we have seen in §3.2. The distinctions described there were found to be of central importance in a wide variety of languages, independently of genetic and areal connections.

### 4.2.3. A geometric representation of implicational universals

In order to capture the relationships between different uses within a use-/function-based framework, the methodology of SEMANTIC MAPS has been proposed and will be adopted here (cf. Anderson 1982, Bybee 1985: 195-6, Croft et al. 1987). The highly specific uses or functions that I have identified above in § 3.2 are thought of as existing in a semantic or functional space. The relations among these uses can be studied by determining cross-linguistically which uses can be covered by the same grammatical marker. These relations are represented geometrically on a semantic map in such a way that two uses or functions that are expressed by the same grammatical marker in at least one language are adjacent on the map. The underlying hypothesis is that it will be possible to draw up such a map in a way that is consistent with any existing grammatical system.

Consider first an abstract example:

## Figure 5.

| $a$ | $b$ | $c$ | $e$ |
| :--- | :--- | :--- | :--- |
|  |  | $d$ |  |

Figure 5 represents a semantic map of the five uses or functions $a, b, c, d$, and $e$. There are various ways in which these functions can be covered by different markers in different languages. Three possibilities are given in Figure 6.

## Figure 6.

| Language I: marker X: $a, b$ marker Y: $c, d, e$ | a | $\begin{aligned} & \mathrm{c} \\ & \mathrm{~b} \\ & \mathrm{~d} \end{aligned}$ |  |
| :---: | :---: | :---: | :---: |
| Language II: marker W: $a, b, d, e$ a marker Z: c | b d | C | e |
| ```Language III: marker U: b,c marker V: d,e marker T: a``` | b d |  | c |

However, the semantic map in Figure 5 disallows languages like Language IV and V in Figure 7, because in these hypothetical languages there are markers that have several uses that are not adjacent on the semantic map.

## Figure 7.

| *Language IV: | marker S: $a, e$ <br> marker R: $b, c, d$ | a | c |  |
| :--- | :--- | :--- | :--- | :--- |
| d | b | e |  |  |
|  |  |  |  |  |
| *Language V: | marker Q: $a, c$ |  | c |  |
|  | marker O: $b, e$ | a | b | e |
|  | marker P: $d$ |  | d |  |

So the semantic-map approach not only helps us to express the relations of semantic similarity between various uses, but it also makes testable predictions about what a possible linguistic system is.

Indeed, semantic maps can also be thought of as making statements about IMPLICATIONAL UNIVERSALS. For any two uses/functions $a$ and $b$ that are expressed by the same marker, the semantic map predicts that all uses/functions that are located in the space between $a$ and $b$ are expressed by the same marker as $a$ and $b$. Thus, we can also speak of IMPLICATIONAL MAPS. ${ }^{\text {iii }}$ The main crosslinguistic implicational generalizations about the distribution of indefiniteness markers that I propose in this study will be expressed in the form of an implicational map.

Another area where semantic maps make predictions is the diachronic extension of the functions of a marker (cf. especially Croft et al. 1987, Kemmer 1993). The prediction is that when markers gradually acquire new functions, they will first be extended to those functions that are adjacent to the original functions on the map, and only later to functions that are further away. The diachronic extension of indefiniteness markers of indefinite pronouns will be discussed in chapter 6 (especially § 6.4).

We now turn to the implicational map that I propose.

### 4.3. The Implicational Map

After examining the evidence from a wide variety of languages, I have arrived at a two-dimensional implicational map for the uses/functions of indefiniteness markers. This map is shown in Figure 8.

Figure 8. An implicational map for functions of indefiniteness pronoun series

(9)
free choice

This map consists of nine functions/uses (taken from Figure 4 in § 3.2.6) arranged in two dimensions. Three of the nine functions are arranged in a onedimensional sequence, and a second dimension is introduced for the other six functions. The functions are numbered to allow us to refer to the various positions on the map in a simple way.

The evidence for the cross-linguistic generalizations embodied in this semantic map is found throughout this work. Some evidence has already been presented in $\S 3.2$. Most of the evidence from the 40-language sample is found in Appendix A. More evidence, also from other languages that are not in the sample, is scattered throughout other parts of this work.

In this chapter, I will confine myself to showing how this map works with three examples: English, Russian, and Nanay (Manchu-Tungusic).

### 4.3.1. English

The distribution of indefinite pronoun series over the functions on the map in English is shown in Figure 9. (In this and in subsequent representations of the map, function numbers and connecting lines between functions are omitted for the sake of clarity.)

Figure 9. English

|  |  |  | question | indirect <br> specific <br> known | specific <br> unknown |
| :--- | :--- | :--- | :--- | :--- | :--- | | irrealis |
| :--- |
| non-specific |$\quad$| direct |
| :--- |
| negation |

English has three main series of indefinite pronouns: the some-series, the anyseries, and the no-series. Each of these corresponds to a continuous area (graphically delineated by a closed line) on the map.

The some-series covers the five uses 'specific-known', 'specific-unknown', 'irrealis', 'question', and 'conditional' - for examples see (98), (102), (74), (151a), and (154a) respectively. The any-series covers the six uses 'question', 'conditional', 'comparative', 'indirect negation', 'direct negation', and 'free choice' - for examples, see (44b), (45b), (51b-52), (49-50), (43), and (103) above. The no-series covers only the function 'direct negation' (e.g. 34b).

Note that two indefinite series may of course overlap in their distribution: the some-series and the any-series overlap in the uses 'question' and 'conditional', and the no-series overlaps with the any-series.

The kind of map exemplified in Figure 6 is simplified in several ways, in addition to the simplification inherent in the selection of just the nine uses of Figure 5. First, finer differences between two series that overlap in one function are not shown, for example the difference between the no- and the any-series (cf. Bolinger 1977: 37-65), or the difference between the some- and the any-series in functions where either is possible (cf. § 4.3 .7 below). Second, marginal series are not included. In English, one could perhaps recognize a marginal -everseries (whoever, whatever, wherever, etc.), or a no matter-series (no matter who, no matter what, etc.). The indefinite adverb ever has special properties and could be thought of as a series of its own. And third, differential behavior of different members of the same series is ignored. An example of this is the singular determiner some, which in most ways behaves just like the other members of the some-series. However, unlike the other members, it does not have the 'specific-known' use, as we saw in § 3.2.4. One could easily add this information to Figure 6 by distinguishing a some ${ }_{1}$-series and a some 2 -series, the latter consisting only of one member, the determiner some. Some 2 still conforms to the implicational generalization, because it occupies the continuous area from 'specific-unknown' to 'question' and 'conditional'.

### 4.3.2. Russian

The distribution of indefinite pronoun series in Russian is shown in Figure 10. (For a full justification of this distribution, see Appendix A, Section 16.)

Figure 10. Russian

| gure 10. Russian |  |  |  |  | direct negation |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | question | indirect |  |
| specific known | specific unknown | irrealis non-specific |  | negation |  |
|  |  |  | conditiona | comparative |  |
|  |  |  |  |  | free-choice |

Russian is richer than English in its indefinite pronoun system: It has at least seven core series, as well as several marginal series (see Appendix A). Russian shows even more overlap between the different indefinite series. For two functions, three different series of indefinites are possible, again with the differences that are neglected in Figure 10. In addition to the pragmatic differences in terms of speaker expectations (§ 4.7.4), stylistic differences are also relevant: Where the -nibud'-series and the -libo-series overlap, the -nibud'-series is more colloquial, while the -libo-series is more formal. But Russian differs from English not only quantitatively, but also qualitatively. The space of indefinite pronoun functions is divided up quite differently. There is a special series for a 'specific-known' function (koe-), the two free-choice indefinites
(ugodno/ljuboj) do not have any other functions, and there is a series that spans the five functions 'irrealis non-specific', 'question', 'conditional', 'comparative', and 'indirect negation' (-libo). On the other hand, there are also some obvious similarities between Russian and English: a special series for 'direct negation' (ni-/no-) as opposed to 'indirect negation', and overlap in the question and conditional functions between a 'left-hand' series (-to/some-) and a 'right-hand' series (-nibud'/any-). Russian also has two series that overlap completely: the ugodno-series (kto ugodno 'anyone', č to ugodno 'anything', etc.), and the ljubojseries, which consists only of the determiner ljuboj 'any'.

### 4.3.3. Nanay

The distribution of indefinite pronoun series in Nanay (Manchu-Tungusic) is shown in Figure 11.

Figure 11. Nanay

| specific | irrealis <br> non-specific | question | indirect <br> negation | direct <br> negation |
| :--- | :--- | :--- | :--- | :--- |
|  |  | conditional | comparative |  |
|  |  |  |  | free-choice |

My information on Nanay (from Onenko 1980, 1986) is less complete than my information on English and Russian. I lack information on the the difference between the 'known' and 'unknown' sub-cases of the 'specific' function, and it may be that Figure 11 requires some changes in details (for instance, it could be that -nuu and -daa overlap, just like English some-/any-, and Russian -to/-nibud'). But it is beyond doubt that Nanay again differs significantly from both English and Russian, while at the same time conforming to the implicational generalizations embodied in the map. In particular, Nanay has an indefinite series (daa) which covers all the functions between 'direct negation' and 'irrealis nonspecific', as shown in (134-138). Within the irrealis function, -daa may even be used with past perfective events if an evidential modality is present (138b).

Nanay (Onenko 1980: 441-2, 449)
(134) direct negation

Tuj manga puksin-du xamačaa-daa aliasi-ni goani.
thus strong storm-DAT who-INDEFbear-3SG PT
'Of course, nobody can bear such a strong storm.'
(135) indirect negation

Duente doowani xaj-daa xažon anaapulsiu-mi ačaasi.
taiga inside who-INDEF weapon without walk-CONV suit:NEG
'One should not walk in the taiga without any weapon.'
(136) comparative

Naj xaj-doj-daa murumku, masi, imdar.
human who-than-INDEF smart strong skillful
'A human being is smarter, stronger, and more skillful than anyone.'
conditional
Xajdu-daa maNga-wa, kamaa-wa baa-xanosini, mimbi-we
where-INDEF difficulty-ACC problem-ACC find-PAST if I-ACC
doolaa xeersigu-xeeri.
quietly call-IMPV
'If you meet with difficulties anywhere, call me quietly.'
irrealis non-specific: possiblility, evidential
a. Xaj-daa osii-daa osi-žara. what-INDEF [?] happen-FUT.3SG
'Something may happen.'
b. Sajna, xaj-daa žaka o-či-ni bižere. probably what-INDEF thing happen-PAST-3SG apparently 'Probably something has happened.'

The free-choice indefiniteness marker -daa xem aja includes the marker -daa, but is distinct from it. An example of its use is (139).
(139) free choice (Onenko 1986: 116)

Xaami-daa xem aja, ii-xeri.
when-INDEF come-IMPV
'Come at any time.'
The indefiniteness marker -пии is only used with specific expressions:
(140) specific
$\begin{array}{llll}\text { a. Uj-nuu } & \check{z} \text { ook-č } i & \text { laN } & \text { ži i-či-ni. (Onenko 1986: 98) } \\ \text { who-INDEF } & \text { house-DIR } & \text { near } & \text { go-PAST-3SG }\end{array}$ 'Someone went up to the house.'
b. Noambani xajla-nuu bajtalto-j-či. (Onenko 1980: 443)
theywhat-INDEF accuse-PRES-3PL
'They are accusing him of something.'
These three examples should be sufficient to illustrate how the semantic map captures cross-linguistic generalizations about indefinite pronoun systems and makes universal predictions. It embodies the hypothesis that no language will be found where, for instance, an indefinite series expresses both the free-choice function and the irrealis-non-specific function, but not the question/ conditional and comparative functions, or an indefinite series that expresses both the specific-known and the irrealis-non-specific functions, but not the specificunknown function, etc. In the 40 languages that I looked at, I have not found a single counterexample to the implicational map. The reader may examine the data from the 40-language sample in Appendix A. For convenience, the distribution of the indefinite series in the 40 languages is reproduced in the following section.

### 4.4. The Distributional Schemas of 40 Languages

Figures 12.1-40 show the distributional schemas of the 40 languages of the smaller sample. More details, examples, and sources of the data can be found in Appendix A for each language. (For some languages, the specific-known function is missing: This means that I lack the relevant data.)
insert Figures 12.1-40 here

### 4.5. Further Restrictions on Combinations of Functions

The patterns of the 40 languages shown in $\S 4.4$ exhibit a bewildering diversity - in fact, every language has its unique pattern, so that there are no two languages in my sample that have the same system. My data provide evidence for 37 different combinations of functions in indefinite pronoun series (see Table 4 below), a much larger number than previous studies suggested. Thus, with respect to indefinite pronouns, as elsewhere in the grammar, languages vary widely. However, the variation is not unconstrained: All languages conform to the adjacency requirement imposed by the implicational map, which embodies the deeper unity behind the superficial diversity.

It should also be noted that in most languages several indefinites overlap in their distribution, i.e. some functions may be expressed by several different indefinite pronouns. Sometimes there are additional subtle meaning distinctions, but in many cases two (or more) indefinites are equivalent for most purposes. This massive overlap of indefinites shows that an approach to grammatical meaning that relies on contrast cannot be correct. If grammatical meaning consisted in contrasts in a tight system, we would expect to find only patterns where the space of functions is neatly divided up among the different indefinite series. But as in the case of tense, aspect, and modality markers (cf. Bybee 1988), the grammatical meaning of indefiniteness markers must be due to their semantic substance, not to contrasts in the system.

We have seen that the implicational map puts interesting constraints on the distribution of indefinite pronoun series. But there are probably further restrictions on possible combinations of functions in addition to the adjacency requirement of the map. Given this requirement, there are 95 geometrically possible combinations of functions that any one indefinite series could express, but only 37 different combinations are attested in my data. Since several types are systematically missing, it is unlikely that the other 58 combinations are all accidental gaps. Table 4 lists the 37 attested combinations and gives an example of each type (the digits represent the nine functions of Figure 5).

Table 4. Attested combinations of functions

| 1 | Russian koe- | 45678 | Catalan cap |
| :---: | :---: | :---: | :---: |
| 12 | Kazakh älde- | 456789 | English any |
| 123 | Serbian / Croatian ne- | 4568German je |  |
| 12345 | English some- | 45689 | Serbian/Croatian bilo |
| 123456 | German etwas | 4589Hungarian akár |  |
| 1234567 | Swedish någon | 467 | Italian nessuno |
| 2 | Kannada -oo | 4678Finnish -kaan |  |
| 23 | Basque bait? | 468 | Icelandic nokkur |
| 2345Latin al | $i$-, Greek ka- | 568 | Russian by to ni bylo |
| 23456789 | Portuguese qualquer | 5689Bulgarian -to i da e |  |
| 2345689 | German irgend | 589 | Modern Greek -dhípote |
| 345 | Russian -nibud' | 67 | Icelandic $n$ - |
| 3456Ossetic |  | 678 | Maltese ebda |
| 34567 | Greek típota | 6789Kannada -uu |  |
| 345678 | Nanay -daa | 689 | German jeder |
| 3456789 | Hindi/Urdu bhii | 7 | German $n^{-}$ |
| 34568 | Lithuanian nors | 89 | Swedish som helst |
| 345689 | Dutch dan ook | 9 | Icelandic sem er |
| 4567Hebrew |  |  |  |

Some of the missing combinations are probably true accidental gaps, but many others are apparently excluded for principled reasons, i.e. they cannot occur in any language. Two such principles might be formulated along the following lines:
(i) Principle 1: Combinations of less than three functions are not possible in the middle of the map, i.e. in the area of functions $4,5,6,8$. This excludes the combinations '4', '5', '6', '8', '45', '46', '58', '68'. (Perhaps the fact that no indefinite expresses just function 3 is also related to this principle.)
(ii) Principle 2: Functions 9 (free choice) and 8 (comparative) are never combined with function 1 (specific-known). This excludes combinations such as '1234568', '1234678', '1234689', '12346789', '12358', '1234589'.

These two principles thus have to be added to the adjacency requirement of the implicational map. Of course, they are also on need of further explanation. A speculative explanation for Principle 1 will be suggested in $\S$ 5.4.4. Principle 2 can probably be explained by the need to distinguish between meanings that are too different - the emphatic functions 'comparative' and 'free choice' are just too different semantically from 'specific known' to be expressible in the same way (cf. §5.6.1, §5.7.2 for more on the nature of these differences).

### 4.6. Earlier Formulations of Typological Implications

There are two earlier attempts at accounting for the cross-linguistic variation in terms of implicational constraints: the implicational hierarchy of Edmondson $(1981,1983)$ and the map-like schemas of Bernini and Ramat (1992). I became aware of them only after I had arrived at my implicational map, and I see the similarities between these two proposals and my own results as confirming the soundness of the general approach. However, both these attempts are much smaller in scope and have a number of shortcomings in comparison to my map.

Edmondson $(1981,1983)$ formulates an implicational hierarchy for various kinds of negative-polarity items (auxiliaries, intensifying adverbs, indefinite
pronouns). This hierarchy is shown in Figure 13, together with examples of the four types of negative-polarity items predicted by this hierarchy.

Figure 13. Edmondson's implicational hierarchy for negative-polarity items


Edmondson's implicational hierarchy bears obvious resemblances to my implicational map, especially with respect to the functions 'negative', 'interrogative' and 'conditional'. Only the position of the comparative function is incompatible with my map, and the data show that Edmondson's hierarchy cannot be correct: Many languages have indefinites that express just the comparative and the free-choice function, but not the conditional, question and negation functions, e.g. Lithuanian bet-indefinites, Swedish som helstindefinites, Basque edo-indefinites and Romanian ori-indefinites. In addition, the implicational relations cannot be expressed by a hierarchy, because some indefinites that are used in the conditional and interrogative functions are not used in the negative functions (e.g. the Russian -nibud'-indefinites).

Bernini and Ramat (1992: ch. 6) distinguish just three main functions of indefinite pronouns: N (cf. English no-), A (any-), and S (some-). Technically, N is defined as the indefinite used in elliptical answers, as in (141); A is defined as the indefinite used in positive or negative questions (141-42); and $S$ is defined as the indefinite used in positive (and presumably realis) answers, as in (142).
(141) Did you see anyone? - No, nobody.
(142) Didn't you see anyone? - Yes, (I did see) someone.

Bernini's and Ramat's map-like schema looks as follows (1992: 126):

|  | negative | positive |
| :--- | :---: | :---: |
| answerN | S |  |
| question | A | A |

They do not claim explicitly that this schema expresses an adjacency requirement (and they do not call their schema an implicational map), but in the seven types that they distinguish, all indefinites (indicated by the letters $x, y, z$ ) occupy contiguous areas, as shown in Figure 14 (Bernini and Ramat 1992: 12736).

Figure 14. Types of indefinite pronoun distributions in European languages according to Bernini and Ramat

| answer question | neg. | pos. |
| :---: | :---: | :---: |
|  | X | y |
|  | neg z | Z |
|  | $\begin{aligned} & \text { e.g. E } \\ & \text { (no/son } \end{aligned}$ |  |

N vs. S vs. A

NA vs. S

e.g. Russian
(ni-/koe-/nibud')
N vs. S1 vs. S2

| neg. | pos. |
| :--- | :--- |
| neg $x$ $y$ <br> neg $x$ $x$ <br> e.g. <br> (i--bait) <br> Basque  <br> A vs.  |  |

A vs. S

e.g. Romanian
(ni-/-va)
N vs. S


AS

The similarities between Bernini's and Ramat's and my approach are evident. The fact that they distinguish fewer functions results from the scope of their study, which includes all negation patterns, but includes non-negative indefinites only peripherally.

However, there are several problems with their approach. First, the use of the terms N, A and S is confusing. On the one hand, these are said to refer to functions, but then they are also used to refer to specific distributional patterns. For example, Romanian is said to have an N vs. S pattern, although the $-v a-$ indefinites are used for the functions $S$ and A. This is mainly a terminological problem, but the result is that it is not always clear what the authors mean.

Second, I see no reason why negative questions should be given special prominence. Apparently English is the only language where negative questions are said to have different indefinites than negative declarative sentences, but this is not the case (Did you see nobody? is quite acceptable, as is I didn't see anybody.) A third problem is that negative elliptical answers are used to define the function ' N '. As I argue in § 8.1.2, elliptical answers are not a good criterion for defining negative pronouns.

In conclusion, although the proposals advanced by Edmondson and by Bernini and Ramat are problematic in several respects, they are interesting precursors to the implicational map proposed in this work.

### 4.7. Some Finer Distinctions

The nine functions of indefinite pronoun series that are represented on the implicational map constitute the core functions with respect to which indefinites can differ within or across languages. However, they do not exhaust the possibilities. In this section I mention a couple of further distinctions that are relevant but for which I could not get systematic cross-linguistic data. Some of these distinctions can probably be eventually be integrated into the map, while others seem to belong to a different dimension of variation.

### 4.7.1. Comparatives

Hoeksema (1983) shows that there are two types of comparative standard expressions in which indefinites may behave differently, nominal comparatives and clausal comparatives. Only clausal comparatives allow ook maar-indefinites in Dutch (cf. 144a), whereas nominal comparatives do not (cf. 144b).
a. Jansen was sneller dan ook maar iemand ooit geweest was. Jansen was faster than INDEF anyone ever been had 'Jansen was faster than anyone had ever been.'
b. *Jansen was sneller dan ook maar iemand. Jansen was faster than INDEF anyone 'Jansen was faster than anyone.'

Similarly, in Serbian/Croatian only clausal comparatives (marked by nego 'than') allow $i$-indefinites (cf. 145), whereas nominal comparatives (marked by od 'from, than') do not (cf. 146) (Progovac 1994: 71).
(145) Marija je viša nego i-ko u razredu.

Marija is taller than INDEF-who in class
'Marija is taller than anyone in the class.'
(146) Marija je viša od *i-koga/bilo koga u razredu.

Marija is taller from INDEF-whomin class
'Marija is taller than anyone in the class.'
The data from Dutch and Serbian/Croatian suggest that the comparative function should eventually be split up into two functions, the clausal comparative function being closer to the indirect negation function (Dutch ook maar-indefinites are used in the indirect-negation and (marginally) in the directnegation functions), and the nominal comparative function being closer to the free-choice function (Serbian/Croatian $i$-indefinites are not used in the freechoice function). ${ }^{\text {iv }}$

### 4.7.2. Indirect negation

The indirect-negation function can be subdivided at least into the two functions 'implicit negation' (i.e. expressions like 'without', 'lack') and 'superordinate negation' (i.e. sentential negation in a superordinate clause). German jeder and Latvian jeb WH are examples of indefinites that behave differently in these two contexts:
(147) German jeder
a. (implicit) ohne jede Vorwarnung 'without any warning'
b. (superordinate)
\#Es ist nicht nötig, dass jeder kommt.
'It is not necessary that anybody comes.'
(148) Latvian jeb WH
a. (implicit) Tru@ka jeb-ka@da e@dama@.
lacks INDEF-which food 'Any food is lacking.'
b. (superordinate) ${ }^{*}$ Es nedoma@ju, ka jeb kas atna@ks. I not:think that INDEF who came 'I don't think that anybody came.'

I have too few examples of such a contrast, but these two cases suggest that the sub-case 'implicit negation' is closer to the comparative and free-choice functions, whereas the sub-case 'superordinate negation' is closer to the irrealis-non-specific function.

### 4.7.3. Questions

Strictly speaking, the 'question' function on the map refers only to polar questions. In many cases, different indefinites are used in parametric (or 'WH-') questions, as for instance in Italian, where niente from the negative-polarity series is not used in parametric questions, cf. (149a-b).
(149) Italian (Zanuttini 1991: 141)
a. Ha detto niente di nuovo? has said anything of new 'Has he said anything new?'
b. Quando ha detto qualcosa/*niente di nuovo? whenhas said something/anything of new 'When did he say something new?'
c. Quando mai ha detto niente di nuovo? whenever has said anything of new 'When has he ever said anything new?'

However, two kinds of parametric questions must be distinguished: Ordinary questions asking for information, and rhetorical questions that presuppose a negative answer. When a negative-polarity indefinite is used in parametric questions, usually a rhetorical reading results, as in (149c). Similarly, Progovac (1994: 98) reports that (150) from Serbian/Croatian, with the negative-polarity indefinite ikoga, must have rhetorical force. The situation is similar with English any-indefinites (cf. Lakoff 1969: 609, Borkin 1971, Lawler 1971) and Modern Greek típota-indefinites (cf. Tsimpli and Roussou 1993: 150-57).
(150) Serbian/Croatian

Kada je Marija i-koga uvredila?
when is Marija INDEF-whom insulted
'When did Marija insult anyone?'
It appears that ordinary parametric questions must be situated to the left of the 'question' function on the map, perhaps just coinciding with the 'irrealis nonspecific' function, whereas rhetorical parametric questions must be close to the indirect negation function, perhaps just coinciding with the 'question' function. Positive and negative expectations are also sometimes relevant in polar questions, as is discussed in the next section.

### 4.7.4. Expectations of the speaker

In a number of unrelated languages, the pragmatic contrast between positive and negative or neutral expectations of the speaker is relevant for the choice of the indefinite pronoun series within the conditional and (polar) question functions. Invariably the indefinite series that is chosen for positive expectations is the one that has more functions to the left of the question/conditional functions on the map, and the series that is chosen for neutral or negative expectations is the one that has more functions to the right
on the map. It is therefore tempting to propose a further subdivision of the question and conditional functions and thus to capture this generalization by making the map more fine-grained. Although such a step would not be against the spirit of the whole enterprise, it meets with a technical problem: It is not possible to draw a two-dimensional map in such a way that the adjeacency requirement is always satisfied - indefinites like the Russian -nibud'-series cannot be accommodated (see the discussion below). Thus, the parameter of speaker expectations must be treated as belonging to a different, though related, dimension. The relevance of speaker expectations has been reported in the literature for English, Catalan, Russian, and Japanese.

The importance of pragmatic conditions for the English some/any distinction was originally pointed out by Bolinger (1960) and became widely known through Lakoff (1969). In questions and conditional protases, the unmarked case is the occurrence of negative-polarity indefinites of the any-series. However, if the speaker's expectations are positive, indefinites of the someseries are used. Consider Lakoff's examples:
(151) English (Lakoff 1969: 609-11)
a. Do you think those men want to do some work?
(Because my road needs to be repaired.)
b. Do you think those men want to do any work?
(Because they've been standing around all morning telling dirty jokes.)
In (151a), the speaker expects (or hopes) that the answer to his question will be positive, so some is used. By contrast, in (151b) the speaker expects the answer to be negative, so only any can be used here.

Two special types of questions that consistently behave according to this generalization are invitations and requests in the form of a question and rhetorical questions. In invitations and requests, the speaker expects (or hopes for) a positive answer, so the some-series must be used (Bolinger 1977: 31):
(152) a. (invitation) Good morning, will you have some <*any> breakfast?
b. (request) May I have something for somebody who is coming by at four o' clock to pick it up?

The situation is quite similar with conditional protases. When the speaker expects that the condition will be fulfilled (or assumes that it has been fulfilled), some-indefinites are used, but when the expectation is that it will not be fulfilled, any-indefinites are used. Again, (153a-b) are from Lakoff (1969: 610).
a. Unicorns are mythical beasts: if Joan seens any <? ?some> unicorns out there, I'll eat my hat.
b. If John sees some $<$ ??any $>$ goldfish in that tank, it's not surprising: there are lots of them in there.

Lakoff also points out special uses of conditionals: conditional promises and warnings. In conditional promises, the speaker hopes that the hearer will fulfill the condition, so that (154a) has some, whereas in conditional warnings, the speaker hopes that the hearer will not fulfill the condition, so that (154b) has any (Lakoff 1969: 611).
(154) a. I promise you that, if you eat some <*any> spinach, I'll give you ten

## dollars.

b. I warn you that, if you eat any <*some> candy, I'll whip you.

The relevance of speaker expectations is found in other languages as well. In Catalan, as in English, negative-polarity indefinites are used when speaker expectations are negative, whereas positive-polarity indefinites are used when they are positive. According to Lleó (1983: 326), in (155a) the speaker considers it more likely that someone came to see her, whereas in (155b) she considers it more likely that the answer to her question is negative.
(155) Catalan (Lleó 1983: 326)
a. Ha vingut algú a veure'm?
has come someone to see-me
'Has someone come to see me?'
b. Ha vingut ningú a veure'm?
has come anyone to see-me
'Has anyone come to see me?'
In questions that are used as requests and therefore expect a positive answer, the negative-polarity indefinite is impossible (Lleó 1983: 313).
(156) Podríeu tancar alguna <*cap> finestra, si usplau? could close some any window if you please
'Could you close some window, please?'
Analogously, in conditional protases a negative-polarity indefinite (157a) indicates lower likelihood than an affirmative-polarity indefinite (157b) (Lleó 1983: 326):
a. Si en Joan vol res, ja ens ho dirà. if ART Joan wants anything already us it will:say 'If Joan wants anything, he will tell us about it.'
b. Si en Joan vol alguna cosa, ja ens ho dirà. if ART Joan wants some thing already us it say:FUT.3Sg 'If Joan wants something, he will tell us about it.'

Finally, conditional warnings and promises behave as expected from the above discussion on English:
(158) a. Si dius res <?alguna cosa>, et castigaran. if say:2SG anything something you they'll:punish 'If you say anything, you'll be punished.'
b. Si dius alguna cosa <?res>, et donaran un premi. if say:2SG something anything you give:FUT.3PL a prize 'If you say something, you'll get a prize.'

Speaker expectations have been shown to be relevant also in Russian (Paillard 1984). In (159a), there is no particular expectation on the part of the speaker, whereas in (159b) the context makes it clear that the speaker expects a positive answer (cf. also Dahl 1970: 38).
(159) Russian (Paillard 1984: 272-3)
a. Vy kogo-nibud'ž dete?
you who-INDEF wait

```
    'Are you waiting for anybody?'
b. Ja celuju Valjušku \(i\) vsë prislušivajus': ne razdastsja li \(v\)
    I kiss Valjuš ka and still listen not sounds \(Q\) in
    koridore zvonok. No zvonka vsë net. - Ty ždeš'kogo-to?
    corridor ring but ring still not.exist you waitwho-INDEF
    spraš ivaet Valjuš ka.
    asks Valjuš ka
    'I kiss Valjuš ka and continue to listen if the bell rings in the
    corridor. But there is still no ring. - Are you waiting for someone?
    - asks Valjuš ka.'
```

In confirmation questions introduced by pravda, č to...? 'is it true that...?', only -to-indefinites are admissible (Paillard 1984: 272):
(160) Pravda, č to ty kupil kakuju-to <*?kakuju-nibud'> true that you bought which-INDEF which-INDEF
francuzskuju knigu?
French book
'Is it true that you bought a French book?'
By contrast, in questions marked with the question particle razve, which indicates that the speaker would be surprised at a positive answer, only -nibud'-indefinites are possible (Paillard 1984: 272):
(161) Razve slučilos' čto-nibud' <*?č to-to>, o čem ja ne znaju? PRT happened what-INDEF what-INDEF about that I NEG know 'Did anything happen that I don't know about?'

Since Russian -nibud'-indefinites are also used in a function to the left of the question and conditional functions, the irrealis-non-specific function, it is not possible to express the similarity between English, Catalan and Russian by making the implicational map more fine-grained. Still, Russian conforms to the above generalization that the indefinite chosen for positive speaker expectations is the one that is located further to the left on the map.

A type of question which usually implies positive speaker expectations is the negated polar question (this seems to be true cross-linguistically). In Japanese, there is a fairly rigid division between the $k a$-series of indefinite pronouns, which occurs in non-negative sentences, and the mo-series, which occurs in negative sentences.

Japanese (cf. Hasegawa 1991: 271)
(162)
a. Dare-ka ki-ta.
who-INDEF come-PAST
'Someone came.'
b. Dare-mo /*dare-ka ko-nakat-ta.
who-INDEF who-INDEFcome-NEG-PAST
'Nobody came. / Somebody didn't come.'
In contrast to English, where the some-series is possible in negative sentences but is then interpreted as not being in the scope of the negation, the Japanese $k a$-series is completely impossible with negation, where the mo-series is obligatory. However, in negated polar questions this ban is lifted. As McGloin (1976: 409) points out, $k a$-indefinites are used in polar questions when the
speaker has a firm basis for believing that the presupposition is true, i.e. when the speaker expects a positive answer. Thus, (163a) is an information-seeking question, whereas (163b) is interpreted as an explicit invitation (McGloin 1976: 409).
a. Nani-mo tabe-mas-en ka?
what-INDEF eat-POL-NEG $Q$
'Are you not going to eat anything?'
b. Nani-ka tabe-mas-en ka?
what-INDEF eat-POL-NEG $Q$
'Aren't you going to eat something?'
Notice that the same is true for the English some/any contrast (cf. e.g. Bolinger 1977: 24).

And again the situation is quite parallel in conditional antecedents. When the speaker makes a promise and therefore has positive expectations, the $k a$-series is possible with negation, as shown in (164b) (McGloin 1976: 415).
a. Nani-mo tabe-nakat-tara, eigae ture-te it-te
what-INDEF eat-NEG-COND movie to bring-CONV go-CONV
age-na-i yo.
give-NEG-PRES AFF
'If you don't eat anything, I won't take you to the movie.'
b. Nani-ka tabe-nakat-tara,...
what-INDEF eat-NEG-COND
'Unless you eat something, I won't take you to the movie.'
Thus, we have seen four languages (English, Catalan, Russian, Japanese) where speaker expectations play an important role in selecting an indefinite pronoun series. This is all the more remarkable as the uses of the two different series are different in other ways in the four languages: English some/any and Catalan algú/ningú are non-polarity/negative-polarity items, Japanese $\mathrm{ka} / \mathrm{mo}$ are positive/negative, and Russian -to/-nibud' are specific/non-specific. That negative expectations are expressed by indefinites that are located further to the right on the implicational map is of course just what we expect, because the negation functions are also located on the right. However, the details of an explanation of these facts remain to be worked out.

### 4.8. Toward an Explanation of the Implicational Map

At this stage we have completed the third step of typological analysis, implicational generalizations. The next and final step is the explanation of the observed patterns. Why are indefinite pronoun series distributed over the various functions in such a way that the semantic map of $\S 4.3$ results?

I have already alluded to an obvious interpretation of the implicational map: Closeness on the map means close semantic relatedness. This is of course intuitively very plausible, but we have to ask further: In what way are the various functions semantically related? Only once we have an explicit account of the semantic relationships between the functions of indefinite pronoun series can we say that we understand the typological pattern.

The next chapter will discuss a number of theoretical approaches to the interrelations of the various functions of indefinite pronouns, which is a necessary prerequisite for explanatory success.

[^4]
## 5

# Theoretical Approaches to the Functions of Indefinite Pronouns 

This chapter will review and discuss various theoretical approaches to the semantic and syntactic functions that are found in different indefinite pronoun series. These approaches generally concern only a small subset of the functions distinguished in chapter 3. Thus, the approaches dealt with in this chapter are not necessarily to be seen as alternatives, and some of them could and should be regarded as complementary (though others are indeed incompatible). Most of these theoretical approaches are based on a much narrower range of data than this study, often only data from a single language. My discussion will highlight the points that are illuminated by the broad cross-linguistic data assembled in this study. In § 5.6, I make an attempt to show how the various functions of indefinite pronouns fit together and how the implicational map of chapter 4 is motivated. Finally, $\S 5.7$ deals with focusing and sentence accent.

### 5.1. Structuralist Semantics

My discussion begins with structuralist semantics, the study of meaning in the spirit of Ferdinand de Saussure's foundational work. (While linguists in the 19th century developed theoretical perspectives in many areas of semantics, pragmatics, and syntax, the functions of indefinite pronouns were not among them. The descriptions of indefinite pronouns in pre-structuralist reference grammars are too sketchy to warrant discussion here.)

The fundamental assumption of structuralist linguistics is that language is a system whose parts must be defined and described on the basis of their place in the system and their relation to each other, not on the basis of their own intrinsic properties (as the opposing view, which might be called 'substantivist', would maintain). A typical structuralist analysis of a class of linguistic units classifies them on the basis of several binary distinctions (or 'oppositions'). These binary distinctions are often written in the form ' $[+\alpha]$ vs. $[-\alpha]$ ' and are called features ('semantic features' in the case of a semantic analysis).

Structuralist semantics, especially in application to grammatical meaning, was pioneered by Roman Jakobson (especially 1936, 1957) and was widely adopted by linguists in the following decades, particularly in Europe. There are a substantial number of studies on indefinite pronouns that came from this tradition (Greimas 1963, Veyrenc 1964, Manoliu-Manea 1966, Kř ǐž ková 1971, Levin 1973, Dausendschön-Gay 1977, Ponomareff 1978, Pilka 1984, Gluszkowska 1985). Studies from the generative tradition often preserve much of the spirit of classical structuralism in their emphasis on abstract formal systematization (e.g. Labov 1972).

In contrast to the other approaches to be dealt with below, no particular analysis in this approach has become famous and widely discussed, so an illustrative example should be sufficient here. A typical case of a structuralist study is provided by Veyrenc (1964). Veyrenc classifies four Russian indefinite
series (-to, -nibud', koe-, -libo) in the way shown in (165), where kto 'who' is taken as representative of the whole series.

| unique | non-unique |  |
| :--- | :--- | :--- |
| real | kto-to |  |
| virtual | $k t o-n i b u d^{\prime}$ | kto-libo |

The feature 'real/virtual' corresponds closely to my specific/non-specific distinction (§ 3.2.3), and Veyrenc's classification makes sense this far: the toand koe-series are indeed specific most of the time, while the -nibud'- and the -libo-series are non-specific. Veyrenc does not mention the possibility of the -toseries being used non-specifically (cf. Appendix A, Section 16), but this does not pose a threat to his analysis. He could simply take this as evidence for the unmarked status of the feature value 'virtual' ('[-real]': When an opposition is neutralized, neutralization is invariably in favor of the unmarked member of the opposition.

However, the other feature ('unique/non-unique') is very weakly motivated. Veyrenc justifies it with reference to the plural-like meaning of the koe-series (koe-gde 'somewhere, here and there', koe-č to 'something, this and that'). Now the schema in (165) predicts that the relation between the -nibud'-series and the -libo-series can be described in the same way, but this is not in fact the case: The -libo-series does not have a plural-like meaning, but rather it has its most important function in indirect-negation and comparative functions (cf. Appendix A, Section 16). Evidently, the binary classification of (165) is a Procrustean bed into which Veyrenc squeezes a distinction that is of a very different nature. ${ }^{i}$ While Veyrenc's analysis is certainly not one of the best structuralist analyses, it serves well as an illustration of the approach and the problems associated with it.

First, it is often left unclear what the status of the semantic features is. In many analyses, it seems that they are created ad hoc and are not interpreted further, so that they do not have any additional explanatory power and might as well be replaced by arbitrary numbers. Uninterpreted semantic features become interesting only if it is hypothesized that there is a universal restricted (possibly innate) set of them (see Wierzbicka (1980a: ch. 1) for discussion).

Second, the binary privative oppositions that are usually employed, contrasting an unmarked feature value $[-\alpha]$ with a marked feature value $[+\alpha]$, often simply do not do justice to the facts. Even if the classification of (165) for Russian indefinites could be accepted, there are still other indefinite series in Russian that remain to be accounted for. For instance, the by to ni bylo-series is in many ways similar to the -libo-series (cf. Appendix A), with which it overlaps to a certain extent, but it also differs from it. One would have to postulate a third opposition (say 'emphatic/non-emphatic'), but this would lead to new possible combinations of features that are not instantiated (e.g. 'real + unique + emphatic') and would have to be arbitrarily excluded.

Third, the view that grammatical meaning consists in oppositions rather than in inherent semantic substance leads us to expect no overlap between contrasting units. But we do find massive overlap of the functions of grammatical items in many areas, including indefinite pronouns (cf. § 4.5). Thus, there are certain contexts where either the -nibud'-series or the -libo-series may be used with only a stylistic difference, and the -to-series and the -nibud'series also overlap.

Fourth, structuralist semantics makes wrong predictions about semantic change. An analysis in terms of binary oppositions would lead us to expect changes consisting in a feature switching from a plus value to a minus value (or vice versa), or in adding or replacing a feature. But semantic change seems to proceed in a gradual fashion, with an expression acquiring only one slightly different new use at a time. There is good evidence that the -libo-indefinites originally were free-choice indefinites (§ 6.2.2). The -libo-indefinites lack the free-choice function now, but they still have the comparative function (very often expressed by free-choice indefinites in other languages). In addition, they now have the indirect-negation function and the question/ conditional function, overlapping here with the -nibud'-series. The analysis of (165) does not even begin to account for these (hypothesized) changes. Quite generally, grammatical meanings often retain subtle traces of earlier (especially lexical) meanings which are better accounted for by a substantivist approach that attributes semantic substance to them (cf. Bybee 1988 for discussion).

Fifth, structuralist semantic analyses of different languages are rarely comparable and thus are not a suitable basis for typological studies (cf. § 4.2.2). Of course, if structuralist semanticists operated with a sufficiently restricted universal set of semantic features, comparability would be ensured (much as phonemic systems are comparable when based on a restricted universal set of phonological features). But in the absence of such a restricted set of features, analysts typically attempt to build a system that best captures the peculiarities of a given language, with the result that existing analyses of distinct languages are often radically different.

For all these reasons, I am skeptical about the approach of structuralist semantics. This does not, of course, mean that there is no value in it - the studies of indefinite pronouns cited above all contain valuable data and discussion, much of which has been directly useful for this study. But I will base my conclusions on a substantivist rather than a structuralist view of language.

### 5.2. Logical Semantics

Since Gottlob Frege's and Bertrand Russell's writings, modern linguistics has been influenced by the thinking and notational devices of mathemati$\mathrm{cal} /$ philosophical logic. Indefinite pronouns are one of the areas where logical semanticists have had especially many things to say, based on the predicate calculus of modern logic. There are two main aspects of indefinites which have been discussed from a logical-semantic point of view: free-choice indefinites ( $\S$ 5.2.1) and non-specific indefinites ( $\$ 5.2 .2$ ).

As in the preceding section, my evaluation of the logical-semantic approach will be rather critical, and I will discuss alternative ways of dealing with the issues raised by logical semantics in §5.4-5.

### 5.2.1. Free-choice indefinites and universal or existential quantifiers

There is a huge literature on quantification and corresponding phenomena in grammar, beginning with the late 1960s. ${ }^{\text {ii }}$ Most of this literature is not immediately relevant to my more narrow concern of exploring the relation between meaning and form in indefinite pronouns. In the following, I will concentrate on the logical-semantic literature that deals with indefinite pronouns in the narrow sense.

In general, logical formulas containing an existential quantifier correspond to sentences with specific indefinites, and logical formulas containing a universal quantifier correspond to sentences with universal pronouns, ${ }^{\text {iii }}$ as illustrated in (166-167).
(166) a. ( $\exists x$ ) (Pavlina saw $x$ )
b. Pavlina saw something.
a. $(\forall x)$ (Waldemar ate $x$ )
b. Waldemar ate everything.

But what is the logical structure corresponding to free-choice indefinites? Rather than introduce a new quantifier, logicians and linguists working within logical semantics have tried to express the meaning of free-choice quantifiers in terms of the two classical quantifiers, the universal and the existential quantifiers. Since most of the relevant discussion has taken place in English and no typological evidence has generally been taken into account, the English anyseries (most often the determiner any) has been at the center of the attention. This has led to additional problems and challenges, because the English anyseries is also widely used in non-free-choice uses, in particular in negation and negative-polarity contexts. The prevailing view among linguists seems to be that two anys have to be distinguished: a 'free-choice any', corresponding to the universal quantifier, and a 'polarity-sensitive $a n y$ ', corresponding to the existential quantifier (cf. Carlson 1980, 1981). But a sizable minority has defended the view that any has a unitary meaning corresponding to the universal quantifier (e.g. Savin 1974, Gil 1991). The third logical possibility, unitary meaning corresponding to the existential quantifier, has also found adherents (Davison 1980, Kadmon and Landman 1993).
5.2.1.1. Univocal universal any. The view that any invariably corresponds to the universal quantifier was put forward in two famous works of philosophical logic (Reichenbach 1947: §21, Quine 1960: §29). According to Reichenbach and Quine, any differs from every in that the universal quantifier to which it corresponds always has wide scope with respect to other logical operators such as negation and material implication. In (168), an example of the free-choice use of any, there is no additional operator, so that any and every are logically equivalent.
(168) a. $(\forall x)(x$ knows this secret $)$
b. Anybody knows this secret.
c. Everybody knows this secret.

In (169-170), examples of any in negative-polarity contexts, we see how the difference between any and every is reflected in the different scope relations between the universal quantifier and the additional operator.
(169) a. $(\forall$ : member $x)(x \text { contributes } \supset x \text { gets a poppy })^{\text {iv }}$
b. If any member contributes, he or she gets a poppy.
c. $((\forall$ : member $x)(x$ contributes $)) \supset\left(I^{\prime} l l\right.$ be surprised $)$
d. If every member contributes, I'll be surprised.
a. $(\forall$ : poem $x) \neg(\operatorname{I}$ know $x)$
b. I do not know any poem.
c. $\neg(\forall$ : poem $x)($ I know $x)$
d. I do not know every poem.

If we only consider these examples, the analysis seems satisfactory. Not only does it allow us to maintain a unitary, non-ambiguous meaning of any, it also accounts for the fact that an existential meaning seems to be associated with negative-polarity any. Indeed, (169b) and (170b) can be paraphrased by (171b) and (172b), which contain the existential expression 'there is'.
(171) a. $((\exists:$ member $x)(x$ contributes $)) \supset(x$ gets a poppy $)$
b. If there is a member who contributes, he or she gets a poppy.
(172) a. $\neg(\exists$ : poem $x)(I$ know $x)$
b. There is no poem that I know.

Given the general logical equivalences in (173-174), it follows that (171a) and (172a) are equivalent to (169a) and (170a), and the (near) synonymy between (171b) and (169b), and between (172b) and (170b) is explained.

$$
\begin{array}{ll}
(\forall x)(\mathrm{F} x \supset p) & \equiv((\exists x)(\mathrm{F} x)) \supset p  \tag{173}\\
(\forall x) \neg(\mathrm{F} x) & \equiv \neg(\exists x)(\mathrm{F} x)
\end{array}
$$

Reichenbach even offers an explanation for the fact that any always has the widest possible scope: He says that any corresponds to a free variable. As a rule, logical formulas must be closed in the argument variables, and expressions containing free variables do not have a determinate truth value. But, Reichenbach claims (1947: 105), 'when an expression containing a free variable is true for all values of the variable, it can be asserted.' This idea is not made precise, but it has a certain intuitive plausibility, and it explains why the scope of any is always the whole formula $(\mathrm{F} x \equiv(\forall x)(\mathrm{F} x), \neg \mathrm{F} x \equiv(\forall x) \neg \mathrm{F} x, \mathrm{~F} x \supset p \equiv$ $(\forall x)(\mathrm{Fx}) \supset p$, etc. $)$.
5.2.1.2. Negative-polarity any as existential. Whereas the univocal analysis of any has been adopted by some linguists (Bolinger 1960, Bach 1968: 112, Savin 1974, Schmid 1980, Hintikka 1980, LeGrand 1974, Gil 1991), other linguists have objected that any should correspond to an existential quantifier in negativepolarity contexts like (45b), (46b). The following five arguments (among others) have been cited in the literature for the existential nature of negative-polarity any (Dahl 1970: 38-39, Horn 1972: §2.35, Davison 1980, Carlson 1980, 1981, Ladusaw 1980: 94-104, Linebarger 1980, 1981: ch. 5, and many others).

First, any-indefinites are ambiguous in negative-polarity environments, as shown in (175-177). In one of the readings, they are roughly equivalent to everypronouns (the 'universal reading'), and in the other reading they are roughly equivalent to some- or no-pronouns (the 'existential reading'). Note that the two readings are in fact different suprasegmentally (see Ladd (1980: 160) for some discussion of the intonational differences).
(175) You can't do anything here.
a. 'You can do nothing here.' (existential reading)
b. 'You can't do everything here.' (universal reading)
(176) If anybody can swim the channel, I can do it.
a. 'If somebody can swim the channel, I can do it.' (existential reading)
b. 'If everybody can swim the channel, I can do it.' (universal reading)
(177) Can anybody swim the channel?
a. 'Can somebody swim the channel?' (existential reading)
b. 'Can everybody swim the channel?' (universal reading)

Such cases seem to show that there are two different anys, one corresponding to a universal quantifier, and one corresponding to an existential quantifier.

Second, in many other languages free-choice indefinites and indefinites in negative-polarity environments are formally different. Horn (1972: 131) observes 'the isolation of the situation in English from the usual trend encountered in the languages of the world to separate the two cases morphologically'. It is unclear, however, what the basis for Horn's claim is. My data show that the situation in English is certainly not 'isolated': 18 of my 40 sample languages have indefinites which are used both in the free-choice function and in conditionals. But on the other hand, 19 languages indeed have special freechoice indefinites which cannot be used in conditionals and questions. And only 12 languages have indefinites which are used both in the free-choice function and in the direct-negation function.

Third, only negative-polarity any may occur in existential sentences with there (cf. 171-172), whereas free-choice any is impossible in such sentences (*There is any apple that you can take).

Fourth, only free-choice any may be modified by the particles almost/nearly and absolutely:
a. (free choice) Absolutely/almost anyone can ride a bike.
b. (negative polarity) Has (*absolutely/*almost) anyone seen my bike?

Fifth, the wide-scope universal analysis does not account for all occurrences of $a n y$, e.g. in questions. Sentence (179a) is not correctly paraphrased by (179b).
(179) a. Has wealth made anyone happier?
b. $(\forall$ : person $x)$ (has wealth made $x$ happier?)

I might add a sixth argument from the cross-linguistic distribution of indefinites on the implicational map that we saw in chapter 4: In many languages, the indefinites that occur in negative-polarity contexts are also used in irrealis non-specific contexts like imperatives or modal contexts (e.g. Russian -libo, Lithuanian -nors, Modern Greek típota, Hindi/Urdu bhii, Yakut eme, Georgian -me, Kannada -aadaruu). In such contexts, the wide-scope universal analysis is completely ruled out.

For further arguments see Carlson $(1980,1981)$ (especially concerning more complicated scope interactions) and Ladusaw (1980) (especially concerning the formulation of compositional meaning).

It should also be mentioned, however, that there is an additional argument against separating a free-choice any and a negative-polarity any, in addition to the general preference for univocal analyses: There are occurrences of anyindefinites that are, so to speak, neutral between free-choice any and negativepolarity any. As Carlson (1981: 13) observes, sentences (180a-c) have only one reading.
(180) a. Bob can run faster than anyone.
b. Bob is unlikely to kick anyone.
c. For Bob to eat anything now would be impossible.

Note that these are precisely the uses (comparative, indirect negation) which are between the free-choice function and the question and conditional functions on the implicational map of chapter 4.
5.2.1.3. Problems with the logical-semantic approach to free-choice indefinites. Thus, the logical-semantic approach is in a dilemma: On the one hand, there is an analysis that accounts for a core set of data and permits the desired unitary treatment of $a n y$, and on the other hand, a closer look seems to show that any is not only ambiguous, but ambiguous between two meanings (existential and universal quantification) that are in a sense opposites. ${ }^{\vee}$

Another limitation of logical semantics is that it cannot express the difference between any and every in cases where they are roughly equivalent. In (181a) (showing free-choice any), we have some kind of universal meaning, but as Vendler (1967) has pointed out, (181a) and (181b) do not have the same meaning, and not even the same truth conditions.
(181) a. Any doctor will tell you that Stopsneeze has dangerous side effects. b. Every doctor will tell you that Stopsneeze has dangerous side effects.

Assuming a meaning element of universal quantification in free-choice indefinites is particularly suspect in cases like (182a), which is evidently very different from (182b).
a. Take any apple.
b. Take every apple.

Thus, we are justified to be skeptical that universal quantification in the standard logical sense is involved in free-choice indefinites at all.

It happens that Davison (1980) has claimed that free-choice indefinites are to be understood as existential quantifiers, too, differing from negative-polarity indefinites mainly in that they carry a pragmatic implicature of universality (cf. also Carlson (1981: 16-20) for arguments for this view, and Kadmon and Landman (1993) for a similar approach). It is not surprising that this option has also been advocated, because it would again permit a univocal semantic characterization of any. However, as has been shown in the preceding subsection, there are many behavioral differences between free-choice any and negative-polarity any which also argue against a univocal existential analysis.

Thus, although the logical-semantic approach has allowed us to ask many interesting new questions, it has ultimately remained unsuccessful with respect to the relation between free-choice indefinites and negative-polarity indefinites. We will see in $\S 5.5$ that a wider perspective was necessary to make new progress.

### 5.2.2. (Non-)specific indefinites and referential opacity

The logical-semantic approach has also been applied to describe the difference between specific and non-specific noun phrases. However, since English indefinite pronouns do not make this distinction, (non-)specificity has not often
been discussed with reference to indefinite pronouns in the logical-semantic literature. The main motivation of these analyses has been to explicate specific/non-specific ambiguities, not to explicate the meaning of a particular indefinite expression.

The basic idea is that the two readings of a sentence like (183) can be distinguished by assigning different scope relations to the existential quantifier that binds the variable corresponding to the ambiguous NP. In the specific reading, the existential quantifier has scope over 'want' (184a), and in the nonspecific reading, it has narrow scope and is within the scope of 'want' (184b).
(183) Bob wants to marry a linguist.
a. (specific) ( $\exists$ : linguist $x$ ) (Bob wants to marry $x$ )
b. (non-specific) Bob wants ( $\exists$ : linguist $x$ ) (Bob to marry $x$ )

The original idea seems to be due to Quine (1956), and it was later taken up by several linguists, among others C. L. Baker (in an unpublished 1966 paper), Bach (1968), Dahl (1970), Fodor (1970).

Unfortunately, some confusion has arisen as a result of the different goals of logicians and linguists. While linguists are mostly interested in explaining ambiguities, Quine as a logician was primarily occupied with the problem of REFERENTIAL OPACITY. If the two inference rules of substitutivity of identicals and existential generalization are not valid in a context, logicians say that the context is REFERENTIALLY OPAQUE. The 'want' context of (183) is such an opaque context:
(i) Existential generalization is not possible: It could be that there is no linguist-at least in the non-specific reading; logicians also speak of an OPAQUE or DE DICTO READING, as opposed to a TRANSPARENT or DE RE READING, corresponding to the linguists' specific reading.
(ii) NPs cannot be replaced by other NPs with the same extension without affecting the truth value. This is best illustrated with a sentence like (185).
(185) Bob wants to marry the linguist he met at the last conference.

Suppose that the linguist he met at the last conference has the same extension as the mother of Irene, Jonathan and Charlotte. Then one cannot infer from this and (185) that Bob wants to marry the mother of Irene, Jonathan and Charlotte, because Bob might not know that the two are identical.

Referential opacity is by no means restricted to contexts like 'want' that allow NPs to be non-specific. Sentences with non-volitional propositional-attitude verbs such as 'believe', 'think', 'imagine' are perhaps even more typical examples of referential opacity (cf. Jackendoff (1983: ch. 11), Fauconnier (1985: ch. 1) for convincing treatments of opacity). But a sentence like (186) does not show the specific/non-specific ambiguity I am interested in here. ${ }^{\text {vi }}$
(186) Mary believes that a friend of mine is a busdriver.

Thus, the specific/non-specific distinction must not be collapsed with the transparent/opaque distinction, as is sometimes done in the linguistic literature, even if only terminologically (Fodor 1970, Givón 1973, Lavric 1990: § 3.6).

There are a number of works in the literature in which the analysis of (nonspecificity) in terms of different scopes of an existential quantifier is applied to indefinite pronouns, most notably Dahl (1970) for Russian -to/-nibud' (and,
following him, Rufiž ič ka (1973); Pilka (1984: 65) for Lithuanian kaž-/nors). As we saw in § 3.2.3, (183) has two different translations in Russian and many other languages, corresponding to the two readings in (184a-b). (In Russian, these different translations appear only when an indefinite determiner, kakoj-to or kakoj-nibud' 'some' is used. Thus, (187a-b) correspond more closely to English Bob wants to marry some linguist. When the determiner is omitted, the Russian sentence is just as ambiguous as the English one.)
(187) Russian
a. Bob xočet ženit'sja na kakoj-to lingvistke. Bob wants marry on which-INDEF linguist
b. Bob xočet ženit'sja na kakoj-nibud'lingvistke. Bob wants marry on which-INDEF linguist

Dahl proposes the generalization that 'a variable, bound by an existential quantifier that stands first in a declarative sentence, will be realized as a topronoun' (1970: 35). This not only accounts for 'want' contexts, conditionals, and questions, but also for the fact that the non-specific -nibud'-series appears when a distributive meaning is intended. In such cases, the existential quantifier follows not a non-reality verb like 'want', but another quantifier:
a. Vse ljudi č itajut č to-to.
all people read what-INDEF
'Everybody is reading something.'
(non-distributive: everyone is reading the same thing)
b. ( $\exists$ : thing $x)(\forall$ : people $y)(y$ read $x)$
(189) a. Vse ljudi č itajut č to-nibud'. all people read what-INDEF
'Everybody is reading something.'
(distributive: each person may read something different)
b. $(\forall$ : people $x)(\exists$ : thing $y)(x$ read $y)$

Dahl's rule also accounts for the fact that a specific -to-indefinite may cooccur with negation only if it is not in the scope of negation. (190-91) are parallel to (188-89), except that a non-specific indefinite which is in the scope of negation is obligatorily a $n i$-indefinite, not a -nibud'-indefinite.
a. Ja ne videl kogo-to.

I not saw whom-INDEF
'I didn't see someone.'
b. ( $\exists$ : person $x) \neg(\operatorname{I}$ saw $x)$
a. Ja ne videl nikogo <*kogo-nibud'>.

I not saw whom-INDEF whom-INDEF 'I didn't see anybody.'
b. $\neg(\exists$ : person $x)(\operatorname{I}$ saw $x)$

But Dahl runs into problems with futures. A non-specific -nibud'-indefinite is licensed in future sentences as well. Here Dahl is forced to introduce an abstract performative verb PREDICT. Thus, the two sentences in (192-93) (a) are analyzed as (192-93) (b).

[^5]road ends where-INDEF
'The road will end somewhere [specific].'
b. ( $\exists$ : place $x$ ) I Predict (road end at $x$ )
a. Doroga konč itsja gde-nibud'.
'The road will end somewhere [non-specific].'
b. I PREDICT ( $\exists$ : place $x$ ) road end at $x$ )

A similar difficulty arises with non-reality verbs that are not followed by a subordinate clause, as shown in (194a) and its English translation (194b).
a. Ja poprosila ee o kakoj-to/ kakoj-nibud' knige.

I asked her for which-INDEF which-INDEF book
b. I asked her for some [specific/non-specific] book.

Here we have a difference between Russian -to and -nibud', and ambiguity in English, but there are no two different syntactic positions for the existential quantifier. Again, the only solution for the logical-semantic approach seems to be to posit an additional abstract predicate that does not appear at the surface (Bach 1968, Fodor 1970: 17, 1977: 127-9). Thus, the two meanings of (194b) are analyzed as in (195a-b).
(195) a. ( $\exists$ : book $x$ ) (I asked her (SHE GIVE ME $x$ ))
b. I asked her (( $\exists$ : book $x$ )(SHE GIVE ME $x)$ )

It would be preferable to do without such abstract predicates. ${ }^{\text {vii }}$

### 5.2.3. Conclusion

The logical-semantic approach has undoubtedly meant progress in our understanding of the relevant semantic distinctions. But its limitations are equally apparent: In both areas considered here, free-choice/negative-polarity indefinites and specific/non-specific indefinites, some fundamental questions were left unresolved.

I will try to show in §5.4-5 that approaches that do not make crucial use of a logical-semantic representation fare better in coming to grips with the semantics of indefinite pronouns. But first we must consider syntactic approaches to indefinite pronoun functions.

### 5.3. Syntactic Approaches

### 5.3.1. Transformational approaches

The tools developed by the transformational syntacticians in the early 1960s were soon applied to indefinite pronouns (Lees 1960, Klima 1964). Klima proposed to account for the alternation between some-, any- and no-indefinites in English by various transformations, so that the sentences in (196a-b) share the same deep structure, and (196c) has the same deep structure minus an abstract negation element.
(196) English
a. There wasn't any snow falling.
b. There was no snow falling.
c. There was some snow falling.

Some is the spellout of an abstract element QUANT, any is the spellout of the abstract elements INDEF + QUANT, and no is the spellout of NEG + INDEF + QUANT. The incorporation of INDEF into QUANT, i.e. in fact the conversion of some into any, is effected by a transformational rule that inserts INDEF if QUANT is in the scope of a suitable trigger. Klima noted that in addition to negation, 'INDEF incorporation' is triggered by other expressions such as only, parametric questions, if, before, lest, and 'adversative predicates' like difficult, afraid, ashamed, refuse, reluctant, surprised, and he introduced a syntactic feature 'affective' shared by all these triggering expressions. This uninterpreted, arbitrary feature 'affective' was of course not very illuminating.

Later writers attempted to reduce the triggering environment for negativepolarity any and other negative-polarity items to negation by proposing that the core case of 'affective' expressions is negation, and that the other 'affective' expressions share a negative implicature (Baker 1970, Linebarger 1981, 1987). But none of these proposals were felt to be totally convincing. The most problematic case for the negative implicature view are relative clauses modifying universally quantified NPs, as in (197). It is hard to see where the negative implicature is here.

## (197) Everyone who knew anything shared their knowledge with me.

An additional blow was dealt to syntactic analyses by the demonstration in Bolinger (1960) and Lakoff (1969) that pragmatic conditions also play a role in the distribution of some and any (see § 4.7.4). In the 1970s, interests of generative syntacticians shifted in other directions, and it was not until the late 1980s that a new attempt at accounting for indefinite pronouns in syntactic terms was made (but see McCawley (1988: 546-561), where a Klima-style transformation is still advocated).

### 5.3.2. A binding approach

A very interesting theory of negative-polarity indefinites in terms of Chomsky's (1981) Binding Theory was developed by Progovac (1994) (cf. also Progovac 1988, 1990, 1991, 1992a, 1992b, 1993), elaborating an idea of Milner (1979) and Aoun (1986). Progovac points out some intriguing similarities between the syntactic locality restrictions on reflexive pronouns and on negative-polarity items and formulates a typology of kinds of negative-polarity indefinites in different languages that is not unlike my own typology formulated in the implicational map (chapter 4). Although due to her narrow syntactic perspective Progovac's approach is less successful than it could be, her theory is original and important and needs to be discussed in greater detail.

### 5.3.2.1. Principles A and B and raising at LF. Chomsky's Binding Theory consists of three principles:

(198) Chomsky's Binding Theory (1981: 183-222)

Principle A: An anaphor must be bound in its governing category.
Principle B: A pronominal must be free in its governing category.

Principle C: A name must be free.
Binding is defined as co-indexing with a c-commanding antecedent, and the 'governing category' is a local domain of a certain kind, most often a clause. (The details do not concern us here.) Typical examples of 'anaphors' are reflexive pronouns. Principle A explains why (199a) is possible, whereas (199b) is ungrammatical because the antecedent is outside the clause of the reflexive pronoun, and thus outside its governing category.
(199) a. Luozhu $_{i}$ praised herself ${ }_{i}$.
b. ${ }^{*}$ Luozhu $_{\mathrm{i}}$ was glad [that the teacher praised herself $\mathrm{i}_{\mathrm{i}} \mathrm{l}_{\mathrm{s}}$.

Principle B explains why (200a) is ungrammatical (the 'pronominal' her has its antecedent within its clause), whereas (200b) is possible (the antecedent is outside the governing category).
a. ${ }^{*}$ Luozhu $_{i}$ praised her $_{i}$.
b. Luozhu $u_{i}$ was glad [that the teacher praised her $r_{i}$ ls.

Principle C explains why both (201a) and (201b) are ungrammatical.
(201) a. *Luozhui praised Luozhu ${ }_{i}$.
b. *Luozhu $u_{i}$ was glad [that the teacher praised Luozhu ${ }_{i}$ ].

Progovac now observes that some indefinites in some languages show a very similar distribution (her account also extends to other negative-polarity items, but I will confine the discussion to indefinites, which figure most prominently in Progovac's work). In Serbian/Croatian, the language discussed most extensively by Progovac, the ni-series of indefinite pronouns is reminiscent of anaphors: It may cooccur with clausemate negation, but not with superordinate negation.
(202) Serbo-Croatian (Progovac 1994: 40-1)
a. Milan ne vidi ni-šta.

Milan not sees NEG-what
'Milan cannot see anything.'
b. *Milan ne turdi [da Marija poznaje ni-koga].

Milannot claims that Marija knows NEG-whom
'Milan does not claim that Marija knows no one/anyone.'
The $i$-series, on the other hand, is reminiscent of pronominals: It may not occur with clausemate negation, but it does occur with superordinate negation (Progovac 1994: 41-3).
(203)
a. *Marija ne poznaje i-koga

Marija not knows INDEF-whom
'Marija does not know anyone.'
b. Milan ne tvrdi [daMarija poznaje i-koga].

Milan not claims that Marija knows INDEF-whom
'Milan does not claim that Marija knows anyone.'

Progovac proposes to account for these similarities by saying that negativepolarity items are subject to the same binding principles as reflexive pronouns and ordinary pronouns. They are bound (and hence licensed) by negation, and Serbian/Croatian $n i$-indefinites are subject to Principle A (i.e. they are 'anaphors"), and $i$-indefinites are subject to Principle B (i.e. they are 'pronominals'). ${ }^{\text {viii }}$

But this is not yet sufficient to account for the distribution of $i$-indefinites. Ordinary pronouns need not be bound, so (204) is acceptable. By contrast, $i$ indefinites must be bound, but not in their governing category. (205) is ungrammatical because $i$-koga is not bound by anything at all.
(204) The teacher praised her.
*Marija poznaje i-koga.
Marija knows INDEF-who
'Marija knows anyone.'
Progovac explains this situation by assuming that $i$-indefinites raise to a higher position at the syntactic level of Logical Form (LF), and that they are subject to Principle A there. In (206), sentence (203b) is shown both at S-structure (= 'surface structure') and at LF.
a. (S-structure) Milan ne tordi [da Marija poznaje i-koga].
b. (LF) Milan ne tvrdi i-koga [da Marija poznaje e].

These facts follow from the assumption that $i$-indefinites are 'anaphoric pronominals', i.e. that they are subject both to Principle A and to Principle B of the Binding Theory. Their pronominal requirement ('must be free in its governing category') is satisfied at S-structure, and their anaphoric requirement ('must be bound in its governing category') is satisfied at LF.

A third type of indefinite arises from the possibility of an indefinite series that is subject only to Principle A, but that raises at LF (like Serbian/ Croatian $i$ indefinites). Progovac claims that English any-indefinites should be analyzed in this way. This explains why any-indefinites occur both with clausemate negation (cf. 4.45), like Serbian/Croatian ni-indefinites, and with superordinate negation (cf. 4.46), like Serbian/Croatian $i$-indefinites.
(207) a. (S-structure) Milena did not know anything.
b. (LF) anything [Milena did not know e].
a. (S-structure) Franz did not think [that Milena saw anything].
b. (LF) Franz did not think [anything [that Milena saw e]].

In (207), anything is bound by its clausemate negation and satisfies its anaphoric requirement at S-structure. In (208), anything is bound by superordinate negation and satisfies its anaphoric requirement at LF.

Thus, the main three types of negative-polarity indefinites discussed by Progovac can be represented as in Table 5. The two binary parameters 'nonraising vs. raising' and 'Principle A only vs. Principle A and B' yield four slots, of which three are filled by Serbian/Croatian and English indefinites (the fourth slot cannot be filled because no indefinite can be simultaneously subject to Principles A and B without raising - these principles contradict each other, and the only way an item can satisfy both is to raise and satisfy them at different syntactic levels).

Table 5. Three types of negative-polarity indefinites (Progovac 1994)

|  | subject to <br> Principle A only | subject to <br> Principles A and B |
| :--- | :--- | :--- |
| non-raising | Serbian/Croatian <br> $n i$-indefinites | - |
| raising | English <br> any - -indefinites | Serbian/Croatian <br> $i$-indefinites |

5.3.2.2. Non-negative contexts. Of course, this cannot be the whole story because any-indefinites and $i$-indefinites also occur in various non-negative negative-polarity contexts, e.g. in questions, conditionals, and with 'adversative predicates', as in (209-11).
a. Da li Milan voli i-koga? Q Q Milan loves INDEF-whom
b. Does Milan love anyone?
a. Ako Milan voli i-koga, bi-će srećan u životu. if Milan loves INDEF-whom be-FUT.3SG happy in life
b. If Milan loves anyone, he will be happy.
a. Sumnja-m da Milan volii-koga. doubt-1SG that Milan loves INDEF-whom b. I doubt that Milan loves anyone.

Progovac (1994: ch. 4) assumes that negative-polarity indefinites in these contexts are licensed (i.e. bound) by a null 'polarity operator' situated in a high position in the sentence (specifically, in the COMP position). She further assumes that the notion of 'governing category' can be defined in such a way that COMP falls outside of the governing category of the indefinite, so that the non-raising $n i$-indefinites cannot be licensed by the polarity operator. Only raising indefinites can be licensed by it.

Progovac then identifies a further parameter: Some indefinites (e.g. English any- and Serbian / Croatian $i$-) are licensed both by superordinate negation and in non-negative licensing contexts. Other indefinites are licensed only by superordinate negation, e.g. Turkish hiç-indefinites ${ }^{\mathrm{ix}}$ :
(212) Turkish (Progovac 1994: 89; data from Mürvet Enç)
a. (clausemate negation)

Ali hiç kimse-yi gör-me-di.
Ali INDEF anyone-ACC see-NEG-PAST(3SG)
'Ali did not see anyone.'
b. (superordinate negation)

Ali hiç-bir sey-inbozul-duğ-u-nu söyle-me-di.
Ali INDEF-one thing-GEN break-REL-3SG-ACC say-NEG-PAST(3SG)
'Ali didn't say that anything broke down.'
c. (conditional)
*(Eğ er) Ali hiç kimse-yi getir-ir-se, televizyon seyred-eceğ-iz.
if Ali INDEF anyone-ACC bring-AOR-COND television watch-FUT-1PL
'If Ali brings anyone over, we will watch TV.'
Yet another type, according to Progovac, is represented by Chinese rènhé, which is licensed only by clausemate negation and non-negative environments, not by superordinate negation.
(213) Chinese (Progovac 1994: 87; data from Yen-Hui Audrey Li)
a. (clausemate negation)

Tā bù xǐhuan rènhé dōngxi.
she not like any thing
'She does not like anything.'
b. (superordinate negation)
*Wǒ méiyǒ u gàosu guo tā nǐ zuò rènhé shìqing.
I NEG:PRF tell ASP he you do any thing
'I did not tell him that you did anything.'
c. (conditional)

Rúguǒ tā xǐhuan rènhé dōngxi qing gàosu wǒ.
if he like any thing then tell me
'If she likes anything, tell me.'
Progovac proposes to account for these types in terms of different raising possibilities of different negative-polarity indefinites. In the framework of her assumptions, raising must be to the specifier of COMP in the case of licensing by superordinate negation, but to a lower position (specifically, IP adjunction) in the case of non-negative licensing contexts, because the specifier of COMP is already occupied by the polarity operator. Thus, she can account for the Turkish data in (212) by hypothesizing that Turkish hiç-indefinites can raise only to the specifier of COMP, and for the Chinese data in (213) by saying that Chinese rènhé can only adjoin to IP, whereas English any and Serbian/Croatian $i$-indefinites have both options. Thus, by proposing two binary parameters and subdividing one value into three sub-options, Progovac predicts seven types of indefinites, five of which are attested. Progovac's typology can be summarized as in Table 4.5.

Table 6. Seven possible types of negative-polarity indefinites (Progovac 1994)

|  |  | subject to <br> Principle A only | subject to <br> Principles A \& B |
| :--- | :--- | :--- | :--- |
| no raising |  | 1. Serbian/Croatian <br> ni- | - |
| raising | specifier of COMP <br> \& IP adjunction | 2. English <br> any- | 5. Serbian/ Croatian <br> i- |
|  | specifier of comP <br> only | 3. Turkish <br> hiç- | 6. [?] |
|  | IP adjunction <br> only | 4. Chinese <br> rènhé | 7. [?] |

As far as I can see, nothing excludes types 6 and 7 in Progovac's theory, but she does not comment on these types.
5.3.2.3. Comparison with the implicational map. Progovac's theory distinguishes three main types of contexts with respect to which we observe variation between different indefinites: clausemate negation, superordinate negation, and non-negative contexts. The distribution of the seven types over these three contexts can be represented as in Figure 15.

Figure 15. Distribution of Progovac's indefinite types over contexts non-negative superordinate clausemate


Looking at Progovac's theory in this way, it can be easily compared to my approach in terms of the implicational map. The similarities to the upper right subarea of my map are immediately evident: Progovac's three contexts are more or less equivalent to my three functions 'direct negation', 'indirect negation', and 'question/conditional'. Thus, Progovac's typology and my typology show some significant resemblances.

There is only one respect in which Progovac's theory and mine make different predictions: The implicational map excludes the possibility of type 4, which Progovac allows. Progovac's data would seem to show that she is right, because if Chinese rènhé is possible in conditionals and in the direct-negation function, but not in the indirect-negation function (cf. 213), it would be a counterexample to my implicational map. However, while (213b) with the superordinate verb gàosu 'tell' sounds odd, rènhé is possible with other superordinate verbs such as xiangxin 'think':

Chinese (Fengxiang Li, p.c.)
Wǒ bù xiangxin rènhé rén lái le.
I not think any person come PFV
'I don't think that anybody came.'
The fact that xiangxin 'think' allows rènhé, while gàosu 'tell' does not, must have to do with the fact that verbs of thinking in general allow negative raising much more readily than some other verbs. But whatever the explanation is, a closer look at the Chinese data shows that it does not contradict my implicational map.
5.3.2.4. Discussion of Progovac's theory. Progovac's theory is particularly successful in bringing out the parallels in the locality restrictions on certain types of anaphoric pronouns and on certain types of indefinites. Reflexive pronouns often must be coreferential with a clausemate antecedent, and similarly indefinite pronouns often must cooccur with clausemate negation. Other types of pronouns cannot be coreferential with a clausemate antecedent, and likewise some indefinites cannot occur with clausemate negation. These parallels would seem to call for a unified account, and Progovac has provided a concrete proposal of how to achieve it. I will not discuss the details of her theory here because it presupposes a large number of controversial assumptions that I do not necessarily share. I will restrict myself to pointng out a number of general weaknesses of her approach which will have to be addressed in future work.

First, Progovac assumes that the Binding Theory is a primitive of universal grammar, although it has been argued (convincingly, to my mind) that the locality restrictions on reflexive pronouns can be explained with reference to more general extragrammatical principles (Van Valin 1990, Levinson 1991).

Ultimately we need an extragrammatical account that extends both to reflexive pronouns and to indefinite pronouns with locality restrictions.

Second, and most importantly, Progovac has made no attempt to incorporate the undeniable semantic-pragmatic motivation (§5.5) into her theory. In her theory it is not clear what unifies the the two licensers of negative-polarity items, negation and the empty 'polarity operator' (and of course, the very existence of this operator, which never surfaces, is doubtful). Furthermore, a theory like Progovac's, where negative-polarity items must be lexically marked as subject to certain binding principles and as having certain raising possibilities, runs into problems with open-class negative-polarity items of the sort discussed by Schmerling (1971) (I didn't say a word/do a thing/hear a sound/eat a bite/move a muscle/...).

Third, Progovac's account in terms of the Binding Theory fails to extend to related types of indefinites such as irrealis-non-specific indefinites and freechoice indefinites. ${ }^{\mathrm{X}}$ These are clearly semantically related to negative-polarity indefinites, but they are not susbject to syntactic locality restrictions.

Fourth, as Progovac (1994: 90) notes herself, there is no independent evidence for the various parametric differences that she assumes. Her system seems to work, but she has no way of predicting when an indefinite will be subject to which binding principle, and when it will select which raising option. It is true that there is probably a lot of arbitrariness, but some things can be explained. In particular, diachronic explanations are possible - e.g. the fact that Serbian/ Croatian $i$-indefinites are marked by $i$, which means 'and, also, even'. It is not clear how such connections could be accounted for in Progovac's framework. ${ }^{\text {xi }}$

Progovac's work has shown clearly that much of the work on binding in syntax is relevant to an understanding of certain properties of indefinite pronouns. However, by choosing a narrow syntactic approach, she has missed the possibility of integrating her insights into a more realistic mixed approach that recognizes the basic semantic-pragmatic motivation of negative prolarity, without denying the important role of syntax for an interesting range of facts.

### 5.4. Mental Spaces

### 5.4.1. Introduction to the mental space approach

The approach that seems most suitable for describing non-specificity and related phenomena is Fauconnier's $(1985,1987)$ theory of MENTAL SPACES. (A somewhat similar approach had already been proposed in Jackendoff 1972a: ch. 7). The concept of a mental space is best introduced through a concrete example. Consider (215):
(215) Youssouf wants to marry some Frenchwoman.

On the specific reading ('a certain Frenchwoman', say Geneviève) the Frenchwoman exists quite independently of Youssouf's desire and his wish concerns only a particular relation between himself and Geneviève. On the nonspecific reading ('any Frenchwoman, no matter who'), however, the very possibility of talking about a Frenchwoman arises only because of Youssouf's desire. If it makes any sense to speak about existence in this latter case, the

Frenchwoman exists only in the world of Youssouf's desire, or, in Fauconnier's terminology, in the mental space that is set up by 'Youssouf wants...'.

Mental spaces have a certain similarity to the Leibnitzian concept of POSSIBLE WORLDS, but in contrast to these they carry no ontological implications - they are purely cognitive constructs. Furthermore, alternative mental spaces are concerned only with a small segment of reality (hence, 'space' rather than 'world') and are therefore psychologically plausible constructs, unlike possible worlds.

We can now describe the ambiguity in (215) in the following way (cf. Fauconnier 1985: § 1.5): On the non-specific reading, a referent for the phrase 'some Frenchwoman' exists only in the mental space of Youssouf's desire, whereas on the specific reading a referent for this phrase exists both in the mental space of the speaker's reality and in the mental space of Youssouf's desire. This can be represented as in Figures 16-17.

Figure 16: Non-specific reading of (215)
Youssouf
wants
Youssouf
marry
Frenchwoman
speaker's reality space
Figure 17: Specific reading of (215)
Youssouf
wants
Frenchwoman
Frenchwoman
speaker's reality space
'want' space
In these diagrams the large circles symbolize mental spaces, the black nodes symbolize entities, and the white nodes symbolize relations between entities. Broken lines connect relations with entities, and continuous lines symbolize pragmatic connectors that link entities in different spaces. (In the examples cited here, only referentially identical entities are linked by such connectors. See Fauconnier (1985) for more complicated cases, and detailed justification of the notion of a pragmatic connector.)

The 'want' space is set up by the meaning of the non-reality verb 'want' (sometimes called an 'intensional verb' in the philosophical literature). Elements that set up spaces can be of very different types, to be illustrated below. All such elements are called SPACE-BUILDERS. Spaces which are set up within other, 'superordinate' spaces are called DEPENDENT SPACES. Thus, the 'want' space in Figure 13-14 is dependent on the speaker's reality space. Fauconnier applies the notion of mental spaces to a wide variety of cases, some of which are illustrated by (216a-e).
(216) a. Lisa, who has been depressed for months, is smiling in this picture.
b. Len believes that the girl with blue eyes has green eyes.
c. In 1929, the lady with white hair was blonde.
d. If he had listened to his mother, this criminal would be a saint.
e. In that movie, Clint Eastwood is a villain.

Thus, mental spaces can be of quite different sorts: for instance picture spaces (a) in (216), belief-spaces (b), time spaces (c), hypothetical spaces (d), theater spaces (e).

Fauconnier's theoretical constructs allow us to make precise the intuition behind the widespread characterization of (non-)specificity according to which with a specific phrase, the speaker has a particular entity in mind, whereas with a non-specific phrase, this is not the case (e.g. Partee 1972: 415, Ioup 1977: 234, Hawkins 1978: 204). Evidently, what is meant by this informal description is that in the case of a specific phrase, the referent exists within the speaker's reality space, whereas it does not exist there in the case of a non-specific phrase.

We can now also explain two of the three specificity tests mentioned in $\S$ 3.2.3, discourse referents and existential paraphrases. A sequence like (217a) is impossible because the referent of the NP a paper on phonological iconicity is in Irene's 'want' space, whereas the referent of the anaphoric pronoun 'it' is in the speaker's reality space. A condition on pronominalization is that the anaphoric pronoun and its antecedent must be in the same mental space. Thus, (217b), where 'it' is also in the 'want' space, is perfectly acceptable.
a. *Irene wants to write a paper about phonological iconicity. It is brilliant.
b. Irene wants to write a paper about phonological iconicity. She wants it to be brilliant.

Existential paraphrases are only possible with specific phrases because only in a reality space can the existence of entities be presupposed by the speaker, and a presupposition of existence is a necessary prerequisite for an existential paraphrase.

### 5.4.2. A definition of (non-)specificity

On the basis of what was said above, I propose the preliminary definitions in (218), to be revised below.
(218) A SPECIFIC phrase is a phrase that has a referent in the speaker's reality space.
A NON-SPECIFIC phrase is a phrase which does not have a referent in the speaker's reality space.

Note, incidentally, that this definition does not make reference to the syntactic category NP (noun phrase) because adverbial phrases may also show this distinction (e.g. example (74) above). Also, this definition is not restricted to indefinite phrases, because definite phrases may also be specific or non-specific (pace Hawkins 1978: 204). This is illustrated in (219). 'The referee' is non-specific in (219a), and non-specific in (219b). (We will see further examples below, e.g. (225-28).)
a. (non-specific)

We should go to a hockey game tomorrow. [I don't care which one.] I want to take a picture of the referee.
b. (specific)

We should go to a hockey game tomorrow. [It's Lahore against Rawalpindi.] I want to take a picture of the referee. [It's Hanif Abdul Nasir, my brother-in-law.]

Notice further that the definition in (218) does not deny the existence of a referent of a non-specific phrase, so non-specific is not the same as NONREFERENTIAL. (This latter term is sometimes used in the sense in which I use non-specific, e.g. in Givón (1973, 1978), Bakker (1988), Ladusaw (1993). I would reserve the term non-referential for predicative noun phrases or dependent compound members.)

The definition in (218) would also describe ambiguities as in (220) in terms of the (non-)specificity distinction. The phrase 'a dragon' may have a referent only in the space set up by 'Alice believes...'.
(220) Alice believes that a dragon ate her petunias.

Such a terminological choice is sometimes made in the literature (e.g. Fodor 1970, Ioup 1977; see footnote 6 of this chapter), but I prefer a definition of the term non-specific which allows it to be used for characterizing the behavior of certain indefinite pronoun series in some languages (cf. § 3.2.3, and see Croft 1985). The non-specific indefinites in the languages that I have come across are not used in sentences like (220), but only in contexts where their unique identifiability is not presupposed by the speaker. These include, above all, other dependent spaces which describe unrealized situations like 'want'-spaces. Space-builders that set up such IRREALIS SPACES are other modals like 'can' and 'must', the future tense, and the imperative. Conditionals and questions can also be regarded as setting up irrealis spaces because of their semantic similarities to imperatives ( $\$ 3.2 .3$ ). Furthermore, distributive quantification can also license non-specific indefinites, so mental spaces set up by distributive quantifiers (cf. especially Fauconnier 1987) should also be accounted for in the definition.

We can now revise the definition in (218) as in (221).
(221) A NON-SPECIFIC phrase is a phrase which has a referent only in a dependent irrealis or distributive space.
A SPECIFIC phrase is a phrase which also has a referent also in some other space.

It would of course be interesting to know exactly what it is that unites irrealis and distributive mental spaces, but this question is beyond the scope of this book. I refer to Giannakidou (1994a, b, c) for further discussion in different terms (Giannakidou uses the semantic notion of (non-)veridicality which basically corresponds to my notion of irrealis spaces).

### 5.4.3. Advantages of the mental space approach

The mental space approach and the classical logical-semantic approach show some obvious similarities, and one might even claim that they are largely notational variants of each other. Existence of a referent in a dependent space
corresponds to narrow scope, dependent spaces correspond to logical operators and opaque contexts, etc. However, mental spaces have certain advantages over logical semantics.

First, the terminology and notation of the mental-space approach is much more appropriate for the cognitively oriented study of language than the terminology and notation of predicate logic. Logic was developed by philosophers and mathematicians who were not concerned with language and cognition, and the use of logic in linguistics has sometimes given rise to misunderstandings. The quasi-spatial representations of Figures 16-17 are also much more likely to be realistic than logical formulae because there is considerable evidence that much of abstract thinking has a spatial dimension (as shown by the pervasive spatial metaphors in language).

Second, the mental space approach provides a unified account of a large number of apparently disparate phenomena, as discussed in detail by Fauconnier (1985). Only a small number of these phenomena are amenable to a logical-semantic treatment.

Third, and more concretely, there is nothing in Fauconnier's theory that says that space builders must be of a particular form. The construction of mental spaces is a relatively autonomous cognitive process which makes use of linguistic information of various sorts, but there are few constraints on the expression type of this information, and even non-linguistic pragmatic information may be sufficient to set up a mental space. By contrast, the logical approach always needs some tangible element in the logical formula to represent scope differences. As we saw in §5.2.2, this forced logicians and linguists to introduce abstract elements into the representation. While this is certainly a possible strategy, it has an unpleasant flavor of artificiality. The solution (first proposed in Jackendoff (1972a: ch. 7) and adopted by Fauconnier) to separate the representation of syntactic structure from the representation of mental-space structure (in Jackendoff's terms, 'modal structure'), seems more adequate.

Fourth, there are some semantic phenomena that can only be expressed in the mental space framework. Thus, Fauconnier points out that a sentence like (222) has at least four readings, whereas a logic-based description can only capture three of these readings.
(222) Every child wants to see a movie.

Thus, the mental-space approach is also descriptively the most adequate approach.

### 5.5. Pragmatic Scales and Scale Reversal

An approach to the meaning and distribution of free-choice and negativepolarity indefinites like any that differs radically from the logical-semantic approach of $\$ 5.2 .1$ has been advanced in a series of papers by Gilles Fauconnier (1975a, 1975b, 1977, 1979, 1980) (and see Krifka (1992) for further refinements). I believe that this is the most successful treatment of free-choice and negativepolarity indefinites proposed so far, and I will discuss it in some detail.

### 5.5.1. Pragmatic scales

The key concept of Fauconnier's theory is that of a PRAGMATIC SCALE, which may lead to pragmatic SCALAR IMPLICATURES. The notion of a pragmatic scale is also crucial in the domain of SCALAR FOCUS PARTICLES (cf. König 1991), and scalar focus particles may be used to illustrate what is meant by a pragmatic scale. Consider (223), where (223a) shows the non-scalar focus particle 'also', and (223b) shows the scalar focus particle 'even'.
(223) a. Véronique also speaks Dutch.
b. Natasha even speaks Dutch.

The meaning difference between the two sentences is that whereas (223a) only implies that Véronique speaks some other language in addition to Dutch, (223b) also implies that Dutch is a particularly surprising or unlikely language for Natasha to speak. The focus value 'Dutch' and the included implicit alternatives (i.e. other languages) are taken to constitute a (partially) ordered scale, e.g. (224).
(1) Russian, (2)
(2) English
, (3) German, (4) French,...
(n) Dutch
'Even' characterizes its focus value as ranking high on such an ordered scale, so (223b) is only appropriate if a scale like (224) is taken for granted.

### 5.5.2. Scalar implicatures

Semantic and pragmatic scales often give rise to scalar implicatures. Consider sentence (225), which has two readings: one in which the weakest cow is specific (a), and one in which it is non-specific (b). ${ }^{\text {xii }}$
(225) The weakest cow can swim through this river.
a. (specific) 'A certain cow, who is weaker than all others, can swim through this river.'
b. (non-specific) 'Any cow can swim through this river.'

Note that the paraphrase of the second reading contains the free-choice indefinite 'any', suggesting that this reading is quantificational in some way. Fauconnier calls superlatives with readings like (225b) QUANTIFYING SUPERLATIVES. This sense arises by scalar implicature. On the quantifying reading, (225) is associated with a scale of cow weakness, as illustrated in Figure 18.

Figure 18. Pragmatic scale of cow weakness


Pragmatically, it is assumed that if a cow $x_{n}$ can swim through a river, then any cow $x_{n+m}$ who is higher on the weakness scale (i.e. is stronger) can also swim through it. Superlatives specify an extreme value on a scale, so the weakest cow implicates that all cows can swim through the river, and the resulting meaning is similar to that of universal quantifiers like 'every' and 'all'. Note that this
universal reading is based on pragmatic implicature, not on logical entailment: Logically, a weaker cow could of course be able to swim through a river (e.g. by compensating weakness by special swimming skills), whereas a stronger cow could be unable (e.g. because of hydrophobia). It is important to note that not any superlative gives rise to a universal reading, but only superlatives that express the lowest point on the relevant scale. Thus, in (226-28) only the (a) cases allow a universal reading (marked by '+U'), whereas the (b) cases, which express the highest point on the relevant scale, do not (marked by '-U'). Thus, in the (b) cases only the specific reading (analogous to (225a)) is possible.
(226) a. (+U) The weakest cow can swim through this river.
b. (-U) The strongest cow can swim through this river.
(227) a. (+U) The most popular politician can plummet in the ratings by raising the gasoline tax.
b. (-U) The least popular politician can plummet in the ratings by raising the gasoline tax.
a. $(+\mathrm{U})$ My friend will review the cheapest book.
b. (-U) My friend will review the most expensive book.

Similar scalar implicatures arise also in cases like (229), where an individual that is well-known for some extreme property is taken to represent an extreme point on the relevant scale.
(229) a. Even Croesus would hesitate to buy this house.
b. Even Kasparov could lose this game.
c. Even Saddam Hussein would have been impressed by this diplomat.

### 5.5.3. Scale reversal

Now observe what happens to the quantificational reading if the examples of $\S$ 5.5.2 occur in a negated sentence or in a (rhetorical) question:
(230) a. (-U) The weakest cow cannot swim through this river (so we must leave it behind).
b. (+U) The strongest cow cannot swim through this river (so we cannot even think about crossing it).
a. (-U) Can the weakest cow swim through this river? (Then we wouldn't have to leave it behind when crossing the river.)
b. (+U) Can the strongest cow swim through this river? (And you are proposing that we should cross it!)
(232) a. ?*Even Croesus would not hesitate to buy this house.
b. OK: Even a beggar would not hesitate to buy this house.

We see that suddenly the superlative that gave rise to the universal implicature ('the weakest cow') does not have this implicature anymore, and the superlative that denotes the other end of the scale acquires it. The explanation for this is that in negated and conditional clauses, pragmatic scales are reversed. Consider the examples in (233-34), where Squeaky and Lowy are two cows, and Squeaky (e.g. $x_{1}$ in Figure 18) is weaker than Lowy (e.g. $x_{4}$ in Figure 18).
(233) a. Squeaky can swim through this river.
$\Rightarrow$ Lowy can swim through this river.
b. Lowy can swim through this river. / Squeaky can swim through this river.
a. Lowy cannot swim through this river. $\Rightarrow$ Squeaky cannot swim through this river.
b. Squeaky cannot swim through this river. / Lowy cannot swim through this river.

Similar examples could be given for conditionals or questions. The fact that the pragmatic implicatures are reversed in negative, conditional and interrogative sentences, as shown in (233-34), explains the reversal of the pragmatic scales and the disappearance of universal scalar implicatures in (230-32) (a).

The reversal of pragmatic implicatures in negative and conditional clauses is closely related to the reversal of entailment relations that has been highlighted in Ladusaw (1980: ch 6). He observes that a sentence like (235a) entails (235b), whereas in negative and conditional clauses the opposite entailment holds, cf. (236-37).
(235) a. Johanna ate brussels sprouts for dinner.
$\Rightarrow b$. Johanna ate a green vegetable for dinner.
(236) a. Johanna didn't eat a green vegetable for dinner.
$\Rightarrow \mathrm{b}$. Johanna didn't eat brussels sprouts for dinner.
(237) a. If Johanna eats a green vegetable for dinner, she will stay healthy.
$\Rightarrow b$. If Johanna eats brussels sprouts for dinner, she will stay healthy.

Since the entailment is from hyponyms to hyperonyms in (235), and the other way round in (236-37), Ladusaw calls contexts like (235) upward-entailing, and contexts like (236-37) downward-entailing. However, since the scale-reversing effect of these contexts is their crucial property in the present context, I will call them SCALE-REVERSING.

As Fauconnier notes (1975a: 195-6, 1977: 24-35; cf. also Ladusaw 1980: 14771), the scale-reversing contexts are precisely those contexts that license negative-polarity items. In addition to overt negation and conditionals, these include the standard of ordinary comparison (238) and excessive comparison ('too', 237), emotive verbs like 'be surprised' (240), implicit negation (241), and others. ${ }^{\text {xiii }}$ In the following examples (238-41), the scale-reversing effect of each context is illustrated by the scale of cow weakness, where the weakest cow gives rise to universal scalar implicatures in non-reversing contexts (cf. 225), but the strongest cow results in such universal implicatures in scale-reversing contexts (e.g. 230-31 (b)).
(238) standard of ordinary comparison

The dog can swim through wider rivers than the strongest cow.
(239) standard of excessive comparison

The river is too wide for the strongest cow to swim through.
(240) emotive verbs

I'm surprised that the strongest cow can swim through this river.
implicit negation
She denies that the strongest cow can swim through this river.

Characterizing the licensing contexts for negative-polarity items as scalereversing accounts better for the observed restrictions than all other alternatives proposed so far (cf. Ladusaw 1980: 147). It avoids the arbitrariness of the syntactic feature [+affective] of Klima (1964), and it is more adequate than attempts to reduce all cases of negative-polarity licensing to negation in one way or another (Baker 1970, Linebarger 1987, 1991, Progovac 1988), because the context of universal quantifiers (ex. 197), for one, clearly does not involve negation. And, most importantly for my goals, it allows us to explain many formal properties of negative-polarity items, in particular negative-polarity indefinites. Somewhat surprisingly, this point has rarely been addressed (though see Linebarger (1981: ch. 8) for a subset of negative-polarity items), but it is my major concern here.

### 5.5.4. Negative polarity items express the low point on a scale

As Fauconnier (1975b: 196) notes, the distribution of many negative-polarity items can be explained in the same way as the distribution of quantifying superlatives once we recognize that negative polarity items are generally idiomatic expressions for a low point on a pragmatic scale. This is particularly clear with negative polarity items that denote a MINIMAL UNIT, e.g. a red cent, a jot, a tittle, and equivalents in other languages, as in (242-43) (for more examples, see Horn 1989: 452-3, von Bergen and von Bergen 1993: 139-54).
(242) a. She didn't give a red cent to him.
b. If she gives a red cent to him, I'll be surprised.
c. Everybody who gives a red cent to him must be pretty stupid.
(243) a. *She gave a red cent to him.
b. *She would give a red cent to him.

Since they express the low point on a pragmatic scale, these minimal-unit expressions also have universally quantified readings, quite analogously to quantifying superlatives (she didn't give a red cent = she gave nothing at all). The perfect parallelism is best illustrated by examples (244-45), corresponding to (242-43).
(244) a. (+U) She didn't give the smallest sum to him.
b. (+U) If she gives the smallest sum to him, I'll be surprised.
c. (+U) Everybody who gives the smallest sum to him must be pretty stupid.
a. (-U) She gave the smallest sum to him.
b. (-U) She would give the smallest sum to him.

The main difference is of course the ungrammaticality of negative-polarity items (cf. 243) in contexts where the corresponding superlative simply lacks a quantifying reading (245). This non-quantifying reading is not available for negative-polarity items because they are idiomatic expressions in which the function of expressing the low point on a scale has become fixed. ${ }^{\text {xiv }}$ To put it differently: Minimal-unit expressions that are restricted to scale-reversing contexts have been grammaticalized as inherently non-specific (cf. Ladusaw 1993), so they do not have the specific non-quantifying reading exemplified by (225a) and (245).

Perhaps not all negative-polarity items can be shown to express a low point on a scale (cf. Fauconnier (1975b: 198), who points out cases like English yet), but in the case of negative-polarity indefinites it is not difficult to make this plausible considering the form of the indefinites. In particular, the expression types in (246), to be discussed in greater detail in the following chapters, are motivated by the basic value 'low point on a scale'.
(246) a. 'one, single': Latin ullus, English any, etc. (§§ 7.5.2, 8.3.2.1)
b. generic nouns: French personne, Hebrew iš , etc. (§§7.5.1, 8.3.2.1)
c. scalar focus particles: Japanese nani-mo lit. 'even what', Modern Greek kan-énas lit. 'at least one', Russian ni-kto lit. 'not even who' (§§ 7.1, § 8.3.1)
d. minimal-unit expressions like 'a trace','a tittle' (§ 8.3.2.1)
e. maximal-unit expressions like 'my life', 'eternity', 'the world' (§ 8.3.2.2)

### 5.5.5. Free-choice indefinites express the low point on a scale

Fauconnier (1975a) has explored in great detail the parallels between the freechoice indefinite any and quantifying superlatives. He observes that the (a) and (b) sentences of (247-48) are virtually synonymous (1975a: 354-5).
(247) a. My uncle can hear the faintest noise.
b. My uncle can hear any noise.
(248) a. She would give the largest sum to him.
b. She would give any sum to him.

In addition to the near synonymy of these sentences, there is another striking parallel between quantifying superlatives and free-choice indefinites, which Fauconnier fails to mention but which is observed in Bakker (1988: 30-6) and König (1991). Quantifying superlatives are possible in precisely those contexts where free-choice indefinites are licensed, i.e. mainly possibility contexts, generic contexts, and contexts expressing a sufficient condition (cf. § 3.2.5). While (249-50) (a) have a quantifying reading, which can be paraphrased by 'any', (251-52) (a) do not have such a reading, and the corresponding sentences with 'any' are unacceptable.
(249) a. (+U) The youngest beaver can swim.
b. Any beaver can swim.
(250) a. (+U) The smallest amount is enough.
b. Any amount is enough.
(251) a. (-U) The youngest beaver swam across the river.
b. *Any beaver swam across the river.
(252) a. (-U) The largest/smallest amount is necessary.
b. *Any amount is necessary.

Again, free-choice indefinites are licensed in contexts where superlatives give rise to a quantifying reading. This completely parallel behavior of quantifying superlatives and free-choice indefinites suggests that free-choice indefinites, too, express a low point on a scale.

But we saw in the preceding section that negative-polarity items express the low point on a scale, and clearly negative-polarity indefinites and free-choice
indefinites are not synonymous. About half of the languages of my 40-language sample employ different indefinite series for the free-choice function and negative-polarity functions. On the other hand, also roughly half of the languages allow the same indefinite series to be used to express free choice and in negative-polarity contexts, which confirms the suspicion that there is a strong similarity.

In the framework advocated here, the solution to this dilemma is quite straightforward: Free-choice indefinites express the low point on a non-reversed scale, whereas negative-polarity indefinites express the low point on a reversed scale. We saw in § 5.5.3 that scale-reversing contexts license negativepolarity items, which follows from the fact that these express a low point on a reversed scale.

Thus, we can say that in a sense both negative-polarity indefinites and freechoice indefinites express the low point on a scale, albeit on opposite scales. Already Fauconnier (1975a: 373) proposed to 'interpret the function of any as being the indication of a low point on an arbitrary scale'.

We can now also solve the puzzle of ambiguous sentences like (253), which have baffled proponents of the univocal universal any view, and which advocates of the two-any view have cited as crucial evidence in their favor.
(253) If she can solve any problem, she'll get a prize.
a. ('existential') 'If there is any problem she can solve...'
b. ('universal') 'If she can solve every problem...'

The scalar approach allows us to have our cake and eat it too. Consider again the equivalent sentences with quantifying superlatives. There are two different sentences, one corresponding to each of the readings of (254).
(254) a. ('existential') If she can solve the simplest problem, she'll get a prize.
b. ('universal') If she can solve the most difficult problem, she'll get a prize.

These paraphrases clearly show what is going on in (253). Any each time expresses the low endpoint on a scale: the low endpoint of the non-reversed scale in (253b) ( $=$ 'the most difficult problem'), and the low endpoint of the reversed scale, i.e. the opposite endpoint, in (253a) (= 'the simplest problem'). Thus, we can capture both the insight of the univocal universal any theory that the two uses of any are closely related, and at the same time account for the ambiguity of sentences like (253) which motivated the two-any theory.

### 5.5.6. Widening and strengthening

Another recent proposal for a unified account of negative-polarity and freechoice indefinites is found in Kadmon and Landman (1993). These authors propose that polarity-sensitive and free-choice any are the same element, which induces semantic WIDENING along a contextual dimension and functions to STRENGTHEN the statement that it occurs in. For example, they note that (255a) differs from (255b) in that its domain is wider (for example, (255b) might still be true if a wet match does not light, but in (255a) even wet matches are included in the domain of quantification).
a. Any match I strike lights.
b. Every match I strike lights.

They propose that any is licensed only if the widening that it induces fulfills its function of creating a stronger statement, i.e. if the statement on the wide interpretation entails the statement on the narrow interpretation. This happens in downward-entailing contexts. Thus, Kadmon and Landman can account for why any is licensed precisely in such contexts. In addition, they propose that free-choice any arises when widening and strengthening are combined with a generic interpretation.

Although Kadmon and Landman make use of the completely new concepts of widening and strengthening, their explanation is not all that different from Fauconnier's. Their notion of widening corresponds to the extreme point on a scale, the contextual dimension corresponds to the pragmatic scale, and their notion of strengtehning corresponds to scalar implicature. On their account, a sentence like *I have any matches is ungrammatical because strengthening is not satisfied, i.e. the widened statement I have matches of some kind (dry or wet) does not entail the statement on the narrower interpretation I have dry matches. In Fauconnier's theory, one would say, quite analogously, that *I have any matches is ungrammatical because any is inherently non-specific and expresses and endpoint on a scale, but when the scale is not reversed, no universal scalar implicature results and hence the inherently non-specific any cannot be interpreted. Thus, Fauconnier's proposal and Kadmon's and Landman's proposal are more similar to each other than the very different terminology suggests.

In my view, Fauconnier's theory has three advantages: (i) It makes use of theoretical constructs that are independently motivated (pragmatic scales and scalar endpoints), whereas widening and strengthening are theoretical innovations; (ii) in many cases, there is a direct connection between the meaning of a scalar endpoint and the form of negative-polarity items (see 246), whereas there is no such connection with widening; and (iii) the frequent connection with focusing (see § 5.7) is also explained by Fauconnier's theory (because scales are a typical instantiation of the range of alternations that focusing evokes), whereas there is no such natural connection between widening and focusing.

In any event, Kadmon's and Landman's analysis of any, which is more detailed than Fauconnier's and addresses a number of notorious difficulties in the analysis of negative polarity, is successful in demonstrating that a semanticpragmatic approach to negative polarity and free choice is on the right track.

### 5.6. Explaining the Implicational Map

After discussing the various theoretical perspectives on the functions of indefinite pronouns, I will now put the pieces together and propose an explanation for the implicational map of chapter 4, reproduced in (256).
(256) The implicational map for indefinite pronoun series

|  |  | question | indirect <br> specific | specific <br> known <br> unknown |
| :--- | :--- | :--- | :--- | :--- |
| negation |  |  |  |  |

conditional comparative
free-choice
Why are the various functions arranged in this particular configuration? The present section will answer this question by demonstrating that the functions that are most similar to each other semantically and pragmatically are adjacent on the map.

There are four binary features that can be used to characterize all the nine functions on the map. Two of the four features have just been discussed in detail, and the other two are, I trust, self-explanatory.
(i) known to the speaker
(ii) specific
vs. unknown to the speaker
vs. non-specific
(iii) scalar endpoint
vs. no scalar endpoint
(cf. §5.5)
(iv) in scope of negation
vs. not in scope of negation

In addition, there is one binary feature that applies only to the functions with the feature value 'scalar endpoint':
(v) endpoint on non-reversed scale vs.
endpoint on reversed scale

I assume that the implicational map should be arranged in such a way that all functions that share some relevant characteristics, i.e. that have the same value on one of the features in (257-58) form a contiguous area on the map. This general requirement together with the distribution of the features over the map explains a considerable part of the explanandum.

First, the feature 'known vs. unknown' is distributed as shown in (259).
(259) known vs. unknown

|  |  |  | question | indirect | direct <br> negation |
| :--- | :--- | :--- | :--- | :--- | :--- |
| specific <br> known | specific <br> unknown | irrealis <br> non-specific |  | negation |  |

In only one function is the referent known to the speaker, while it is unknown in all others, so this function must be at the periphery of the map (otherwise all other functions could not form a contiguous area). As was observed in § 3.2.4, all 'non-specific' functions are automatically also 'unknown', because what exists only in an irrealis or a distributive space cannot be known in principle.

Second, the feature 'specific vs. non-specific' is distributed as shown in (260).
(260) specific vs. non-specific

|  |  |  | question | indirect <br> specific <br> known | specific <br> unknown |
| :--- | :--- | :--- | :--- | :--- | :--- | | irrealis |
| :--- |
| non-specific |$\quad$| direct |
| :--- |
| negation |

As was also observed earlier, an expression denoting a scalar endpoint must be non-specific in order to give rise to quantificational implicatures ( $\$ 5.5 .2$ ), so not only the 'irrealis-non-specific' function, but also all scalar-endpoint (i.e. negative-polarity and free-choice) functions are non-specific. The 'known' function, by contrast, cannot be non-specific because identifiability by the speaker and non-specificity are in principle incompatible.

Third, the feature 'scalar endpoint vs. no scalar endpoint' is distributed as shown in (261). The subclassifying feature 'scale reversal vs. no scale-reversal' is also shown in (261).
scalar endpoint vs. no scalar endpoint; scale reversal vs. no scale reversal

|  |  |  | question | indirect <br> specific | specific <br> known <br> unknown <br> negation |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | irrealis <br> non-specific |  | negation |  |
|  |  |  | conditional | comparative |  |
|  |  |  |  | free-choice |  |

We saw in § 5.5 that a negative-polarity expression with a quantificational reading is possible only in a scale-reversing context or in a free-choice context. This yields the basic binary distinction in (261): Only one of the six 'scalar-endpoint' functions has the value 'no scale reversal', so that value must again be in a peripheral position.

Fourth, the feature 'in scope of negation vs. not in scope of negation' is distributed as shown in (262).
(262) in scope of negation vs. not in scope of negation

|  |  | question | indirect <br> specific | specific <br> known <br> unknown | irrealis <br> negation |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  | non-specific |  |
|  |  |  | conditional | comparative |  |
|  |  |  |  | free-choice |  |

Only the two negation functions have the value 'in scope of negation', so these must also be at the periphery of the map. The feature 'scope of negation' can also be subdivided into two subclassifying features, corresponding to the Boolean properties anti-additive and anti-morphic, as discussed insightfully in van der Wouden (1994: ch. 1) (a discussion of these notions would take us too far afield here). Both direct and indirect negation have the property of antiadditivity, but only direct negation is anti-morphic as well. Clearly, direct negation is in some sense 'more strongly negative', which explains its peripheral position on the map.

Given the distribution of the four main features and the two subclassifying features over the nine functions, there are not many possibilities left. Only the relative position of the functions 'question', 'conditional', and 'comparative' to each other must be explained.

The explanation for the closer relationship between questions and negation is straightforward: In questions, negation is neutralized, whereas it is not in conditionals. Can you hear nothing? and Can you hear anything? have identical truth conditions, but if you hear nothing is radically different from if you hear
anything. And it is also clear why conditionals should be closer to free choice. Conditionals with scalar-endpoint indefinites are pragmatically quite normal, just more emphatic than conditionals with non-emphatic indefinites. However, questions with scalar-endpoint indefinites are somewhat odd, and make best sense as rhetorical questions. A question like Did you hear the slightest noise? could hardly be meant as an information question, because it is very unlikely that the speaker should be interested in information about an extreme value. ${ }^{\text {xv }}$

The crucial difference between the question and conditional functions and the comparative function is that only the latter context allows both non-specific indefinites (which are interpreted as scalar endpoints and yield a quantificational reading) and specific indefinites (which are not interpreted as scalar endpoints), whereas indefinite noun phrases are necessarily non-specific in questions and conditionals. This results in the fairly dramatic semantic difference between (263a) and (263b), whereas the difference between the (a) and (b) readings in (264-65) is rather small (the truth conditions are not affected, whereas (263a) and (263b) have very different truth conditions).
(263) a. Leoluca is smarter than anyone.
b. Leoluca is smarter than someone.
a. If you hear something, wake me up.
b. If you hear anything, wake me up.
a. Did you hear something?
b. Did you hear anything?

In this respect, the comparative is like the free-choice function: In free-choice contexts, too, both 'scalar-endpoint' and 'non scalar-endpoint' indefinites are admitted, but with a big meaning difference.
a. Leoluca can do anything.
b. Leoluca can do something.

Another similarity between the free-choice function and the comparative function is that in both contexts universal pronouns have a very similar meaning to scalar-endpoint indefinites, whereas this is not the case in questions and conditionals. ${ }^{\text {xi }}$
a. Leoluca can do anything ( $\approx$ everything).
b. Leoluca is smarter than anybody ( $\approx$ everybody).
c. If you hear anything ( $\neq$ everything), wake me up.
d. Did you hear anything ( $\neq$ everything)?

This completes my account of the implicational map. It has been shown that there are independent semantic reasons why the map should be arranged precisely in this fashion: Only in this way are semantically related functions adjacent to each other. That indefinite pronoun series show only polysemy patterns that cover adjacent areas on the map (as we saw in $\S 4.4$ ) is completely as expected, if we assume that polysemy patterns are not random but reflect semantic relationships.

I should perhaps point out that the map has originally been established inductively. I hope that this chapter has shown that the deductive perspective leads to the same results, so that explanatory success has been achieved.

### 5.7. Focusing and Sentence Accent

Before we look at the diachronic sources of indefinite pronouns in the next two chapters, I would like to point out the intimate connection between focusing and certain types of indefinite pronouns.

### 5.7.1. Sentence accent

In § 5.5.1 I illustrated the notion of a pragmatic scale with the example of scalar and non-scalar focus particles. This was not accidental: Focusing plays an important role in all scalarity phenomena. It seems that every pragmatic scale presupposes focusing (whereas there is of course focusing without scalarity, as in (223a)). Quite generally, a focus establishes a relation between the value of a focused expression and a set of alternatives (see König (1991: 32), who cites earlier work by Joachim Jacobs). In the case of a pragmatic scale, the nonextreme values constitute this set of alternatives.

In this section, I would like to point out a common type of surface manifestation of focusing that is often observed in scalar-endpoint indefinites in English and typologically similar languages: sentence accent. This is also characteristic of other types of focusing, as illustrated in (268) (cf. König 1991: 12).
(268) sentence accent on focused element
a. (contrastive focus) COLLOR won the election, not Lula.
b. (focus particle) Only FRANCESCA bought a new bike.
c. (attitudinal verb) I regret that PALME was shot./ I regret that Palme was SHOT.
d. (question) Is MOTHER home?/Is mother HOME?

Constituents have to bear sentence accent in order to be interpreted as scalar endpoints. This is true not only for true superlatives (269) and 'pragmatic superlatives' (270), but also for free-choice indefinites (271). Sentences with superlatives and pragmatic superlatives simply lose the scalar universal interpretation when the stress is not on these elements (cf. 269b, 270b), but sentences with free-choice indefinites become odd (271b).
(269) superlatives
a. (+U) She would review the CHEAPEST book for that prestigious journal.
b. (-U) She would review the cheapest book for that prestigious JOURNAL.
'pragmatic superlatives'
a. (+U) The Dalai LAMA would apply force in such a situation.
b. (-U) The Dalai Lama would apply FORCE in such a situation.
free-choice indefinites
a. You may invite ANYONE to our party.
b. ?*You may INVITE anyone to our party.

Free-choice indefinites contrast with specific indefinites in a particularly striking way, because specific and other non-scalar-endpoint indefinites never bear accent, even when they are in a position that normally bears sentence
accent. In English, for example, the sentence accent is normally on the direct object. (272) shows that free-choice indefinites are marked in that they attract stress, and (273) shows that non-scalar-endpoint indefinites are marked in that they reject stress.
(272) a. Ram may buy a ВООК.
b. ANYONE may buy a book. (?*Anyone may buy a BOOK.)
c. Someone may buy A BOOK.
a. You may invite SANGITA.
b. You may invite ANYONE.
c. You may INVITE someone. (?*You may invite SOMEONE.)

I have not investigated stress systematically, but it appears that a similar situation obtains in many other languages. Below examples from Russian and German are given. ${ }^{\text {xvii }}$

Russian
(274) a. Kto UGODNO mož et kupit' knigu.
(?*Kto ugodno mož et kupit' KNIGU)
'Anyone may buy a book.'
b. Kto-nibud' mož et kupit' KNIGU.
(?*KTO-NIBUD' mož et kupit’ knigu.)
'Someone may buy a book.'
(275) a. Ty mož eš' priglasit' KOGO UGODNO.
(?*Ty mož eš' PRIGLASIT' kogo ugodno.)
'You may invite anyone.'
b. Ty mož eš ' PRIGLASIT' kogo-nibud'.
(?*Ty mož eš ' priglasit' KOGO-NIBUD'.)
'You may invite someone.'
German
a. IRgend jemand kann ein Buch kaufen.
'Anyone can buy a book.'
( $\neq$ Irgend jemand kann ein BUCH kaufen.
'Someone can buy a book.')
b. Jemand kann ein BUCH kaufen.
(?*JEMAND kann ein Buch kaufen.)
'Someone may buy a book.'
a. Du darfst IRGEND JEMANDEN einladen.
'You may invite anyone.'
( $\neq$ Du darfst irgend jemanden EINLADEN.
'You may invite someone.')
b. Du darfst jemanden EINLADEN.
(?*Du darfst JEMANDEN einladen.)
'You may invite someone.'

### 5.7.2. Emphatic vs. non-emphatic indefinites

Since the contrast with respect to sentence accent that was just exemplified is so striking, I will occasionally use the terms EMPHATIC INDEFINITE and NONEMPHATIC INDEFINITE. ${ }^{\text {xviii }}$ These terms are used in a deliberately loose way here because it is not always possible to pay attention to all details, but it is often useful to have this distinction. The functions 'specific (known or unknown)'
and 'irrealis non-specific' require non-emphatic indefinites, and the functions 'free choice' and 'comparative' require emphatic indefinites. The functions 'indirect negation', 'question' and 'conditional' are interesting in that they allow both emphatic and non-emphatic indefinites without a difference in the truth conditions. In (278-79) the distinction between emphatic and nonemphatic indefinites is only marked by the stress. ${ }^{\text {xix }}$
conditional
a. If you HEAR anything, wake me up.
b. If you hear ANYthing, wake me up.
question ${ }^{\text {xx }}$
a. Can you SEE anything?
b. Can you see ANYthing?

There is a clear meaning difference between the (a) and (b) sentences: In the (b) case, a scale of alternative values is present of which the chosen value is the endpoint. No such scale is present in the (a) sentences, where non-emphatic any-indefinites are used. ${ }^{\text {xxi }}$

Many languages use two different indefinites to render these two meanings. If these indefinites are used in other functions as well, the emphatic indefinite (corresponding to the (b) case) is used in other emphatic functions (comparative and free choice), and the non-emphatic indefinite is used in other non-emphatic functions (irrealis non-specific, specific). The following examples are illustrative.
(280) French
a. Si quelqu'un vient, réveille-moi. if someone comes wake-me 'If anyone COMES, wake me up.'
b. Si qui que ce soit vient, réveille-moi. if anyonecomes wake-me 'If ANYONE comes, wake me up.'
Polish
a. Jez\%elico-ś zobaczysz, odrazu mnie obudź. if what-INDEF see:2SG immediately me wake:IMPV 'If you SEE anything, wake me up immediately.'
b. Jez\%elico-kolwiek zobaczysz, odrazu mnie obudź. if what-INDEF see:2SG immediately me wake:IMPV 'If you see ANYTHING, wake me up immediately.'
Hindi/Urdu
a. Agar koii fonkare, mujhe bataanaa. if someone phone calls I:DAT tell:IMPV 'If anybody CALLS, tell me.'
b. Agar koii bhii fon kare, mujhe bataanaa. if someone INDEF phone calls I:DAT tell:IMPV 'If ANYBODY AT ALL calls, tell me.'
(283) Chinese (Fengxiang Li, p.c.)
a. Wǒ bù xiangxin shénme rén lái le. I not think what man come PFV 'I do not think that anyone CAME.'
b. Wǒ bù xiangxin rènhé rén lái le. I not think any man come PFV 'I do not think that ANYONE came.'

More examples of this can be found in Appendix A, e.g. in Russian, Hungarian, Bulgarian, Italian.

One might say that these examples show that it is not sufficient to have one question/conditional function, but that two such functions have to be distinguished: first, 'question/conditional + scalar endpoint', and second 'question/ conditional + no scalar endpoint'. The first would be located next to the irrealis-non-specific function, and the second would be located next to the indirect-negation and comparative functions on the implicational map. I have not adopted this proposal because the semantic distinction between the (a) and (b) sentences in (278-83) is very subtle and is not easy to identify across languages. However, future research along these lines should take this possibility very seriously.

### 5.7.3. Further meaning differences associated with sentence accent

In addition to the semantic differences illustrated in (278-79), even more dramatic distinctions can be coded by sentence accent. In particular, quite a few languages have indefinites that may be used both in clearly emphatic and in clearly non-emphatic functions. It appears that in such cases sentence accent in general disambiguates the two readings. Thus, the German irgend-series is used both in the free-choice function and in the irrealis-non-specific function. Which function is intended is determined by the location of sentence accent.
(284) German


The situation is quite parallel in Portuguese:
(285) Portuguese


In Spanish, a particularly dramatic distinction can be observed with the expression en mi vida 'in my life' (and several related expressions). This phrase has been idiomaticized as a negative-polarity item meaning 'ever', as illustrated in (286a) (see also § 8.3.2.2). By analogy with indefinites like nuпса 'never', en mi vida may now also be used preverbally, and since preverbal negative indefinites do not cooccur with verbal negation in Spanish (cf. § 8.2.2), there is no verbal negation in (286b) (see Vermeylen 1984). However, (286b) has this negative interpretation only when it is stressed, so that a scalar interpretation becomes possible. Otherwise, it simply means 'in my life', as in (286c). (I am grateful to Brenda Laca for native speaker judgments.)

Spanish
a. No lo he visto EN MI VIDA.

NEG it have:1SG seen in my life
'I haven't ever (<in my life) seen it.'
b. En mi VIDA lo he visto.
in my life it have:1SG seen
'Never have I seen it.'
c. En mi vida lo he VISTO.
in my life it have:1SG seen
'In my life I have seen it.'
Hungarian has the lexical item valamennyi which has the two very different meanings 'some, several' and 'all'. There is probably no synchronic way in which these two meanings can be unified, but I would propose the following diachronic scenario to account for the synchronic polysemy: Originally the valaseries had the free-choice function (as expected given its etymology: val- 'be', cf. § 6.2.3), which later developed into a non-emphatic meaning ('some') in the manner outlined in $\S$ 6.4.2. But independently, it also developed into a universal meaning, as outlined in § 6.5. Although the contemporary universal meaning is no longer scalar, valamennyi preserved its original stress properties: When it means 'all', it must bear sentence accent, but when it means 'some', it cannot (Hunyadi 1981).
(287) Hungarian
a. Valamennyi fiú tanUlt.
some boy learned
'Some of the boys were learning.'
b. Valamennyi fiú tanult.
all boy learned
'All of the boys were learning.'
Finally, in Modern Greek the indefinites of the típota-series may be stressed or unstressed. If they are stressed (and thus focused, cf. Tsimpli and Roussou 1993), they are strictly limited to the direct-negation function, but they may also have that function if they are unstressed, much like English any-indefinites. (See Tsimpli and Roussou (1993: 147-50) for the subtle difference in interpretation between the two variants of (288b).)
(288) Modern Greek
a. An dhís kanénal *KANÉNA,...
if see:2SG anyone anyone
'If you see anybody,...'
b. Dhen ídha kanéna/ KANÉNA. not saw:1SG anyone anyone 'I didn't see anybody.'

All these facts once more underline the point that the notions of focusing and scalarity are central for our understanding of both meaning and form of indefinite pronouns.
${ }^{i}$ Veyrenc merely speaks vaguely of '-nibud', indicateur de l'indéterminé virtuel du particulier', as opposed to '-libo, indicateur de l'indéterminé du général', not even attempting a detailed justification of his classification. To be fair, however, I must add that Veyrenc's prose text contains a lot of original useful observations and interpretations, and that the classification in (165) is perhaps not the main point of his paper.
${ }^{\text {ii }}$ For the earlier discussion within the generative semantics debate, see Jackendoff (1972a), Carden (1976), Aldridge (1982). For a later standard treatment within Chomsky's Government-Binding framework, see May (1985).
iii Universal pronouns and determiners are therefore often called universal quantifiers in the linguistic literature. The analogous use of existential quantifier for 'indefinite pronoun' is much rarer, but is also occasionally found (e.g. König 1991: 32).
${ }^{\text {iv }}$ Here I use restricted quantifiers (following McCawley 1981: §4.5) for convenience. Strictly speaking, also the quantifiers in (166-168) should be restricted: (166a') ( $\exists$ : thing $x$ ) (Pavlina saw $x$ ); (167a') ( $\forall$ : thing $x$ ) (Waldemar ate $x$ ); (168a') ( $\forall$ : person $x$ ) ( $x$ knows this secret). Natural languages have no expressions corresponding to variables bound by unrestricted quantifiers - even the most general expressions, pronouns, incorporate the meaning of an ontological category.
${ }^{v}$ The situation is similar to the analysis of the focus particle even (cf. König 1991: §4.2.1), which may characterize its focus value as maximal or minimal. In a question like Can she even speak French?, either reading is possible, and here, too, a univocal analysis would be highly desirable. See § 5.5, § 8.3.1 for more parallels between even and any.
${ }^{\text {vi }}$ Fodor (1970: ch. 2) claims that (186) allows a specific and a non-specific reading of $a$ friend of mine, whereas a sentence like $A$ friend of mine is a busdriver allows only a specific reading. I do not follow this. It is true that (186) may be construed in two ways, (a) meaning that there is some particular friend of mine such that Mary believes he or she is a busdriver, and (b) meaning simply that Mary believes that there is a friend of mine who is a busdriver, though she may not know, or may not be concerned with, which particular friend it is. But these two readings do not depend on the embedding in a propositional-attitude verb and are also available in the simple sentence $A$ friend of mine is a busdriver. A similar example is discussed in Ioup (1977: 236): I talked to a logician. This may mean (a) that I talked to a person who is independently identifiable but happens to be described as a logician in (ii), or (b) that all that matters is that the person I talked to was a logician. Ioup also characterizes these two readings as specific/non-specific, but this terminological usage is infelicitous. The two readings
should rather be distinguished as the VALUE reading and the ROLE reading, see the discussion in Fauconnier (1985: § 2.2). Non-specific expressions can only have a role reading, so there is a relation here, but the non-specific/specific distinction must not be collapsed with the role/value distinction.
vii A further insurmountable problem for the classical logical-semantic analysis is discourse anaphora (cf. Jackendoff 1972a: 281-4, Fodor 1977: 186-93, Lyons 1977: 191-2). In response to these problems, Jackendoff's (1972a) theory of modal structure, Fauconnier's (1985) mental-space theory, and Kamp's Discourse Representation Theory (Kamp and Reyle 1993) were developed.
viii Note that the more abstract notion of 'binding' that can account for both pronouns and negative-polarity items has nothing to do with coreference - obviously, negativepolarity items cannot be said to be coreferential with negation or an empty polarity operator. (In addition, Progovac works within the 'generalized binding' framework of Aoun (1986). The technical details need not concern us here.)
${ }^{\text {ix }}$ Turkish is not a good example because hiç-indefinites are allowed in one non-negative environment, questions (cf. Appendix A, Section 23 for data). Progovac's attempt to explain this away by saying that the question particle $m u / m u ̈ / m i / m ı$ is 'negative' in some way (1994: 151) is unconvincing. However, there are other languages where an indefinite series is restricted to clausemate and indirect negation, e.g. the Maltese ebdaseries (Appendix A, Section 30), or the Hebrew af/s um-series (Section 31), etc. Progovac could have chosen one of these languages to make her point.
${ }^{x}$ Progovac does discuss free-choice indefinites (1994: ch. 7), but she makes the crucial mistake of considering Serbian/Croatian bilo-indefinites as representing unambiguous free-choice indefinites in all their uses, although these can be used in non-free-choice functions like questions and conditionals (see Appendix A, Section 14 for the data).
${ }^{\text {xi }}$ The same criticism applies to Chomskyan treatments of reflexive and ordinary pronouns. These studies have rarely addressed the question why reflexive pronouns are so often identical to emphatic reflexives (cf. König (1995) for an explanation in semanticpragmatic terms).
xii There is also a suprasegmental difference between the two readings; see § 5.7.1 below for discussion. (Note, incidentally, that (225) shows the need to recognize definite non-specific phrases, as argued in § 5.4.2 above.)
xiii For a detailed discussion of pragmatic implicature in questions, see Fauconnier (1980). (Note that questions are a problem for Ladusaw's downward-entailment approach, but they are not for Fauconnier's pragmatic-implicature approach.)
${ }^{\text {xiv }}$ Quantifying superlatives may also become idiomaticized or lexicalized and thus turn into negative polarity items. For example, the Russian synthetic superlative malejš ij 'the smallest' can only be used in negative-polarity environments (the analytic
superlative samyj malen'kij has no restrictions). An example is polnoe otsutstvie malejšix priznakov nacionalizma 'the complete absence of the slightest signs of nationalism'.

Hoeksema (1994) discusses the process of fixing or grammaticalization of expressions which denote a scalar endpoint or are frequently associated with negative polarity for other reasons.
${ }^{\text {xv }}$ I am grateful to Ekkehard König for pointing this out to me.
xvi The ambiguous status of any in comparatives between 'free-choice/universal any' and 'existential any' has sometimes been noted in the literature (Carlson 1981: 13, Hoeksema 1983: 408-10). The intermediate location on the map is a reflection of this status in my approach.
xvii The 'focus gemination' that we find in Chechen indefinites (see (26) above) seems to have a function similar to sentence accent, iconically reflecting the pragmatic emphasis. xviii Note that emphasis was the usual term for 'focus' until Chomsky (1970) used this latter term. The term emphasis is of course associated with all sorts of other meanings, but this is not a big disadvantage here because my use of this term is deliberately somewhat loose.
${ }^{\text {xix }}$ In the direct-negation function, too, both emphatic and non-emphatic indefinites seem to be possible: I didn't SEE anything vs. I didn't see ANYTHING. However, it is not clear to me whether one can say that only the second involves a scale. But intuitively, the second sentence is 'stronger' than the first in much the same way as (278-79) (b) are 'stronger' than (278-79) (a).
${ }^{\mathrm{xx}}$ The same contrast is found with the Dutch cognate enig 'any', e.g. Heeft hij enig success gehad met al zijn pogingen? This may mean (with enig stressed) 'Has he had any success at all with all his attempts?', or it may mean (with enig unstressed) 'Has he had some success with all his attempts?'
${ }^{x x i}$ This was pointed out to me by Ekkehard König. The relevance of stress in examples of this type is also discussed in Kadmon and Landman (1993: 362-8).

# The Grammaticalization of Indefinite Pronouns 

### 6.1. Diachronic Typology

In this and the following chapter, I study the ways in which indefinite pronouns arise and change over time in different languages and the regularities in these changes. There are two main reasons for engaging in such a study of diachronic typology. First, for the sake of diachrony itself. Language change is a universal and essential feature of human language, and by studying the general laws of language change, we learn a lot about human language.

But secondly, diachronic typology also helps us understand synchronic language states better. All languages are constantly in a process of change, in a kind of flux, and many features that do not fit neatly into a synchronic system begin to make sense once a diachronic point of view is taken. This applies both to recent innovations and to remnants of earlier regularities that are no longer synchronically motivated. Languages can carry around such synchronic irregularities for many generations of speakers, and if our goal is the explanation of linguistic structures, we have to take diachronic explanations into account.

Most importantly for my purposes, there is often a close correspondence between the generalizations obtained from synchronic and from diachronic typological studies, so that the results from such studies reinforce each other. For instance, in Hawkins's (1983) study of word order universals, the implicational hierarchies that account for the cross-linguistic distribution of word order patterns also make correct predictions about possible diachronic changes, as Hawkins shows. If a language acquires new word order patterns, it acquires them in accordance with the order of the implicational hierarchy. Quite analogously, implicational maps that account for the cross-linguistic distribution of different functions of grammatical categories also constrain the possible diachronic changes: A category can acquire a new function only if that function is adjacent on the semantic map to some function that the category already covers. Semantic change of grammatical categories is 'incremental' (cf. Croft et al. 1987), and grammatical categories gradually extend their uses along the paths allowed by the map.

This correspondence between synchronic and diachronic typology can also be observed in the case of indefinite pronouns. As I will show in this chapter (especially § 6.4), the extension of indefinite series to new functions proceeds along the paths permitted by the implicational map of chapter 4.

One problem for the diachronic-typological study of indefinite pronouns at this stage is that there are very few specialized studies on diachronic change in indefinite pronouns in individual languages. While I was able to make use of quite a few studies on individual languages for the synchronic distribution, I had to rely on other kinds of evidence for the diachronic study. First, some of the large historical grammars of the major European languages do contain a limited amount of relevant information. Second, I use comparative evidence from closely related languages. And third, etymological information, which is
available for many languages, also gives us valuable insights, especially about the source construction from which an indefinite pronoun was derived.

A key concept for understanding the genesis and later development of indefinite pronouns is the concept of grammaticalization (cf. Lehmann 1982a, Heine et al. 1991, Hagège 1993, Hopper and Traugott 1993, among many others). Research in diachronic typology is to a large extent concerned with various types of grammaticalization. Grammaticalization is the unidirectional gradual diachronic change by which a lexical-syntactic source construction loses its autonomy and is integrated into the grammar. In the following section (§ 6.2), I identify four main source constructions from which the grammaticalization of indefinite pronouns started. In a next step (§ 6.3-4), I will relate these changes to general properties of grammaticalization, and discuss the consequences for different theoretical accounts of grammaticalization changes.

In this and the following chapter mainly non-negative pronouns will be treated. The discussion of the diachrony of negative indefinites will be reserved for chapter 8 (especially § 8.3).

### 6.2. Source Constructions for Indefiniteness Markers

The grammaticalization processes are particularly interesting in the case of a large subclass of interrogative-based indefinite pronouns. Accordingly, I will concentrate the discussion on such indefinites in the following subsections. In chapter 7, I will then discuss further diachronic sources of indefinite pronouns that cannot be subsumed under grammaticalization.

### 6.2.1. The 'dunno' type

6.2.1.1. The source construction. Some indefiniteness markers that combine with interrogative pronouns have arisen from a clause with the meaning 'I don't know', or similar. This type is especially well-attested in European languages. Some cases are shown in (289). (Here and in many of the following examples, one indefinite pronoun, often the one denoting a person, stands for the whole indefinite series.)
'dunno'-indefinites from 'I don't know wh-'
a. Middle High German neizwer 'somebody'
< ne weiz wer '(I) don't know who'
b. Old English $n t h w '$ somebody' < ne wt hw'(I) don't know who'
c. Old Norse nekkver 'somebody' ( $>$ Swedish någon, Icelandic nokkur) < *ne wait ik hwarir 'I don't know who'
d. Romanian (dialectal) nes3tine 'some' < Latin nescio quis 'I don't know who'
e. Bulgarian (dialectal) $n a(m) k o j$ 'somebody' (cf. Paov 1965) < ne znam koj 'I don't know who'
f. Old Church Slavonic nkto 'somebody' < *ne vkto 'I don't know who'
g . French je ne sais quel 'some kind of' cf. je ne sais (pas) quel 'I don't know which'

A variant of the explicit negation 'I don't know' is the rhetorical question 'who knows?', which by way of a conversational implicature renders the same meaning. This type of source construction has been strongly grammaticalized in Lithuanian, while in the other languages where I have found it it is quite rare and highly expressive, i.e. it is still weakly grammaticalized.
(290) 'dunno'-indefinites from 'who knows wh-?'
a. Lithuaniankakas (kainkas, kanokas) 'somebody'
< kas ino kas 'who knows who'
b. Czech kdovikdo
$<k d o$ víkdo 'who knows who'
c. German wer weiß wer 'someone or other' cf. wer weiß wer 'who knows who'

In Albanian, the strongly grammaticalized indefiniteness marker di- (e.g. dikush 'somebody', di-ç 'something', di-ku 'somewhere', etc.) is identical to the root di- 'know'. It is unclear whether this goes back to type (289) (with the negation omitted) or to type (290) (with 'who' omitted) or perhaps to some third type (e.g. a rhetorical polar question like 'do I know who?').

Another highly expressive variant of this type is an expression like 'God knows wh-' or even 'the devil knows wh-'. I know of no case where such a source construction has been grammaticalized strongly.
(291) 'dunno'-indefinites from 'God (etc.) knows wh-'
a. Russian Bog vest' kto 'God knows who' ert znaet kto 'the devil knows who'
b. Serbian / Croatian bogzna ko 'God knows who'
c. Slovak bohvie kto 'God knows who'
d. French Dieux sait qui 'God knows who'
e. Swedish Gud vet vad 'God knows what'

The scarcity of attested cases of 'dunno'-indefinites outside of Europe might lead one to suggest that such indefinites are an areal feature typical of Europe. But in view of the unsatisfactory documentation of most non-European languages, this conclusion may turn out to be premature.

It is not difficult to see why an expression like 'I don't know' should come to mark an indefinite pronoun: Indefinite pronouns are typically used when the referent is unknown to the speaker (though it need not be unknown, cf. § 3.2.4). The diachronic scenario of its development is also easy to reconstruct: The original source structure is an indirect parametric (or 'wh-') question embedded in the matrix clause 'I don't know' where the greater part of the embedded question is omitted because it is obvious from the context (this type of contextual omission was called 'sluicing' in Ross (1969); cf. also von Bremen (1983: 118-19)).
(292) (She told him somethingi.) I don't know what [it $\mathrm{i}_{\mathrm{i}}$ was].

In a next step, this sentence is inserted into another sentence where the interrogative pronoun occupies some syntactic position.
(293) She told him I don't know what.

This is a kind of 'syntactic amalgam' of the type studied in Lakoff (1974) (cf. Lakoff's example I saw you'll never guess how many people at the party). One could propose a constituent structure as in (294) for it (cf. Espinal 1991: 748-9), where there are two separate structures with their own root node that share one constituent (the NP what).
(294) S S


Whatever the best syntactic analysis of such constructions is, they are obviously highly marked and prone to reanalysis. The erstwhile matrix clause 'I don't know $^{\prime}$ is reanalyzed as an indefiniteness marker, and when this way of expressing indefinite pronouns becomes more frequent, it may undergo quite radical phonological reduction, as shown by the Bulgarian, Romanian and especially the Old Norse example.
6.2.1.2. The original meaning. Now let us ask what kind of indefinite meaning we get from the source 'I don't know'. Obviously we do not get the meaning 'known to the speaker', but can we be more specific? We can: In all the other functions distinguished in $\S 3.3$, the referent is unknown to the speaker, but this source only gives rise to the specific-unknown function. The reason is that in all the non-specific functions, it would be nonsensical for the speaker to state that he or she does not know the referent because if the referent is non-specific, nobody could possibly know it. This can also be illustrated by the impossibility of adding I don't know wh- when the referent of the indefinite pronoun is nonspecific. Thus, while (295a-b) are possible (like 292), (296a-c) are anomalous.
(295) specific
a. Susanne is thinking about something. I don't know what.
b. She wants to marry an Ainu speaker. I don't know whom. (All I
know is that) she fell in love with him during fieldwork sessions.
(296) non-specific
a. (irrealis: imperative) \#Take some apple. I don't know which one.
b. (interrogative) \#Did you see anybody? I don't know whom.
c. (free choice) \#You can take any apple. I don't know which one.

When we look at the way 'dunno'-indefinites are used, we see that the prediction that they have the specific-unknown function is confirmed.
(297) a. French

```
    Il nous reste encore je ne sais quel désir
    vague,
    it us remainsstill indef which desire vague
    je ne sais quelle inquiétude. (Voltaire)
    indef which restlessness
    'We are left with some kind of vague desire, some kind of
    restlessness.'
    b. Old English (Rissanen 1987: 417)
\begin{tabular}{lllll} 
pær & on & innan giong / iniDa nat-hwilc, & \\
there & on & inside & went of.men indef-which & \\
se & pe & neh & gefeng / & hæDnum
\end{tabular} horde.
(Beowulf 2214-16)
    he that near caught heathentreasure
    'Some man or other crept inside it, who reached out
toward the
    heathen treasure.'
    c. Lithuanian (Pilka 1984: 29)
    Ka-kas atejo.
    indef-who came
    'Someone came.'
```


### 6.2.2. The 'want/pleases' type

6.2.2.1. The source construction. Some indefiniteness markers that combine with interrogative pronouns go back to an expression meaning 'want' or 'pleases' or similar. Examples are given in (298). (Again, the indefinite pronoun denoting a person generally represents its series.)
(298) Latin qui-vis 'anybody' vis 'you want'
qui-libet 'anybody' libet 'it pleases'
Spanish cualquiera 'any' quiera 'wants (subjunctive)'
Italian qualsivoglia 'any' voglia 'wants (subjunctive)'
Russian kto-libo 'anybody' libo <ljubo 'dear, pleasing'
kto ugodno 'anyone' ugodno 'suitable'
Romanian cine-va'somebody' va<vrea 'wants'
Albanian kushdodo 'wants'
Bulgarian koj-gode 'anyone' gode <
Old Church Slavonic god'suitable'
Ossetic i-fændy 'anyone' fændy 'you want'
Slovakvol'a-kto 'anyone' vol'a 'wanting'
Serbian/Croatian ko mu drago 'anybody'drago mu 'dear to him'
For these indefinite pronouns, I hypothesize the source constructions in (299) as the starting point of the grammaticalization process.
(299) a. You may take what you want [to take].
b. You may take what it pleases (you) [to take].
(299a) and (299b) are semantically equivalent and differ only in that the addressee is the subject of the predicate 'want' in (299a), but the object of the predicate 'please' in (299b). The predicate ('want/pleases') is in both cases the predicate of a non-specific free relative clause which serves as an argument of the main clause.

In contrast to the previous case, this source construction does not require any syntactic restructuring before it can be turned into a grammatical marker, the reason being, of course, that the original construction consists of a subordinate clause, rather than a superordinate clause as in § 6.2.1.

The hypothesized source constructions also explain why the indefiniteness markers in this section are suffixes, whereas the indefiniteness markers from 'I don't know' are prefixes. And that these indefinites, too, are based on interrogative pronouns finds a natural explanation in the fact that in many languages, non-specific free relative clauses are formed with an interrogative-based relative pronoun (cf. Lehmann 1984: 326)
6.2.2.2. The original meaning. As in 'dunno'-indefinites, it is pretty obvious why source constructions like (299a-b) should be chosen for an indefinite pronoun. A sentence like (299a) is a close paraphrase of a sentence with a freechoice indefinite pronoun like You may take anything, and in $\S 3.3 .3$ we saw that languages lacking free-choice indefinites use precisely such constructions to render the same meaning.

Thus, we expect 'want/please'-indefinites to express the free-choice meaning initially, and this is indeed what we find in many cases:
a. Spanish

| Puedes traerme | cualquier | libro. |
| :--- | :---: | :--- |
| can:2sg bring:me | any book |  |
| 'You can bring me any book.' |  |  |
| Latin |  |  |

b. Latin

Utrum-libet elige; alterum incredibile est,
alterum nefarium
which-indef choose:impv other incredible is other sinful
'Choose either; one is incredible, the other sinful.' (Quint.
81)
c. Russian


### 6.2.3. The 'it may be' type

6.2.3.1. The source construction. Many indefiniteness markers contain an element that goes back to form of the verb 'be'. Why this should be so is perhaps not immediately obvious, but there is a straightforward account for it, which will be presented immediately below. Consider the examples in (301).

Russian kto by to ni bylo 'anyone' 'who it not be', i.e. 'whoever it may be'
kto-nibud' 'any-/ some-one' < kto ni budi 'whoever it may be'
Bulgarian kojto ida e'anyone' 'who also it be', i.e. 'whoever it may be'
Serbian/Croatian ko bilo 'anyone' who it be'
French qui que ce soit 'anyone' 'whoever it may be'
Icelandic heer sem er 'anyone' 'whoever it is'
Hebrew mi-e-hu 'someone' 'who that it (is)", i.e.

| Korean | it may be |
| :---: | :---: |
|  | mues-i-n-ka 'someone' mues 'what?', i-n- 'be', -ka 'question particle' |
| Lezgian | wuajit'ani 'anyone' 'whoever it may be' |
|  | ( $w u^{\prime}$ who', $a-j i-$ ' $\mathrm{be}^{\prime}-t^{\prime} a$ conditional, $-n i$ 'also') |
| Kannada | yaar-aadaruu 'anyone' 'whoever it may be' (yaaru 'who', aa-d- 'be' -ar conditional, -uu 'also') |
| Cze | meone' $<$ |

The hypothesized source construction for these indefinites is a parametric concessive conditional clause, as shown in (302) (cf. von Bremen 1983).
(302) You can take something ${ }_{i}$, whatever $i_{i}$ may be.

One might ask why the source construction cannot contain a non-specific free relative clause, as in the 'want'-type that we saw in the preceding section. This would look as in (303).
(303) You can take whatever it may be.

The problem is that the subject 'it' (which appears overtly in Russian (to), French (ce), and Hebrew ( $h u$ )) in this hypothetical source construction is unmotivated, so I assume that (302) is correct. But eventually some kind of illunderstood restructuring takes place and turns (302) into (303), which is then grammaticalized, yielding the indefiniteness markers in (301). The replacement of (302) by (303) may also be facilitated by the fact that in many languages, parametric concessive conditional clauses and non-specific free relative clauses are structurally quite similar (cf. Haspelmath and König (to appear)).

The typical structural features of parametric concessive conditional clauses are also reflected in the resulting indefinite pronoun. Thus, the verb is typically in some kind of subjunctive mood in concessive conditional clauses, and this is what we find in the indefiniteness markers: French soit, Russian bud'/by...bylo, Bulgarian da e, Proto-Slavic *sit (in Czech kdo-si) are all subjunctive forms of the verb 'be'. Russian parametric concessive conditional clauses are marked by the pleonastic negator ni, and this is carried over to the indefiniteness markers by to ni bylo and -nibud'.

A common formal feature of concessive conditional clauses is the focus particle 'also, even' (cf. König 1988). In Lezgian and Kannada, this focus particle follows the verb, which is in the conditional mood, cf. (304).
a. Lezgian (Haspelmath 1993a: 399)

Hiniz wun fe-ji-t'a-ni, zun wa-qh galaz fi-da. where you:absgo:aor.ptcp-cond-even I:abs you-postess with
go-fut
'Wherever you go, I will go with you.'
b. Kannada (Sridhar 1990: 912)

Aval5u es5t5uheel5i-d-ar-uu keel5-al-ee illa. she how.much tell-past-cond-even listen-inf-emph neg 'However much she was told, she didn't listen.'

Accordingly, the particle 'also, even' ( $-n i /-u u$ ) also appearsin this place in the Lezgian and Kannada indefiniteness markers. In European languages, by
contrast, the focus particle tends to occur after the interrogative pronoun, before the verb, as for instance in Bulgarian:
(305) Bulgarian

| Kakvo-to |  | $d a$ | kae | tja, | toj | te | li. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| what-indef | also | that | says |  |  | fut | be.silent |
| What | he sa | he w | 1 rem | n si |  |  |  |

As a result, we find the focus particle $i$ in the Bulgarian indefiniteness marker (WH-to) ida e 'any-' between the interrogative pronoun and the verb.

There are four further structural features that parametric concessive conditionals commonly display, in addition to those already mentioned ((i) subjunctive mood, (ii) pleonastic negator, (iii) focus particle 'also, even', (iv) conditional marker): (v) a temporal adverb like 'ever', (vi) an additional general subordinator ('that'), (vii) an expression meaning 'want', (viii) other emphatic particles like 'now', 'only' (cf. von Bremen 1983, Haspelmath and König (to appear)). These are exemplified in the following sentences:
(306) temporal adverb
a. German (focus particle auch, temporal adverb immer), Wohin auch immerdu gehst, ich werde dich
nicht verlassen.
whitheralso ever you go I will you not
leave
b. English (temporal adverb ever)

Wher-ever you go, I will not leave you.
(307) general subordinator
a. Italian (che)
scontare la pena. $\quad$ which that be the his protections must:fut
serve the sentence $\begin{aligned} & \text { 'Whatever his protection is, he will have to serve his }\end{aligned}$ sentence.'
b. Standard Arabic (maa) Wa-l̀ayQu-maa daxal-tum bayt-an fa-?aqiim-
uи fii-hi
and-where-sbor enter:perf-2pl house-acc and-remain:impv-2pl
in-3sg
?ilaa ?anna ta-rlal-uu.
until sbor 2-depart:impf-pl
'In what place soever ye enter into an house, there abide till
ye
(308) 'want'
depart from that place.'
a. Spanish (-quiera from querer 'want', que general subordinator)

No abras la puerta,quien-quiera que sea.
not open:impv the door who-want that be 'Don't open the door, whoever it may be.'
b. Hungarian (cf. akar 'want')

Akár-ki tanul-t, túl hangos-an tanul-t.

$$
\begin{array}{llllll}
\text { past(3sg) } & \text { want-who learn-past(3sg) too loud-adv } & \text { learn- } \\
\text { (309) other emphatic particles } \\
\text { Swedish } \\
\text { Han måste lyckas, hur det nu skal learning, he was learning too loudly.' } \\
\text { he must succeedhow that now will come till. } & & & \\
\text { 'He has to succed, however that will come about.' }
\end{array}
$$

It is not my task here to explain this astonishing variety of structural means associated with parametric concessive conditionals (cf. Haspelmath and König (to appear) for an attempt at an explanation). But we need to be aware of the components of the source constructions in order to understand the components of the resulting indefinite pronouns. Thus, the French indefiniteness marker que ce soit contains a general subordinator (French que), which is explained by the fact that it has arisen from a source construction with a subordinator, cf. (307).

In quite a few cases, indefiniteness markers consist of the same structural components as parametric concessive conditional clauses, but show no trace of the verb 'be'. Nevertheless, I claim that these, too, can be understood as arising from such clauses. Examples are given in (310-14).
(310) temporal adverb

German wer auch immer 'anyone' immer 'always'
Polish kto-kolwiek ‘anyone' < *koli 'ever', wiek 'age'
French quiconque 'anyone' <quiqu' onques
( $<$ Latin umquam 'ever')
quelque 'some' <quel que
M. Greek opjos-dhí-pote 'anyone' poté '(n)ever'
focus particle 'also, even'
German wer auch immer 'anyone' auch 'also, even'
Dutch wie dan ook 'anyone' ook 'also'
general subordinator
Hebrew miehu 'someone' $e$ 'that'
conditional marker
Turkish kimse 'someone, anyone' -se 'conditional marker'
Udmurt kinke 'someone' ke'conditional marker'
'want'
Hungarian akár-ki'anyone' akar'want'
Romanian ori-cine 'anyone' ori- < *volet'wants'
Spanish cual-quiera'any' quiera'wants (3sg subjv)
A well-documented case of this development is French quelque, whose evolution is traced in detail in Foulet (1919).

In descriptive grammars of European languages, the identity between indefinite pronouns in (310-14) and the pronouns introducing parametric concessive conditional clauses is often described as if the indefinite pronouns were primary and their function in concessive conditionals secondary. However, the opposite is in fact the case: The indefinite pronouns in (310-14) are derived from the same kind of source construction that was discussed above (see 302), with the difference that the verb 'be' has also been ellipted. Although the verb 'be' cannot be reconstructed from the context (unlike the
ellipted parts in the earlier source constructions (see 292, 299)), it does not carry much informational weight and is therefore dispensable.
(315) You can take something, whatever [it may be].

Such source constructions are not entirely hypothetical, as shown by (316) from Dutch.
(316) Dutch (Paardekooper 1978: 572)

Je mag iemand anders vragen, wie danook.
you may somebody else ask who indef
'(lit.) You may ask somebody else, whoever.'
6.2.3.2. The original meaning. What kind of indefiniteness meaning do we get from a parametric concessive conditional source construction? As in the 'want' type of the previous section, the original meaning is that of free choice. While the source construction in the 'want' type explicitly leaves the choice to the hearer, the same effect is achieved more indirectly by the concessive conditional source construction. Concessive conditionals express a conditional relationship between a consequent and a series of antecedent conditions, but in contrast to ordinary conditionals, they entail their consequent. The antecedent conditions are therefore irrelevant for the consequent, and concessive conditionals have also been called 'irrelevance conditionals' (cf. König 1985). Thus, a parametric concessive conditional clause like whoever it may be states that the identity of the person in question is irrelevant, which amounts to the same as free choice. This close semantic relationship between the two meanings is also reflected in similar cooccurrence restrictions. For example, neither free-choice indefinites nor the two source constructions can be used in contexts that allow only specific reference (in (318-19), a non-habitual reading of the past tense is intended):
(317) a. You may take any apple.
b. *You took any apple.
(318) a. You may take whichever apple you want.
b. *You took whichever apple you want(ed).'
(319) a. You may take an apple, whichever it may be.
b. *You took an apple, whichever one it may be.

Here are some examples of 'it may be'-indefinites in their original (i.e. freechoice) meaning:
a. Bulgarian Moe da vzeme koj-to ida e moliv. you:may sbjv you:take which-indef pencil 'You may take any pencil.'
b. Lezgian (Haspelmath 1993a: 195) Bilbildi-kaj mani ni-waj ajit'ani tük'ür-iz
$e-d a$. nightingale-subel song who-adel indef compose-inf
can-fut 'Anyone can compose a song about a nightingale.'
c. Dutch Je mag wie danook uitnodigen.

> you may who indef invite
> 'You may invite anyone.'

### 6.2.4. The 'no matter' type

6.2.4.1. The source construction. In indefinite pronouns of this type, the indefiniteness marker is derived from an expression meaning 'it does not matter wh-', 'it's all the same wh-'. Some examples are given in (321).
(321) French n'importe qui 'anyone'
cf. il n'importe (pas) 'it does not matter'
Dutch onverschillig wie 'anyone'
cf. onverschillig 'indifferent'
German gleich welcher 'any'
cf. gleich 'equal, same'
English no matter who
I know of no indefinite pronoun of this type that has been strongly grammaticalized, so the indefiniteness markers of this type are fairly transparent. The source construction is shown in (322).
(322) You may take something. It does not matter what [you take].

Since the future indefiniteness marker is a superordinate clause here, as in the 'dunno'-type of $\S 6.2 .1$, the source construction has to be 'amalgamated', yielding a structure as in (323).
(323) You may take it does not matter what.

As the it does not matter clause is turned into an indefiniteness marker, it may undergo simplification, especially omission of the copula (thus, German es ist gleich $w$ - 'it is the same wh-' becomes gleich wer).

In this type we see again an overlap with an earlier type: In some languages, parametric concessive conditionals are expressed by means of a 'no matter' expression, as for example in (324).

Dutch, English
a. Onverschillig wat je wilt kopen je zult
het te duur vinden.
no.matter what you want buy you will it
too expensive find
b. No matter what you want to buy, you will find it too expensive.

However, it seems an unnecessary complication to assume that the development of the indefiniteness markers of the 'no matter' type proceeded via concessive conditionals. The source construction in (322) must be posited anyway because not all languages with 'no matter' indefinites have 'no matter' concessive conditionals. For example, in French there is no evidence that a n'importe-concessive conditional ever existed that could have given rise to the indefiniteness marker n'importe:

```
*N'importe qui vient, n' ouvre pas la porte!
    no.matter
who comes neg open not the door
```

'No matter who comes, don't open the door!'
6.2.4.2. The original meaning. Since 'no matter' indefinites are all weakly grammaticalized, they all have the expected free-choice meaning synchronically, as exemplified by (326).
a. Dutch (Geerts et al. (eds.) 1984)

Kinderen van onverschillig welke leeftijd,kunnen
hier hun children of irrelevant which age can here
their
hart ophalen.
heart pull.up
'Children of any age can enjoy themselves here.'
b. French

N'importe qui peut venir à la réunion
demain.
indef who can come to the meetingtomorrow 'Anyone can come to the meeting tomorrow.'

### 6.3. Grammaticalization

### 6.3.1. Grammaticalization theory

Let us now see in what way the changes described in the previous section can be subsumed under the general phenomenon of grammaticalization. A comprehensive and systematic description and discussion of the various individual aspects of grammaticalization changes is Lehmann (1982a), summarized in Lehmann (1985). Lehmann identifies three main parameters: weight, cohesion, and variability, each of which has a paradigmatic and a syntagmatic aspect. The six resulting parameters are shown in Table 7.

Table 7. Lehmann's $(1982 a, 1985)$ six parameters of grammaticalization
(cover terms)
paradigmatic
syntagmatic
(- weight)

- integrity
- scope
(+ cohesion)
+ paradigmaticity
+ bondedness
(- variability)
- paradigmatic
variability
- syntagmatic variability

A plus sign in front of a parameter means that with increasing grammaticalization, the degree to which this parameter is present increases, and a minus sign means that the degree to which a parameter is present
decreases. In principle, all of these parameters are affected simultaneously by grammaticalization changes, and there is a high degree of correlation among them. However, in each particular case there may be circumstances that make a parameter inapplicable, so not all parameters can be observed in every change. But what is strictly disallowed by Lehmann's theory is for different parameters to change in opposite directions.

Three well-known paradigm cases of grammaticalization are the change from a modal construction like cantare habeo 'I have to sing' in late Latin to the Romance synthetic future, e.g. Portuguese cantarei 'I will sing'; the development of a suffixed definite article in Bulgarian (kniga-ta 'the book') from a demonstrative determiner (cf. Old Church Slavonic kniga ta 'that book'); or the development of a comitative/instrumental case suffix in Turkish (aaçla 'with the tree') from an earlier postposition (aaç ile). These examples serve to illustrate what is meant by each of the six parameters.

Integrity is the most conspicuous parameter of grammaticalization. It has two aspects, a phonological one and a semantic one. Loss of phonological integrity or erosion means that an expression loses phonological substance (loss of segments or whole syllables) or distinctiveness (loss of stress, assimilation), as exemplified by all three examples above. Loss of semantic integrity or desemanticization means that an expression loses semantic features, is 'bleached', generalized, or weakened (for alternative views, see § 6.4). For example, the meaning of the definite article is weaker than and included in the meaning of a demonstrative pronoun.

Reduction of (syntactic) scope means that an item that earlier combined with constituents of arbitrary complexity is increasingly restricted to a word or stem. For instance, the Latin verb habeo 'have' in its modal sense combined with a verb phrase, whereas the Portuguese suffix -ei combines with a verb stem.

Increasing paradigmaticity means the integration into an increasingly small and tightly organized paradigm. For example, the Turkish postposition ile was part of a large paradigm of postpositions with little coherence, but by becoming a case affix it joins the small Turkish case paradigm which consists of only six cases (including the new comitative/instrumental).

Increase of bondedness means that an item is more tightly attached to a host. In all three examples cited above, an erstwhile independent word becomes an inseparable affix.

Loss of paradigmatic variability means that an item is increasingly obligatory, more dependent on grammatical rules than on communicative intentions. Thus, Bulgarian nouns have to have a definite article when its conditions (uniqueness and inclusiveness) are met, independently of the speaker's communicative intentions.

And finally, loss of syntagmatic variability means an increasingly fixed word order. In Latin, the verb habeo could precede or follow its complement, but in the Romance future, the future suffixes may only follow the stem.

Let us now consider the way in which the various parameters of grammaticalization are manifested in the development of indefinite pronouns as presented in $\S 6.2$. First of all, grammaticalization changes are always unidirectional, and indefiniteness markers are no exception. No changes whereby an indefiniteness marker turns into a superordinate clause of the 'dunno' or 'no matter' types, or into a free relative or concessive conditional clause, have been attested. In the following sections we will consider each of Lehmann's six parameters of grammaticalization in turn.

### 6.3.2. Integrity

The semantic aspect of loss of integrity, desemanticization, will be treated in detail in the next section (§6.4). So far we have only seen the original meanings of the indefiniteness markers: 'specific-unknown' for the 'dunno'-type (§ 6.2.1), and 'free choice' for the other three types (§ 6.2.2-4). These are the meanings that I assume for the earliest stage of the new indefiniteness markers, and they are not very far away from the meanings of the source constructions yet. But later desemanticization is amply attested, as shown in § 6.4.

Phonological attrition (the phonological aspect of the loss of integrity) is especially radical in 'dunno'-indefinites. We find phonological changes like ne weiz > neiz (Middle High German), ne znam > nam (Bulgarian), *ne $v>n$, kas ino kas > kakas (Lithuanian), or even *ne wait ik hwarir > nekkver (Old Norse). These reductions go well beyond regular sound changes, but this is a frequent feature of phonological attrition as part of grammaticalization changes and is therefore not surprising. Phonological attrition is less conspicuous in the other three types of indefinites, although it can be observed in some cases (e.g. Romanian $v a<v r e a)$. The reason for this probably has to be sought in their basic freechoice meaning. As was mentioned above ( $\S 3.2 .6, \S 5.7$ ), free-choice indefinites are typically stressed, and stressed expressions are naturally more resistant to phonological reduction. This seems to apply also to the expressions of the type 'God knows wh-' (cf. 291) which have an emphatic value, are therefore stressed and are not reduced phonologically.

However, free-choice indefinites are of course not immune to semantic change, as will be documented below ( $\S 6.4 .2$ ). Once they are no longer restricted to the free-choice function, they are unstressed and therefore subject to more substantial changes. Thus Romanian -va (<vrea) is a general indefinite with non-specific and specific uses and no longer has the free choice meaning. Similarly, Russian -libo (<ljubo) and -nibud' (< ni budi) no longer have the free choice meaning and show some phonological reduction. Another suggestive case from the 'dunno'-type is Lithuanian kakas (cf. 290), which contrasts with the other indefinites of its type (Czech kdovikdo, German wer weiss wer, and others) both formally (it is reduced) and functionally (it is not emphatic, cf. Appendix A, Section 17). In order to prove the correlation between desemanticization and phonological attrition one would have to study a large number of examples, devise a measure for the degree of deseman-ticization and phonological attrition, and perform a statistical analysis (as is done for futures in Bybee et al. 1991). Such an investigation is beyond the scope of the present work, but the few examples just cited show that this approach seems to be promising.

### 6.3.3. Scope

The next parameter of grammaticalization is the reduction of syntactic scope. This can also be observed in indefiniteness markers. For example, in older French the indefiniteness marker n'importe combined with prepositional phrases, as is evident from its position in front of the preposition in (327a) (Grevisse 1986: § 373).
(327) a. (older French) n'importe à quelle heure 'at any hour'
b. (modern French) à n'importe quelle heure

In the contemporary language, only (327b) is possible, where the indefiniteness marker is combined directly with the noun phrase (or the pronoun). Thus, its scope, which used to extend over a prepositional phrase, has been reduced.

Similarly, in Old Church Slavonic the indefiniteness marker $n$ - could precede a preposition, as shown in (328a). In modern Russian, this is no longer possible (328b). Again, the scope of $n$ - has been narrowed.
a. Old Church Slavonic
nna koje msto'at some place'
b. Russian
na nekoe mesto (*ne na koe mesto)
Indefiniteness markers show a tendency to stand as close as possible to the pronominal stem, i.e. to have the narrowest possible scope. Suffixal indefiniteness markers often switch places with suffixal case markers after the indefiniteness marker has become an affix. Thus, the Georgian suffixed indefiniteness marker -me, which used to be a case-external extrafix (cf. § 3.1.1), may now also occur in internal position. This type of change, the externalization of inflection, is not motivated by grammaticalization, but grammaticalization is responsible for creating the structures that are affected by it (cf. Haspelmath $1993 b$ for detailed discussion).

## Georgian (Vogt 1971: 44-6)

old new

Nom. ra-me
ra-me

| Dat. | $r a-s-m e$ | $r a-m e-s$ |
| :--- | :--- | :--- |
| Instr. | $r-i t(i)-m e$ | $r a-m e-t i$ |
| Adv. | $r a-d-m e$ | $r a-m e-d$ |

Again, it should in principle be possible to rigorously test the prediction that the parameter of scope correlates with the others. Some anecdotal but suggestive evidence for a correlation comes from Lezgian, which has two nonnegative indefiniteness markers, jat'ani and ajit'ani. Both belong to the 'it may be'-type (cf. 301), and the only difference is that jat'ani is based on the copula $j a$ 'be', whereas ajit'ani is based on the full verb un 'become, be'. However, there is a striking meaning difference between them: ajit'ani, evidently the younger form, has free-choice meaning, but jat'ani has only functions further to the left on my implicational map. This correlates with different scopes: The functionally younger form ajit'ani occurs in phrase-external position, i.e. has scope over the phrase, whereas the older form jat'ani always stands next to the interrogative word, i.e. has scope only over this word.

Lezgian (Haspelmath 1993a: 194)
a. hitin mani ajit'ani what.kind song indef 'any kind of song'
b. sa hitin jat'ani mani
one what.kind indef song
'some kind of song'
Analogously, in Japanese the indefiniteness marker - $k a$ occurs inside case particles, whereas -mo and -demo occur outside. The marker -ka, which has uses
to the left of the implicational map and is presumably older, has narrower scope:
(331) Japanese

$$
\begin{array}{lll}
\text { a. dare-ka-ni } & \text { 'to somebody' } \\
\text { b. dare-ni-mo 'to nobody' } \\
\text { c. dare-ni-demo 'to anybody' }
\end{array}
$$

### 6.3.4. Paradigmaticity

There is usually a very small set of indefiniteness markers (at most four or five) that are strongly grammaticalized, but there is a much larger set of indefiniteness markers with a low degree of grammaticalization in many languages. For example, English has a core system consisting only of some-, anyand no-, but at the periphery there are various forms such as wh-ever, God knows wh-, no matter wh-, and others. Sometimes these weakly grammaticalized, peripheral forms are not fixed in their internal structure. For example, in older Latin there is not only the form qui-vis 'anyone', with the indefiniteness marker vis (2nd singular indicative of velle 'want'), but similar expressions with other tense-mood forms of velle are attested as well:
(332) Latin
a. $\quad \underset{\text { lord winus vino }}{\text { Dot }}$ quid $\begin{aligned} & \text { volet } \\ & \text { what } \\ & \text { wants daciet. (Cato R.R. 47) }\end{aligned}$ 'The lord will do what he wants (=anything) with the wine.'
b. Facile cuj velles tuam causam probares. (C. Verr. easy whom:dat want:2sg your cause prove:2sg 'You can easily prove your cause to anyone (=to whom you want).'

Similarly, in modern French there is not only the weakly grammaticalized je ne sais qu- 'I don't know wh-' (e.g. 297a), but other pronominalized subjects (on 'one', elle 'he') are also possible, or different tense forms of the verb savoir 'know' (Grevisse 1986: § 373).
(333) French

one doesn't know where.'

| b. | $C e$ | mariage, | $c^{\prime}$ | était | un | point | de |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| départ vers |  |  |  |  |  |  |  | | this | wedding | it | was a | point | of |
| :--- | :--- | :--- | :--- | :--- | :--- |
| departure | toward <br> elle <br> she | ne neg savait quelle vie. |  |  |  |

'This wedding was the beginning of she didn't know what
kind of

This freedom of choice is no longer possible in indefiniteness markers with a high degree of grammaticalization.

### 6.3.5. Bondedness

Increase of bondedness between two expressions is the gradual transition from juxtaposition (where both are independent words) to cliticization and affixation, and possibly on to internal modification. It is often hard to tell which degree of bondedness an indefiniteness marker has, but there is no doubt that indefiniteness markers start out as (sequences of) independent words and end up as affixes. To give just one example, the Russian marker by to ní bylo (e.g. in gdé by to ní bylo 'anywhere') still has its own stress, whereas the marker -nibud' (e.g. in gdé-nibud' 'somewhere, anywhere') is stressless and thus at least a clitic, if not a suffix. The higher degree of bondedness of -nibud' (which is also reflected in its spelling) again correlates with its higher degree of desemanticization.

### 6.3.6. Paradigmatic and syntagmatic variability

With increasing grammaticalization, the items undergoing the change become increasingly obligatory, and there is less and less choice between different members of a paradigm. This parameter is not so easy to illustrate in the domain of indefiniteness markers because there are no syntactic environments that require an indefinite pronoun (in contrast to cases or agreement categories, for instance, which are obligatory under certain syntactic conditions, independently of their meaning). But one might perhaps say that, for example, weakly grammaticalized free-choice pronouns leave the speaker more freedom to select between them (e.g. between Dutch wie dan ook, wie ook, wie ook maar, onverschillig wie, om het even wie, gelijk wie, all meaning 'anyone'), whereas strongly grammaticalized ones allow fewer alternatives (e.g., there is no alternative to Dutch iemand 'someone' in iemand is gekomen 'someone came').

Syntagmatic variability, i.e. increasing fixation of order, cannot be observed in indefiniteness markers because the source constructions already show fixed word order, so this parameter is vacuous in our case.

### 6.3.7. The explanatory power of grammaticalization

The paths of grammaticalization that we have seen in this section allow us to formulate two types of diachronic explanations: parochial and universal explanations. The parochial explanations concern facts of individual languages that become clear once they are viewed against the background of grammaticalization theory, e.g. the fact that the Russian indefiniteness marker nibud' contains the negative marker ni and the root bud' 'be', or the fact that the Albanian indefiniteness marker -do is homonymous with do 'want'. These facts are of course not part of the linguistic knowledge of the speakers of these languages, but in the present context that does not mean that they are automatically uninteresting.

At another level, grammaticalization also explains universal or crosslinguistically widespread properties of indefinite pronouns. For example, the fact that indefinite pronouns are so often based on interrogative pronouns is
explained (at least in part) by the source structures identified in $\S 6.2$, which contain embedded interrogative, free relative and parametric concessive conditional clauses, and these three clause types usually contain an interrogative pronoun. But the strongest predictions are made by the general tenet of grammaticalization theory that there is a correlation between the degrees of grammaticalization of the six parameters of $\S$ 6.3.1. The overall prediction is that if an element is more grammaticalized than another element on some parameter, then it is grammaticalized also on all other parameters (or at least not less grammaticalized). We have already seen some examples of such correlations in § 6.3.2-6, and some more evidence will be presented in § 6.4.

### 6.4. Desemanticization: The Semantic Side of Grammaticalization

### 6.4.1. Three competing theories of semantic grammaticalization

In Lehmann's systematization of grammaticalization processes, the semantic aspects are subsumed under 'loss of integrity', i.e. Lehmann stresses those aspects of semantic development that have been characterized as 'bleaching' (Givón 1975), 'generalization', or 'weakening' (Bybee and Pagliuca 1987) of meaning. Other authors have put the emphasis on other aspects of semantic grammaticalization. Thus, Heine et al. (1991) see metaphorization as the main driving force behind semantic change associated with grammaticalization. For example, often concrete spatial expressions like 'head' come to be used as local relators with abstract meanings like 'on', 'in front of', or 'before', or a concrete spatial verb like 'go (to)' comes to express future meaning. Traugott (1988), by contrast, emphasizes the role of 'pragmatic strengthening' in the development of grammatical meaning. For instance, she assumes that the semantic extension of English while from a strictly temporal subordinator to an adversative one ('whereas') has to do with grammaticalization. It would be nice if the evidence of grammaticalization of indefinite pronouns helped to resolve the theoretical issue, and indeed it does.

Most of the semantic changes that are found in indefinite pronouns and that are part of the grammaticalization process are clear instances of weakening or generalization of meaning, so the evidence from indefinite pronouns favors the views of Lehmann, Bybee and Pagliuca, and Givón. In contrast, there is no evidence whatsoever for metaphorization in indefinite pronouns - the source structures of $\S 6.2$ are already rather abstract, so there is no change from concrete to abstract here. And those instances of pragmatic strengthening that we do find in indefinite pronouns are not connected with grammaticalization appreciative meanings like 'some important person' for someone, and depreciative meanings like 'an unimportant person' for anyone are not linked to grammaticalization. Indeed, they are rarely conventionalized, so that there is rarely any semantic change. (These senses are discussed in $\S 7.5 .4$ below.)

None of the three theories of semantic grammaticalization has made crucial use of indefinite pronouns (although Lehmann (1982a: 51-6) discusses them), so the fact that the weakening/generalization hypothesis can accommodate this new case is a point in its favor.

The semantic development of indefinite pronouns can be characterized as 'generalization' in that indefinite series are often diachronically extended to more functions on the implicational map of chapter 4, thus becoming more
general. As mentioned in § 4.4, the implicational map makes predictions about the route of the change: Indefinite series can extend only to functions that are adjacent to those that it already covers, and the extension is incremental, i.e. the marker is extended only to one new function at a time (cf. Croft et al. (1987) for a programmatic proposal along these lines).

### 6.4.2. Extension from 'free choice'

The clearest cases of generalization of the meaning of indefinite pronouns involve indefinites whose original function was that of free choice, and which were then extended to other functions to the left of 'free choice' on the map. The extension thus proceeds from right to left on the scale in Figure 19. This scale is identical to the map of chapter 4 except that the two negation functions are missing. Below the scale, I give some examples of indefiniteness markers whose original function must have been 'free choice' because they come from one of the sources in § 6.2.2-4.

Figure 19. Diachronic extension of indefinite series from 'free choice'


The first three examples show different stages of extension to the left. The fourth example, Russian -libo, covers one more function on the left, but on the other hand, it no longer has the original free-choice function. Russian -nibud' has even lost the comparative function. The next two examples, Lezgian ajit'ani and French quelque, in addition have the 'specific' function (see Foulet (1919) for the semantic development of quelque), and Czech -si only has the 'specific' function (but recall that its etymology is not certain, cf. § 6.2.3.1).

Thus, an original free-choice indefinite may be extended all the way to the opposite end of the scale. However, generalization of the meaning is clearly not the whole story, because indefinites that have been extended to functions in the left part of the scale lose some of the original functions in the right part. Rather than growing larger and larger, the area covered by an indefinite shifts to the left, like a window that opens up the view on a limited area of the semantic space. But the shift of the window from right to left is apparently unidirectional - indefinites do not acquire the comparative or free-choice functions by semantic extension. How can we understand this leftist orientation of indefinites if it is not motivated by generalization?

Here we have to make use of the notion of 'weakening'. The functions on the right side of the scale are in some sense 'stronger' than the functions in the middle and on the left, and a change from right to left means a loss of 'strength', just as predicted by the weakening view of semantic grammaticalization. To express this visually, the scale in Figure 19 can be represented as a 'trough' (cf. Figure 20), where the stronger functions are above the weaker functions. The diachronic extension is restricted to a downward movement in this visualization.

Figure 20. Diachronic extension of indefinite functions from 'free choice': the 'trough' model
free choice
comparative
question/
conditional
weakening
specific non-specific

### 6.4.3. Semantic change as weakening

After these rather abstract considerations, let us now ask what 'weakening' means in semantic terms.
6.4.3.1. Loss of focusing and scalarity. If we just look at the free-choice function and at the irrealis-non-specific function, it is immediately clear that semantic substance has been lost. Consider the minimal contrast in (334).

## a. (free choice) You may invite anyone.

b. (irrealis non-specific) You may invite someone.

The free-choice indefinite in (334a) expresses the endpoint of a pragmatic scale, as we saw in § 5.5.5, but no pragmatic scale is associated with the simple nonspecific indefinite in (334b). Both share the feature of non-specificity - recall that free-choice indefinites are also non-specific (cf. § 3.2.6). In those cases where an original free-choice indefinite has acquired the irrealis non-specific function, we can say that the semantic development consists in the loss of focusing and thereby of the semantic component of the pragmatic scale and its endpoint. Only the semantic component of non-specificity is preserved. This development must have taken place, for example, in Russian -nibud'- and -liboindefinites.
6.4.3.2. Loss of non-specificity. Desemanticization may also be understood as loss of semantic substance in the further development from the simple nonspecific function to the 'specific-unknown' function. Consider the minimal contrast in (335).
(335) a. (irrealis non-specific) She may go somewhere.
b. (specific unknown) She went somewhere (I don't know where).

If an indefinite that has the simple non-specific function is extended to the 'specific-unknown' function, it loses the feature of non-specificity. Since the referents of non-specific indefinites are also necessarily unknown to the speaker, the 'unknown' feature is common to both, and it is the only feature that is left after non-specificity has been lost. This development must have taken place in Portuguese qualquer-indefinites, for example.
6.4.3.3. Loss of unknownness. Finally, even the feature of unknownness may be lost, and then the indefinite may even be used in the specific-known function. This development must have taken place, for example, in Romanian $v a$-indefinites. (Of course, one could also think of this change as the acquisition of the new feature 'unknown', so this extension is not a strong argument for the view that semantic change in indefinites generally means loss of semantic features.)
6.4.3.4. The comparative. In the preceding subsections, I hope it has become plausible that the extension of the functions of original free-choice indefinites can be understood as the loss of semantic substance. The developments are summarized in (336).
(336) loss of semantic substance of original free-choice indefinites free choice > simple non-specific : loss of focusing and scalarity simple non-specific $>$ specific unknown : loss of specificity specific unknown $>$ specific known : loss of unknownness

But so far I have not accounted for the two intermediate functions 'comparative' and 'question/ conditional'. Unfortunately, the semantics of the comparative function is not clear to me, so I cannot say much on its semantic development here. However, it has been remarked several times in the literature that the comparative function is intermediate between free choice and negative polarity (cf. §5.6), and if that is correct, then whatever explains the shift from free choice to negative polarity will also explain the shift from the free-choice function to the comparative function, and from the comparative to the question/ conditional function.
6.4.3.5. Negative polarity: questions and conditionals. The semantic difference between free-choice and negative polarity has been described above as the difference between non-reversed and reversed pragmatic scales. It is not clear that this difference can be described as 'weakening' in any way, and I can see no other reason why there should be a unidirectional development from nonreversed to reversed scales. Thus, I have to admit that I have no good explanation for the fact that free-choice indefinites commonly acquire the negative-polarity function, whereas negative-polarity indefinites are not generally extended to the free-choice function.

However, semantic weakening can be observed in questions and conditionals in a different way. Recall from § 5.7.2 that both emphatic and non-
emphatic indefinites may occur in these contexts, where they have the same truth conditions but subtly different meanings, as in (337).

Russian
a. Esli ty uslyi to-nibud', razbudi menja.
if you hear what-indef wake:impv me 'If you hear anything, wake me up.'
b. Esli ty uslyi to by to ni bylo, razbudi menja.
if you hear what indef wake:impv me 'If you hear anything at all, wake me up.'

In § 5.7.2 we saw that the meaning difference between these sentences can be characterized as 'presence vs. absence of scalarity'. In (337b), to by to ni bylo is the endpoint of a pragmatic scale, hence a more emphatic reading results ('if you hear the slightest noise, e.g. if a cat meows'). At some stage the indefinite in (337b) may lose its emphatic value and become equivalent to (337a) - this must indeed have happened in Russian, because etymologically -nibud' is completely analogous to by to ni bylo (§ 6.2.3.1).

Thus, the question and conditional functions serve as a bridge between the obligatorily scalar free-choice and comparative functions, and the obligatorily non-scalar irrealis-non-specific function.

### 6.4.4. Extension from 'dunno'

In addition to the source constructions that yield scalar-endpoint indefinites (§ 6.2.2-4), there is also one source construction that yields specific indefinites: the 'dunno' type of § 6.2.1. As I showed in § 6.2.1.2, the original function of recently grammaticalized 'dunno'-indefinites is 'specific unknown'. Like the scalarendpoint indefinites, 'dunno' indefinites undergo semantic extension when they are strongly grammaticalized, and as a result they may come to cover a substantial portion of the implicational map, and perhaps lose their original function. However, here it is much more difficult to make generalizations because such cases are not common. In the modern European languages, only Lithuanian $k a-$, and Albanian di-, and perhaps Slavic $n-$, Scandinavian någon (Swedish)/nokkur (Icelandic) represent strongly grammaticalized 'dunno' indefinites. It appears that 'dunno' indefinites resist stronger grammaticalization for some reason.

But Lithuanian $k a$ - and Albanian di- can also be used in non-specific functions and in questions and conditionals, and so can neiz-indefinites in older German. This is exemplified in (338-39).
(338) Lithuanian
a. Ar tu ka-ka matai?
q you indef-what you:saw
'Did you see anything?'
b. Jei tu ka-ka matai, pasaky-k man.
if you indef-what you:saw tell-impv me 'If you see anything, tell me.' older German neiz- (neusz) (Grimm's dictionary, s.v. neizwaz) a. Nach solchem rumor... fraget er seinen nachbarn, ob ihm

```
    whether
    according such rumor asks he his neighbor
he
neusz was gebrest.
indef what lacks
'According to this rumor he asks his neighbor whether he
```

lacks
anything.'
b. Ich müestemich wol imer schamen, solte ich

I should refl prt always be.ashamed should I
fürhten neizwaz.
fear something
'I would have to be ashamed forever if I were afraid of anything.'

Thus, in addition to the right-to-left extension of Figure 20, we also have to assume left-to-right extension as shown in Figure 21.

Figure 21. Diachronic extension of indefinite functions from 'dunno'

| specific <br> unknown | irrealis <br> non-specific conditional | question/ |
| :--- | :---: | :---: |

If there is both right-to-left extension and left-to-right extension on the map, does that mean that the semantic grammaticalization is not unidirectional? I do not think so. I have argued above that the most important semantic change in the grammaticalization of indefinites is semantic weakening, and this is a dimension that is not directly represented in Figure 21. In the weakening of the original 'dunno' meaning, the most important change is that the speaker's lack of knowledge is no longer emphasized, and similarly, in the weakening of freechoice indefinites, the most important change is the loss of scalarity. Thus, instead of two opposite movements in one dimension, what seems to be going on is unidirectional movement in two dimensions, from strong (or emphatic) to weaker (or less emphatic). This can be represented by the 'trough model' in Figure 22.

Figure 22. Diachronic extension of indefinite functions from 'free-choice' and 'dunno': a trough model

| emphatic/ emphatic <br> stronger <br> comparative |  |  |
| :--- | ---: | :--- |
| unknown |  |  |
| weaker/ | specific irrealis | question/ |
| non-specific | conditional |  |

non-emphatic
It must be admitted that this visual representation cannot capture all the relevant details. But it does seem useful as an approximation, and it drives home the point that semantic grammaticalization of indefinite pronouns is primarily weakening of emphasis, not metaphorization or pragmatic strengthening.

In addition, the model in Figure 22 helps us understand an observation that was made above in $\S 4.5$ (Principle 1): In the middle of the implicational map, indefinite pronoun series always express more than two adjacent functions. This seems to be due to the fact that the functions in the middle, which are the functions at the bottom of the trough in Figure 6.4, are 'weakest', i.e. least distinctive, and hence least likely to be expressed by a unique indefinite series that has no other functions.

### 6.5. From Free-Choice Indefinite to Universal Quantifier

In some languages, the indefinites that express the free-choice functions can also be used as true universal quantifiers, corresponding to English every, everyone, everything, etc. Since the meaning distinction between 'any' and 'every' is often quite subtle, we can be sure that we are dealing with a truly universal use only if the expression can be used in contexts that do not allow free-choice indefinites, as in (340).
(340) German
a. Der Vater gab jedem Kind einen Apfel. 'The father gave every child an apple.'
b. Jeder Mensch muss sterben.
'Every human being must die.'
But how can we be sure that the German determiner jeder is also a free-choice indefinite? True, it can be used to translate English free-choice any, as in Jeder Idiot würde das sehen 'Any idiot would see that'. But we saw in § 3.3.4 that some languages do not have special free-choice indefinites and use universal quantifiers in their place. In the case of German, a convincing argument is that jeder may also be used in the indirect-negation function, where it cannot be paraphrased by 'every' (cf. 341). In such cases, jeder also combines with noncountable nouns.
(341) German
a. ohne jede Hilfe
' without any help'
b. Sie leugnete jede Schuld.
'She denied any guilt.'
Thus, German jeder spans the four functions 'indirect negation', 'comparative', 'free choice', and 'universal'. We thus have reasons to add an additional function to our implicational map, which would now look as in Figure 23, where the distribution of jeder is shown.

Figure 23. German jeder on the extended implicational map direct
question indirectnegation

I have not found many languages where one expression covers both the indirect-negation function and the universal function, but it is intuitively highly plausible that 'universal' should be located next to 'free choice' on such an extended implicational map.

This would also account for the fact that free-choice indefinites may diachronically evolve into universals, as I argued in Haspelmath (1995). Again, the evidence for this development is rather indirect, but a number of languages have universal quantifiers which consist of the same formal elements as (freechoice) indefinite pronouns and hence must go back to one of the source constructions identified in § 6.2.2-3 and § 7.1. Compare the following cases:

```
(342) a. Romanian fiecare 'every(one)'
            care 'who, which' fie 'be (3sg subjunctive)'
b. Latin quisque 'every'
        quis 'who, which'-que 'and, also'
    c. Gothic hwarjizuh 'every'
        hwarjis 'which' -uh 'and, also'
    d. Old Church Slavonic
        ku-ido 'every'
        ku 'which' -ido [meaning unknown]
e. English each
        < Old English \(x l c<\) *a-whilc 'ever-which'
        (the strengthened form ever-each later became every)
```

The semantic change from 'any' to 'every', which must be posited to account for these cases, also involves the loss of the semantic feature of scalarity, like the change from 'any' to 'some' that was posited in $\S$ 6.4.2. However, in this case the semantic feature of non-specificity is also lost, and the implicature of universal quantification is strengthened to a semantic component (in contrast to the change from 'any' to 'some', where the universal implicature is also lost, but non-specificity is preserved).

Thus, the meaning of free choice can develop in two directions: to 'some', and to 'every'. Both these developments seem to be unidirectional. 'Some' cannot develop into free-choice 'any', and 'every' cannot develop into 'any', either.

## 7

## Further Sources of Indefinite Pronouns

This chapter deals with diachronic sources of indefinite pronouns that cannot be accounted for by grammaticalization. First I discuss indefinite pronouns marked by scalar focus particles like 'even' and 'at least' (§ 7.1), and then I discuss and reject the possibility that the disjunctive conjunction 'or' may be used as an indefiniteness marker (§ 7.2). In § 7.3 I look at bare interrogatives that are used as indefinites, and in § 7.4 I treat reduplicated indefinite pronouns. These last two types are not so common in European languages, but they are widespread elsewhere. Although I do not have a good explanation for the form-meaning relation in either of these form types, I formulate a number of interesting generalizations. Finally, § 7.5 deals with some further diachronic issues, such as the change from generic nouns and 'one' into indefinite pronouns, and the borrowing of indefinite pronouns.

### 7.1. Indefinite Pronouns Marked by Scalar Focus Particles

### 7.1.1. The facts

In many languages there are indefiniteness markers that are identical to scalar focus particles meaning 'even'. Since normal additive focus particles like 'also' often have a scalar value, too (König 1991: 68), it is not necessary or even possible to strictly separate the meanings 'also' and 'even'. As a rule, when an indefiniteness marker is identical to a form that is glossed 'also' in a grammar or dictionary, I assume that its scalar use ('even') is responsible for its functioning as an indefiniteness marker. (Such particles often also have the meaning 'and', König 1991: 6-66.)

Below is a selection of such cases from a wide variety of languages (supplementing the earlier lists in Coyaud and Aït Hamou (1972, 1976), König (1991: 67), Gil (1993)). In most cases, focus particles are added to interrogative pronouns.
(343) additive focus particles on interrogative pronouns

| Serbian/Croatian | i-ko | 'anyone' | i'and, also, even' |
| :--- | :--- | :--- | :--- |
| Indonesian | siapa-pun | 'anyone' | -pun 'also, even' |
| Tagalog | kahit na sino | 'anyone' | kahit (na) 'even' |
| Hittite | kuis -ki | 'someone' | -ki 'and, also' |
| Even | Ni-de | 'someone' | -dal-de 'and, also' |
| Kannada | yaar-uu | 'anyone' | -uu 'and, also' |
| Ancash Quechua | ima-pis | 'anything' | -pis 'also, even' |
| Selkup | ämtä kuty | 'nobody' | ämtä 'even' |
| Nivkh | aN-hagin | 'nobody' | hagin 'even' |
| Gooniyandi | ngoorndoo-ngaddaya | 'someone' | -ngaddaya 'also' |
| Sanskrit | kaś cana | 'anyone' | cana 'even' |
| Japanese | nani-mo | 'nothing' | -mo 'also' |
|  | nan-demo | 'anything' | -demo 'even' |

Less frequently we find scalar additive focus particles added to generic nouns or the numeral 'one' (cf. 344), or to (non-derived) indefinite pronouns (cf. 345).
(344) additive focus particles on generic nouns and 'one'

| Chechen | addam a | 'nobody' | cf. adam | 'person' |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| Hebrew | af elad | 'nobody' | cf. elad af | 'one' 'even' |
| Lezgian | (sa) kas-ni | 'nobody' | cf. (sa) kas | '(one) person' |
|  |  |  | -ni | 'and, also' |

(345) additive focus particles on (non-derived) indefinite pronouns Hindi/Urdu koii bhii 'anybody' cf. koii 'someone' bhii 'also, even'
Dutch ook maar iemand 'anybody' cf. iemand 'someone' (cf. Paardekooper 1979) ook maar 'even, at least'

While the use of a focus particle meaning 'even' as an indefiniteness marker is probably most common, some languages use a scalar focus particle meaning 'at least'. A typical example is Russian $x o t^{\prime}$ ', which is used as in (346) (cf. Parš in $(1987,1988)$ for detailed discussion of Russian $\left.x o t^{\prime}\right)$.
(346) Russian (cf. Parš in 1987: 72)
a. Skažite xot' slovo.
say at.least word
'Say at least a word.'
b. Ja rabotaju s utrado več era, soderžu tebja,- mogu že ja

I workfrom morning till evening support you can PRT I
imet' xot'to udovol'stvie, č tob obo mne zabotilis'.
have at.least that pleasurethat aboutme care:3PL
'I work from morning till evening, I support you, - so I should at
least have the pleasure that somebody cares for me.'
c. Ona gotova xot' v pustynju bežat' so mnoj.
she ready even in desert run with me
'She is ready to run away even into a desert with me.'
As example (346c) shows, xot' can also mean 'even' in certain environments. In contrast to English even and corresponding expressions in other languages like German sogar, French même (also Russian daž e), which characterize the value of its focus as high on a pragmatic scale, Russian $x o t^{\prime}$ can also be used when the value of its focus is characterized as low on a pragmatic scale, as in (346a-b), i.e. only medial scalar values are not possible.

In several languages, words that also serve as focus particles of the xot' type are used as indefiniteness markers, as the examples in (347) show.
(347) xot'-type focus particles on interrogative pronouns

| Russian | xot' $k t o$ | 'anyone' | xot' | 'at least' |
| :--- | :--- | :--- | :--- | :--- |
| Finnish | vaikka kuka | 'anyone' | vaikka | 'at least' |
| Modern Greek | kan-énas | 'anyone' | kan | 'at least' |
| Latvian | kaut kas | 'something' | kaut | 'at least' |
| Hungarian | akár-ki | 'anybody' | akár | 'at least' |
| Nenets | xibja-xart | 'nobody' | -xart | 'at least' |


| Lezgian | wuž $\hat{\text { a ajit'ani }}$ | 'anybody' | रु ajit'ani | 'at least' |
| :--- | :--- | :--- | :--- | :--- |
| Kannada | yaar-aadaruu | 'anybody' | -aadaruu | 'at least' |
| W. Greenlandic | suna-luunniit | 'anything' | -luunniit | 'at least' |
| Yakut | kim eme | 'somebody' | eme | 'at least' |

### 7.1.2. Two possible pathways

It is not immediately obvious why a focus particle meaning 'even' or 'at least', when combined with an interrogative pronoun, should yield an indefinite pronoun. One avenue of explanation that one might try is to relate the use of focus particles as indefiniteness markers seen in § 7.1.1 to the well-understood cases of § 6.2.2-3. Indeed, additive focus particles are also widely used in parametric concessive conditional clauses (e.g. 304-06), so perhaps the cases of additive focus particles in (343) can be accounted for in the same way as the indefiniteness markers in (310-14). That is, the focus particles are used to mark concessive conditional clauses, and then become associated with the interrogative word. Indefinite pronouns containing the focus particle result from the reduction of concessive conditionals. König (1991: 67-8) seems to opt for such an explanation.

Similarly, based on the observation that many of the $x o t^{\prime}$-type focus particles in (347) derive from 'want' or 'it may be', one could suggest that these cases should also be related to the well-understood cases of § 6.2.2.-3. The etymology of some of the $x o t^{\prime}$-type focus particles of (347) is given in (348-50).
(348) 'want'

Russian $x^{\prime} t^{\prime}(<x o t j a)$ < converb of xotet' 'want'
Hungarian akár < some form of akar 'want'
Lithuanian nors <noris, converb of noreti 'want'
(349) 'it may be'

Lezgian $\hat{x} a j i t^{\prime} a n i \quad<\hat{x} a-j i-t^{\prime} a-n i$ (lit.) 'even if it is'
Kannada -aadaruu <aa-d-ar-uu (lit.) 'even if it becomes/is'
(350) 'even if'
M. Greek kan < Classical Greek kán < kaì eán 'even if'

Thus, the similarity between indefiniteness markers and xot'type focus particles noted in (347) could be explained through their common origin. Schematically, we have the following possible pathways that would explain the formal parallels between indefiniteness markers and focus particles:
(351) 'even'-type focus particles: two possible pathways
a. focus particle $\rightarrow$ indefiniteness marker
b. focus particle $\rightarrow$ marker of non-specific relative pronoun/ concessive conditional clause $\rightarrow$ indefiniteness marker
(352) $x o t^{\prime}$-type focus particle: ${ }^{i}$ two possible pathways
a. focus particle $\rightarrow$ indefiniteness marker focus particle
b. 'you want/it may be'

Option (b) of (351) and (352) is more attractive than option (a) for two reasons: First, option (b) would allow us to reduce the occurrence of focus particles as indefiniteness markers to the pathways established in $\S 6.2$, so that no additional source for indefinite pronouns has to be posited. Secondly, option (a) is not as well understood semantically. In Haspelmath (1991, 1995) I assumed that the pathway in (b) was universally correct, but I now realize that option (a) must be possible, too. Several reasons speak in favor of this.

First, it will be shown in $\S 8.3 .1$ that negative scalar focus particles play an important role in deriving negative indefinites, and in that case the direct combination of a focus particle with its base (corresponding to the (a) option above) is the only plausible possibility. So there is independent evidence that indefinite pronouns can be formed by simply combining a focus particle and its base, without an intermediate source construction as in $\S$ 6.2.

Second, the source constructions of $\S 6.2$ can only explain indefinite pronouns based on interrogative pronouns, not indefinite pronouns based on generic nouns or (non-derived) indefinite pronouns that we saw in (344-45). (But of course, it could also be that interrogative-based indefinites are derived according to (b), whereas non-interrogative-based indefinites are derived according to (a).)

Third, and perhaps most importantly, the clausal source constructions of § 6.2 cannot account for the forms of the resulting indefinite pronouns.

Consider first the case of an additive focus particle, which according to option (b) is first used in a parametric concessive conditional clause, which is later reduced, as shown schematically in (353) (in pseudo-English).
(353) You can go [somewhere], where even it may be. >

You can go where-even.
This scenario can explain indefinites like Dutch wie dan ook, German wer auch immer, because parametric concessive conditional clauses do show the additive focus particle ook/auch in the same place, i.e. after the WH-word. But a problem arises with indefinites like Tagalog kahit na sino and Serbo-Croatian i-ko, where the focus particle precedes the WH-pronoun. In these languages, parametric concessive conditional clauses are not marked by additive focus particles preceding the WH-pronoun, and there is no evidence that they ever were.

Fourth, in many verb-final languages, parametric concessive conditional clauses are formed by suffixing an additive focus particle to the whole clause, i.e. to the verb, as exemplified in (354) (see Haspelmath and König (to appear)).
(354) Huallaga Quechua (Weber 1989:370)

May-taaywa-r-pis yus-ninchi ayura-yka:-ma-nchi. where-ACC go-CONV-even God-1PL.INCL help-IMPF-1.OBJ-1PL.INCL
'Wherever we go, God is helping us.'
It seems somewhat less likely that a clause like mayta aywar-pis in (354) should be reduced to mayta-pis, because the WH-word mayta and the focus particle -pis are not adjacent in the presumed source structure. And consider the case of Kannada, where concessive conditionals have the same form as in Quechua:
(355) Kannada (Sridhar 1990: 312)

Avalu estu heeli-d-ar-uu keel-al-ee illa.
she how.much tell-PAST-COND-even listen-INF-EMPH NEG
'No matter how much she was told, she didn't listen.'

By turning such a clause with 'be/become' as its predicate into an indefinite pronoun, we get yaar-aadaruu 'anyone', completely as expected. But notice that Kannada also has yaar-uu, with the additive focus particle suffixed directly to the WH-pronoun. It seems unlikely that the same source construction should have led to two quite different resulting indefinites.

Fifth, consider indefiniteness markers that are identical to $x o t^{\prime}$-type focus particles. One problem for option (6352b) is again the position of the indefiniteness marker. If indefiniteness markers of the types 'want'/'it may be' arise through the scenario in (356), as proposed in § 6.2.2-3, then one would expect them to become frozen in the position after the interrogative pronoun.
(356) a. You can go [somewhere], where(ever) it may be. >

You can go where-it-may-be.
b. You can go where(ever) you want.

You can go where-you-want.
This is indeed the case in five languages in (347) (Nenets, Lezgian, Kannada, West Greenlandic, Yakut), but not in Russian, Finnish, Latvian, and Hungarian, which argues against option (352b) at least for these languages.

Sixth, according to option (352b), the same source construction would have led independently to the indefiniteness marker and the focus particle in all the cases in (347). It is certainly possible to imagine this, but it would constitute a remarkable coincidence. For even if a language chooses essentially the same source construction for both structures, it is by no means guaranteed that they will end up having the same form. For example, in French and in Spanish, the resulting forms are somewhat different despite the similar source constructions:
(357) French (<'it may be')
a. (indefiniteness marker) qui que ce soit
b. (focus particle)
$L^{\prime}$ homme doit oublier, ne serait-ce que pour un bref instant,
the man must forget at.least for a brief moment
son souci du painquotidien.
his concern of:the bread daily
'A human being has to forget, at least for a short while, his or her concern for the daily bread.'
(358) Spanish (<'want')
a. (indefiniteness marker) cual-quiera
b. (focus particle)

Diga siquiera una palabra.
say at.least a word
'Say at least a word.'
By contrast, in all nine cases of (347) the form of the indefiniteness marker is exactly identical to that of the focus particle.

Seventh, some of the forms of (347) clearly show that they originated as focus particles. In (357-58) (b), the focus particle is still overtly marked as conditional: In Spanish by means of the prefix si- (cf. si 'if'), in French by means of the conditional verb form serait and subject-verb inversion in serait-ce (cf. English
were $i t$ ). The scenarios in (369) seem to represent plausible paths by which such focus particles arise.
a. Say [something], (even) if it is (only) one word. >

Say if-it-is(-only) one word. (= 'Say at least (xot') one word.')
b. Say something, (even) if you want (only) one word. >

Say if-you-want(-only) one word. (='Say at least (xot') one word.')
Three of the forms in (347) show traces of the source constructions in (359): The clearest case is Greek kan, which comes from kaì eán 'even if' and is derived via (359a) by omission of 'it is'. Russian xot' and Hungarian akár are also naturally explained in terms of (359b), because both forms are originally imperative forms of 'want'. ii Now an imperative form of the prototypically non-agentive verb 'want' seems to be a strange thing, until we recall that imperative sentences are commonly interpreted as conditionals if the right pragmatic conditions are present (cf. also König (1985) on the concessive conditional interpretation of imperative sentences). Thus, for several of the forms of (347) we have conclusive evidence that they were originally created by a scenario like (359) as focus particles, so option (352a) must be correct for these forms.

All these arguments only show that at least SOME of the indefiniteness markers of (343) and (347) must have been created by direct combination of the base and the focus particle. For several indefiniteness markers, both scenarios seem equally plausible, e.g. for Lezgian $\hat{x} a j i t^{\prime} a n i ~ a n d ~ K a n n a d a ~-a a d a r u u . ~$ These both have a conditional component (Lezgian -t'a 'if', Kannada -ar- 'if'), but this is not decisive evidence for the focus-particle-first account because in these languages, parametric concessive conditional clauses also make use of the conditional verb form, unlike in typical European languages.

### 7.1.3. Towards an explanation

As the discussion of the preceding section has shown, some indefinite pronouns are created by combining an interrogative pronoun with a scalar focus particle of the type 'also, even' or of the type 'at least'. It is somewhat puzzling that interrogative pronouns should be used in such combinations, and I cannot offer a completely satisfactory explanation for this fact here. The use of interrogative pronouns has been satisfactorily explained for the indefiniteness markers arising from one of the source constructions in $\S 6.3$, hence the temptation to reduce the cases of $\S 7.1 .1$ to these source constructions (to which I succumbed in Haspelmath 1991, 1995). But as we have just seen, this does not account for several formal properties of the resulting indefinite pronouns.

In approaching the question of why interrogative pronouns should be used with focus particles, one has to take into account the widespread use of bare interrogative pronouns as indefinite pronouns in the world's languages, as documented and discussed in § 7.3. No conclusive explanation for this will be offered there, but at least one puzzle can be subsumed under another, independently existing puzzle. We can thus assume that in the cases of (343) and (347), we are not dealing with combinations of an interrogative pronoun plus a focus particle, but with combinations of an indefinite pronoun (which happens to be identical to an interrogative pronoun) plus focus particle. In this way, the indefinites of (343) and (347) are assimilated to the indefinites of (344$45)$, which clearly consist of indefinites plus focus particle.

Why scalar focus particles should combine with indefinite pronouns to yield indefinite pronouns with a special meaning is much easier to understand. We saw in § 5.5.5 that free-choice indefinites must be understood as denoting the low point on a pragmatic scale. But this is precisley the function of scalar focus particles: expressing an extreme point on some scale. If we look at the meanings of the indefinites in (343) and (347), we see that most of them express freechoice functions, negative functions, or negative-polarity functions, i.e. precisely those functions that are associated with a scalar endpoint. This is not true for all such indefinites, however. For example, Evenki Ni-de means 'someone, kto-to' ('anyone/kto-nibud' is Ni-wul), and Latvian kaut kas may mean 'something' or 'anything' (cf. Appendix A, section 18 for details). In such cases, it must be assumed that a semantic change analogous to that described in $\S 6.4$ has intervened.

Let us now consider how focus particles that are used as indefiniteness markers contribute to the meaning of indefinite pronouns. It does not seem to be an accident that many of the indefinites in (343-45) are primarily used in negative functions. In a negative context, pragmatic scales are reversed, and expressions denoting the low point on a scale acquire the meaning of nonexistence by implicature:
(360) Jebba did not see even something.
$=$ 'Jebba did not see anything.'
In this respect, indefinite pronouns (especially, apparently, bare interrogatives used as indefinites) may function like minimal-unit expressions ('a jot', 'a soul', etc.). While such minimal-unit words are generally more colorful expressions for insignificant entities, indefinite pronouns are also suitable for this function because their semantic content is also minimal. For almost any $X$, the statement Jebba saw $X$ tells us more about Jebba's visual impressions than the statement Jebba saw something. Thus, the negation of this statement, Jebba did not see something, can carry the implicature that Jebba saw nothing, especially if the scalar-endpoint value is reinforced by the scalar focus particle 'even'. The same can of course be said for other negative-polarity (i.e. scale-reversing) environments like conditionals and questions. Xot'type focus particles are semantically quite similar to 'even'-type focus particles, and in some languages they are not even distinguished (cf. (64c), where Russian $x o t^{\prime}$ is translated by English 'even').

It is of course not an accident that similar formal elements appear in the two different pathways that I have contrasted in this section. The fundamental semantic component contributed by the indefiniteness markers considered here is the endpoint of a pragmatic scale, and although this may be expressed by syntactically different means (concessive conditional clauses, free relative clauses, focus particles), the basic building blocks for expressing this idea are of the same type. Thus, ultimately the two distinct pathways of (351-52) (a-b) are closely related.

### 7.2. Indefinite Pronouns from 'Or'?

It has long been known to logicians that there is a close relationship between universal quantification and logical conjunction on the one hand, and between existential quantification and logical disjunction on the other (cf. Reichenbach
(1947: 92), Rohrer (1973), among many others). For a finite number of entities $x$, a universal statement is equivalent to a conjunction, and an existential statement is equivalent to a disjunction:
a. $(\forall x) \mathrm{f}(x) \equiv \mathrm{f}\left(x_{1}\right) \& \mathrm{f}\left(x_{2}\right) \ldots \& \mathrm{f}\left(x_{\mathrm{n}}\right)$
b. $(\exists x) \mathrm{f}(x) \equiv \mathrm{f}\left(x_{1}\right) \vee \mathrm{f}\left(x_{2}\right) \ldots \vee \mathrm{f}\left(x_{\mathrm{n}}\right)$

Now it looks as if in natural languages there may also be a connection between these logical types. A particularly intriguing example comes from Japanese, where both universal pronouns and indefinite pronouns are derived from interrogative pronouns with markers that are identical to coordinating conjunctions:
(362) Japanese

| a. dare-mo <br> nani-mo | 'everyone' | 'everything' |
| :--- | :--- | :--- | :--- |$\quad$ mo 'and, also'

The distribution of mo 'and' and $k a$ 'or' is exactly as suggested by (361). At first blush, it seems unlikely that this should be an accident. But can we say that Japanese mo expresses an extremely general meaning 'universality/ conjunction', and $k a$ expresses an extremely general meaning 'existentiality/ disjunction'? ${ }^{\text {iii }}$ In this section I argue against such a hypothesis, and I will indeed claim that the pattern in (362) is a coincidence (at least to some extent).

In $\S 6.2 .3$ and $\S 7.1$ we saw possible ways of explaining the use of 'and, also' in indefinite pronouns (especially of the free-choice type), and in $\S 6.5$ we saw that free-choice indefinites may become universal pronouns. The explanations offered there took as their point of departure the use of 'and, also' as scalar focus particles ('even'), not the use of 'and, also' as a coordinating conjunction. This analysis is thus incompatible with the hypothesis that there is a close connection between the pattern in (362) and (361). When we go beyond the Japanese data, the empirical evidence confirms that there is no direct formal connection between 'or' and existential indefinites, and between 'and' and universal pronouns.

First of all, although many languages have indefiniteness markers that are formally identical to disjunctive conjunctions, the situation in Japanese is quite exceptional. Consider the examples of indefiniteness markers that are identical to 'or' in (363).
(363) Indefinites whose marker is identical to 'or' (all interrogative-based)

| Japanese | dare-ka | 'someone' | ka | 'or' |
| :---: | :---: | :---: | :---: | :---: |
| Kannada | yaar-oo | 'someone' | -00 | 'or' |
| Korean | nwukwu-na | 'anyone' | -(i)na | 'or' |
|  | nwukwu-tunci | 'anyone' | -(i)tunci | 'or' |
| Russian | kto-libo | 'anyone' | libo | 'or' |
| Hungarian | akár-ki | 'anyone' | akár...akár | 'whether..or' |
| Portuguese | qual-quer | 'any' quer... | uer | 'either...or' |
| Basque edo-no |  | 'anyone' | edo | 'or' |
| Latvian | jeb-kas | 'anything' | jeb | 'or' |
| Rumanian | ori-cine | 'anybody' | ori | 'or' |
| Ossetic | či-fændy | 'anyone' | frndy | 'or' |


| Nanay uj-nuu | 'someone' | -пии | 'or' |
| :---: | :---: | :---: | :---: |
| Hausa kóo-mée | 'anything' | kóo | 'or' |
| W. Greenl. sumi-luunniit | 'anywhere | somew | other ${ }^{\prime}$ |
|  |  | -luun |  |

Most of the 'or'-indefinites in (363) are primarily free-choice indefinites, not non-emphatic indefinites like Japanese WH-ka. The only exceptions are Kannada and Nanay, which are specific (and partially Russian and West Greenlandic, insofar as these forms can also be used in irrealis-non-specific functions). Now this is not necessarily a conclusive argument against a connection of 'or'-indefinites with (361b), as long as one assumes that freechoice indefinites express existential quantification rather than universal quantification (cf. §5.2.1). ${ }^{\text {iv }}$

But not all languages with 'or'-indefinites also have 'also'-indefinites, and in those that do, the meaning relation between the two only occasionally corresponds to the equivalences in (361). In Figures 24.1-6, I repeat the distribution of 'or'- and 'also'-indefinites in the six languages of the 40language sample that have them.

Figure 24.1. Japanese

|  |  |  |  | direct |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| specific |  |  |  |  |  |
| known | specific <br> unknown | irrealis | non-specific |  | indirect | | negation |
| :--- |

Figure 24.2. Korean

|  |  |  |  | direct |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| specific |  |  |  |  |  |
| known | specific <br> unknown | irrealis | non-specific |  | indirect | | negation |
| :--- |

Figure 24.3. Kannada

|  |  |  |  | direct |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| specific |  |  |  |  |  |
| known | specific <br> unknown | irrealis | non-specific |  | indirect | negation

Figure 24.4. Nanay

| specific | irrealis <br> non-specific | question | indirect <br> negation | direct <br> negation |
| :--- | :--- | :--- | :--- | :--- |
|  |  | conditional | comparative |  |
|  |  |  |  | free choice |

Figure 24.5. Ossetic

| specific | irrealis <br> non-specific | question | indirect <br> negation | direct <br> negation |
| :--- | :--- | :--- | :--- | :--- |
|  |  | conditional | comparative |  |

Figure 24.6. Yakut

| specific | irrealis <br> non-specific | question | indirect <br> negation | direct <br> negation |
| :--- | :--- | :--- | :--- | :--- |
|  |  | conditional | comparative |  |
|  |  |  | free choice |  |

It is quite striking how different the 'or'-indefinites and the 'also'-indefinites are in different languages. While Kannada, Nanay and Yakut are like Japanese at least in that the 'or'-indefinite is further to the left on the map and the 'also'indefinite is further to the right, not even that is true for Korean and Ossetic. Thus, the Japanese situation does not even seem to represent a tendency.

But if (361) is not the explanation for 'or'-indefinites, why is 'or' used in indefinite pronouns at all? Again, as in the discussion of $x o t^{\prime}$-type focus particles in § 7.1, there is an obvious alternative to the most straightforward option (364a). It could be that both 'or' and the indefiniteness marker arise from the same source independently, as shown in (364b).
(364) a. 'or' $\rightarrow$ indefiniteness marker
b. 'or'

X
indefiniteness marker
In this case, I will argue that (364b) is correct. The ' $X$ ' of (364b) is to be filled by one of the two expressions 'want' or 'it may be' that we have already seen twice (§ 6.2, § 7.1).

Explaining how 'or' arises from 'want' or 'it may be' is a fairly straightforward matter. An abstract scenario like (365) seems immediately plausible. ${ }^{\text {v }}$
a. Jebba (may come), if you want Jawro may come. > Jebba or Jawro may come.
b. (Someone) may come, it may be Jebba, it may be Jawro. > Jebba or Jawro may come.

It is not difficult to find cases of 'or' that evidently go back to similar source constructions:
a. 'or' from 'if (you) want'

| Ossetic | frndy | 'or' | < frndy 'you want' |
| :---: | :---: | :---: | :---: |
| Russian | libo | 'or' | <ljubo 'pleasant ("one wants") ${ }^{\text {vi }}$ |
| Rumanian | ori | 'or' | < late Latin *volet (<vult) 'wants' |
| Hungarian | akár | 'or' | < imperative of akar 'want' |
| Latin | vel | 'or' | < imperative of velle 'want' |
| Portuguese | quer | 'or' | <quer 'wants' |


| b. 'or' from 'it may be' |  |  |  |
| :--- | :--- | :--- | :--- |
| Korean | $-(i) n a$ | 'or' | <-na-mood of $i$ - 'be' |
| French | soit | 'or' | <soit 3sg subjunctive of $\hat{e}$ tre 'be' |
| Lango | $\grave{o} \hat{o}$ | 'or' | <3sg perfective of $\hat{o} o$ 'be possible' |

Now I have to show that for those cases of 'or' / indefiniteness marker whose etymology is known the change from 'want'/'it may be' to an indefiniteness marker is plausible. The most straightforward case are indefiniteness markers that follow the interrogative root, because these have already been explained in § 6.2.2-3.

| a. indefiniteness marker (identical to 'or') from 'want' |  |  |
| :--- | :--- | :--- |
| Russian | kto-libo | 'anyone, someone' |
| Ossetic | či-fændy | 'anyone' |
| Portuguese | qual-quer | 'any' |

b. indefiniteness marker (identical to 'or') from 'it may be' Korean nwukwu-na 'anyone'

We can safely assume a similar explanation for those 'or'-indefiniteness markers which are suffixed and whose origin is unknown, e.g. Japanese $-k a$, Kannada -oo, Nanay -nuи, West Greenlandic -luunniit. But what about the prefixed markers, whose function as indefiniteness markers cannot be explained by the source construction in § 6.3.2-3 (e.g. Hungarian akár-, Basque edo, Latvian jeb, Rumanian ori-, Hausa kóo)?

For these cases, my hypothesis is that they developed their function as indefiniteness markers via a function as focus particles of the type 'at least', so that the complete set of possible changes looks as in (368).

$$
\begin{align*}
& \text { 'or' }  \tag{368}\\
& \text { indefiniteness marker } \\
& \text { xot'-type focus particle } \rightarrow \text { indefiniteness } \\
& \text { marker }
\end{align*}
$$

This hypothesis not only accounts well for the data without any additional assumptions, it is also independently motivated by the fact that some of the particles of (363) are attested as having the additional meaning 'at least', in particular Hungarian akár, West Greenlandic -lunniit (cf. § 7.1), and probably also Hausa kóo (although Meyers (1974) describes only the meaning of positive 'even', which is more salient for speakers of English, since English lacks a precise equivalent of Russian $x o t^{\prime}$ ). For the remaining cases, in particular Latvian jeb and Basque edo, it can be assumed that these had the meaning 'at least' at an earlier stage.

This completes my proposed account of the observed homonymy of 'or' and indefiniteness markers. It is essentially a diachronic-typological account: This homonymy is so common because the sources and pathways of change are so common, not because there is a synchronic common meaning that must be captured by a synchronic semantic analysis. Seen in this way, the massive parallel homonymy of (363) is not an accident (which would be excluded by the laws of statistics, as observed by Haiman (1974)), because there is a diachronic semantic relation, but in each individual language it may well be that speakers
no longer see the similarities. Therefore indefiniteness markers may change their meaning (along the lines of $\S 6.4$ ) independently of other meanings that are historically closely related, which results in the quite diverse patterns that were illustrated in Figure 24.1-6.

### 7.3. Bare Interrogatives as Indefinites

### 7.3.1. Bare interrogatives and strategies for disambiguation

In many languages, some indefinite pronouns are formally identical to interrogative pronouns. In other words, these languages use bare interrogatives (as opposed to interrogatives plus an indefiniteness marker, the most widespread type of indefinite in my 40-language-sample) as indefinite pronouns. Some examples of such languages are given in (369).
a. Classical Greek
tís 'who?' tis 'someone'
b. Chinese
shei 'who?' sheí 'someone'
shénтe 'what?' shénme 'something'
c. Hopi (Uto-Aztecan; Malotki 1979: 110)
hak 'who?' hak 'someone'
haqam 'where?' haqam 'somewhere'
d. Newari (Sino-Tibetan; Korolev 1989: 62)
su 'who?' su 'nobody (with verbal neg.)'
chu 'what?' chu 'nothing (with verbal neg.)'
e. Dyirbal (Pama-Nyungan; Dixon 1972: 265)
wanya 'who?' wanya 'someone'
minya 'what?' minya 'something'
f. Khmer (Austro-Asiatic; Huffman 1967: 153-6)
$q w y$ 'what?' $q w$ 'y 'something'
naa 'where?' naa 'somewhere'
Disambiguation is usually achieved by syntactic differences and/or suprasegmental means. For instance, in Classical Greek and in Modern German, the interrogative pronoun is usually clause-initial, whereas the indefinite pronoun must cliticize to the preceding word and hence cannot be clause-initial.

Classical Greek
a. Tís e\$lthen?
who came
'Who came?'
b. Elthén tis.
(*Tis elthen.)
came who
'Someone came.'
(371) Modern German
a. Wer kommt da?
'Who is coming?'
b. Da kommt wer. $\quad\left(=J e m a n d<{ }^{*}\right.$ wer $>$ kommt da. $)$
'Someone is coming.'
In Lakhota, questions are marked by a sentence-final particle he, which marks the difference in (372).
(372) Lakhota (Van Valin 1990: 210)
a. Wič háša ki táku nax?ú. man the whatheard 'The man heard something.'
b. Wič háša ki táku nax?ú he?
man the what heard $Q$
'What did the man hear?'
In Chinese, only intonation disambiguates the two sentences in (373) (Frei 1940: 14). Rising intonation indicates a question, and normal falling intonation indicates a statement.
(373) Chinese (Tsai 1990: 41)
a. Tā bǎ shénme shū dī̄ le? she ACC what book throw PFV 'What books did she throw away?'
b. Tā bǎ shénme shū diū le. she ACC what book throw PFV 'She threw away a certain book.'

In Classical Greek, the interrogative tís is always stressed, and the indefinite tis is always unstressed, as shown in the spelling. According to Kang (1988: 188), stress is also the main factor in disambiguating sentences with interrogativeindefinites in Korean.

### 7.3.2. Bare interrogatives in Indo-European

Bare interrogatives as indefinites are an option in several western IndoEuropean languages which normally use interrogative-derived indefinites: Vedic Sanskrit, Latin, German, Gothic (Behaghel 1917), Lithuanian, and most of the Slavic languages (cf. Kř íž ková (1974) for a special study of bare interrogatives in Slavic languages). Since Classical Greek also uses bare interrogatives, this could be a very old feature, although it is doubtful that it could be reconstructed for Proto-Indo-European, because the oldest Indo-Iranian texts show it only sporadically (Delbrück 1893: 511). Independently of the genetic relationships, the conditions for the use of bare interrogatives in these languages are remarkably similar. It does not seem possible to attribute these similarities only to common inheritance, especially since indefinite pronouns are otherwise known to change at a fast rate.

In most of the western Indo-European languages, bare interrogatives may be used as indefinites in conditional clauses, e.g.
a. Latin

Si quis mortuus fuerit non habens filium,... (NT, Mt 22.24)
if who dead becomes not having son
'If someone dies, having no children...'
b. Old Church Slavonic (Kř íž ková 1974: 91)

Aš te kŭ to xoš tetŭ po mĭ ne iti... (NT, Mt 16.24)
if who wants after me go:INF
'If anyone wants to come after me...'
c. Ukrainian (Kř ǐž ková 1974: 91)

Koly maeš suproty mene jakyj sumniv - skažy... if you:have against me which doubt say:IMPV 'If you have any doubt with respect to me, tell me...'

They may occur in questions:
a. Old High German (Behaghel 1917)

Habet ir hier waz, thaz man ezzan mugi?
haveyou here what that one eat might
'Do you have anything to eat here?'
b. Slovene (Kř íž ková 1974: 90)

Se je zatreskala v kakš nega fanta?
REFL is fallen in which young.man
'She fell in love with some young man.'
Bare interrogatives as indefinites also occur in other non-specific functions, such as non-specific free relative clauses (cf. 376), other irrealis clauses (cf. 377), and indirect negation (cf. 378).
(376) non-specific free relative clauses

Old High German (Behaghel 1917; O. III, 16, 19)
Ther fon imo saget waz, ther suachit io thaz sinaz.
who from him says what he seeks always the own
'Whoever says something of him, he always seeks his own (thing).'
(377) irrealis subordinate clauses
a. Old High German (Behaghel 1917; Tat. 145,3)

Gisehet ir, thaz wer iuиuih ni forleite.
see you that who you not lead.astray
'Take care that someone does not lead you astray.'
b. Ukrainian (Kř ǐž ková 1974: 91)

Ozyralasja, šč oby xto ï ne pidsluxyvav. looked.around that who her not eavesdrop
'She looked around so that someone would not eavesdrop on her.'
(378) indirect negation
a. Latin
neque Patrem quis novit, nisi filius (NT, Mt 11.27)
and:not Father:ACC who knows if:not son
'neither knoweth any man the Father, save the Son'
b. Gothic

Ni manna in analaugnein hwa taujip (NT, John 7.4)
not man in secret what does
'Nobody does anything in secret.'
Further non-specific functions where bare interrogatives occur are the imperative (cf. 379) and future and uncertain statements (cf. 380).
(379) imperative
a. Slovene (Kř íž ková 1974: 91)

Pišikaj iz Pariza.
write:IMPV what from Paris
'Write something from Paris.'
b. Belorussian (Kř íž ková 1974: 91)

Njaxaj jana paprosic' kago pamagčy. let her ask whom to:help 'Let her ask somebody to help her.'
future/ uncertain statements
a. Gothic
skal pus hwa qipan (NT, Lk 7.40)
I:must to:you whatsay
'I must tell you something.'
b. Polish

Moz\%eon jeszcze kiedy przyjedzie. maybe he still when will:arrive 'Perhaps he will still arrive sometime.'

Thus, western Indo-European bare interrogatives may occur practically in all non-emphatic non-specific functions. They are generally excluded from past or current present affirmative declarative clauses, where indefinites must be specific.

This situation is rather puzzling. Why should bare interrogatives used as indefinites be restricted in this way? I have no answer to this question, but the facts from the western Indo-European families which I have cited are rather robust, and the generalizations cannot be due to coincidence.

Moreover, a restriction of bare interrogatives to non-specific functions can be found outside of Indo-European as well. Li (1992) reports that Chinese bare interrogatives (especially shénme 'what, which') may be used as indefinites in questions, conditionals, negative sentences and other contexts where it can be interpreted non-specifically (in embedded clauses of non-factive verbs), but not in ordinary declarative sentences:
(640) Chinese (Li 1992: 127-9)

| a. (question) | Tā xǐhuan shénme ma? <br> he like what $Q$ |
| :---: | :---: |
|  | 'Does he like anything?' |
| b. (negation) | Tā bù wèi shénme rén zuò shi. |
|  | he not for what person work thing |
|  | 'He does not work for anyone.' |
| c. (non-factive) | Wó xíwàng nixíhuan shénme (dōngxi). |
|  | hope you like what thing |
|  | 'I hope that you like something.' |
| d. (factive)*Wǒ | hòuhuĭ zuoshénme (shiqing). |
|  | I regretdo what thing |
|  | 'I regret having done something.' |

The similarity between the Chinese situation and the one in Indo-European is too striking to be due to accident. The only explanation for these restrictions that I can think of is that bare interrogatives are perhaps less easily mistaken for true question pronouns in such environments, but it is hardly sufficient.

### 7.3.3. Why are indefinites often identical to interrogatives?

We have seen that in many cases, interrogatives are derived from indefinites because they arose by grammaticalization from an indirect question or a nonspecific free relative clause (cf. chapter 6). So one possible way of explaining the use of bare interrogatives as indefinites is the hypothesis that bare
interrogatives also come from these sources but their indefiniteness marker has gotten reduced to the point of disappearing. However, this hypothesis must be rejected.

One problem with it is that there is absolutely no positive evidence for it. I do not know of a single case of a language whose earlier stages are attested where we see an indefiniteness marker being reduced to zero, resulting in a bare interrogative pronoun.

Secondly, one does not get the impression that bare interrogatives arise as an accident of language change, and that they are subject to quick change. Speakers seem quite happy with them and not too concerned about removing them (although they did disappear in modern Romance, modern Greek, and modern Scandinavian).

Thirdly, and most importantly, bare interrogatives are extremely widespread in the world's languages. In my 100-language sample, there are 64 languages whose indefinites are based on interrogatives. Of these 64 languages, 31 languages or almost one third of the whole sample have bare interrogatives. It is extremely unlikely that zero-grammaticalization should happen so often, and so systematically. The typological facts show conclusively that we are dealing with systematic polysemy rather than with accidental homonymy.

Since it cannot be shown that bare interrogatives as indefinites are diachronically derived from interrogatives, we are well advised to look for synchronic functional similarities that justify the systematic polysemy. Such functional similarities are not hard to come by: It is clear that the sentences (382a) and (382b) have a lot in common.
(382) a. Someone stole my bike.
b. Who stole my bike?

As pointed out by Karcevski (1969) and many others (e.g. Wierzbicka 1980b), the common element in the meaning of indefinite and interrogative pronouns is ignorance (hence Karcevski's term 'ignorative pronouns'). Similarly, Bhat (1993) says that both are characterized by an 'information gap'. In indefinites such as (382a), the speaker either does not know who stole the bike or does not want the hearer to know who stole it. In interrogatives such as (382b), the speaker does not know who stole the bike either, but here she or he wants the hearer to supply the missing information.

Given this common meaning element, one might suspect that an inter-rogative-indefinite pronoun could actually be vague rather than polysemous. Indeed, Dixon (1980: 372) reports that speakers of Australian languages will often translate a sentence with an interrogative-indefinite pronoun as in (383), suggesting that it is simultaneously an indefinite specification, and a request for further information. ${ }^{\text {vii }}$
(383) Someone stole my bike - who did it?

But vagueness at the utterance level is not the general case - in most languages, it seems, sentences containing interrogative-indefinite pronouns are clearly either interrogative or indefinite (cf. the disambiguation strategies mentioned in § 7.3.1).

Another way of formulating the similarity between (382a) and (382b) is to say that (382a) is presupposed by (382b) (Lyons 1977: 758), so in a way the indefinite meaning is contained in the interrogative meaning. Attempting to ac-
count for the formal relationship between interrogatives and indefinites found in many languages, Lyons suggests that the interrogative variant of (382a), the polar question (384), might also be construed as a parametric question, presupposing (382a) and expecting the hearer to respond by supplying a value for 'someone' (cf. already Paul (1920: 136) for similar considerations).

Someone stole my bike?
Somewhat similarly, Klima (1964: 252-3) derived interrogative pronouns like what by 'incorporation' of indefinites (in this case, something) into the abstract question operator wh (wh...something is transformed to wh+something, which is spelled out as what). ${ }^{7 \mathrm{a}}$

In this line of reasoning, interrogatives are derived from indefinites. It is therefore natural to ask whether the formal similarities between interrogatives and indefinites can perhaps be explained (even if only partially) by a diachronic change from an indefinite to an interrogative pronoun. Such a change was indeed posited speculatively by several linguists several decades ago (e.g. Meunier 1875, Gardiner 1932: 307-8; cf. the discussion in Frei 1940: 7-9). This hypothesis is interesting, but it must be rejected. There is no positive evidence for it, although it should be quite easy to find such evidence: There should be plenty of languages whose interrogative-indefinite pronouns go back etymologically to generic ontological-category nouns or to the numeral 'one'. These are the sources of indefinites in many languages, and we would expect cases where such indefinites become interrogatives. Furthermore, we would expect at least some of the numerous indefinites consisting of root plus indefiniteness marker to become interrogative pronouns, but we never observe any traces of such earlier indefiniteness markers in interrogatives. What we find, instead, is that in language family after language family, interrogative pronouns prove resistant to etymological analysis. In fact, interrogative pronouns are among the slowest-changing elements in any language. Consider, for instance, interrogatives in Indo-European languages: The reconstructed original root is ${ }^{*} k^{w i} \|^{*} k^{w} 0-$, and reflexes of this root are still found in all modern languages, e.g. English what, Russian č to, Modern Greek ti, Yazgulami č iǵ, Irish cad, Punjabi ki, Italian che, etc. These words have undergone phonological and morphological changes, but the root was never replaced. Interrogative pronouns are generally so old that their root cannot be etymologized. ${ }^{\text {viii }}$

So neither can interrogative-indefinite pronouns go back to interrogative pronouns in a well-understood way, nor can they go back to indefinite pronouns in the way just sketched. We can only conclude that somehow the functional similarity between them which was noted above must be responsible for the systematic polysemy.

But one thing we know for sure: The interrogative function is always primary, and the indefinite function is secondary. An interrogative pronoun may lose its indefinite function (e.g. Latin quis/quem 'who(m)', which survived into modern Romance, but can no longer be used as an indefinite; similarly, Classical Greek tís 'who?' can no longer be used as an indefinite in Modern Greek). Unfortunately, I know of no good case where an interrogative pronoun that lacks the indefinite sense acquires it at some later stage. Such cases could give us hints for explaining the mechanism the rise of indefinites from interrogatives.

### 7.3.4. The multiple partitive use of bare interrogatives

There is one special type of indefinite use of bare interrogatives which is more widespread than the use of bare interrogatives as ordinary indefinites, as discussed in the preceding sections (§ 7.3.1-3). For lack of a better term, I call this the MULTIPLE PARTITIVE construction. It occurs in three variants.

A typical example of the first variant is (385).
(385) Georgian

Vin pul-s eloda, vin c'eril-s, vin gazet-eb-s. who money-DAT waits who letter-DAT who newspaper-PL-DAT 'Some (people) are waiting for money, some for a letter, some for newspapers.' (Lit. 'Who is waiting for money, who for a letter,...')

The bare interrogative in this construction always occurs together with at least another instance of the same interrogative pronoun in a parallel coordinate clause (hence 'multiple'), and each indefinite denotes a subset (hence 'partitive') of a larger contextually given set, so the translation 'some (people)' is more appropriate than 'someone'. The verb is often gapped in all clauses except one. The multiple partitive construction can be found in a wide variety of languages, a selection of which is illustrated in (386).
a. French (Grevisse 1986: §729)

Qui apportait un fromage, qui un sac de noix, qui un quartier de chèvre.
'Some brought a piece of cheese, some a bag of nuts, some a piece of goat meat.'
b. Russian

Gde ubirajut sveklu, gde paš ut lošad'mi. where reap:3PL beet where plow3PL horses:INSTR
'In some places people are reaping beet, in some places people are plowing with horses.'
c. Finnish (Karttunen and Peters 1980: 194)

Tuuli puhaltaa milloin länne-stä, milloin idä-stä.
wind blows when west-ELAT when east-ELAT
'The wind blows sometimes from the west, sometimes from the east.'
d. Mansi (Finno-Ugrian; Beke 1913-14: 150)

Xot xum xańśi, xot xum at xańśi.
who person knows who person not knows
'Some people know, some people don't know.'
e. Turkish (Xovratovič 1989: 35)

Kimi adak, kimi matem için topla-n-d . who sacrifice who mourning for gather-REFL-PAST(3SG) 'Some gathered for a sacrifice, some for mourning.'
f. Kilivila (Austronesian: Oceanic; Senft 1986: 63)

Te-vila e-sisu-si va simla te-vila
G(MALE)-how.many they-stay-PL at island G(MALE)-how.many $e$-sila-si.
they-go.by.ship-PL
'Some of them stay at the island, the others keep on sailing.'
In the second variant of this construction, the multiple partitive indefinite pronoun is not an independent element of the clause, but a kind of discontinuous modifier of another (semantically plural) phrase.
a. French (Grevisse 1986: § 729)

Les clients de l' hôtel prenaient, qui du thé, qui du porto, the guests of the hotel take who ART tea who ART port qui un cocktail.
who a cocktail
'Of the hotel guests, some drank tea, some port, some a cocktail.'
(Lit.: 'The hotel guests drank, who tea, who port,...')
b. Hebrew (Glinert 1989: § 7.8)

Et zot ro?im, mi be-mida raba u-mi be-mida peíuta, ACC this they:see who in-degree big and-who in-degree less
ke-ierex bifney iacmo.
as-value before itself
'They regard this as a value in itself, some to a greater and some to a lesser extent.'
c. Hungarian (Beke 1913-14: 150)

Az ország-á-ban lak-ó ember-ek, ki kocsi-n, ki szekér-en the country-3SG-IN live-PTCP person-PL who cart-by who coach-by

```
hoz-t-ák a temérdek tülk-öt.
bring-PAST-3PL the loads horn-ACC
'The people living in his country brought the innumerable horns,
some by cart, some by coach.'
```

In the third variant of this construction, two different bare interrogatives are used in this way, i.e. not as independent elements of the clause. In this construction, there are not two parallel coordinate structures, but the resulting meaning is similar.
a. Russian

Oni rassypalis' kto kuda.
they dispersed who whither
'(Lit.) They dispersed, some in some direction, some in another direction (i.e. different people in different directions).'
b. Finnish (Karttunen and Peters 1980: 194)

Tuuli puhaltaa milloin mistäkin sunna-sta.
windblows when which direction-ELAT
'(Lit.) The wind blows, sometimes from some direction, sometimes from another direction (i.e. from different directions at different times).'
c. Romanian

Acestia se împrăstiară ca puii de potîrniche,
theseREFL dispersed like young of partridges
caresi pe unde.
which to where
'These dispersed like young partridges, different people in different directions.'

I note these constructions here without offering so much as the beginning of an explanation. I find them quite puzzling, but their wide cross-linguistic distribution (at least in Europe and northern Asia) makes it impossible to regard them merely as marginal curiosities.

### 7.4. Indefinite Pronouns Derived by Reduplication

In many languages, indefinite pronouns have a reduplicated form. The most common case are indefinites consisting of two full instances of the corresponding interrogative pronoun. I know of no case of partial reduplication, or of triple reduplication. Reduplicated indefinites of this form occur commonly all over the world (cf. Pott 1862, Gonda 1949, 1954-55, Coyaud and Aït Hamou 1971, 1972, 1976, Moravcsik 1978: 319).
a. Moksha Mordva (Finno-Ugrian; Feoktistov 1966: 207) kije 'who?' kije-kije 'somebody, anybody' meze 'what?' meze-meze 'something, anything' kodama 'which?' kodama-kodama 'any'
b. Ila (Bantu)
oni 'who?' oni-oni 'whoever, anyone' ukwi 'where?' ukwi-ukwi 'anywhere'
c. Vietnamese (Coyaud and Aït Hamou 1972)
ai 'who?' ai ai 'anybody, everybody'
d. Latin
quis 'who?' quis-quis 'anybody, whoever'
ubi 'where?' ubi-ubi 'anywhere, wherever'
e. Bugis (Austronesian; Sirk 1979: 116)
niga 'who?' niga-niga 'anyone'
aga 'what?' aga-ga 'anything'
f. Ainu (Refsing 1986: 104)

```
nen 'who?'' nen-nen
```

g. Khasi (Mon-Khmer; Moravcsik 1978: 319)
ka?ey 'who?' ka?ey-ka?ey 'someone'
h. Kristang (= Malacca Creole Portuguese; Baxter 1988: 54)
keng'who?' (<quem) keng keng 'anybody'
ki 'what?' ki ki'anything'
But general nouns are also occasionally reduplicated to form indefinite pronouns:

Yoruba

| e5ni | 'person' | e5ni-k-e5ni |
| :--- | :--- | :--- |
| ohun | 'thing' | ohun-k-ohun |

And one also finds reduplicated combinations of an interrogative pronoun and an indefiniteness marker ( $n a$ also means 'or' and 'although', cf. § 7.2):
(650) Malagasy
$\begin{array}{lll}\text { iza 'who?' } & \text { na iza na iza } & \text { 'anyone' } \\ \text { inona } & \text { na } & \\ \text { 'what?' } & \text { nany inona na inona }\end{array}$
How can this formal strategy for creating indefinite pronouns be related to their meaning? Unfortunately, the answer is not clear to me, although reduplication is sometimes regarded as one of the most iconic ways of signaling meaning. According to Moravcsik (1978: 317), 'the most outstanding single concept that reduplicative constructions recurrently express in various lan-
guages is the concept of increased quantity'. She distinguishes two subtypes of this meaning, 'quantity of referents' and 'amount of emphasis', and subsumes indefinite pronouns under the first of these two general categories, noting further that the plurality of referents expressed by reduplicative constructions is usually distributive rather than collective. ${ }^{\text {ix }}$ The iconic motivation of reduplication for the expression of distributive plurality is easy to see. But in what respect is the meaning of indefinite pronouns related to distributive plurality?

When we look at the meanings of reduplicated indefinites more closely, we see that most of them have a free-choice or at least negative-polarity meaning, rather than a specific meaning. The similarity between the free-choice function and the distributive universal function has been highlighted earlier (cf. § 3.2.6, § 6.5 ), and indeed reduplication is widely used to express the meaning 'every', as illustrated in (392-93) (cf. Gonda 1949: 176).

| (392) | Tagalog | taon-taon | 'every year' |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Manggarai | leso leso | 'every day' |  |  |
|  | Sanskrit | ahany-ahani | 'every day' |  |  |
| (393) | Hungarian | ki ki | 'everyone' | (k | 'who') |
|  | Hindi/Urdu | ek ek | 'every' | (ek | 'one') |

But there are some additional facts that suggest that reduplication may somehow express the notion of irrelevance by itself. Thus, in some languages, reduplicated interrogatives are used primarily or exclusively as non-specific free relative pronouns, in free relative clauses or in parametric concessive conditional clauses, e.g.
(394) a. Da'a (Austronesian, Central Sulawesi; Barr 1988)

Sema-sema na-rata ri ja'i-na kana ni-tarima-na. who-who REAL-come to.him must OF.REAL-receive-he 'Whoever comes to him will be received by him.'
b. Latin

Quid-quid id est, timeo Danaos et dona ferentes.
what-what that is I:fear Danaans even gifts bringing 'Whatever that is, I fear the Danaans even if they bring gifts.'
c. Bagandi (Australian; Hercus 1982: 171)

Gila yuri-wa-yiga-ayi,mina-mina yawara Nadu
not hear-ASP-3PL-SUBJ-1SG.OBJ what-what wordI:ERG gulba-ra-na-ата.
speak-TOP-PTC-2SG.OBJ
'They don't understand me, whatever words I may be saying to you.'

Not only interrogative pronouns may be reduplicated in such sentences, but also relative pronouns, as in Sanskrit (whose interrogative and relative pronouns are distinct), and even verbs, as in Sicilian:
(395) a. Sanskrit

Yo yas tad karoti sa (sa) mū rkhah5.
who who that does that (that) fool
'Whoever does this is a fool.'
b. Sicilian (Bollée 1978: 329)

Unni vaju vaju, tutti mi salutunu.
where I:go I:go all methey:greet
'Wherever I go, everyone greets me.'
As we saw in $\S 6.2 .3$, indefinite pronouns may have their source in nonspecific relative pronouns. So a possibility is that the reduplicated indefinites of (389) in general come from non-specific relative pronouns as in (394-95). At least for Latin, where the use of reduplicated interrogatives as indefinite pronouns is quite limited and evidently secondary, this looks like a plausible scenario.

However, in view of examples like (390), where a non-interrogative-based indefinite is formed by reduplication, one should perhaps resist the temptation to derive interrogative-based indefinites in general from clausal sources. (Cf. also the completely analogous dilemma in $\S 7.1$ and the discussion there.) But even if the non-specific clauses in (394-95) cannot be regarded as the single key to reduplicated indefinites, they suggest that the meaning of distributive plurality is not the only starting point for understanding reduplicated indefinites.

While distributive plurality can probably also be detected in (394-95), another important meaning element is that of free choice, negative polarity, and non-specificity. There is independent evidence that these meanings are also somehow inherent in reduplicated constructions. Steever (1988) describes verbal 'echo compounds' (i.e. partial reduplications) in several Dravidian languages (Tamil, Toda, Kannada, Kodagu, Telugu), which are used only in 'affective contexts such as questions, negatives and modals' (1987: 63). An example from Tamil is given in (396). ${ }^{\text {x }}$

Tamil
Pāttiratai ut5ai-tt- $\bar{a} y \quad$ kit5ai-tt- $\bar{a} y \quad$ en 2r2-āl tō lai uri-pp-ēn2. pots break-PAST-2SG RED:break-PAST-2SG say-COND you skin-FUT-1SG 'If you broke the pots or did any such stupid thing, I'll skin you alive.'

### 7.5. Some Further Diachronic Issues

### 7.5.1. Generic nouns turned pronouns

As I have already observed, many languages use generic nouns like 'person', 'thing', 'place', 'time', etc. to express notions like 'someone', 'something', 'somewhere', 'sometime', etc. (but not, of course, for the free-choice sense of 'anyone', 'anything', etc.). In my 100-language sample, 42 languages use this strategy. As was also mentioned above, it is not always easy to tell whether we are really dealing with pronouns, or whether true nouns are used as alternatives to indefinite pronouns (cf. § 3.3.1), because the differences are sometimes quite subtle (cf. also § 2.2.2).

The diachronic process by which a generic noun is turned into an indefinite pronoun is quite straightforward, so not much needs to be said here. A generic noun is first used in a noun phrase without modifiers to render meanings like 'somebody', 'something', and it gradually acquires phonological, morphological and syntactic features that set it off from other nouns. The last doubts about its new pronoun status are dispelled when the original generic noun falls into disuse, as in the case of English somebody/anybody, where body can no longer be used in the sense 'person'; French rien 'nothing', which can no
longer be used in the sense of 'thing' (cf. Latin rem 'thing(ACC)'); or Maltese $x i$ mkien 'somewhere', where mkien (cf. Arabic makaan 'place') can no longer be used in the sense of 'place'.

In some cases, an indefinite determiner like 'one', 'some' or 'any' is combined with a generic noun in a new pronominal form, as in Italian qualcosa 'something' (< qualche 'some' + cosa 'thing'), Maltese xi mkien 'somewhere' (xi indefiniteness marker < šay? 'thing, something' + mkien 'place'). Again, this is so straightforward that it need not be commented on further.

It should be pointed out, however, that there is an interesting tendency for generic-noun-based indefinites to be restricted to negative-polarity or negative functions, e.g. French personne 'person; nobody', Hebrew davar 'thing; anything, nothing'. This tendency will be discussed further in § 8.3.2.

### 7.5.2. Indefinite pronouns from 'one'

Not much needs to be said on the numeral 'one' as a source of indefinite pronouns either. This source is also very widespread, but 'one' is usually restricted to the use as an indefinite determiner or an indefinite pronoun of the ontological category 'person' (presumably because individuality is generally associated with people). It is often used in the same series as generic nouns, e.g.
'one':
Frenchquelqu'un
English some-one
Catalan ningú‘anybody' ( $<$ пес-ипия)
Maltese $\quad x i$ Ì add 'someone'
(liadd < 'one')
generic noun:
quelque chose
some-thing
res/gens 'anything'
xi Ìaga 'something'
(İaga 'thing')

Kabyleyizen 'one; someone' kra 'thing; something'

Dongolawi wEr'one; someone'
Welsh rhyw-un 'someone'
(un 'one')
$h \bar{a} g \check{g} a$ 'thing; something'
rhyw-beth 'something'
(peth 'thing')

But 'one' is occasionally also found in series that are otherwise based on interrogative pronouns, e.g.

| M. Greek | kan-énas 'anybody' <br> tí-pota 'anything' | (ténas 'one') <br> Latvian <br>  <br>  <br>  <br> ne-viens 'nobody' <br>  <br>  <br> ne-kas 'nothing' |
| :--- | :--- | :--- |
| (viens 'one') |  |  |
| (kas 'what') |  |  |

Somewhat surprisingly, 'one' is sometimes also found as an indefiniteness marker together with interrogative pronouns, e.g.

| Pashto yaw cok 'somebody' yaw 'one' |  |
| :--- | :--- |
| Lezgian | sa wuž jat'ani 'somebody' |
| cok 'who; somebody' |  |
| sa 'one' |  |

> Uighur bir nemä 'something' bir 'one' nemä 'what'
> Khmerqwy-mu'y 'something' qw'y 'what' muy 'one'

An interesting case of reanalysis in terms of 'one' is reported by Haegeman (1991) for a West Flemish dialect, where the older opaque indefiniteness marker $e(n) t$ - was reanalyzed as containing the numeral een 'one', so that besides eentwa 'something' (i.e. een-twa, earlier e(n)t-wa) it is also possible to say een schuon twa 'something nice', lit. 'a nice something'.

Like generic nouns, 'one' has a tendency to become restricted to negative-polarity and negative functions - see § 8.3.2.1.

### 7.5.3. Borrowing of indefiniteness markers

Although indefinite pronouns are part of the grammatical system and grammatical markers are relatively resistant to borrowing, a surprisingly large number of cases have been attested where an indefiniteness marker was taken over from another language, either by direct borrowing or by calquing.
7.5.3.1. Direct borrowing. I know of no cases where a complete indefinite pronoun has been borrowed, ${ }^{\text {xi }}$ but some languages with interrogative-based indefinites have indefiniteness markers that were adopted from other languages with interrogative-based indefinites. This usually happens only in languages that are under very strong influence of another language (cf., e.g., Majtinskaja (1969: 250-1) and Beke (1913-14: 174-7) for Finno-Ugrian languages).
(400) Hungarian né- (in né-mi 'some', né-hol 'here and there', etc.)

| Hungarian | né- (in né-mi 'some', né-hol 'here and there', etc.) |
| :---: | :---: |
|  | < Slavic ně- (e.g. Russian ne-č to 'something', Czech ně co, Serbo-Croatian neš to) |
| Mordva | koj- (in koj-kov 'somewhere', koj-koš ta 'sometime', etc.) |
|  | < Russian koe- (e.g. koe-gde 'somewhere') |
|  | -buti (in kije-buti 'somebody', meze-buti 'something', etc.) |
|  | $<$ Russian -(ni)bud' (e.g. kto-nibud' 'somebody') |
| Hill Mari | $t a$ - (in ta-ma 'something', tä-gü 'somebody', etc.) |
|  | $<C^{\text {c }}$ Chuvash ta- (e.g. ta-kan 'somebody', te-mĕn 'sth') |
| Udmurt | kot'- (in $k o t^{\prime}$-kin 'anybody', $k o t$ '-ma 'anything') |
|  | $<$ Russian $x o t^{\prime}$ (e.g. ott' kto 'anyone') |
| Slovak b | bár- (in bár-kto 'anyone') |
|  | < Hungarian bár- (e.g. bár-ki 'anyone') |

Widespread borrowing of indefiniteness markers has been documented for Romani dialects of eastern Europe by Boretzky and Igla (1991). Romani dialects have adopted indefiniteness markers from practically all the surrounding languages of the region, e.g.
(401) Romani indefinites based on interrogatives
(ko 'who', so 'what', $k a j$ 'where', etc.) (Boretzky and Igla 1991: 21-3)
bilo kaj 'anywhere' <Serbo-Croatian bilo
$i$-so 'anything' <Serbo-Croatian $i$ -
kaj-godi 'anywhere' <Bulgarian -gode
vare-so 'something' < Rumanian oare-
choč -so 'anything' < Polish choć (= Russian xot')
so-nebud' 'anything' < Ukrainian -nebud' (= Russian -nibud')
akar-so 'anything' <Hungarian akár
7.5.3.2. Calquing. Indefiniteness markers are often relatively weakly grammaticalized and can still be related to other elements in the grammar, so that calquing is possible.

An example comes from Yiddish, which has been heavily influenced by Slavic languages (espacially Polish and Ukrainian). For non-emphatic nonspecific uses, Yiddish employs the indefiniteness markers -(s')-nit-iz (lit. 'not is') and -es-iz (lit. 'it is'), which are probably modeled on Slavic forms like Ukrainian -nebud' and Polish (nie) ba $\mathbf{4} d z$ (lit. '(not) be'). Of course, it cannot be excluded in principle that these forms arose independently in the manner described in $\S$ 6.3.3, but the fact that German, the closest relative of Yiddish, has nothing of this sort, and that Slavic influence is strong elsewhere in Yiddish grammar, makes it highly plausible that this is a calque. Examples are given in (402).
(402) Yiddish (Š apiro et al. 1984: 103, 206)
a. Mir veln vu-nit-iz ibernekhtikn. we want where-INDEF spend.the.night 'We'll spend the night somewhere.'
b. mer vi ven-s'-nit-iz more than when-INDEF 'more than ever'

A particularly intriguing example of calquing is described by Subbarao and Arora (1988) for the Dakkhini dialect of Hindi/Urdu. This dialect has been in close contact with Telugu (Dravidian) for centuries, and its grammatical system is now in many ways identical to Telugu. At some point, Dakkhini speakers equated the Hindi/Urdu particle ki ('that, whether', a subordinator borrowed originally from Persian $k e$ ) with the Telugu particle -oo, which is used as a subordinator in embedded questions, as a disjunctive coordinator ('or'), and as an indefiniteness marker on interrogatives (cf. the Kannada cognate -oo in Appendix A, Section 35). As a result, Dakkhini now uses interrogative-based indefinites marked with $-k i$, in contrast to standard Hindi, which has a special, synchronically non-derived series of indefinites (cf. Appendix A, Section 22, and (28c) in § 3.1.1). Compare the parallel examples in (403-04) (standard Hindi would use koii and kuch here).

Dakkhini Hindi (D), Telugu (T) (Subbarao and Arora 1988: 105)
(403) D. Kon ki aayaa.
who INDEF came
T. Ewaru-oo wacceru.
who-INDEF came 'Someone came.'
D. Mere abbaa kyaa ki leko aaye.

my father what INDEF taking came<br>T. Maa naannagaaru emiti-oo tecceru.<br>my father what-INDEF brought<br>'My father brought something.'

Another example of calquing, provided to me by David Gil, comes from Singlish, a variety of English spoken in Singapore which exhibits strong influence from southern Chinese. In Singlish, the combination which also is used in the free-choice function:

Singlish
Which way also can? [from a taxi driver]
'Can (I take) any route?'
This construction is evidently based on a Chinese construction corresponding to Mandarin shénme yě 'which also, i.e. any' (cf. Appendix A, Section 36).

Calquing probably occurs widely in indefinite pronouns, but in most cases it is hard to prove that language contact played a role in the creation of a particular type of indefiniteness marker because it might as well have been arisen independently. Thus, rather than being an exotic phenomenon, the clear cases of Yiddish, Dakkhini and Singlish may well represent the tip of an iceberg.

### 7.5.4. Semantic enrichment by implicature: Appreciative and depreciative meanings

In many languages, indefinite pronouns may be used with secondary qualitative meanings, both positive ('someone important', 'something remarkable') and negative ('an unimportant person', 'in a negligent manner'). I will call these uses APPRECIATIVE and DEPRECIATIVE (following Stoffel's (1899) terminology). These uses have often been noted in the literature, but no cross-linguistic comparison has ever been made to my knowledge.

Appreciative and depreciative uses of indefinite pronouns are interesting for linguistic theory because they are an example of semantic enrichment based on conversational implicatures. More specifically, Grice's first maxim of Quantity, 'make your contribution as informative as is required for the current purposes of the exchange', comes into play here. Indefinite pronouns are intrinsically uninformative because their semantic content is quite minimal in comparison to most other words, and when speakers nevertheless use them in situations where they do not contribute any additional information, hearers are entitled to make additional inferences. Such interpretative enrichment may then be conventionalized and lead to semantic change. However, I know of no case where a whole indefinite series is only used in appreciative or depreciative senses. Clearly, semantic change by conversational implicature is not nearly as widespread and important for indefinite pronouns as semantic change by grammaticalization (§6.4), and languages do not differ as radically in this respect as they differ with respect to the patterning of other indefinite pronoun meanings. It appears that most the examples cited in this section generally illustrate special contextual interpretations based on converstional implicature rather than additional truly semantic readings.
7.5.4.1. Appreciative meanings. The examples in (406) illustrate the appreciative interpretation of indefinite pronouns. In general, the meaning of ap-
preciative indefinites can be described as 'remarkable, important'. The fact that all the examples in (406) are from European languages should not be taken to imply that this phenomenon is restricted to European languages, or even particularly characteristic for them. It just reflects the fact that I happen to have much better access to data from European languages, and that appreciative and depreciative meanings are not often noted in grammars of non-European languages. I would not expect languages to differ significantly in the extent to which they show such meanings.
a. German

Wir sind wieder wer.
'We are somebody (important) again.'
b. French

Il lui sembla qu'il entrait dans une vie nouvelle et charmante,
it him seemed that he entered in a life new and charming
$q u^{\prime}$ il devenait quelqu'un, qu' il était sauvé.
that he became somebody that he was saved
'It seemed to him that he began a new and charming life, that he
became somebody (important), that he was saved.'
c. Polish

On byl kiedy-ś czym-ś, ale dziś jest niczym.
he was when-INDEF what-INDEF but today is nothing
'He was something (important) once, but today he is nothing.'
d. English (informal, especially American) (Quirk et al. 1985: 6.52[c]) That was SOME meal! ('a very good meal')
e. Latin

Nunc iste se ali-quem putat. (Seneca Dial.5.37.3)
now that self INDEF-whom considers 'Now he considers himself (to be) somebody.'
f. Basque (Aulestia 1989: 432)

Nor-bait zen alkatea gu-reherri-an. who-INDEF he:was mayor:the we-GEN country-LOC 'The mayor in our country was someone (important).'
g. Hungarian

Ö vala-ki a gyár-ban.
he INDEF-who the factory-at
'He is somebody at the factory.'
In all these cases the indefinite pronoun is (part of) the predicate nominal in a copular clause with some kind of copular verb ('be' in (a), (c-e), (g-h), 'become' in (b), 'consider' in (f)). As predicate nominal, an indefinite pronoun is not just relatively uninformative, but actually creates a tautology, a blatant violation of the first maxim of Quantity (cf. Levinson 1983: 110-11 on tautologies). The informative inference in all these examples is 'appreciative', i.e. the speaker is understood as referring to something important or special.

Furthermore, all these indefinite pronouns also have the 'specific' function. Non-specific indefinites are apparently never used appreciatively, but tend to have depreciative meaning (cf. § 7.5.4.2). This is particularly nicely illustrated in (407) from Latin, where the specific indefinite quidam 'some(one)' is contrasted with the free-choice indefinite quilibet 'any(one)'. Example (407) is not a copular sentence, but it is also a tautology, because necessarily life is led in some way or other.
(407) Latin

Vita agenda est certo genere quo-dam, non quo-libet. life to.be.led is certain way which-INDEF not which-INDEF 'Life must be led in a certain (special) way, not (just) anyhow.' (Cicero Fin. 3.24)

Fijn van Draat (1898) observes that English any-indefinites can also have an appreciative interpretation. However, all his examples involve negative-polarity contexts, where we would expect any-indefinites anyway, e.g.
(408) English (Fijn van Draat 1898: 153-4)
a. Nobody who is anybody doubts it.
b. an illustrated paper, which is the first to publish portraits of everybody who becomes anybody
c. There was absolutely no natural foundation on which a building of any size could be erected.
d. Stamps are liable to deterioration when exposed to view for any length of time.

Here, too, examples (c-d) are not copular clauses, but the pragmatic enrichment is also due to a tautology because 'size' and 'length (of time)' specify only a dimension and do not constitute information in themselves (necessarily, any building has a size, and any event take some time).
7.5.4.2. Depreciative meanings. When an indefinite pronoun with primarily non-specific functions is used in a specific tautological context, the interpretative enrichment is generally in the opposite direction, i.e. a depreciative meaning results ('unimportant' or 'bad'). This is illustrated in (409).
a. Russian

On vsë delaet kak-nibud'.
he all does how-INDEF
'He does everything badly ('anyhow').'
b. Lithuanian

Jis viska daro bet kaip/ kaip nors.
he all does INDEF how how INDEF
'He does everything badly ('anyhow').'
c. Spanish (Lombard 1938-39: 196)

No sean tan cualquieras.
not be(IMPV) so any
'Don't be such good-for-nothings.'
d. Basque (Aulestia 1989: 153)

Edo-nola ezarri du. INDEF-how leave she:it:AUX 'He has left it in a mess ('anyhow').'
e. Yakut (Ubrjatova (ed.) 1982: 201)

Baahynajdar sebileniilere daVany xannyk eme ete. peasants arms PT what.kind INDEF were 'The arms of the peasants were pretty bad ('any kind').'
f. English (Stoffel 1899: 147) Who on earth can it be? It is somebody for us to a certainty, and my hair is anyhow, and my eyes are red,...

Note that most of these indefinites would not be grammatical in their normal meaning, because they are not allowed in contexts that do not admit a nonspecific interpretation. Thus, the additional meaning also leads to additional cooccurrence possibilities.

Stoffel (1899: 147) attempts a pragmatic explanation of this interpretative enrichment: 'Taught by sad experience, speakers are convinced that, with respect to qualitative statements, their hearers are apt to suspect the worst', hence the depreciative interpretation. But this not only presupposes that all hearers are pessimists, but also leads one to expect that all interpretative enrichments are depreciative. As we saw in the preceding section, this is not the case.

The cross-linguistically observable correlation between specific functions and appreciative interpretations, and between non-specific functions and depreciative interpretations suggests an alternative explanation: Non-specific indefinites, especially free-choice indefinites, refer to an arbitrary element of their class. Given that all people are choosy (a much likelier supposition than that all people are pessimists), it is normal that hearers expect the worst if they are told that the referent has been selected randomly.

However, occasionally specific indefinites must also be interpreted in a depreciative sense.
a. Russian

Rabota sdelana koe-kak.
work done INDEF-how
'The work was done badly.'
b. Macedonian

Se druži so ne-kakov neranimajko.
REFL befriends with INDEF-which [?]
'She is friends with some bad person.'
Some individual indefinites seem to have conventionalized the depreciative meaning, e.g. English anyhow 'in a bad manner' or Russian koe-kak 'anyhow'. Dictionaries generally list these forms and translate them, whereas this is the case much more rarely with appreciative meanings as in (664).
7.5.4.3. Anti-depreciative meanings. The third type of interpretatively enriched reading, called ANTI-DEPRECIATIVE here, represents the negation of the depreciative sense that we saw in the preceding subsection. It comes close to the meaning of appreciative indefinites ('She is not anybody' $\approx$ 'She is somebody.'). Anti-depreciative readings are treated separately here because they seem to be much more readily available than depreciative readings. For example, in German (411a) the depreciative reading is hard to get, but in (411b) is it the only possible reading.
(411) German
a. Sie hat die Arbeit irgendwie gemacht.
'She did the work somehow.' /??'She did the work anyhow.'
b. Sie hat die Arbeit nicht irgendwie gemacht.
'She did the work not anyhow.'
This fact, too, points to a stronger tendency towards lexicalization of the depreciative interpretation.

Like the depreciative interpretation, the anti-depreciative interpretation is generally found with non-specific and free-choice indefinites, as illustrated by the examples in (412) (where Chuvash takam 'somebody (specific)' is the only exception).
a. German

Ich verpacke doch nicht irgendwelche Brücken und Gebäude, einfach so. I wrap PRT not any bridges and buildings simply so 'I don't wrap just any bridges and buildings, just like that.' (Christo)
b. Latin
...virtutes-que non quas-libet faciebat Deus per manum Pauli. miracles-and not which-INDEF did God through hand of:Paul 'And God wrought special ('not just any') miracles by the hands of Paul.' (Act. 19.11)
c. Bulgarian (Guentchéva 1981: 411)

Čovek-ât ne iska kakvato i da e ovca, a si târsi ovca-ta. man-the not wants which INDEF shep but REFL seeks sheep-the 'The man doesn't want just any sheep, but is looking for his sheep.'
d. Serbian/Croatian (Progovac 1990: 130)

Milan nije video bilo koga, već predsednika.
Milan NEG:has seen INDEF whom but president
'Milan did not see just anyone, but the president.'
e. Chuvash (Skvorcov (ed.) 1985: 438)

Văltakam marśke, xamăr śyn.
he someone not.is ourselves person
'He is not just anyone, but one of ours.'
These anti-depreciative cases also differ from the depreciative cases of $\S 7$ 7.5.4.2 in that they are not restricted to tautological environments. Apparently the negation somehow licenses the occurrence of free-choice indefinites in these environments.

In languages like English where free-choice indefinites are also used in the direct-negation function, sentences with anti-depreciative indefinites threaten to be ambiguous between the negative and the anti-depreciative interpretation. However, there is an intonational difference between the two interpretations (see Ladd 1980: 145-62, Horn 1989: 230): The anti-depreciative reading is associated with a fall-rise (cf. 413a), while the negative meaning is associated with a simple falling contour (cf. 413b).
(413) English
a. I don't want to talk to "anyone.
b. I don't want to talk to 'anyone.

This fall-rise contour of anti-depreciative indefinites is also found in languages in which there is no potential ambiguity, e.g. in German. The simple falling contour is simply odd in (414).
(414) German

Ich möchte nicht mit `irgend jemandem sprechen.
'I don't want to talk to " anyone.'
The similar facts in Hungarian are discussed by Hunyadi (1987: 133).
${ }^{\mathrm{i}}$ In a few languages, another possibility is that a xot'-type focus particle is used to mark concessive conditionals, e.g. in Hungarian (cf. 308b) and Romanian. A route of development analogous to (351b) is also a possible option for these languages.
${ }^{\text {ii }}$ Compare also Latin vel 'even; at least; or', which derives from the imperative of velle 'want'. However, vel is not used to form indefinite pronouns.
iii The most explicit defense of a unified semantic analysis in the literature is Gil (1993), who analyzes elements such as Japanese $m o$ as 'conjunctive operators'. However, he does not say whether there is a unified analysis of elements like $k a$ as 'disjunctive operators'.
iv Indeed, Manoliu-Manea (1966: 445) and Jackendoff (1972b) suggest that the distinction between 'every' and 'any' can be captured by paraphrases along the lines of (361): (i) You can invite any friend. = You can invite Joan or Bill or Henry or Julie or... (ii) You can invite every friend. = You can invite Joan and Bill and Henry and Julie and... See also Hunyadi (1987) on Hungarian mind- 'every; and' and akár 'any; or'. ${ }^{\mathrm{v}}$ It is interesting that Sannikov (1989), in the only semantic analysis of 'or' (Russian ili) that I am aware of, proposes to analyze 'A or B' as 'A is possible, B is possible'. The source construction in (365b) comes quite close to Sannikov's analysis (which was arrived at completely independently, without regard to the form of 'or'), while (365a) is basically a hearer-oriented variant of (365b).
vi Vasmer (1953-58) rejects this etymology, found in Miklosich (1886), for phonological reasons and derives it from $l i$ 'whether' and the particle bo. If that were the case, the homonymy between -libo (indefiniteness marker) and libo 'or' would be accidental, which is of course possible. I have no stake in the etymology of libo 'or' offered in (366), but I am convinced that Vasmer is too strict in demanding phonological regularity even for such grammatical items as 'or' (cf. also Haiman (1974), who makes the same point).
vii Compare also Givón's (1990: 818) continuum between declarative and parametric question, moving gradually from certainty through uncertainty to question: Joe called/What's-his-name called/Whoever it was that called.../I don't know who called/Who knows who called/Who called?
${ }^{7 a}$ Li (1992) and Postma (1994) are more recent attempts of configurational analyses within formal syntactic frameworks which assign the same meaning to WH-expressions and derive the different resulting meaning from the syntactic structure.
viii I know only of four cases where one could think of a diachronic origin of an interrogative root in an indefinite pronoun:
(i) Italian cosa 'what?' is of course related to cosa 'thing', but it derived from che cosa? 'which thing?' (cf. the analogous reduction in qualcosa 'something' from qualche $\cos a$ );
(ii) Maltese $x i$ 'what?', which seems to be related to Arabic $\check{s}$ ay? 'thing' - probably a similar explanation as in the Italian case can be given;
(iii) Coptic $u$ 'what?' has been claimed to go back to Ancient Egyptian wéj 'one' (Gardiner 1932: 307-8). This etymology is anything but certain.
(iv) Acehnese (Austronesian) pat 'where?' apparently derives historically from teumpat 'place' (Mark Durie, personal communication). This case is the most intriguing one, since it is part of a complex system of 'epistemological classifiers' (Durie 1985: ch. 6), where pat can also mean something like 'place', e.g. with dum 'every' (dum=pat 'everywhere') and $s a=$ 'one, same' (e.g. sa=pat 'same place').
${ }^{\text {ix }}$ In some languages, reduplicated interrogatives have simple plural meaning, e.g. in Ainu, Khmer, Mongolian (juи juи 'what what', i.e. 'what kinds of things'), and Tagalog (sinu-sino 'who-who', i.e. 'who(PL)').
${ }^{x}$ In addition to being restricted to negative-polarity contexts, these Dravidian echo compounds also express the nuance of contempt. This is a widespread function of reduplication (cf. Moravcsik 1978), which is also represented in English in the construction book-shmook borrowed from Yiddish. Contempt is semantically close to irrelevance and hence to free choice, so there is another possible connection here. Unfortunately, I have no concrete proposal for a way of integrating all these interconnections and must leave this topic for future research.
${ }^{\text {xi }}$ Except for some languages where a generic noun was borrowed, e.g. Turkish bir sey 'something' < 'one thing' (sey from Arabic šay? 'thing') or Dongolawi hāğa 'something, thing' (from Arabic liaağ at 'thing')

## 8

## Negative Indefinite Pronouns

While this work is the first in-depth typological study of indefinite pronouns in general, negative pronouns in particular have been the object of two recent large-scale cross-linguistic investigations, Bernini and Ramat (1992) and Kahrel (1989). I will focus my attention on the relation between negative indefinites and other indefinites, as well as on explanations of the observed universal tendencies that were not yet given in the works cited.

In § 8.1, I discuss the received taxonomy of negated indefinites, demonstrating that it is inadequate and that the implicational map of chapter 4 provides for a better classification. § 8.2 deals with one important aspect of the syntax of negative indefinites, the cooccurrence with a negative element associated with the verb. I will formulate a number of cross-linguistic generalizations and will propose functional explanations for them. Finally, in § 8.3 I examine various diachronic sources of negative indefinites, in particular negative scalar focus particles and minimal-unit expressions.

### 8.1. The Main Syntactic Types of Negative Indefinites

### 8.1.1. The consensus: four types

There is general agreement that there are four main syntactic ways of expressing negated indefinites, or in my terms, the direct-negation function of indefinite pronouns (Dahl 1979, Kahrel 1989: 3, ${ }^{\text {i }}$ Bernini and Ramat 1992: 10910). These four strategies are illustrated in (415a-d).
a. Verbal negation plus (ordinary) indefinite Turkish (cf. bir s3ey 'something')
Bir s3ey duy-ma-dl-m. something hear-NEG-PAST-1SG
'I didn't hear anything.'
b. Verbal negation plus 'special indefinite'

Basque (cf. nor-bait 'somebody', i-nor 'anybody')
Ez dutinor ikusi.
NEG I:have:him anybody seen
'I have not seen anybody.' (Saltarelli 1988, ex. 525)
c. Verbal negation plus 'negative indefinite'

Polish (cf. kto-s' 'somebody')
Nikt nie przyszed $\Omega$.
nobody NEG come:PAST:3SG
'Nobody came.'
d. 'Negative indefinite' without verbal negation

Latin
Nihil obstat.
nothing hinder:PRES:3SG
'Nothing stands in the way.'

While this typology is useful at a rather superficial level, it is problematic in several ways. In order to apply it consistently, one would have to know precisely (a) what counts as verbal negation, (b) how a 'negative indefinite' is defined, and (c) how a 'special indefinite' is defined. In the following sections, we will see that none of these questions are easily answered. The discussion of question (a) will be deferred till $\S 8.2 .1$, and questions (b) and (c) will be discussed first.

### 8.1.2. Negative indefinites and elliptical contexts

How should we define 'negative indefinite pronouns'? Intuitively, what is meant by saying that an indefinite pronoun is negative is that it somehow expresses the negative sense by itself, inherently, without needing an additional verbal negation. Brown (1985) tries to make this intuition explicit by proposing that negative indefinites like nobody and nothing refer to an empty set. However, this semantic description does not seem to conform to our intuitions. It is not the same to say I heard nothing and I heard an empty set (of sounds). In the first sentence it is conveyed that no hearing event took place, whereas in the second sentence, it is implied that such an event took place. In natural languages, the use of negated indefinite pronouns invariably leads to the first sense, whether the indefinite is inherently negative or not. Thus, despite the widespread intuition that there is something 'inherently negative' about (e.g.) Polish nikt 'nobody' as opposed to Basque inor 'anybody', it seems difficult to make it explicit in semantic terms. Since indefinite pronouns are interpreted within clauses, and at the clause level inor and nikt have the same meaning, the semantics does not seem to help.

A better way of identifying inherently negative pronouns is the purely syntactic criterion of negative meaning in ELLIPTICAL CONTEXTS. Bernini and Ramat (1992: 115) explicitly adopt this criterion to distinguish negative from non-negative indefinites. According to this criterion, indefinites are considered inherently negative if they may occur in elliptical contexts (where the verb with its negation is ellipted) and still convey the negative meaning. I will also speak of free-standing indefinites in such cases. A typical elliptical context is provided by negative answers to parametric questions. In Polish and Spanish, the indefinite can be used in this way (cf. 416), but in Turkish and Hindi/Urdu, it cannot (cf. 417).
(416) free-standing indefinites conveying negative meaning
a. Polish
A: Kto przyszeds?
B: Nikt. nobody
'Who came?
Nobody.'
b. Spanish
A: ¿Qué viste?
'What did you see?
B: Nada. $\quad \begin{aligned} & \text { Nothing.' }\end{aligned}$
(417) free-standing indefinites not conveying negative meaning
a. Turkish
A: Ne duy-du-n?
B: *Bir s3ey.
what hear-PAST-2SG
one thing
'What did you hear?
Nothing.'
b. Hindi/Urdu
$\begin{array}{ll}\begin{array}{ll}\text { A: Aaj kaun aayaa? } \\ \text { today who came } \\ \text { 'Who came today? }\end{array} & \begin{array}{c}\text { B: }{ }^{*} \text { Koii bhii. } \\ \text { someone INDEF }\end{array} \\ & \text { Nobody.' }\end{array}$
Another context where the verb with its negation is typically ellipted is in the standard of comparison. Thus, Rumanian nimeni and Russian nikogda are inherently negative by this criterion, as shown in (418).
(418) free-standing negative indefinite in the standard of comparison
a. Romanian
$M^{\prime}$ a nenorocit ca nimeni altul.
me has made.unhappy like nobody other
'She has made me unhappy like nobody else.'
b. Russian

Ona čuvstouet svoju silu kak nikogda ran'še. she feels her strength like never before
'She feels her strength like never before.'
In addition, there are various other elliptical contexts that allow free-standing inherent negatives. For example, in French the following structures are possible:
(419) French (Gaatone 1971: 135, 160, 173)
a. à une vitesse jamais atteinte de mémoire $d^{\prime}$ homme at a speed never reached from memory of man
'at a speed never reached in human memory'
b. Je vous assure, je ne me permets rien. Absolument rien. I you assure I NEG me permit nothing absolutely nothing Aucune désinvolture...
no casualness
'I assure you, I allow myself nothing. Absolutely nothing. No casualness...'

The ellipsis criterion yields clear results in most cases. However, it has a decisive drawback that Bernini and Ramat do not address: Indefinites that must be characterized as inherently negative by this criterion are not associated with negative interpretations in all contexts. Consider the cases of Catalan and Turkish. Both languages have a series of indefinites which are inherently negative by the ellipsis criterion (Catalan ningú 'nobody/anybody', gens/res 'nothing/anything', etc.; Turkish hiç kimse 'nobody/anybody', hiç bir s3ey 'nothing/ anything', etc.).
(420) a. Catalan (Lleó 1983: 298)

Ells ho tenen tot, nosaltres res.
they it have all we anything/nothing
'They have got everything, we nothing.'
b. Turkish
A: Kim geldi? who come-PAST(3SG) ‘Who came?
B: Hiç kimse. INDEF anyone/no one Nobody.'

But in both languages, this 'negative indefinite' is also found in non-negative sentences, e.g. in questions, and in Catalan also in conditionals.
(421) Catalan
a. Hi ha resde nou?
there exists anything of new
'Is there anything new?'
b. Si dius res, et castigaran. if you:say anything you they:will:punish 'If you say anything, they'll punish you.'
(422) Turkish

Hiçkimse gel-di mi?
INDEF anyone come-PAST(3SG) Q
'Did anyone come?'
An analogous situation is also found, e.g., in French (the personne-series), Italian (the nessuno-series), Spanish (the ninguno-series), and Persian (the hič-series). Thus, it would seem that in these languages, the indefinite series in question is not inherently negative after all, and that the negative meaning in elliptical situations like (420a-b) results from the fact that when the ellipted part is mentally restored by the hearer during the interpretation process, she or he restores the verb together with the negation, so that the correct negative meaning is obtained. This is possible because the association with verbal negation is strong enough in these cases, the non-negative uses of (421-22) being rather rare. By contrast, in the cases in (417) the non-negative uses of the indefinite (Turkish bir-series, Hindi/Urdu bhii-series) are much more prominent, so that the negation cannot be restored in ellipsis.

This hypothesis, which makes use of the seemingly vague notion of 'association', receives support from the validity of the two implicational generalizations in (423).
(423) Negative interpretation of elliptical indefinites: absolute universals
a. (negative) If an indefinite series that is used in the direct-negation function is also used in the free-choice function or a specific function, it may not be used elliptically with a negative interpretation.
b. (positive) If an indefinite series that is used in the direct-negation function is not used in any other function, it may be used elliptically with a negative interpretation.

In fact, the observed regularities are even stronger, but (423a-b) are the strongest statemenst that are exceptionless in my data. Implication (423a) cannot be formulated more strongly because of Modern Greek. In this language, the tipota-series is used in the irrealis-non-specific function (cf. 424a), but it has a negative interpretation when it is free-standing (cf. 424b).
(424) Modern Greek
a. Pés mu típota.
say:IMPV me anything ‘Tell me something!'
b. Tí tis ípes? - Típota! what her you:told anything
'What did you tell her? - Nothing!'

Modern Greek is my only counterexample to the stronger generalization that a free-standing direct-negation indefinite may not be interpreted negatively if it is also used in a function other than the negative-polarity functions. ${ }^{\text {in }}$

Implication (423b) cannot be formulated more strongly because of Icelandic, Italian and Basque. In Icelandic, the indefinite nein- is only used for direct and indirect negation (cf. 425a-b), but it cannot be used with a negative interpretation in elliptical answers (cf. 425c). The same is true for Italian alcuno 'any(body), (no)body'.
(425) Icelandic (Halldór SigurDsson, p.c.)
a. Ég sá ekki neinn.

I saw not anybody
'I saw nobody.'
b. Ég held ekki aD neinn hafi komiD,

I think not that anybody have come 'I don't think that anybody has come.'
c. Hver er er viD dyrnar? - *Neinn. who is there at door:the anybody 'Who is at the door? - Nobody.'

Icelandic and Italian are my only counterexamples to the stronger generalization that a free-standing direct-negation indefinite may be interpreted negatively if it is only used in a negative function. And Basque is my only counterexample to the even stronger statement that a free-standing directnegation indefinite may be interpreted negatively if it is only used in a nega-tive-polarity function (the $i$-series is not used in a free-choice or irrealis-nonspecific function, but it may still not be used in elliptical answers with a negative interpretation).

Thus, the generalizations in (423) are the strongest descriptive statements that seem to hold universally. But given the rarity of some other cases, as just discussed, the stronger formulation in terms of tendencies in (426) captures the linguistic reality better.

Negative interpretation of elliptical indefinites: tendencies
a. (negative) The more additional functions a direct-negation indefinite is used in, the less likely it is that it may be used elliptically with a negative interpretation.
b. (positive) The fewer additional functions a direct-negation indefinite is used in, the more likely it is that it may be used elliptically with a negative interpretation.

The generalizations in (423) and (426) are not sufficient to make exact predictions about the availability of a negative interpretation for free-standing indefinites in every case. For example, the Basque $i$-indefinites have the same range of functions as the Catalan cap-indefinites, but only the latter can be used elliptically. Thus, there is some degree of language particular conventionalization.

This is also confirmed by cases of language-internal variation, as exhibited by the Hebrew af-series (Glinert 1982: 454). This series is restricted to the directand indirect-negation functions, and according to (426b) this makes it quite likely that it may occur elliptically with a negative interpretation. This is true in the colloquial language, but purists favor the use of lo 'not' in elliptical answers:

Hebrew (Glinert 1982: 454)
A: Mi ba? - B: Af elad/ af elad lo. who came INDEF one INDEF one NEG
'A: Who came? - B: Nobody.'
That conservative speakers (purists) favor the construction with lo 'not' can be understood as a reflection of the relatively recent restriction of af eilad to negative functions. Af originates in (and is still homonymous with) the focus particle af 'even', so formally there is nothing inherently negative about this series. However, the new constraints on the non-elliptical uses of this series have made the elliptical use in (427) possible, which is a nice confirmation of the reality of the generalization in (426b).

The generalizations in (423) and (426) have a straightforward functional explanation: If an indefinite series also has another function in addition to those listed above (i.e. free-choice, irrealis-non-specific, or specific), elliptical expressions would be potentially ambiguous, so they cannot receive a negative interpretation. Thus, the English any-series, while being the major strategy for expressing negated indefinites in English, cannot be used in elliptical answers because it also has the free-choice function:

English
A: What would you do? B: Anything.
(Only: ‘I would do anything'; Not: 'I wouldn't do anything.')
From the preceding discussion I draw the conclusion that it does not make much sense to single out a special type (415c) 'verbal negation plus negative indefinite'. One can of course define 'negative indefinite' in various ways, e.g. using the ellipsis criterion, or as 'indefinite whose functions include the directnegation function', but these definitions are incapable of distinguishing between the three types (415a-c).

In this chapter, I use the term negative indefinite pronoun in the deliberately vague sense 'indefinite pronoun that has 'direct negation' as an important function'.

### 8.1.3. 'Special indefinites'

Even more problematic is the definition of 'special indefinites', ${ }^{\text {iii }}$, because there is not even an intuitive basis for it. Bernini and Ramat (1992: 124-6) define them as indefinites that occur in affirmative or negative questions, but do not occur in negative elliptical answers or in affirmative elliptical answers. This seems to be a rather arbitrary definition, and one might suspect that it is due to the influence of English (a suspicion which is confirmed by the abbreviations used by Bernini and Ramat: A stands for 'generic quantifier' (any), N stands for 'negative quantifier' (no), and S stands for 'existential quantifier' (some), cf. § 4.6)

In the data of my 40-language-sample (§4.4), it is easy to see that there are many ways in which an indefinite series that also expresses the direct-negation function can be 'special': it may express also the indirect-negation function (e.g. Portuguese $n$-), the question function (e.g. Italian $n$-), the comparative function (e.g. Finnish -kaan), the conditional function (e.g. Catalan cap/res/ningú), the irrealis-non-specific function (e.g. Quechua -pis, Greek típota), the specificunknown function (e.g. Portuguese qualquer, Turkish herhangi), and even the specific-known function (Hindi/Urdu koii, Persian -i, Swedish någon). If one
wishes, one can of course arbitrarily divide this list of functions into three sets and assign the three types in (415a-c) to these sets, but I see no motivation for such a move.

Thus, the three types of (415a-c) can be dispensed with and reduced to the implicational map of chapter 4 . There is no significant further distinction that is not already captured by the map. In addition, the approach adopted here allowed me to formulate implicational generalizations about the possibility of negative elliptical constructions (see 423, 426) that cannot be detected if the possibility of elliptical constructions is used as a classifying criterion.

The only aspect of the taxonomy in (415) that is not captured by my implicational map is the (non-)occurrence with verbal negation. The next section (§ 8.2) will be devoted to a discussion of this parameter.

### 8.2. Negative Indefinites and Verbal Negation

### 8.2.1. What counts as verbal negation

In this section, we first have to take up the first question posed in § 8.1.1: What counts as verbal negation? Many languages require two separate (often discontinuous) elements for verbal negation (cf. Dahl 1979: 88-9), and sometimes one of them cooccurs with a negative indefinite, while the other one must be absent. This is the case, for example, in French and Maltese:

French
a. Phuoc ne la voyait pas. Phuoc NEG her saw not 'Phuoc did not see her.'
b. Phuoc ne voyait (*pas) rien. Phuoc NEG saw not anything 'Phuoc did not see anything.'

## Maltese

a. Patricia ma rat-x lit-tifel. Patricia NEG she:saw-NEG ACC:the-boy 'Patricia did not see the boy.'
b. Patricia ma rat(*-x) xejn.

Patricia NEG saw nothing 'Patricia did not see anything.'

Do these cases show verbal negation or not? Bernini and Ramat (1992: 203) assign them to the type that lacks verbal negation, claiming that the postverbal negative element, which is absent when a negative indefinite is present, is the main part of the negation. This is plausible for French, where ne is never stressed and is often omitted in the colloquial language, ${ }^{\text {iv }}$ but less so for Maltese, where the postverbal negative element $-x$ clearly has less phonological weight than preverbal ma. Anyway, since both the French and the Maltese situation is due to Jespersen's Cycle ( $\S 8.2 .3 .1$ ), which seems to reflect a gradual change, it is quite likely that at least in some languages we are dealing with real ambiguity (i.e. ambiguity for speakers, not just for linguists).

Thus, the classificatory criterion of cooccurrence with verbal negation is not unproblematic either. But the source of the fuzziness is well-understood, and the distinction cannot be reduced to anything else, so it remains as an
important distinction that will be discussed in greater detail in the next sections.

### 8.2.2. Main subtypes with respect to verbal negation

Negative indefinites can be divided into three subtypes depending on their relation to verbal negation:
(431) Type NV-NI
negative indefinites that always cooccur with verbal negation
e.g. the Polish ni-series (nikt 'nobody', nic 'nothing', etc.)
a. Nikt nie przyszed $\Omega$. 'Nobody came.' nobody NEG came

ype V-NI
negative indefinites that never cooccur with verbal negation e.g. the standard English no-series
a. Nobody came.
b. I saw nobody.
(433) Type (N)V-NI
negative indefinites that sometimes cooccur with verbal negation and sometimes do not
e.g. the Spanish $n$-series

| a. Nadie vino. | 'Nobody came.' |  |
| :--- | :--- | :--- |
| nobody came |  |  |
| b. No vi | a | nadie. |
| not I:saw | ACC | nobody |$\quad$ 'I saw nobody.'

In cases like (431), (433b), traditional linguistics has often spoken of 'double negation'. This is a rather misleading way of talking, because semantically there is of course only one negation in such sentences. However, in languages like Latin and standard English, which represent type V-NI, it is possible (though rather unusual) to express semantically double negation in one sentence:
(434) English

Nobody didn't come.
(435) Latin

Nemo non venit.
nobody NEG came
'Nobody didn't come.'
Thus, from the point of view of the Latin norm, which has long dominated grammatical thinking in Western linguistics, a Polish sentence like Nikt nie przyszed $\Omega$ (431a) sounds as if the opposite were meant. But rather than being 'illogical', Polish speakers just speak a language of a different type.

When we turn to the cross-linguistic distribution of the three types in (43133), we are immediately struck by the strong skewing in favor of type NV-NI,
and the rarity of types V-NI and (N)V-NI. In my biased 40-language-sample, 32 languages have negative indefinites of type NV-NI, 7 languages have indefinites of type V-NI, and 3 languages have indefinites of type (N)V-NI. ${ }^{V}$ In Bernini and Ramat's (1992) study, which is restricted to European languages, the skewing is less strong: 28 languages belong to type NV-NI, 10 languages belong to type V-NI, and 7 languages belong to type (N)V-NI.

In my sample, the Latin type (V-NI) is only represented by European languages, suggesting that it is an areal phenomenon. This idea is confirmed by the distribution within Europe, which is almost confined to a contiguous area from Iceland to the Alps and southern France: Within Europe, the 10 languages of this type are Icelandic, Norwegian, Swedish, Danish, English, Frisian, German, French, Occitan, and Maltese (Bernini and Ramat 1992: 205). That the type V-NI is rather rare is most convincingly shown by Kahrel's (1989) representative world-wide sample of 38 languages. In this sample, only four languages show this type (Dutch, Mangarayi (Australian), Yidiny (Australian), and Nama (Khoisan)), while 34 languages show type NV-NI and (N)V-NI (Kahrel does not distinguish between these two). Thus, type V-NI is so rare that we must ask why it is disfavored. An answer to this question will be proposed in the next section (§ 8.2.3).

It is ironic that the cross-linguistic investigation reveals a picture that is almost opposite to the older prejudice against the 'illogical' type NV-NI. The typological perspective leads to a rather dramatic change of our world view: What used to be regarded as the norm of correct thinking turns out to be a rather rare phenomenon in some peripheral areas such as southern Africa, northern Australia, and the extreme west of Eurasia. The fact that speakers of Latin, English, French and German, all V-NI languages, were extremely successful economically, militarily, and culturally, has meant that the general preference for the type NV-NI has gone unnoticed for a long time.

Since the type NV-NI seems to be the default, its discussion will be deferred to § 8.2.5. The next two sections are devoted to type V-NI (§ 8.2.3) and (N)V-NI (§ 8.2.4).

### 8.2.3. Type V-NI: No cooccurrence with verbal negation

I would like to advance the hypothesis that the relative rarity of type V-NI can be explained by the discrepancy between the semantics, which is that of ordinary sentence negation (or nexus negation, in Jespersen's terms), and the surface expression of negation, which is on a participant rather than on the verb in this type. ${ }^{\text {vi }}$ This form-meaning mismatch is tolerated by some languages, but since such mismatches are generally dispreferred (as expressed in Haiman's (1980) principle of isomorphism), the proportion of languages that violate the preference for a close association between form and meaning is rather small.

But if the type V-NI is dispreferred, why does it exist at all? I would like to suggest a diachronic explanation: An unrelated diachronic change which led to a preferred structure elsewhere in the grammar has had the undesirable side effect of creating the V-NI pattern. Since language change generally results only in local optimization, such apparently counterproductive changes are possible and do not contradict the general rule that language change is language improvement (cf. Vennemann 1988).

There seem to be two types of diachronic change that lead to the V-NI type: Jespersen's Cycle (§ 8.2.3.1) and diachronic negative absorption (§8.2.3.2).
8.2.3.1. Jespersen's Cycle and type V-NI. As Bernini and Ramat (1992: 205) observe, the ten V-NI languages in Europe form not only an areally compact group, but there is also an interesting typological correlation within Europe: All and only the V-NI languages have postverbal negation elements that arose by Jespersen's Cycle. From this correlation it is only a small step to the hypothesis that Jespersen's Cycle is responsible for the V-NI pattern in these languages.

Jespersen's Cycle is the name for the well-known cyclic weakening and simultaneous reinforcement (i.e., the grammaticalization) of the sentence negator, as exemplified by the history of French and of English (Jespersen (1917, 1924: 335-6); see also the discussion in Horn (1989: 452-9), Bernini and Ramat (1992: ch. 1-3), Ladusaw (1993) and the literature cited there). This cyclic development is shown schematically in (436).

Jespersen's Cycle:
I. original situation:
II. negation reinforced:
III. loss of original negator:

| French | English |
| :---: | :---: |
| jeo ne di | ic ne secge |
| je ne dis pas | I ne seye not |
| je dis pas | I say not |

English
I ne seye not
I say not

Like all grammaticalization changes, this change is motivated by the tension between a least-effort tendency toward weakening and an information-preserving tendency toward strengthening (cf. Horn 1989: 457, Lüdtke 1980), i.e. it has identifiable motivations that are unrelated to the syntax of negation or negative pronouns. But it has an effect on these: Since the reinforcement of the negation is achieved by grammaticalizing minimal-unit expressions (e.g. French pas) or indefinite pronouns (e.g. English naught > not), which occur postverbally in VO languages, the language ends up with a postverbal negator once the old negator (ne) is lost. It can be shown that the postverbal negator derives from a strengthening element that underwent Jespersen's Cycle in all the ten European languages that have postverbal negation (West Germanic and Gallo-Romance).

The effect of Jespersen's Cycle on indefinite pronouns is the creation of the V-NI pattern: Like minimal-unit expressions, indefinite pronouns denote an extreme value on a pragmatic scale, so at stage II of Jespersen's Cycle, sentences with negative indefinites do not need the reinforcing element. Thus we have, side by side, (437) (a) and (b), (438) (a) and (b).
(437) French
a. Je ne dis pas. I NEG say not 'I don't say.'
b. Je ne dis rien. I NEG say nothing 'I don't say anything.'
(438) Middle High German (Wolfram von Eschenbach, Parzival)
a. Ich en tuons niht. (266.10) I NEG do:it not 'I won't do it.'
b. Er en-dorfte niemen vrâgen wâ. (69.18) there NEG-needed nobody ask where 'No one needed to ask where.'

At stage III, after the loss of the original negator, the V-NI pattern results:
(439)

Colloquial French
c. Je dis rien.

I say nothing
'I don't say anything.'
Modern German
c. Es brauchte niemand fragen wo. it needed nobody askwhere 'No one needed to ask where.'

Thus, the introduction of type V-NI in European languages can be understood as an undesirable but unavoidable side effect of the desirable reinforcement of the negation. From a functional point of view, we now expect speakers to do something about the undesirable side effect, and a straightforward remedy seems available: The addition of the new negator (French pas, German nicht, etc.) to negative sentences with negative indefinites. This is indeed what we see in many languages in the later development (441-44), although such constructions were not in general admitted into the standard languages - the Latin model, defended as 'logical' by purists, seems to have been a very powerful influence (see Vachek 1947, 1962).
(441) African-American Vernacular English (Labov 1972: 785)

Ain't nobody ever thought about pickin' up nothin'.
(442) Broken (=English-based Torres Strait creole; Shnukal 1988: 72)
a. Nobody no go kam. 'Nobody will come.'
b. Ai no speak nating. 'I said nothing.'
(443) Quebec French (Muller 1991: 262)

Le samedi soir au mois de juillet, y a pas personne
the Saturday night in.the month of July there has not nobody
en ville à Québec.
in town at Quebec
'On Saturday nights in July there's nobody in Quebec city.'
(444) dialectal German

Nichts Genaues weiss man nicht.
nothing precise knows one not
'Nothing precise is known.'
8.2.3.2. Diachronic negative absorption and the Negative First Principle. It seems that not all cases of type V-NI can be explained by Jespersen's Cycle, so some additional explanation must be sought. In this sub-section I will try to motivate another diachronic mechanism by which the V-NI pattern may arise: NEGATIVE ABSORPTION.

It appears that the following generalization holds: All V-NI indefinites, except possibly in those languages that recently underwent Jespersen's Cycle, contain a negation marker that is identical to the verbal negator. This can be explained if a diachronic scenario analogous to Klima's transformations of negative attraction and incorporation is assumed, where the verbal negation is, so to speak, 'absorbed' into the indefinite. Schematically:
(445) Diachronic negative absorption
a. 'Nobody came':
I. Person not-came. >
II. Not-person came.
b. 'She saw nothing.'
I. She thing not-saw. >
II. She not-thing saw.

The motivation for this shift of the negator seems to be Jespersen's Negative First Principle (so dubbed by Horn 1989: 293):
(446) The Negative First Principle (Jespersen 1917)

There is a tendency to put the negative element as early as possible in an utterance because the contribution of the negation to the meaning of a larger constituent is particularly dramatic and the hearer needs to get this information as soon as possible.

If this principle is correct, we expect the shift in (445) to occur only where the negative indefinite precedes the verb (and thus also precedes the negator associated with the verb), i.e. we expect it to occur with all indefinites in verbfinal languages, only with pre-verbal indefinites in verb-medial languages, and not at all in verb-initial languages. This prediction seems to be borne out by what diachronic evidence I have.

Consider first Arabic. Classical Arabic belongs to type NV-NI, i.e. the verb is always accompanied by a negator (laa, lam, or maa, depending on the tense). The basic word order is VSO.
(447) Classical Arabic

Lam yasta?" ir-naa ?aladun. (NT, Mt 20.7)
NEG hired-us one
'Nobody hired us.'
In modern Arabic dialects, the verbal negator is usually maa, regardless of the tense, and the basic word order is SVO (cf. 448a). In Baghdad Arabic, when the indefinite is in subject position, the negator $m a$ is prefixed to the indefinite, not to the verb (cf. 448b), but when the indefinite is in post-verbal position, the negation is on the verb (cf. 448c).
(448) Baghdad Arabic (Ali 1972: 54, 53, 48)
a. Saalim ma ral i-šuf-ni hnak. Salim NEG FUT he-see-me there 'Salim will not see me there.'
b. Ma-lad kis'r il šibbač. NEG-one broke the window 'No one broke the window.'
c. Saalim ma šaf ? æy-walid hnak. Salim NEG saw INDEF-one there 'Salim did not see anyone there.'

Similarly, in Cairene Arabic the discontinuous verbal negation ma ...$\check{s}$ (cf. 449a) may be associated with the indefinite only if it is in pre-verbal position, as in (449b).
(449) Cairene Arabic (Mitchell 1962: 107, 111; Bernini and Ramat 1992: 181)
a. Ma t-xaf-š!

NEG 2SG-worry(IMPV)-NEG
'Don't worry!'
b. Ma laddi-š yi-¿raf yi-?ra xåt5t5-i.

NEG one-NEG 3SG.M-can(IMPF) 3SG.M-read(IMPF) writing-1SG
'Nobody can read my writing.'
c. Ma šuf-ti-š ladd. (*'̌ ufti ma laddiš .)

NEG saw-1SG-NEG one
'I didn't see anybody.'
The Arabic case is particularly interesting because it is clear that the negator on the indefinite pronoun is the verbal negator: Constituent-focusing negation has a different form ( $m u$ in Baghdad Arabic, muš/miš in Cairene Arabic). This is clear evidence that we are really dealing with a shift of the verbal negation to the indefinite, not with some kind of constituent-focusing negation or a negative focus particle (as in the cases of $\S$ 8.3.1).

Another case that can be explained by diachronic negative absorption is the situation in several Uto-Aztecan languages (Tümpisa Shoshone, Hopi, Yaqui). In Tümpisa Shoshone (Dayley 1989: 320-3), whose basic word order is SOV, the sentence negator kee usually stands immediately after the subject, as in (450a). When it occurs together with an indefinite pronoun in object position, no word order change is necessary to yield a sentence like (450b). But according to Dayley, the combination kee-hinna in (450b) is a lexicalized compound. Sentence (450c) shows a negative indefinite containing kee- in clause-initial position, demonstrating that a shift like (445a) has taken place (though exceptionally kee may also occur clause-initially elsewhere, Dayley 1989: 321-2).
(450) Tümpisa Shoshone (Uto-Aztecan; Dayley 1989: 321, 324, 44)
a. Nü kee sukkwa punitü.

I NEG that:ACC see
'I didn't see that.'
b. Nü kee-hinna punitü.

I NEG-what:ACC see
'I saw nothing.'
c. Kee-hii nanangkanna.

NEG-what make.noise
'Nothing is making noise.'
Although no diachronic evidence is available in this case, the most plausible explanation for the V-NI pattern of Tümpisa Shoshone is clearly negative absorption.

The situation is similar in the related language Hopi. In Hopi, sentences are negated by putting $q a$ ' $n o t$ ' immediately before the predicate (cf. 451a). When a negative indefinite is present in the sentence, $q a$ - is attached to the indefinite (cf. $451 \mathrm{~b}-\mathrm{c}$ ). In contrast to Tümpisa Shoshone, word order change must be assumed for all cases in Hopi.
(451) Hopi (Uto-Aztecan; Kalectaca 1978: 41, Malotki 1979: 123)
a. Pam wuuti kuuyit qa wéhekna.
that woman water NEG spilled
'That woman didn't spill the water.'
b. Qa-háqaqw kwii-kwitsi.

NEG-whence RDP-smoke
'Smoke comes out nowhere.' (Lit. 'It smokes from nowhere.')
c. Qa-hak pu-t aw may 'ta. (NT, John 8.20) NEG-who he-ACC to.it hands laid 'Nobody laid hands on him.'

Another variant of this situation is found in the related language Yaqui (Lindenfeld 1973: 26-31). Ordinary sentence negation and negative absorption are quite analogous to Tümpisa Shoshone (with some phonological changes in indefinites with incorporated indefinites: kaa 'not' + habe 'who' > ka-abe, kaa + hita 'what' > ka-ita), cf. (452a-c).
(452) Yaqui (Uto-Aztecan; Lindenfeld 1973: 31)
a. Nee kaa Maria-ta biča-k.

I not Maria-DEP see-REAL
'I didn't see Maria.'
b. Ka-abe ne-u nooka-k.

NEG-who me-to speak-REAL
'Nobody spoke to me.'
c. Ka-ita beete-k.

NEG-what burn-REAL
'Nothing burned.'
But there is an alternative construction to (452b-c): Instead of the $k a$-indefinites with incorporated negation, indefinites marked by huni ('even') may be used in negative sentences. But here the sentence negator kaa must cooccur with the indefinites. The resulting meaning is more emphatic negation ('at all').
(453) Yaqui (Lindenfeld 1973: 31)
a. Habe huni kaa ne-u nooka-k.
who INDEF NEG me-to speak-REAL
'There is nobody at all who spoke to me.'
b. Hita huni kaa beete-k.
what INDEF NEG burn-REAL
'Nothing whatsoever burned.'
Yaqui reminds us that the taxonomy of $\S 8.2 .2$ refers to individual indefinites, not to whole languages. Yaqui $k a$-indefinites belong to type V-NI, while huniindefinites, which cannot have arisen by absorption, belong to type NV-NI. I take this to be confirming evidence for the hypothesis that absorption is the cause for the V-NI pattern.

Now let us go back to Europe and see whether negative absorption can be found here, too. The Yaqui case is of course reminiscent of English: English noand any-indefinites are quite similar in their behavior to Yaqui ka- and huniindefinites. But recall that English has long been an SVO language, so negative absorption as stated above could not account for English sentences like She saw nothing. Furthermore, in earlier English the old negative particle ne cooccurred with the no-indefinites, contrary to what we would expect if it had been absorbed by them. English, as indeed most other modern European languages, is adequately accounted for by Jespersen's Cycle (§ 8.2.3.1), and we should not yield to the temptation of overextending the application of negative absorption.

However, there are two possible cases of negative absorption in Europe, after all. First, in colloquial Frisian the older nimmen 'nobody' (cf. Dutch niemand, German niemand) has been replaced by the form net ien (lit. 'not one'), cf. (454).
(454) Frisian (Bernini and Ramat 1992: 84, 138, 219)
a. Jan yt net fisk. Jan eats not fish
'Jan doesn't eat fish.'
b. Jan het net ien. (older: Jan het nimmen.) Jan has not one
'Jan has nobody.'
However, no dramatic change in type results from this replacement because the old form nimmen belongs to type V-NI (resulting from Jespersen's Cycle), just like the new net ien.

The other possible case is Latin. Although Latin shows traces of having undergone Jespersen's Cycle (non 'not' < ne-oen(um) 'not-one', Jespersen 1924: 336), there is no evidence whatsoever that the original negator ne, which was inherited from Proto-Indo-European, got lost as it did in French, English, or German. Instead, it seems that it was absorbed into the negative indefinites. Since the older Latin word order was verb-final, we expect no subject-object asymmetries in the effect of negative absorption, and indeed none are found. As predicted by the absorption hypothesis, Latin negative indefinites contain the element $n(e)$-.
(455) Origin of Latin negative indefinites

Like the changes of Jespersen's Cycle, negative absorption is motivated independently (by the Negative First Principle) but leads to the dispreferred VNI pattern. The expectation again is that speakers will remedy this state of affairs at some stage if given enough time. For Arabic and Uto-Aztecan languages, it is probably too early to expect a new round of changes. But in Latin, the expectation is borne out fully: According to the standard view (Posner 1984: 1), Proto-Romance belonged to the NV-NI type, i.e. verbal negation was reintroduced. In the next section (§ 8.2.4), I will discuss the Romance languages in more detail.
8.2.3.3. The range of functions of negative indefinites of type V-NI. For the seven negative indefinites of type V-NI in my sample (German, Dutch, English no-, Swedish ingen, Icelandic enginn, Latin $n$-, Ossetic ma-/ni-), the following implication holds:
(456) If a negative indefinite never cooccurs with verbal negation, it has only the direct-negation function.

The implication appears to hold also for the other languages that were mentioned in this section (§ 8.2.3), and I know of no counterexamples. Of course this universal can be easily motivated functionally: If a V-NI indefinite occurred in non-negative functions, these would be understood as negative.

However, the reverse does not hold: Some negative indefinites that do not have functions other than direct negation nevertheless belong to type NV-NI, in particular negative indefinites in the Slavic and Baltic languages. And the Georgian negative indefinite, which also does not have other functions, belongs to type (N)V-NI.

### 8.2.4. Type (N)V-NI: Variation in cooccurrence with verbal negation

Some negative indefinites sometimes cooccur with verbal negation and sometimes do not, as illustrated by Portuguese (cf. 457) and New Testament Greek (cf. 458).
(457) Portuguese
a. Ninguém veio.
nobody came
'Nobody came.'
b. Não veio ninguém.

NEG came nobody
'Nobody came.'
(458) New Testament Greek
a. Oudeìs hē mãs emisthō sato. (NT, Mt 20.7)
nobody us hired
'Nobody hired us.' 'Nobody hired us.'
b. Egō ou krínō oudéna. (NT, John 8.15)

I NEG judge:1SG nobody:ACC
'I judge nobody.'
I have found variation of this kind in the following languages: several Romance languages (Italian, Spanish, Portuguese, colloquial Catalan, cf. Posner 1984), older Slavic (especially Old Church Slavonic, Old Russian, Old Czech, cf. Kř íž ková 1968), Albanian, New Testament Greek, non-standard English (Labov 1972), non-standard German (Tanaka 1994: 196) and Georgian. In all these languages, the negative indefinites that show this variation do not have many non-negative functions, of course, because otherwise sentences lacking verbal negation would possibly be ambiguous (cf. the discussion in § 8.1.2).

The following rule seems to capture the distribution of the V-NI pattern and the NV-NI pattern for all these languages (except for Georgian, for which I do not know what determines the variation):

Cross-linguistic generalization for $V-\mathrm{NI} / \mathrm{NV}$-NI variation
Whenever a negative indefinite may be associated either with the V-NI pattern or with the NV-NI pattern, the V-NI pattern tends to be used when the negative indefinite occurs preverbally, and the NV-NI pattern tends to be used when the negative indefinite occurs postverbally.

The motivation for this generalization is again straightforward: It is Jespersen's Negative First Principle (cf. § 8.2.3.2), as noted in Kř íž ková (1968: 31) ${ }^{\text {vii }}$ and Horn (1989: 450). If rule (459) is strictly observed, as it is in some languages, the result is that the hearer is always informed of the negative character of the sentence before he or she hears the verb, i.e. rather early in an SVO language. (Note that the languages with (N)V-NI indefinites almost all have the basic order SVO.)

But notice that the effect of a rule like (459) would be more easily achieved by adopting the NV-NI pattern uniformly, as is done in the large majority of the world's languages. Against this background, the diachronic development of Slavic is easily understood: While older Slavic showed variation along the lines of (850), all modern Slavic languages uniformly show the NV-NI pattern
(Mathesius 1937, Kř íž ková 1968). That is, the change from (N)V-NI to NV-NI restored the universally preferred state of affairs.

As Kř íž ková (1968) documents, only the NV-NI pattern is attested with postverbal indefinites in Old Church Slavonic and Old Russian (e.g. 460a). With preverbal indefinites, both V-NI and NV-NI are possible (Old Church Slavonic showing a slight preference for NV-NI, Old Russian a slight preference for VNI), cf. (460b-c).
(460) Old Russian (Kř íž ková 1968: 24)
a. (NV-NI) i ne idjaše s nimi nikto že and NEG went with them nobody PT 'And nobody went with them'
b. (V-NI) Nič ego že sja bojat' běsi, tokmo kresta. nothing PT self fear demons only cross 'The demons are afraid of nothing, except the cross.'
c. (NV-NI) jako sooego nikto že ne xulit' because self's:ACC nobody PT NEG abuses 'because nobody abuses his own'

Similar tendencies are attested for Old Czech. In the modern languages, sentences like (460b) are impossible, and only the NV-NI pattern is acceptable.

But when we get to Romance, we seem to be faced with a puzzle: It appears that the reverse development can be observed, from a uniform NV-NI pattern to variation along the lines of (459). Such a reverse development would contradict my thesis that the NV-NI pattern is universally preferred. How can we understand this change? The facts are as follows (see the summary in Posner 1984). In the majority of Romance languages, only the NV-NI pattern is possible (Romanian, standard Catalan, Friulian, Ladin, Romansh, Vegliot, French with reservations), but in Italian (especially central and southern), Sardinian, Spanish, and Portuguese, the sentence negator is omitted when the negative indefinite occurs preverbally. The standard assumption is that this is an innovation and that Proto-Romance was uniformly NV-NI, not only because most Romance languages still belong to this type, but mainly because older texts of (N)V-NI languages have the NV-NI pattern even with preverbal indefinites, e.g. (461a-b).
a. Old Spanish (Llorens 1929: 86)

Vio que ninguno non pud ffallar.
saw that nobody NEGcould speak 'She saw that nobody could find.'
b. Old Portuguese (Llorens 1929: 89)

Nenhuu o nom podia acordar de seu pensar. nobody him NEG could wake from his thought 'Nobody could awaken him from his thoughts.'

Posner (1984) suggests that Spanish and Portuguese may have been influenced by Italian, and that the Latin model played a role in supporting the V-NI pattern in Italian (and Sardinian). However, the Latin influence does not, of course, account for the asymmetry described in (459), which must have a universal basis.

I would like to propose that the puzzle can be solved in the following way: The assumption that Proto-Romance was uniformly NV-NI should be given up. ${ }^{\text {viii }}$ The Latin V-NI pattern was replaced by the NV-NI pattern first in the
case of postverbal indefinites, which violate not only the form-meaning isomorphism, but also the Negative First Principle, and are hence doubly dispreferred. This change leads to the (N)V-NI pattern as described above. Central and southern Italian and Sardinian stopped at this stage, while most other languages extended the NV-NI pattern also to preverbal indefinites. Before the standard languages were codified, there was a lot of variation, and in the process of codification, Spanish and Portuguese were influenced by Italian, and all three languages were to some extent influenced by Latin (cf. Posner 1984). The change from uniform NV-NI to (N)V-NI that we see in the texts would then only be a superficial change, resulting from system-external sociolinguistic factors, and not a deep change in the system. If this interpretation is correct, my general account can be maintained. Note that a change from NV-NI to (N)V-NI is predicted not to occur, because it would mean that a structure that is optimal on two preference parameters (Negative First and form-meaning isomorphism) is turned into a form that is less preferred on one of these parameters.

It is instructive to compare the change from Latin (V-NI) to Romance ((N)VNI > NV-NI) with the analogous change from standard English to dialectal English. As documented in Labov (1972), there are many dialects of English which have not extended the NV-NI pattern to indefinites in subject position and can be compared to Sardinian or Italian. For example, New York City White Vernacular allows NV-NI with postverbal no-indefinites, but not with preverbal no-indefinites:
(462) New York City White Vernacular English (Labov 1972: 785-6)
a. We don't ever see none of them guys.
b. *Nobody don't know.

But sentences like (462b) are possible in other white dialects, and quite common in African-American dialects. But even in African-American English the tendency of (459) finds a reflection: While the NV-NI pattern is normally obligatory with no-indefinites, it is always optional if the no-indefinite is in preverbal position (Labov 1972: 806).
(463) African-American Vernacular English (Labov 1972: 785-6)
a. Nobody don't know where it's at.
b. Nobody fights fair.

Thus, different non-standard dialects of English have diverged from the standard V-NI pattern to various degrees, just like different Romance languages have diverged from Latin to various degrees. And just like the Latin influence on Romance was strong, the standard English influence on English dialects is strong. At the present stage, the most innovative English dialects seem to be further advanced than Italian (in that they allow (463a)), but none is as advanced as Romanian or standard Catalan (in that none disallows (463b)).

### 8.2.5. Type NV-NI: Obligatory cooccurrence with verbal negation

As we saw in §8.2.2, the type NV-NI, where the indefinite pronoun cooccurs with verbal negation, is the most widespread type cross-linguistically, as is to be expected because sentence negation should be expressed on the verb. ${ }^{\text {ix }}$ When a negative indefinite pronoun of this type appears to contain a negative marker
(e.g. Russian ni-kto 'nobody'), Western linguists have traditionally spoken of 'double negation', but I have noted that this is a mistake due to the prejudice of V-NI languages like Latin that do allow real double negation. This was pointed out already by van Ginneken (1907), and Mathesius (1937) proposed that we are instead dealing with a kind of agreement in such cases, or 'negative concord'. Of course, this case is rather different from standard agreement (e.g. in gender, number, or case), and probably we would not want to water down the notion of agreement unnecessarily by subsuming these cases under it.

In any event, there are many negative indefinites that do not contain a negative marker, and although they are not so prominent in Europe, they seem to be prevalent outside of Europe. With respect to these indefinites, it seems best not to ask simply whether they are 'inherently negative', but to ask in which other functions they are used besides the direct-negation function (as I proposed in § 8.1). We can then formulate the generalization in (464):
(464) If an indefinite pronoun series that is used in the direct-negation function is also used in a non-negative function other than the comparative, question and conditional functions, it occurs in the NV-NI pattern.

The condition 'other than the comparative, question and conditional functions' is necessary in order to exclude Romance indefinites like Italian nessuno and Spanish nada, which are possible in these functions but belong to the (N)V-NI type. The generalization in (464) captures the intuition that indefinites that are not 'inherently negative' cannot do without verbal negation and at the same time avoids the problems associated with the notion 'inherently negative' (cf. § 8.1).

Let us now look at an interesting restriction on negative indefinites that are also used in non-negative functions. In some SVO languages, such indefinites cannot be used in subject position, as illustrated in (465-70). This restriction is rarely found in negation-only indefinites like Russian ni-kto, etc. ${ }^{x}$
(465) English
a. I didn't see anybody.
b. *Anybody didn't come.
(466) Swedish
a. Jag har inte sett någon. I have not seen anybody 'I didn't see anybody.'
b. *Någon har inte kommit. anybody has not come 'Nobody came.'
(467) French (Muller 1991:314)
$\begin{array}{cllllll}\text { a. Je } & n^{\prime} & \text { ai } & \text { (pas) } & \text { vu qui que ce soit. } \\ \text { I } & \text { NEG } & \text { have } & \text { not } & \text { seen who indef }\end{array}$ 'I didn't see anybody.'
b. *Qui que ce soit n' est (pas) venu. who indef NEG is not come 'Nobody came.'
Swahili
a. Si-ku-ona mtu.

1SG-NEG.PERF-see person
'I did not see anybody.'
b. *Mtu ha-kufa.
person NEG-die
'Nobody has died.'
(469) Hausa (Ma Newman 1990: 11, 181)
a. Bà mù hàdú dà kóowáa à hányàa bá. NEG we meet with anyone on road NEG 'We didn' meet anyone on the road.'
b. *Kóowáa bài zóo bá.
anyone NEG-he come NEG
'Nobody came.'
(470) Chinese (Li 1992: 127)
a. Tā bù xǐhuan shénme. she NEG like what 'She doesn't like anything.'
b. *Shénme rén bù xìhuan tā. what person NEG likeshe 'Nobody likes her.'

In order to express the ideas of the (b) sentences, these languages have to resort to a different indefinite series (e.g. 471), to an existential construction (e.g. 472 ), or to a change of the word order (e.g. 473).
(471)
a. English

Nobody came.
b. Swedish

Ingen har kommit.
nobody has come
'Nobody came.'
c. French

Personne $n^{\prime}$ est venu.
nobody NEG is come
'Nobody came.'
(472)
a. Swahili

На-kuna mtu a-li-ye-tu-ajiri. (NT, Mt 20.7)
NEG-exist person 3SG.SUBJ-PAST-REL-1PL.OBJ-hire
'There's nobody who hired us.'
b. Hausa

Báà kóowáa wandà yá zóo.
NEG:exist anyone REL 3SG came
'There's nobody who came.'
(473)
a. Swahili $\quad$ Ha-kufa mtu.

NEG-die person
'Nobody died.'
b. French

Il $n^{\prime}$ est pas venu qui que ce soit.
it NEG is not come who INDEF
'Nobody came.'
The reason for the unacceptability of the (b) sentences in (465-70) is the lack of focusing of the indefinite pronoun: In order to be interpreted negatively, an indefinite pronoun that also has non-negative uses needs to be focused (cf. §5.7 on focusing and scalar endpoints), and in many SVO languages only postverbal constituents can be focused. By contrast, all preverbal constituents can be fo-
cused in verb-final languages, so these languages do not show asymmetries like those in (465-70). ${ }^{\text {xi }}$

This explanation, which relates the subject-object asymmetries in (465-70) to focusability rather than to structural relations with the negative element, receives support from Modern Greek. In this language, postverbal indefinites in the direct-negation function may be either stressed or unstressed (i.e. focused or unfocused).
(474) Modern Greek (Veloudis 1982: 179)
a. Dhen érxete kanís IPOPSÍFJOS. NEG comes any candidate 'No candidate comes.'
b. Dhen érxete KANÍs ipopsífjos.

NEG comes anycandidate
'Id.'
However, in the pre-verbal position only stressed negative indefinites are admitted (Veloudis 1982: 194), as shown in (475). Structurally, kanís occurs in the same position in (475a) and (475b), but it must be focused in order to be licensed.
a. *Kanís dhen tin ENDHIAFÉRI. anyone NEG her interests 'Nobody interests her.'
b. Kanís dhen tin endhiaféri. anyone NEG her interests 'Nobody interests her.'

The tendency for negative indefinites to occur postverbally extends even to indefinites that are 'inherently negative' and are not categorically excluded from the subject position. As Labov (1972) notes, in African-American Vernacular English, sentences like (476a) are possible, but subject-verb inversion as in (476b-c) is also a common option.
(476) African-American Vernacular English (Labov 1972: 786, 811) ${ }^{\text {xii }}$
a. Nobody don't know where it's at.
b. Don't no average motherfucker make no fifty dollars a day.
c. Ain't no white cop gonna put his hands on me!

However, this tendency to bar from the subject position negative indefinites that are not 'inherently negative' is not universal - it is only a tendency. Compare the following example from Hebrew, an SVO language that is otherwise much like Swahili or Chinese in the relevant aspects.
(477) Hebrew
a. Lo ra?iti iš. NEG I:saw anybody 'I didn't see anybody.'
b. Iš lo bala-mesiba. anybody NEG came to:the-party 'Nobody came to the party.'

Quite analogous are sentences like Personne n'est venu 'Nobody came' in older French, at a time when ne was still the primary negation marker. And compare sentences like (478) in English, where a lexical scalar endpoint is used to express negation. In (478b), the subject must bear sentence accent in order to be interpreted as focused, but otherwise it is as acceptable as (478a) (cf. König 1991: 41).
(478) English
a. He wouldn't kill A FLY.
b. A ROCKEFELLER could not afford to pay for this.

Thus, the restriction on any- in such environments must be regarded as an idiosyncratic fact about any- (and cannot be predicted from the low position of negation, as claimed by Progovac (1994) and Laka (1994)).

### 8.2.6. Cooccurrence of several negative indefinites in one clause

When several negated indefinites occur in one clause, some languages have restrictions on certain combinations. In the unmarked case, illustrated by (47981), the same negative indefinite series is used for all the indefinites.
(479) Spanish

Nadie hizo nada.
nobody did nothing
'Nobody did anything.'
(480) Swahili

На-wa-kumw-ambia mtu neno. (NT, Mt 16.8)
NEG-they-him-say person word
'They didn't say anything to anybody.'
(481) Basque (Saltarelli 1988: 306)

Ezdigu i-nor-k e-zer esan-go.
NEG he:it:to.us:AUX INDEF-who-ERG INDEF-what say-FUT
'No one will say anything to us.'
But some languages show restrictions on the possible combinations of negative indefinites, as we will see in this section.
8.2.6.1. Cooccurrence restrictions of V-NI indefinites. In many languages with V-NI indefinites, only the first indefinite is from the series that is normally used in the direct-negation function. The other indefinites are from the series that is used in the indirect-negation function, as exemplified in (482-84).
(482) Latin

Nemini quidquam <*nihil> dixerunt.
to:nobody anything nothing they:said
'They didn't say anything to anybody.'
(483) English (standard)

They said nothing to anybody $<^{*}$ nobody $>$.
(484) standard German

Sie sagten niemandem etwas <*nichts>.
they said nobody something nothing
'They didn't say anything to anybody.'

The fact that the other orders are not possible (*Cujquam nihil dixerunt, *They said anything to nobody) is of course another manifestation of Jespersen's Negative First Principle.

The starred variants of (482-84) are impossible only on the intended reading, but they are grammatical on a different reading in these languages, corresponding to the reading of 'real double negation' of (434-35) in § 8.2.2.

English
They said nothing to nobody.
i.e. They said something to everybody.

The fact that this doubly negated reading is available explains the impossibility of two (or more) V-NI indefinites cooccurring with each other - otherwise sentence (485) would be ambiguous. Thus, we have the following typological correlation:
(486) a. If in a language negative pronouns do not cooccur with verbal negation, they also do not cooccur with each other, and conversely,
b. if negative pronouns do not cooccur with each other, they do not cooccur with verbal negation, either.

Unfortunately, I know of two counterexamples to the first generalization (886a), whereas no counterexample to the second generalization (886b) has come to my attention yet. The first of these counterexamples, Occitan, can perhaps be explained by its history. In Occitan, sentences like (887a) are possible, although Occitan belongs to type V-NI (cf. 887b).
(487) Occitan (Bernini and Ramat 1992: 208, 188)
a. Degun vegué ren.
nobody saw anything nobody saw anything 'Nobody saw anything.'
b. Ai ges d' amic. I:have nothing of friend 'I have no friend.'

Occitan has recently undergone Jespersen's Cycle (Bernini and Ramat (1992: 208) note that some dialects like Gascon still retain the preverbal negation), which means that negative indefinites like degun 'nobody' and ren 'nothing' have only recently become inherently negative. So probably sentences like $I$ didn't say nothing (i.e. 'I said something') are not yet possible, ${ }^{\text {xiii }}$ so that the motivation for the impossibility of cooccurrence does not apply.

In contrast to Occitan, the negative indefinites of Latin may be assumed to have arisen by negative absorption (§ 8.2.3.2), which would of course lead to structures like (482), because the verbal negation can be absorbed only into one indefinite pronoun. Thus, the different origin of the Latin and Occitan V-NI pattern also results in different behavior when a clause contains more than one negated indefinite. The fact that standard English and standard German behave like Latin although they underwent Jespersen's Cycle could be attributed to influence from Latin, or it might be due to the fact that a longer time has passed since the preverbal negation got lost, so that there is no danger of misunderstanding sentences like Nobody didn't come.

However, there is a second counterexample, Ossetic, and I can think of no way of explaining it away. In Ossetic, negative indefinites are marked by the prefixes ni- and ma-, which are so similar to the verbal negations næ and ma that an origin by negative absorption seems plausible. This would also account for the V-NI pattern, illustrated in (488a). But unfortunately, several negative indefinites may cooccur in one clause, cf. (488b).

Ossetic (Axvlediani (ed.) 1963: 197)
a. Ma-kædæm aси.

NEG-whither go:IMPV
'Don't go anywhere.'
b. Ма-кæтæп ma-cy zæV.

NEG-to:whom NEG-what say:IMPV
'Don't say anything to anybody.'
I have no explanation for this unexpected situation, but I think that the generalization in (486) is still valid as a strong tendency, and that the explanation is also on the right track.
8.2.6.2. Cooccurrence restrictions in NV-NI languages. In some languages that have several different negative indefinites belonging to type NV-NI, there is a restriction to the effect that a non-inherently negative indefinite may not precede an inherently negative indefinite. For example, in Persian either the $i$ series (which is used in many other functions, including specific functions) or the hič-series (which occurs only in negative functions and in questions) may be used in the direct-negation function, cf. (489). When two negative indefinites cooccur in one clause, only three of the logically possible four combinations are acceptable, cf. (490).

Persian
(489) Hič kas(-i)/ kas-i zang na-zad.

INDEF person-INDEF person-INDEF phone NEG-struck
'Nobody phoned.'
(490) a. Kas-i č iz-i na-š anid.
b. Hič kas hič č iz na-sanid.
c. Hič kas č iz-i na-šanid.
d. *Kas-i hič č iz na-š anid. 'Nobody heard anything.'

The same restriction is found in Turkish, which borrowed the negative indefiniteness marker hič from Persian and seems to have borrowed and preserved the complete pattern.

This restriction, which has not to my knowledge been noted before in the literature, is similar to the restriction of the preceding subsection (§8.2.6.1) in that the 'inherently negative' indefinite must precede the other indefinite, which is clearly another manifestation of the Negative First Principle. If any of the four combinations is impossible, the Negative First Principle predicts that the (d) combination is impossible. But given that (489) is acceptable, why cannot all four combinations be possible?

I would like to venture the following speculation: Persian *Kas-i hič č iz na-š anid and its Turkish equivalent are ungrammatical because kas-i cannot be interpreted as falling in the scope of negation (in this sense there is a similarity to $(465-70)$ (b) in $\S 8.2 .5$ ). The reason is that the following hič -indefinite, which
is more emphatic than the corresponding hič -less form in (490a), is automatically focused and 'absorbs the focus', so to speak, so that kas-i can no longer be the focus (as in 490d).

### 8.3. Diachronic Sources of Negative Indefinites

Diachronic sources of indefinite pronouns that are used in the direct-negation function have already been discussed in earlier parts of this work (especially $\S$ $7.1, \S 8.2 .3$ ). In this section, two sources that deserve more discussion will be treated: negative scalar focus particles ( $\S 8.3 .1$ ) and minimal and maximal unit expressions ( $\S 8.3 .2$ ). Then $\S 8.3 .3$ will briefly summarize the diachronic sources of negative indefinites, and in $\S 8.3 .4$ I discuss and reject the hypothesis that overtly negative indefinites can be reanalyzed as 'non-negative' indefinites.

### 8.3.1. Negative scalar focus particles

It is often taken for granted that negative indefinite pronouns like those in (491) incorporate a negation, so that they are 'inherently negative' not only from a semantic, but also from a formal point of view.

| Russian | ni-kto 'nobody' |
| :--- | :--- |
| Lithuanian | nie-kas 'nobody' |
| Rumanian | nici-odată 'never' |
| Classical Greek | oud-eís 'nobody' |
| Hungarian | sen-ki 'nobody' |

However, this way of speaking is misleading at best. In this type of negative indefinite, which is particularly widespread in Europe, the indefiniteness marker is not a simple negation marker, but a NEGATIVE SCALAR FOCUS PARTICLE. Thus, I claim that negative indefinites of the type in (491) are more closely related to the indefinites in $\S 7.1$, which are also formed by means of a scalar focus particle, than to the negative indefinites in $\S 8.2 .3 .1$, which arise by negative absorption. The important point is that although the negative focus particles in (491) and (492) are 'negative' in some sense, they are quite independent of (and sometimes formally unrelated to) the verbal negator which expresses sentence negation.

The examples in (492) show that indefiniteness markers in negative indefinites are often identical to negative focus particles meaning 'nor, not even', but different from the sentence negator associated with the verb.
(492) negative indefinites from negative scalar focus particles



These negative scalar focus particles are used just like the scalar additive focus particles discussed in § 7.1: They convey the meaning that everything that is higher on the relevant pragmatic scale than their focus value is included, i.e. negated. In (493) I give some examples where they are used in contexts other than indefinite pronouns.
a. Russian

Ja ne skažu ni slova.
I not say not.even word
'I won't say even a word.'
b. Rumanian

Nici măcar unul n-a scăpat.
not.even at least one NEG-has escaped
'Not even one escaped.'
c. Cairene Arabic

Ma mé-ii-š wala walda.
NEG with-1SG-NEG even one
'I haven't a single one on me.'
d. Finnish

Emme saaneet yhtä-än kalaa.
NEG:1PL receive one-even fish
'We didn't receive even a single fish.'
If the focus value is the low endpoint of a pragmatic scale, the resulting meaning is that of universal negation. Some of the negative indefinites in (492) are based on the numeral 'one', which is of course the low endpoint of the scale of numbers (Greek oud-eís, Albanian as-njeri, Spanish ning-uno, Rumanian nici$u n)$. Others are based on generic nouns (Arabic laaga 'thing'), indefinite pronouns (Mansi xotti 'somebody'), or most often bare interrogatives used as indefinites. The semantic mechanism is always the same (cf. also § 7.1): These bases are understood as low endpoints of the relevant pragmatic scale, and together with the sentence negation the meaning of universal negation results.

In most of the cases of (492), the negative indefinite cooccurs with verbal negation (i.e. belongs to type NV-NI of § 8.2.2). ${ }^{\text {xiv }}$ Thus, in these cases there can be no question of 'negative attraction and incorporation'.

But why do some languages use non-negative scalar focus particles (§7.1), whereas others use negative scalar focus particles to form their negative
indefinites? A first answer is: Because different languages use different focus particles in contexts like (493), where no indefinite pronouns are involved. An interesting contrast is provided by the closely related languages Finnish and Estonian. Finnish has two different focus particles for 'even' (-kin) and 'not even' (-kAAn) (cf. 494a-b), whereas Estonian uses the same focus particle -gi/-ki 'even' (the cognate of Finnish -kin) in both contexts (cf. 495a-b).
(494) Finnish
a. Se voi maksaa 100-kin markkaa. that can cost 100 -even marks 'That can cost even 100 marks.'
b. Hän ei edes tahtonut kuulla-kaan mitä minulla olisi ollut sanomista. he NEG even wanted listen-even what on.me was beento.say 'He didn't even want to listen to what I had to say.'
(495) Estonian
a. Lapsed-ki teavad seda. children-even know it 'Even children know it.'
b. Ta ei julge piuksatada-gi.
he NEG dare make.sound-even
'He doesn't dare to even make a sound.'
This difference correlates with a difference in the use of the corresponding indefinite series: In Finnish, the $-k A A n$-series is used in the direct-negation function, whereas Estonian uses its -gi-series there:
(496) Finnish

Hän ei palannut milloin-kaan.
she NEG:3SG returned when-INDEF
'She never returned.'
(497) Estonian

Taeikohanud keda-gi.
she NEG met whom-INDEF
'She did not meet anybody.'
Focus particles and indefinites based on them also show parallels with respect to cooccurrence with verbal negation. In Greek, neither oudeís (mē deís) 'nobody' etc. nor oudé ( $m \bar{e}$ dé) 'not even' cooccurred with verbal negation in the classical period, e.g.

Classical Greek (Herodotus)
a. speírousi dè oudén, all' apò ktē néōn zōousi kaì ikhthúōn they:sow PT nothing but from cattle they:live and fish 'They sow nothing, but live on cattle and fish.' (Hdt. 1.216.3)
b. hoi dè dè hirées kuámous oudè horôntes anékhontai the PT PT priests beans not.even looking tolerate 'The priests do not tolerate even to look at beans.' (Hdt 2.37.5)

Thus, the problem has been pushed back somewhat: A question about indefinite series has been reduced to a question about focus particles, but no definitive solution has been found. A detailed investigation of the typology of scalar focus particles is beyond the scope of this work. But I would like to present some initial evidence showing that such a typology would apparently
look intriguingly similar to the typology of 'scalar indefinites' (i.e. indefinites that express a low endpoint on a pragmatic scale) proposed here.

Consider only the systems of Russian, German, and English. In the (a), (b), (c), and (d) contexts of (499-501), German uses four different focus particles, Russian uses three different focus particles, and English uses only two different focus particles.
(499) German
a. Sie hat sogardie Anmerkungen gelesen. she has even the notes read
b. Wenn sie wenigstens/ auch nur die Schlagzeilen gelesen hat, if she at.least be.it the headlines readhas weiss sie Bescheid knows she knowledge
c. Sie hat nicht einmal eine Seite gelesen. she has not even apage read
d. Lies wenigstens/ *auch nur die Sschlagzeilen! read at.least be.it the headlines
(500) Russian
a. Ona proč itala daž e snoski. she readeven headlines
b. Esli ona proč itala xot zagolovki, ona znaet ob ètom. if she read even headlinesshe knows about it
c. Ona ne čitala ni stranicy. she not read not.even page
d. Proč itaj xot' zagolovki! read at.least headlines
(501) English
a. She even read the notes.
b. If she even/at least read the headlines, she is informed.
c. She hasn't even read a page.
d. At least read the headlines!

In order to describe the cross-linguistic variation among German, Russian, and English, one might propose the semantic map in Figure 25.

Figure 25. Semantic map for scalar focus particles
(c) negative
(d) imperative
(b) conditional
(a) assertive

The distribution of German, Russian and English focus particles over this map is shown in Figure 26a-c.

Figure 26.
a. German
negative
imper. conditional assertive
b. Russian
negative
imper.conditional assertive
c. English
negative
imper.conditional assertive

Although this map is very preliminary and needs a lot of cross-linguistic testing before it can be considered universally valid, the similarity to the implicational map for indefinite pronouns is quite striking. The similarity exists both at the universal level (where Figure 25 shows obvious paralles with the map in Figure

8 in chapter 4), and apparently also at the level of individual languages. Especially these latter similarities are surprising, because they are not restricted to cases where an indefinite series is marked by a focus particle (like the Russian $n i$-series, whose parallel behavior to the focus particle $n i$ is expected). In particular, there is an intriguing parallel between English even and any-, and between at least and some-, between German nicht einmal and the $n$-series (niemand, nichts, etc.), and between Russian xot' and the -nibud'-series. If these parallels are not accidental (as they may well turn out to be after more languages are examined), there must be higher-level regularities that have to be captured somehow. I cannot pursue these matters any further in the present work and leave them as a challenge for future typological research.

### 8.3.2. Minimal-unit and maximal-unit expressions

In the preceding section we saw that scalarity is an important starting point for the creation of negative indefinite pronouns. In addition to scalar focus particles, in which the semantic components of scalarity and a scalar endpoint are inherent, languages grammaticalize minimal-unit and maximal-unit expressions, like 'single' or 'eternity'. These expressions inherently denote an endpoint, and they give rise to scalar implications when they are used nonspecifically and in the right environment (in particular, in scale-reversing contexts, cf. § 5.5.3). Such minimal-unit and maximal-unit expressions are in principle possible in all negative-polarity contexts, but there seems to be a general tendency for them to become restricted to negative contexts (cf. Ladusaw 1993).
8.3.2.1. Minimal-unit expressions. The simplest case are minimal-unit nouns that originally refer to small things that are used metonymically, such as 'trace', 'jot', 'bit', 'tittle', 'atom'. For example, the Irish nouns dath 'trace' and dada 'iota, jot, tittle' are commonly used in negative-polarity contexts with the meaning 'anything'.
(502) Irish (Ó Dónaill (ed.) 1977, de Bhaldraite (ed.) 1959)
a. An bhfuil dadal a dhath le rá agat?

Q is jotART trace to say at:you
'Do you have anything to say?'
b. Má tá a dhath bainne agat,...
if is ART trace milk aty 'If you have any milk,...'
c. Má bhíonn dada ag cur ort,... if is jot on troubling on:you 'If anything troubles you,...'
d. Ni bhfuaireas dadal a dhath.
NEG I:got
'I got nothing.' jot ART trace

In English, sentences like I didn't get a bit are very emphatic, but in Irish the above expressions have lost their emphatic flavor.

Such metonymic expressions for humans are also not uncommon, sometimes containing the attribute 'living', e.g. English a living soul, French âme qui vive (lit. 'a soul that lives'), Irish aon duine beo or aon duine cruthaithe (lit. 'a living man, a created man'). Spanish nada 'nothing' derives from Latin (res) nata 'born (thing)'. Unlike the Irish expressions in (502), Spanish nada has become virtually
restricted to the negative functions (although it is not excluded from the comparative and question functions yet), e.g. No vi nada 'I didn't see anything', Nada vi! 'Nothing I saw!', ¿Qué viste? - Nada! ‘What did you see? - Nothing!'

Besides such colorful metonymic expressions, the ordinary generic nouns may also function as minimal-unit expressions and become restricted to negative-polarity contexts. This has happened, for example, in the cases in (503).
(503) generic nouns as scalar-endpoint indefinites

| French personne | ybody < person' | rien | anything < thing |
| :---: | :---: | :---: | :---: |
| Catalan res | 'anything < thing' | enlloc | 'anywhere < place' |
| Hebrew is | 'anybody < man' | davar | 'anything < thing' |
| Maltese xejn | 'anything $<$ thing' | imkien | 'anywhere < place' |
| Lezgian sa kas-n | 'nobody < even one pe | sa zat'-ni | nothing < even one thi |

Generic nouns are 'minimal' in a somewhat different sense than the 'small things'. In sentences like I will not yield an inch, a scalar-endpoint interpretation is so readily available because it is so unlikely that the speaker should mean the literal interpretation. Utterances like I will not yield an inch, I will yield as much as two centimeters are theoretically possible, but are rarely needed for pragmatic purposes. By contrast, sentences like I did not do a thing do not describe unlikely situations, but they are simply uninformative unless they are given a scalarendpoint interpretation. Thus, the fact that a scalar-endpoint interpretation is often conventionalized with them can be attributed to pragmatic strengthening (cf. Traugott 1988).

In French, Catalan and Hebrew the indefinites in (503) may be used not only negatively, but also in questions and conditionals. However, in elliptical contexts the French and the Catalan indefinites all can do without a negative element, and their use in questions and conditionals appears to be receding. ${ }^{\mathrm{xv}}$ In Maltese the only non-negative use is the comparative use, and Lezgian sa $k a s-n i$ and sa zat'-ni are always negative.

A third type of minimal-unit expression is the numeral 'one' and its emphatic variants like 'single'. Examples of languages where this has been conventionalized for negative-polarity environments are given in (504).

```
'one' as a scalar-endpoint indefinite
English any <Old English ænig, based on an 'one' + -ig
Latin ullus'any' <un-elos, based on unus 'one'
Irish aon 'any' <'one'
Maltese ladd 'anyone' <'one'
Persian hič 'any-, no-' \(<\) Old Persian aiva 'one' \(+c ̌\) čy
                                    (emphatic particle)
```

While the English, Latin and Irish indefinites are also used in questions, conditionals and in part even in the free-choice function, Maltese l̀add (like xejn and imkien of (503)) and Persian hič are practically restricted to the negative functions.

It should be noted that these three types ('small things', generic nouns and 'one') are not incompatible with each other and with scalar focus particles, but can be combined freely. Thus, Lezgian sa zat'-ni 'nothing' contains a scalar focus particle (-ni), the numeral 'one' (sa), and a generic noun (zat' 'thing').
8.3.2.2. Maximal-unit expressions. Finally, we have to consider maximal-unit expressions like 'in the world', 'in eternity', 'in my life'. Such expressions are used as indefinites much more rarely than minimal-unit expressions, but especially in the ontological category 'time' they are attested in several languages.

> '(n)ever' form 'eternity /life' Hebrew me-iolam 'never (in the past)' lit. 'from eternity' le-iolam 'never (in the future' lit. 'until eternity' Cairene Arabic ¿umri 'never' $\begin{aligned} & \text { Spanish en mi vida 'never' } \\ & \text { Irish go brách 'never, (for)ever' } \\ & \text { lit. 'my life' }\end{aligned}$ lit. 'in my life'

Indefinites that make use of the expression 'in the world' are rare, and I know only one case, Irish, where ar bith 'in the world' serves as a regular negativepolarity indefiniteness marker, as illustrated in (506).

Irish
a. An bheiceann tú ináit ar bith é?

Q see you in place on world it
'Can you see it anywhere?' (<'in a place in the world')
b. Má tá airgead ar bith agat,...
if is money on world at:you
'If you have any money,...' (<'money in the world')
c. Nior labhair sé focal ar bith. NEG said he word on world 'He didn't say a word.' (<'a word in the world')

Maximal-unit expressions are similar to minimal-unit expressions in that they are not likely to be given a non-scalar interpretation because otherwise they would not be relevant. A sentence like In my life I have been to Mekka is tautological, whereas a sentence like Have you been to Mekka in your life?, with a scalar interpretation, makes perfect sense.

### 8.3.3. Summary of diachronic sources

I have identified five main types of sources of negative indefinites:
(i) non-negative scalar focus particles (§ 7.1.1), e.g.

Selkup ämtä kuty 'nobody' < 'even who'
(ii)negative scalar focus particles (§ 8.3.1), e.g.

Hungarian sem-mi 'nothing' < 'not even what'
(iii) diachronic negative absorption (§ 8.2.3.2), e.g.

Yaqui $k a$-abe 'nobody' < "kaa habe 'not anybody'
Latin nemo 'nobody' < *ne homo 'not a man'
(iv) minimal-unit expressions (§ 8.3.2.1), e.g.

Irish dada 'nothing' < 'tittle'
French personne 'nobody' < 'person'
Maltese Iladd 'nobody' < 'one'
(v)maximal-unit expressions (§ 8.3.2.2), e.g.

Spanish en mi vida 'never' < 'in my life'

Thus, negative indefinites have rather heterogeneous sources. Unlike freechoice indefinites, which can be weakened and eventually be extended to all other functions (§5.4.2), negative indefinites which are used only in the negation functions are never extended to other functions. In the next section, apparent counterexamples to this generalization are discussed.

### 8.3.4. From negative to non-negative indefinite?

8.3.4.1. A challenge to unidirectionality. In § 8.3.2. we saw how a non-negative expression like 'person', 'thing', may under certain conditions become a negative indefinite, as shown schematically in (507a). In this section, I will discuss and reject the claim that the reverse of this process, shown schematically in (507b), is also a possible diachronic change. I try to show that the proposed instances of this change can be explained differently, and that the unidirectionality of the path of change in (507a) can be maintained.

> a. NEG V ... (non-NEG) indefinite $->$ NEG V ... NEG-indefinite
> b. NEG V ... NEG-indefinite $\quad \longrightarrow$ NEG V ... (non-NEG) indefinite

The hypothesis of a change like (507b) has been advanced occasionally for some indefinites in some Indo-European languages, and most focefully for Semitic languages by Faber (1988). For Indo-European languages, Brugmann (1911: 351) lists the indefinite pronouns in (508) and notes that they appear to contain a negative marker (Proto-Indo-European ${ }^{*} n e$ ).

| Old Irish | nech | 'somebody' |
| :--- | :--- | :--- |
| Welsh | nep | 'anybody' |
| Old Church Slavonic | nĕ -kŭ to | 'somebody' |
| Lithuanian | nekas | 'something', |
|  | nekada | 'sometimes' |

Delbrück (1893: 514-18) and Brugmann (1911) suggest that the non-negative meaning of these indefinites resulted from a reanalysis of a negative indefinite cooccurring with verbal negation as a non-negative indefinite. Since the two (Pseudo-English) sentences in (509a-b) are equivalent, the (a) sentence may be reanalyzed as (b) and vice versa.
a. She not saw anything.
b. She not saw nothing.

The reanalysis from (a) to (b) is historically attested in the paradigm case of French personne 'person' > 'nobody'. Delbrück's and Brugmann's etymologies for the indefinites in (508) imply the claim that this type of change is not unidirectional, and that the reverse reanalysis from (b) to (a) is also possible.

This claim is made explicitly by Faber (1988). She discusses indefinite pronouns characterized by the suffix ${ }^{*}$-ma in various Semitic languages, among others the forms in (510). As Faber notes, they all have mainly negative-polarity meaning.

| Akkadian | mim-ma | 'anything' |
| :--- | :--- | :--- |
| Hebrew | $m$ '?umå | 'anything' |
| Phoenician | $m n-m$ | 'anything' (vowels not attested) |
| Syriac | $m o t o:-m$ | 'ever, always' |
| Amharic | man-'m | 'anybody' |
| Arabic | kayfa-maa | 'however' (non-specific relative pronoun) |

Faber claims that the indefiniteness marker *-ma was originally identical to the negator " $m a$ ' ${ }^{\prime}{ }^{\prime}$ ':

> Only after the loss of transparency of -ma in these forms, as the ma negative was replaced in some or all contexts by other negative markers (*la?, *?al, *?ain, *?, etc.) did they acquire negative polarity: as, for example, ${ }^{*}$ mah-ma ceased to be analyzed as 'nothing', in order to avoid misunderstanding, it needed to be supplemented by another, more transparent, negative, becoming, in effect, 'any-thing'. (1988: 232).

She notes that if this reconstruction of the diachronic development is correct, then the reanalysis of (509a) to (509b), well-known from French, 'cannot reflect a universal, unidirectional process' (1988: 223).
8.3.4.2. Unidirectionality saved. There is a theoretical reason why I am reluctant to accept Faber's conclusion: Many linguistic changes have turned out to be unidirectional, and the unidirectionality of change is one of the most important aspects of language change from the point of view of linguistic theory.

But more importantly, there are no actually attested parallels - all the above cases were merely reconstructed. It is a general rule of diachronic typology that reconstructed changes can never disprove a proposed universal - on the contrary, the burden of proof that the proposed change is possible is on the reconstructer. But instead of just shrugging off these examples as invalid, I will present some specific arguments that alternative etymologies are preferable.

First, let us look at Semitic. Here the derivation of the indefiniteness marker *-ma from ma 'not' is very problematic because of the word order: -ma is a suffix, whereas negative ma always precedes the constituent it negates. In fact, I know of no language where an indefiniteness marker that derives from an absorbed negator ( $\S 8.2 .3$ ) or from an overtly negative focus particle (§ 8.3.1) follows rather than precedes its basis. Second, the evidence from Semitic for a Proto-Semitic negator ${ }^{*} m a$ is not strong - it occurs mainly in Arabic, where it may well be a recent innovation. By contrast, an item deriving from ${ }^{*} m a(h)$ 'what?' is found in almost all Semitic languages, so it seems promising to ask whether this could be a source for the indefiniteness marker *-ma. Indeed, there are parallels for this kinds of indefiniteness marker elsewhere: e.g., Russian koealso means 'which, what'. Note also that the interrogative pronoun 'what?' is used as a general complementizer in some languages (e.g. Russian č to 'what?; that'), and that some indefiniteness markers incorporate a general complementizer (cf. § 6.2.3), which tends to follow the interrogative basis, as Semitic *-ma does. Thus, while I cannot commit myself to a concrete proposal, it is clear that Faber's etymology is by no means the only option.

Of the Indo-European cases in (508), Old Church Slavonic ně-kŭ to 'somebody' is better explained as resulting from *ne vě kŭ to 'I don't know who' (cf. § 6.2.1), for purely phonological reasons: The Delbrück-Brugmann hypothesis cannot account for the long vowel in ně -. The Lithuanian forms like $n e-k a s, n e-k a d a$ etc. most commonly occur in the reduplicative combinations kas
nekas, kada nekada, etc. It is not clear to me what the function of the negation neis in such combinations, but the highly expressive nature of these indefinites makes it unlikely that they originated in reanalysis. ${ }^{\text {xvi }}$ Thus, I do not see a compelling motivation to accept the possibility of a reanalysis along the lines of (507b), and the universal unidirectionality of (507a) can be maintained.
8.3.4.3. A Romance counterexample? Let us now briefly consider an apparently attested case where a negative indefinite which resulted from negative absorption or a negative focus particle is indeed extended to non-negative functions. This is the non-negative use of some Romance negative indefinites like Italian nessuno, niente, Spanish ninguno, Catalan ningú. In Italian and Spanish, they seem to be restricted to comparatives and questions, whereas Catalan ningú may also be used in conditionals, as illustrated in (511-13).
(511) Spanish
a. A Roberto le gusta la sopa de ajo más que a ningun
to Roberto to.him pleases the soup of garlic more than to any
otro amigo mío.
other friend mine
'Roberto likes the garlic soup more than any other friend of mine.'
b. ¿Cuándo ha venido nadie aquí?
when has come anyone here
'When did anyone come here?'
(512) Italian

Hai visto nessuno?
have:you seen anybody
'Did you see anybody?'
Catalan (Lleó 1983:309)
Si hagués vingut ningú, $t^{\prime}$ haurien avisat. if had come anybody you would.have informed 'If anyone had come, they would have informed you.'

In Latin, $n$-indefinites were still restricted to the direct-negation function. So aren't these cases examples of just the kind of change hypothesized by Delbrück, Brugmann, and Faber? I do not think so, for the following reason. In these Romance languages, we are witnessing a merger of two indefinite series of different origins. On the one hand, there are indefinites of non-negative origin like Italian mai, Spanish nada, nadie, Catalan res, cap, mai, and on the other hand, there are negatives inherited from Latin (or late Latin), like Italian nessuno, Spanish ninguno, etc. These two indefinite series merged into one at some point. Synchronically, the members of the series in (514) behave alike, and their different origins are not relevant.

$$
\begin{align*}
& \text { negative and negative-polarity series in Romance }  \tag{514}\\
& \text { ( }{ }^{\circ}=\text { originally negative, } \dagger=\text { originally non-negative, } p .=\text { postposed) } \\
& \text { Italian Spanish Catalan } \\
& \text { person: }{ }^{\text {nessuno }} \text { tnadie } \\
& \text { thing: tnada oniente tres, tgens } \\
& \text { place: } \quad-\quad-\quad \text { tenlloc } \\
& \text { time: tmai } \quad \text { ¿nunca, tjamás tmai } \\
& \text { determiner: }{ }^{\circ} \text { nessuno, talcuno }{ }^{\circ} \text { ninguпо, talcuno (p.) tcap }
\end{align*}
$$

The originally non-negative members came to be used as negative indefinites by the process described in $\S 8.3 .2$, but they retained some non-negative uses, e.g. in questions and conditionals. As they merged with originally negative indefinites, these non-negative uses were also extended to these new members of the series. Thus, my claim is that uses as in (511-13) are due to analogical pressure rather than to any kind of reanalysis.

### 8.4. Concluding Remarks

In this chapter I treated one functional type of indefinite pronouns, negative indefinites, in greater detail. Although negative indefinites have received a great deal of attention in the earlier literature, I hope to have shown that the overall outlook of this book, in particular the typological implications and the diachronic perspective, lead to new insights about negative indefinites.

Negative indefinites cannot be divorced from the other functions on the implicational map that indefinites often have. Since negation is a semantic property of the whole sentence, it is not easy to pin down indefinites as being negative or non-negative. We saw this difficulty in the criterion of elliptical contexts (§ 8.1.2), and it is also evident in the recent debate between Zanuttini (1991) and Laka (1994) on the nature of Romance $n$-indefinites, which Zanuttini regards as 'negative quantifiers' and Laka regards as negative-polarity items. This controversy is quite parallel to the controversy around any, which some analysts regard as a universal quantifier and others regard as an existential quantifier (cf. § 5.2.1). In my view, the search for the true nature of these indefinites is beside the point. Languages are not constrained by categories such as 'universal quantifier', 'negative quantifier', or even 'negative polarity'. They are only constrained by the implicational map, which requires indefinites to be used only in adjacent functions. Of course, most of the semantic and syntactic issues discussed in the previous literature remain relevant in one way or another for setting up and explaining the implicational map, but the nature of the indefinites is expressed sufficiently by their position on the map. I invoked a number of additional principles that constrain the negative interpretation of elliptical indefinites (§8.1.2) and the range of functions that negative indefinites have depending on the cooccurrence with verbal negation ( $456,464,486$ ), but these principles are only strong tendencies with a straightforward functional motivation.

The only major parameter of negative indefinite constructions that is not acounted for by the implicational map is the cooccurrence of negative indefinites with verbal negation. Here I identified three main types, V-NI, (N)V-NI, NV-NI, which are not on an equal footing: The NV-NI pattern is universally preferred because the meaning of negation (predicate denial) should be isomorphic with its form (verbal negation), and the other two patterns arise only when other motivations, such as grammaticalization (reinforcement of negation) and Negative First (negative absorption), come into play. But even then the preference for NV-NI reasserts itself, with V-NI giving way to (N)V-NI and finally NV-NI by reintroduction of the verbal negation.

The close parallels of negative indefinites with other emphatic indefinites were also seen in the conditions of focusing ( $\S 8.2 .5$ ) that some languages impose, and in the diachronic sources of negative indefinites (§8.3), which do not differ substantially from the kinds of sources that are also found in nonnegative indefinites (except for diachronic negative absorption).
${ }^{\text {i }}$ Kahrel distinguishes a fifth type ('existential'), which does not involve the use of indefinite pronouns. See § 3.3.2, where such cases are briefly described.
${ }^{\text {ii }}$ However, Greek is a weak counterexample, because its tipota-series comes in two varieties, a stressed one and an unstressed one. If típota-indefinites are stressed, they are restricted to the direct-negation function (see (288) above). Since the indefinite is stressed in elliptical answers, it cannot be mistaken for the unstressed variety.
iii This is Kahrel's (1989) term. Bernini and Ramat (1992: 109) call them 'generic quantifiers', Dahl (1979: 105) just speaks of a 'substituted pronoun'.
${ }^{\text {iv }}$ But standard French also allows sentences like Je n'ai vu qui que ce soit. 'I didn't see anybody' (Muller 1991: 256), where the negative interpretation cannot be due to qui que ce soit 'anybody', but must be due to ne.
${ }^{\mathrm{v}}$ The distribution is as follows:
V-NI indefinites: German, Dutch, English (no-), Swedish (ingen), Icelandic (enginn),

Latin, Ossetic
(N)V-NI indefinites: Portuguese ( $n$-), Italian, Georgian

NV-NI indefinites: English (any), Swedish (någon), Icelandic (neinn), Portuguese (qualquer), Catalan, Rumanian, and all others, except for Ossetic, Maltese and Georgian.
${ }^{v i}$ The close connection between the verb and sentence negation is expected if Aristotle's and Jespersen's view of negation as predicate denial is adopted, as argued extensively in Horn (1989). The Fregean view of negation as a sentence operator contributes little to our understanding of the form of negation in natural languages.
vii Kř íž ková (1968) does not cite Jespersen at all, and she does not cite anyone in connection with this explanation, which suggests that she found this functional motivation independently.
viii Posner also hints at this possibility when she says that modern dialectal usage 'appears to have conserved Latin features', and talks about 'a pattern that survived in certain areas' (1984: 19), although elsewhere she seems committed to the assumption that Proto-Romance was uniformly NV-NI (1984: 1, 12-13).
${ }^{\text {ix }}$ Tanaka (1994) puts it somewhat differently: This type is the unmarked case because both the scope and the focus of negation must be marked. The negative element on the verb marks the scope, and the negative indefinite marks the focus of negation.
${ }^{\mathrm{x}}$ A rare case of an indefinite which is limited to negative contexts but also shows the restriction is Icelandic neinn/neitt:
(i) Ég sá ekki neinn.
(ii) *Neinn sá ekki mig.

I saw NEG nobody
'I saw nobody.'
nobody saw NEG me
'Nobody saw me.'
${ }^{\text {xi }}$ Progovac (1994: 35) and Laka (1994: 21) attribute the ungrammaticality of (465b) (*Anybody didn't come) to the fact that the negative-polarity item anybody must be licensed by being c-commanded by negation. They contrast English with Serbian/Croatian and Basque, where the corresponding sentences are grammatical. They explain this difference by the position of the negation: In English, negation is postverbal and therefore does not c-command the subject, whereas in Serbian/Croatian and Basque it is preverbal and therefore c-commands the subject. This explanation seems to make the following prediction: Languages with postverbal negation do not allow negative-polarity items in subject position, whereas languages with preverbal negation allow them. This prediction is contradicted by Hausa, Swahili, and Chinese, and is confirmed only by Swedish (French is ambiguous, because it has both preverbal and postverbal negation). However, strictly speaking Progovac's and Laka's explanation fails to generalize to Swedish and Swahili, where någon and $m t u$ (etc.) are clearly not negative-polarity items. Thus, their approach both makes wrong predictions and is less general than my explanation.
xii Labov (1972: 811) notes that negative inversion depends on 'negative transfer' from the subject indefinite to the verb: Nobody will catch us $\longrightarrow>$ Nobody won't catch $u s \rightarrow$ Won't nobody catch us, whereas *Will nobody catch us is excluded. This is an arbitrary restriction in his formal framework, but in the perspective of this work it finds a natural explanation: The Negative First Principle (cf. § 8.2.3.2) makes the latter sentence dispreferred.
xiii In French, which is also near the completion of Jespersen's Cycle (but still retains preverbal ne in its normative variety), sentences like (i) are possible, although 'l'acceptabilité de telles phrases est généralement difficile' (Muller 1991: 258). But sentences like (ii), where verbal negation follows the negative indefinite, are still completely impossible.
(i) Ils n'ont pas rien dit.
(ii) *Personne n'est pas venu.
'They didn't say nothing.'
'Nobody didn't come.'
${ }^{\text {xiv }}$ In fact, the only exception is Greek, where oudeis was V-NI in the classical period, but (N)V-NI in New Testament Greek.
${ }^{x v}$ The cases of French personne 'nobody' < 'person' and rien 'nothing' < 'thing' are often explained as resulting from the weakening of the preverbal negator ne, i.e. from Jespersen’s Cycle (§ 8.2.3.1). It is said that the preverbal particle lost its negative force, which was transferred to personne. This description is not completely wrong, but there is no direct connection between Jespersen's Cycle and the change from 'person' to 'nobody'. Jespersen's Cycle may happen also with other indefinites, and a generic noun
may also become restricted to the negative function if the language does not undergo Jespersen's Cycle.
${ }^{\text {xvi }}$ The Lithuanian indefinites of the type kada ne-kada have an intriguing parallel in Hindi/Urdu, where koii na koii (lit. 'somebody not somebody') means 'somebody'. But they also remind one of Polish indefinites like gdzieniegdzie 'here and there', which can hardly be separated from nie-indefinites, and these have a different origin (§ 6.2.1).

## 9

## Conclusions

This chapter summarizes the main results of this work and looks briefly at possible further typological connections.

### 9.1. Summary of the Results of this Work

In this study I looked at indefinite pronouns in the world's languages with the goal of discovering cross-linguistic generalizations in this area of grammar and thereby adding to our knowledge of human language in general. Although indefinite pronouns are not a very conspicuous part of the grammars of human languages, their study has wide ramifications in semantics, pragmatics, syntax, morphology, and by putting special emphasis on the diachronic origin and development of indefinites, I enlarged the scope of this work further. Since this study is topic-oriented and encyclopedic in character, it is not easy to summarize. Nevertheless, in the following sections I will outline the main findings and their proposed explanations.

### 9.1.1. Typological generalizations about indefinite pronouns

9.1.1.1. Formal generalizations. Once indefinite pronouns are suitably defined (§2.2), the search for them in different languages shows that most languages have indefinite pronouns of some kind, and that their shapes are fairly uniform across languages. In particular, they are almost always of one of two types (§ 3.1): either derived from interrogative pronouns by means of an indefiniteness marker (or identical to interrogatives), or based on generic nouns like 'person', 'thing'. Non-derived indefinites like Dutch iets 'something' are very rare. Whenever indefinites are formally related to another class of words and one of these classes is formally more complex, the indefinites are formally more complex.

The indefiniteness marker is usually an uninflected particle (or a sequence of particles), prefixed or suffixed. Usually an indefiniteness marker characterizes a whole series of indefinite pronouns. Its position is often outside of case inflections. Very often indefinite pronouns are formed by reduplication (§7.4), and often the bare interrogatives may also be used as indefinites (§7.3). The origin of the indefiniteness marker is often still transparent, although the meaning of the indefinite pronoun can never be determined purely compositionally. The transparency of the markers is due to the generally recent grammaticalization: Indefinite pronouns have a relatively short lifespan and are diachronically quite unstable. Closely related languages often show very different indefinite pronouns and indefinite systems.
9.1.1.2. Functional generalizations. As in other grammatical categories, languages differ not only with respect to the forms of their indefinite pronouns, but also with respect to the number and the kinds of functional distinctions that are expressed by them. Since variation in functional distinctions is not unlimited, cross-linguistic comparison is possible and fruitful. For indefinite
pronouns, the following distinctions are often associated with cross-linguistic variation:
(i) known vs. unknown to the speaker (§ 3.2.4)
(ii) specific vs. non-specific ( $\S 3.2 .3, \S 5.2 .2, ~ § 5.4$ )
(iii) negative polarity/scale reversal (§3.2.2, §5.5.4)
(iv) 'emphasis' (scalarity) (\$ 5.7.2)
(v) free choice indefinites ( $\S 3.2 .5, \S 5.2 .1, ~ § ~ 5.5 .5$ )
(vi) direct and indirect negation ( $\S 3.2 .1$, chapter 8 )
(vii) standard of comparison (§ 3.2.2)

No language has a special indefinite series for all these distinctions - usually an indefinite series expresses more than one function. Whenever this is the case, the choice of functions that can be expressed by one series is tightly constrained by a series of implicational universals that can be summarized as an implicational map (Figure 27). This map represents the central typological generalization of this work.

Figure 27. The implicational map of chapter 4 direct (4) (6) negation question indirect negation

| (1) (2) | $(3)$ |  |
| :--- | :--- | :--- |
| specific | specific <br> unknown | irrealis |
| known | non-specific |  |

(8)
conditional comparative
(9)
free choice
When an indefinite series expresses two non-adjacent functions on this map, the prediction is that it also expresses all the other functions in between these two functions. Eventually a number of further functional distinctions will have to be drawn (§4.7), but more cross-linguistic evidence is required before they can be integrated into the map.

In addition, I have explored the connection between these functions and the additional function of expressing negation in elliptical contexts (§ 8.1.2), and the relation between negation on the verb and the type of indefinite pronoun used for the direct-negation function.
9.1.1.3. Diachronic generalizations. While the diachronic development of indefinite pronouns is not easy to trace, I have looked at the diachronic (i.e. etymological) sources of indefiniteness markers in a large number of languages. As in other grammatical categories, the same types of source constructions give rise to indefinites in language after language. The most important sources are:
(i) I don't know who (§ 6.2.1)
(ii) who you want (§ 6.2.2)
(iii) whoever it may be ( $\S 6.2 .3$ )
(iv) no matter who (§ 6.2.4)
(v) even / at least someone (§ 7.1)
(vi) not even someone (§ 8.3.1)

Source constructions (i)-(iv) are subject to formal grammaticalization processes, and all may undergo semantic change associated with grammaticalization, i.e. desemanticization or semantic weakening (§ 6.4). Grammaticali-zation theory (§ 6.3) predicts that the opposite development, semantic strengthening, is impossible.

Indefinites can also acquire new meanings by pragmatic strengthening. In general, specific indefinites acquire appreciative uses (§ 7.5.4.1), while nonspecific indefinites acquire depreciative uses ( $\S 7.5 .4 .2$ ).

### 9.1.2. Explanations of the generalizations

In contrast to facts of individual languages, typological generalizations immediately lead to the question: Why? While facts of individual languages can be due to historical accidents and may have no further relevance, cross-linguistic generalizations demand general explanations that can give us valuable insights into the nature of human language.

Throughout this work, I have sought as general explanations for linguistic facts as possible, i.e. preferably explanations from outside the linguistic system proper. The explanation of the implicational map in Figure 27 (§5.6) consisted in a demonstration that those functions that are next to each other on the map are also functionally the most similar. Thus, it was shown that a correlation between form and function exists. This involved a discussion of various theoretical models that have been proposed for describing the functional distinctions (§5.1-5). I concluded that the theories of mental spaces and scalar implicatures are best suited for the description of the semantic distinctions. In addition, the significance of focusing and sentence accent for indefinite pronouns was highlighted (§5.7).

Functional explanations are also prominent in the chapter on negative indefinites: Several facts relating to verbal negation are related to Jespersen's functionally-based Negative First principle and the general principle of isomorphism.

The regularities of diachronic change are explained by the theory of grammaticalization, which makes strong testable predictions about correlations of a large number of parameters. I have shown how the evidence of indefinite pronouns bears on a contentious issue within grammaticalization theory (§ 6.4.1).

### 9.1.3. Remaining puzzles

I have not succeeded in finding explanations for all the generalizations that I have found. Some puzzles that remain are: What does reduplication express in reduplicated indefinites? (§ 7.4) What is the mechanism by which bare interrogatives come to be used as indefinites? (§ 7.3.3) Why are bare interrogatives often restricted to specific uses? (§ 7.3.2) How can the 'multiple partitive' use of bare interrogatives be understood? Why do many languages allow bare interrogatives here, even though bare interrogatives cannot be used as indefinites elsewhere? (§ 7.3.4) Finally, why do indefinites show an areal distribution of continent size? (This question will be discussed below in $\S 9.2 .3$.) The last four questions have never been asked before to my knowledge, so the
contribution of this work consists in pointing out some puzzles for our science that future research must address.

### 9.2. Wider Typological and Areal Connections

### 9.2.1. Looking for typological correlations

The main synchronic typological generalizations of this work took the form of universal implications among different functions of indefinite pronouns, expressed by the implicational map. Now one might ask whether there are perhaps some wider typological connections between other aspects of the linguistic system and the types of indefinites that a language has. In other words, are there other grammatical features that allow us to make predictions about indefinite pronouns?

The answer seems to be no. Of course, the fact that I have not found any such wider typological correlations does not prove that none exist. But it seems unlikely for two other reasons. First, indefinite pronouns show very little diachronic stability (as I observed in § 2.4.1), so any correlations would not survive long. And second, there are not many good candidates for features that might determine the indefinite pronoun system in a language. We would not expect purely formal grammatical features like word order and head/dependent marking to influence indefinite pronoun systems because the most interesting variation among indefinites is in the functional distinctions of different series of indefinites. It is imaginable that grammatical features having to do with the semantics and pragmatics of reference might be correlated with indefinite pronouns, for example the presence of a definite article (e.g., it might be that languages lacking articles, like Russian, have particularly elaborate systems of indefinite series to compensate the missing article). I have found no evidence for any such connection. Other areas where connections might be sought are the diachronic sources of indefiniteness markers, especially free relative clauses and scalar focus particles (cf. § 8.3.1). However, these correlations would be purely diachronic, because any synchronic connection between the sources and the indefinites is usually lost soon after the indefinites have been created.

One of the most intriguing questions regarding the formal makeup of indefinites is the question why some languages use interrogative pronouns and others use generic nouns as the base of indefinites. One possible explanation would be diachronic: Languages with generic-noun-based indefinites perhaps did not develop interrogative-based indefinites because of some properties that did not allow the corresponding source constructions to be built. However, I am not aware of any such restrictions - the source constructions that yield interrogative-based indefinites (chapter 6) seem to be very common and probably exist in the vast majority of languages. And in any event, many languages use bare interrogatives as indefinites, and since all languages have interrogative pronouns (Ultan 1978), any language could use them as indefinites.

But when we look at the languages of Europe, a pattern seems to emerge. Western languages such as western Romance, Celtic and the Germanic languages tend to show generic-noun-based indefinites, or at least mixed systems, whereas eastern languages such as Slavic, Finno-Ugrian and Turkic languages as a rule show interrogative-based indefinites. However, Basque is an exception
in western Europe - it has only interrogative-based indefinites, like eastern European languages. But Basque is also in other respects an atypical western European language, especially with respect to the well-known word order parameter. Basque shows a strong tendency for head-final word order (SOV, genitive-noun, postpositions), whereas other western European languages generally have head-initial word order (SVO or VSO, noun-genitive, prepositions). So is there perhaps a correlation between word order type and indefinite pronoun type after all?

This suspicion is confirmed when we turn to what is known about diachronic change in European languages. Classical Greek, Latin and Gothic had almost only interrogative-based indefinites, but Modern Greek, modern Romance and modern Germanic have a clear preference for non-interrogativebased indefinites. In several cases the old interrogative-based indefinites have been preserved (i.e. no generic nouns are used), but the synchronic connection with the interrogatives has become obliterated, e.g. Greek típota 'anything' (cf. $t i$ ' 'what'), Portuguese alguém 'someone' (cf. quém 'who'), Icelandic nokkur 'anyone' (cf. hver 'who'), German etwas, dialectal eppes 'something' (cf. was 'what'). It is also known that the older stages of these languages had much more head-final word order than the modern stages. Thus, the diachronic changes fit the putative connection between interrogative-based indefinites and head-final word order, and between generic-noun-based indefinites and headinitial order. It is not clear why such a correlation should exist, but in view of the strong predictive power of word order in other domains of grammar, it is not unimaginable that such a correction will turn out to be correct. This hypothesis will be tested on a world-wide sample in the next section.

### 9.2.2. Indefinite pronoun type and word order in the 100-language sample

Since grammars do not normally give many details on indefinite pronouns, the amount of information that I could get for the languages in the 100-language sample is minimal - not more than the type of base of indefinites (generic noun, interrogative, non-derived), whether indefiniteness markers are suffixed or prefixed, and the basic word order in the clause, the possessive noun phrase and the adpositional phrase. The data are listed in Appendix B.

However, this information is sufficient to test the hypothesis formulated in the preceding section that interrogative-based indefinites are correlated with head-final word order and that generic-noun-based indefinites are correlated with head-initial word order. The relevant figures are given in Tables 8-10. (The columns and rows 'other' include both languages with other types and languages whose type is unknown. A language may belong to more than one base type, but each language is assigned to one word order type.)

Table 8. Indefinite pronoun base and clausal word order clausal word order

| base | SOV | SVO | V-initial | other | total |
| :--- | :--- | :--- | :--- | :--- | :--- |
| generic noun | 12 | 17 | 5 | 1 | 35 |
| interrogative pronoun | 36 | 11 | 5 | 3 | 55 |
| other | 3 | 5 | 2 | 0 | 10 |
| total | 51 | 33 | 12 | 4 | 100 |

Table 9. Indefinite pronoun base and noun phrase word order

|  | noun phrase word order |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| base | GenN | NGen | other | total |
| generic noun | 14 | 19 | 2 | 35 |
| interrogative pronoun | 29 | 13 | 13 | 55 |
| other | 3 | 4 | 3 | 10 |
| total | 46 | 36 | 18 | 100 |

Table 10. Indefinite pronoun base and adposition phrase word order adposition phrase word order

|  | adposition phrase word order |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| base | preposition | postposition | other | total |
| generic noun | 13 | 18 | 4 | 35 |
|  |  |  |  |  |
| interrogative pronoun | 27 | 14 | 14 | 55 |
| other | 2 | 6 | 2 | 10 |
| total | 42 | 38 | 20 | 100 |

It appears from these numbers that a correlation between word order type and indefinite pronoun type indeed exists, even though it is not very strong: Headfinal word order seems to favor interrogative-based indefinites, whereas headinitial word order favors generic-noun-based indefinites.

However, on closer examination this correlation turns out to be spurious. The numbers in Tables 8-10 are not significant because the overall trend is not replicated within areas. As Dryer (1989) has shown, areal effects may create the appearance of a typological correlation, especially if the scale of the areal effect is large (continent-sized). He proposes that a typological correlation is significant only if it obtains in all the five large areas that he proposes.

By this criterion, the above correlation clearly fails to be significant, because indefinite pronouns have a strongly areal distribution.

### 9.2.3. Continent-sized areas of indefinite pronoun type

The geographical map on p. 303 clearly shows what is going on: The indefinite pronoun type shows a strong areal pattern. With few exceptions, interrogativebased indefinites occur in the languages of Eurasia, Australia and the Americas, while generic-noun-based indefinites occur in the languages of Africa and Oceania. As it happens, the languages of Eurasia, Australia and the Americas favor head-final word order, while Africa favors head-initial word order, and this results in the apparent typological correlation. But a closer look conclusively shows that no such correlation exists, and that the correlation is purely areal.

First, Eurasian languages have interrogative-based indefinites also if their word order is head-initial, like many languages in southeastern Asia (in my sample: Chinese, Thai, Khmer, Xinh Mul, Atayal, Tagalog) and in Europe (in my sample: Romansh, Upper Sorbian, Ingrian). On the other hand, the languages of Oceania have generic-noun-based indefinites also if their word order is head-final (in my sample: Takia, Amele, Kobon, Hua, Haruai). These patterns are remarkably consistent. Exceptions exist, but do not form a pattern. ${ }^{\text {i }}$

Thus, the large scale of areal distribution of indefinite pronoun types must be accepted as a fact, although it is a rather curious fact. As Nichols (1992) argues persuasively, the scale of areal patterning of a feature reflects its diachronic stability. Phenomena that show areality at the level of the continent can be
assumed to be very old and diachronically stable. This is in striking contrast with my earlier observation that indefinite pronouns are diachronically quite unstable. Thus, we certainly would not expect to find the continent-sized areas that my 100 -language sample has demonstrated.

I must leave this puzzle as a challenge for future research.

[^6]
## Appendix A The data of the 40-language sample

The distributional schemas of the languages of the 40-language sample were presented in $\S 4.4$. In this appendix I list the indefinite pronouns of the 40 languages and give examples of the most important uses of these indefinites.

These data are not complete and conclusive, especially for those languages for which I could not consult with native speakers (Latin, Catalan, Serbian/Croatian, Yakut, Nanay, Hausa, Swahili). But also the data of the 33 languages for which I consulted native speakers are probably deficient in some respects. Clearly, one individual cannot control data from so many languages in a perfect way. As I observed in § 2.1, typological breadth necessarily implies some loss of depth in individual languages.

I add this appendix to my work in order to make it easier for the reader to link the abstract typological generalizations with concrete data.

## A.1. German

A.1.1. Inventory. German (Germanic, Indo-European) has three main series of indefinite pronouns: (i) the irgend-series, (ii) the negative $n$-series, and (iii) the defective etwas-series.

|  | interrogative | etwas-series | irgend-series | n-series |
| :--- | :--- | :--- | :--- | :--- |
| person: | wer | jemand | irgend-wer, irgend-jemand | niemand |
| thing: | was | etwas | irgend-was, irgend-etwas | nichts |
| place: | wo |  | irgend-wo | nirgends |
| time: | wann |  | irgend-wann | nie |
| manner: | wie |  | irgend-wie | (aufkeine Weise) |
| determiner: | welcher | (ein) | irgend-ein,irgend-welche | kein |

In addition, there is the determiner jeder 'any, every' (§6.5) and the time adverb je 'ever', which do not belong to any of the series. Also, the bare interrogatives wer, was and wo (and marginally wann) are used as indefinites in the colloquial language (§7.3.1).
A.1.2. Origins. Middle High German had three series, a non-emphatic ete-series (ete-wer 'someone', ete-waz 'something', ete-wâ 'somewhere', etc.; the origin of ete- is unknown), and a negative-polarity series marked by ie ('ever') (ie-man 'anyone', cf. man 'man'; iht 'anything' < iewiht 'ever-thing'; iergen 'anywhere' < ie- + hwar-gin 'where-PT'). This distinction was given up, and etwas and jemand are now in the same series. A new series was created on the basis of the particle irgend (< iergen 'anywhere'), combined with the bare interrogatives or with jemand/etwas/ein. The $n$-series consists of the old negator ne combined with the old ie-series. The negative determiner kein (< dehhein) was formerly used in all negative-polarity environments and became restricted to negation only 200 years ago. On the history of jeder, see Kolb (1983).
A.1.3. Distribution. The distribution of the three series is shown in Figure A.1. The data are from my native speaker knowledge and observations.

## Figure A.1.

specific specific irrealis
known
unknown non-specific

| question | indirect <br> negation | direct <br> negation |
| :--- | :--- | :--- |
| conditional | comparative | free-choice |

The etwas-series is possible in all non-emphatic functions. It can always be replaced by the irgend-series, except in the specific-known function.
(A.1) specific known/unknown
a. Ich habe etwas <*irgend etwas> verloren. Rate mal, was!
'I lost something. Guess what!'
b. Ich habe etwas/irgend etwas verloren, aber ich weiss nicht, was.
'I lost something, but I don't know what.'
(A.2)
irrealis non-specific (imperative, 'want')

Sie möchte jemanden/irgend jemanden mit schwarzen Haaren heiraten.
'She wants to marry someone [non-specific/ specific] with black hair.'
In the question/conditional and indirect-negation functions, a possible alternative to irgendwann is je 'ever'.
(A.3) question/ conditional
a. Hast du (irgend) etwas gehört?
'Did you hear anything?'
b. Ist sie irgend-wann/je in Chittagong gewesen?
'Has she ever been to Chittagong?'
c. Wenn (irgend) jemand anruft, sag mir Bescheid!
'If anyone calls, tell me!'
(A.4) indirect negation

Ich glaube nicht, dass hier je/irgend-wann (irgend) jemand war.
'I don't think that anyone has ever been here.'
In the comparative function, only the irgend-series and $j e$ are possible (the etwas-series would yield a different sense). The irgend-indefinite must be stressed.
(A.5) Joan Baez sang besser als IRGEND JEMAND JE zuvor.
'Joan Baez sang better than anyone ever before.'
In the free-choice function, the irgend-series may occur, but it must be stressed. However, jeder 'any, every' is generally preferred.
(A.6) free choice

Dieses Problem kann IRGEND JEMAND lösen.
'This problem can be solved by anyone.'
The determiner jeder may be used in the free-choice, comparative and indirect-negation functions. Jeder is also used as a distributive universal pronoun/determiner, so one might claim that A.1.7-8 do not belong here. However, its use in the indirect-negation function indicates that it should also be regarded as an indefinite.
(A.7) free choice

Dieses Problem kann jeder lösen.
'This problem can be solved by anyone.'
(A.8) comparative

Joan Baez singt besser als jede andere Sängerin.
'Joan Baez sings better than any other singer.'
(A.9) indirect negation
a. ohne jede/irgend-welche Hilfe
'without any help'
b. Sie stritt jede/irgend-eine Beteilingung ab.
'She denied any participation.'
Direct negation is expressed by the $n$-series, which does not cooccur with verbal negation.
(A.10) direct negation
a. Niemand ist gekommen.
'Nobody has come.'
b. Ich habe niemandem (irgend) etwas gesagt.
'I didn't tell anything to anybody.'

## A.2. Dutch

A.2.1. Inventory. Dutch (Indo-European, Germanic) has three series of indefinite pronouns: (i) the non-emphatic iets-series, (ii) the non-specific dan ook-series, and (iii) the negative niets-series.
person:
interrogative iets-series
dan ook-series
niets-series iemand

| thing: | wat | iets | wat dan ook | niets |
| :--- | :--- | :--- | :--- | :--- |
| place: | waar | ergens | waar dan ook | nergens |
| time: | wanneer | ooit | wanneer dan ook | nooit |
| manner: | hoe |  | hoe dan ook |  |
| determiner: | welke | een 'one' | welke dan ook | geen |

A colloquial variant of iets is wat, i.e. the bare interrogative (but the other interrogatives cannot be used as indefinites). The WH dan ook series has the alternatives WH ook and WH ook maar, which have the same distribution.

The indefinite determiner enig 'any' is the only member of its series.
A.2.2. Origins. The forms of the iets-series originally all contained *ajw 'ever' (=German $j e)$ : iemand < *ajw + *mann 'man'; iets < *ajw + wiht 'thing' (cf. older German iht); ergens < *ajw + *hwar-gin 'where-PT'; ooit < "ajw + jet 'still' (cf. English yet). The niets-series has in addition the negator *ne. Geen goes back to Old Saxon nigên, i.e. nih 'neither, not even' + ên 'one'. The particle ook is 'also', dan is 'then'. Enig is etymologically identical to English any.
A.2.3. Distribution. The distribution of the three series is shown in Figure A.2. The data are from Paardekooper (1978, 1979), Geerts et al. (eds.) (1984) (G84), and from native speakers (Leon Stassen, Kees Hengeveld, Jan Rijkhoff).

Figure A.2.
specific specific irrealis known unknown non-specific

| question | indirect <br> negation | direct <br> negation |
| :--- | :--- | :--- |
| conditional | comparative | free-choice |

The iets-series is used in all non-emphatic functions, from specific-known to indirect negation.
(A.11) specific known/unknown

Er heeft vanmorgen iemand opgebeld. (Raad eens wie./ Ik weet niet meer wie het was.)
'Someone phoned this morning. (Guess who. / I don't remember who it was.)'
In non-specific functions, the dan ook-series is a possible alternative.
(A.12) irrealis non-specific (imperative)

Koop iets/wat dan ook voor haar verjaardag.
'Buy something for her birthday.'
(A.13) question/ conditional
a. Zou er nog iemand/wie dan ook komen? (G84: 265)
'Will anyone else come?'
b. Als je iets/wat dan ook ziet, waarschuw me dan.
'If you see anything, tell me.'
(A.14) indirect negation ('without', 'difficult')
a. zonder iemand/wie dan ook
'without anybody'
b. Het is moeilijk om iets/wat dan ook te zien.
'It is difficult to see anything.'
In the comparative and the free-choice functions, only the dan ook-series is possible:
(A.15) comparative

De jongen loopt harder dan wie dan ook in zijn klass.
'The boy runs faster than anyone in his class.'
(A.16) free choice

Je mag wie dan ook uitnodigen.
'You may invite anyone.'
In the direct-negation function, niets-indefinites are used alone, without verbal negation. As in German and English, only one negative indefinite per clause is used in the standard language unless multiple negation is intended.
(A.17) Niemand heeft opgebeld.
'Nobody called.'
The determiner enig is used in the comparative, indirect-negation, and question/conditional functions:
(A.18) comparative

Het is $n u$ kouder dan in enige vorige winter. (G84: 275)
'It is now colder than in any previous winter.'
(A.19) indirect negation
zonder enige help
'without any help'
(A.20) question/ conditional
a. Heeft hij enig succes gehad met al zijn pogingen? (G84: 275)
'Has he had any success with all his attempts?'
b. Als hij enig succes heeft, dan komt dat door zijn goede kontakten.
'If he has any success, that is due to his good connections.'

## A.3. English

A.3.1. Inventory. English has three main series of indefinite pronouns: the non-emphatic someseries, (ii) the emphatic any-series, and (iii) the negative no-series. These are formed by combining the determiners some, any and no with generic nouns or interrogative pronouns.

|  | interrogative | some-series | any-series | no-series |
| :--- | :--- | :--- | :--- | :--- |
| person: | who | some-body, some-one | any-body, any-one | no-body, no one |
| thing: | what | some-thing | any-thing | no-thing |
| place: | where | some-where | any-where | no-where |
| time: | when | some-time | any-time | never |
| manner: | how | some-how | any-how | no way |
| determiner: | which | some | any | no |

The indefinite ever forms a series of its own. Note that English spelling does not distinguish between the indefinite determiner sôme [ sUm ] and the indefinite article sòme [ sm ]. The latter only combined with mass nouns and plurals (some sand, some books).
A.3.2. Origins. On the history of English indefinites, see Einenkel (1903). Some (Old English sum, Gothic sums, cf. Behaghel 1917) is an old indefinite adjective and has Indo-European cognates meaning 'one' (e.g. Latin semel 'once'). Any (Old English ænig) is derived from Old English an 'one' plus -ig (cf. § 7.3.2.1). The uses of sum and ænig in Old English were much like the modern English uses, so that not much can be said on the diachronic development. However, the free-choice use of any developed only later (Einenkel 1903).
A.3.3. Distribution. The distribution of the three series is shown in Figure A.3.

Figure A.3.
specific
known

irrealis non-specific

| question | indirect <br> negation | direct <br> negation |
| :--- | :--- | :--- |
| conditional | comparative | free-choice |

No further examples are given here, because they can be found throughout this work (cf. § 4.3.1). There is of course an extensive literature on English indefinites. Monographic treatments are Sahlin (1979) and Tesch (1990), and the list of papers on English indefinites includes Stoffel (1899), Bolinger (1960, 1977), Klima (1960), Lakoff (1969), Borkin (1971), Lawler (1971), Horn (1972), Labov (1972), Warfel (1972), Ferrer (1973), Savin (1974), Fauconnier (1975a), Anthony (1977), McCawley (1977), Ladusaw (1980), Davison (1980, 1981), Hintikka (1980, 1986), Carlson (1980, 1981), Léonard (1980, 1983), Linebarger (1980, 1981, 1987), Aldridge (1982, Hirtle (1982, 1988, Strickland (1982, Kadmon and Landman (1993). Diachronic issues are dealt with in Einenkel (1903), Raumolin-Brunberg (1994), Tottie (1994).

## A.4. Swedish

A.4.1. Inventory. Swedish (Germanic, Indo-European) has three series of indefinite pronouns, only one of which is based on interrogatives: the non-emphatic nagon-series, (ii) the negative ingen-series, and (iii) the free-choice som helst-series.

|  | interrogative | någon-series | ingen-series | som helst-series |
| :--- | :--- | :--- | :--- | :--- |
| person: | vem | nägon | ingen | vem som helst |
| thing: | vad | nägon-ting, något | ingen-ting, intet | vad som helst |
| place: | var | nägon-stans | ingen-stans | var som helst |
| time: | när | năgon gång | aldrig | när som helst |
| manner: | hur | på något vis |  | hur som helst |
| determiner: | vilken | năgon | ingen | vilken som helst |

The word någonsin 'ever' formally belongs to the någon-series, but it it used differently.
A.4.2. Origins. Någon is said to go back to *ne hwait ik hwarir 'I don't know who' (cf. § 5.3.1.1). Ingen goes back to *ain-gi- 'one-particle'. Någon and ingen are combined with generic nouns (ting 'thing', etc.) Som helst is literally 'that (is) dearest', so it represents the type discussed in § 5.3.2. Aldrig 'never' is from the dative of alder 'age, time' plus the emphatic particle -gi (also found in ingen).
A.4.3. Distribution. The distribution of the three series is shown in Figure A.4. The data are from various reference works and a native speaker (Östen Dahl). See also Thelander (1980).

## Figure A.4.

| specific | specific | irrealis |
| :--- | :--- | :--- |
| known | unknown | non-specific |


| indirect | direct |
| :--- | :--- |
| negation | negation |

free-choice
The nagon-series is used in all non-emphatic functions and in the negative functions, and also in the comparative function. WH som helst is a possible alternative only in the comparative function.
(A.21) specific (known, unknown)
a. Jag har ännu något att talamed honom om. I have still something to talkwith him about 'I still have something to talk to him about.'
b. Någon, jag minns inte vem, säger... somebody I remember not who says 'Somebody, I don't recall who, says...'
(A.22) irrealis non-specific (future)

Någon gångfär han nog erfara.
some time gets he enough experience
'Sometime he will learn.'
(A.23) question/conditional
a. Har du hört något <*vad som helst>? have you heard something anything 'Did you hear anything?'
b. Om du hör någonting <*vad som helst>, väck mig. if you hear something anything wake me 'If you hear anything, wake me up.'
(A.24) indirect negation

Jag trorinte att någon <*vem somhelst> vet det.
I think not that anyone anyone knows that
'I don't think that anyone knows that.'
(A.25) comparative

Den här pojken springer fortare än någon/ vem som helst this here boy runs faster than anyone who INDEF annan $i$ klass-en.
other in class-ART
'This boy runs faster than anyone in his class.'
In the direct-negation function, there is competition between någon (which cooccurs with verbal negation) and ingen (which does not cooccur with verbal negation). When the negated indefinite occurs preverbally, ingen must be used (cf. § 8.2.5):
(A.26) direct negation
a. Ingen har sett mig. (*Någon har inte sett mig.)
none has seen me 'Nobody has seen me.'
b. Jag har aldrig hört någon opera. I have never heard any opera 'I never heard any opera.'

When the negated indefinite occurs postverbally, någon is now generally preferred to ingen (cf. Thelander (1980) for discussion of the various factors contributing to the choice).
(A.27)
a. Jag vet intenågot.
b. Jag vet ingenting.
I know not anything I know nothing
'I do not know anything.' 'I know nothing.'

In the free-choice function, WH som helst is used.
(A.28) free choice

Du kan fråga vem somhelst.
you can ask who INDEF
'You can ask anyone.'
The indefinite någonsin 'ever' is only used in negative-polarity environments:
a. *Jag har hört det någonsin. I have heard that ever 'I ever heard that.'
b. Skivor är dyrare än någonsin. records are dearer than ever 'Records are more expensive than ever.'

## A.5. Icelandic

A.5.1. Inventory. Icelandic (Germanic, Indo-European) has five main series of indefinite pronouns, two of which are based on interrogatives: the non-emphatic ein-series, (ii) the negative-polarity nokkur-series, (iii)-(iv) the negative enginn- and neinn-series, and (v) the freechoice series marked by sem er.

| person: | rogative | ein-series | nokkur-series | enginn-series | neinn-series neinn | sem er-series |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | hver | ein-hver | nokkur | enginn |  | hver sem er |
| thing: | hvad | eitt-hoad | nokkuD | ekkert | neitt | hvad sem er |
| place: | hvar | einhvers $\text { sta } \boldsymbol{D}_{a r}$ | nokkurs <br> staDar | hvergi |  | hvar sem er |
| time: | hvenær | einhvern <br> tíma | nokkurn tíma | aldrei |  | hvenær sem er |
| manner: |  | einhvern |  | engan | nein leiD |  |
| determ |  | veginn | nokkur | vegin | inn |  |

A.5.2. Origins. Three series use generic nouns in combination with indefinite determiners for the adverbial categories place, time and manner. Only in the sem er-series are all indefinites based on the corresponding interrogatives. Sem is a relative marker, and er is a form of the verb 'be' (§ 6.2.3). The ein-series consists of ein- 'one' plus hver (§ 7.5.2). For nokkur, going back to Old Norse nekkver, it has often been claimed that it goes back to *ne wait ik hwarir 'I don't know who'
(§ 6.2.1.1). The enginn-series was originally marked by the emphatic particle -gi, which is currently recognizable only in hver-gi: enginn < *ein-gi 'even one (person)'; ekkert < *eitt-gi [?] 'even one (thing)'; aldrei < *aldri-gi (aldri, dative of aldr 'age') 'even at age, i.e. at any time'. Neinn must be from the ancient negator *ne plus einn 'one'.
A.5.3. Distribution. The distribution of the three series is shown in Figure A.5. The data are from a native speaker (Halldór SigurDsson). See also Jónsdottir (1991).

Figure A.5.
specific specific irrealis question/ indirect $\quad \begin{aligned} & \text { direct } \\ & \text { negation }\end{aligned}$ known unknown non-specific conditional

The ein-series is used in all non-emphatic functions. However, in the specific-known function a generic noun would be more natural.
(A.30) specific known

PaD hringdi ein-hverl maDur í mig í morgun(en ég segi pér ekki hver). it rang one-who man in me in morning and I say you not who 'Someone called me up this morning (but I won't tell you who).'
(A.31) specific unknown

Strákur-inn sá eitt-hvaD á bak viD tréD (en ég veit ekki hvaD).
boy-the saw one-what on back near tree and I know not what 'The boy saw something behind the tree (but I don't know what).'
(A.32) irrealis non-specific (imperative)

Kaupta eitt-hvaD/ *nokkuD fyrir mig!
buy one-what anything for me
'Buy something for me!'
In questions, the nokkur-series is a possible alternative (nokkur is used in questions when a negative answer is expected). However, nokkur is not used in conditionals, nor is it used in the irrealis non-specific function (see A.32).
(A.33) question/ conditional
a. Sástu nokkuD/ eitt-hvaD?
saw:you anything one-what
'Did you see anything/ something?'
b. Ef ein-hver/ ??nokkur hringir, viltupá segja aD égsé ekkiheima. if one-who anyone rings will:you then saythat I am not home 'If anyone calls, please say I'm not at home.'

The nokkur-series is also used in the comparative and indirect-negation functions.
(A.34) comparative

Hann getur hlaupiD hraDar en nokkur/ *hver sem er/*neinn annar í
he can run faster than anyone who that is noone other in
bekknum.
class
'He can run faster than anybody else in his class.'
(A.35) indirect negation

Ни́n neitaDi aD viDurkenna nokkuD.
sherefused to accept anything
'She refused to accept anything.'
The enginn-series is used in the direct-negation function, without cooccurring verbal negation.
(A.36) direct negation

Enginn sá mig./ PaD sá mig enginn.
nobody saw me it saw me nobody
'Nobody saw me.'

An alternative to the enginn-series is the neinn-series, which cooccurs with verbal negation. However, it cannot precede the negation (cf. § 8.2.5, fn. 10), so in subject position only enginn is possible. Neinn is also used in indirect negation:
(A.37) indirect negation

Ég held ekki aD neinn hafi komid.
I think not that nobody has come
'I don't think that anybody has come.'
In the free-choice function, the sem er-series is used.
(A.38) free choice
Pú mátt heimsækja okkur hvenær sem er.
you may visit us
'You may visit us anytime.'

## A.6. Latin

A.6.1. Inventory. Latin (Italic, Indo-European) has a rich system of five major series of indefinite pronouns, four of which are mostly derived from interrogatives: (i) the non-emphatic ali-series, (ii) the negative-polarity series marked by -quam, (iii-iv) the two free-choice series marked by -vis and -libet. The negative $n$-series (v) is not derived from interrogatives. The bare interrogatives are also commonly used as indefinites. In the following table, the -libet-series is omitted because it does not differ from the -vis-series.

|  | interrogative | ali-series | -quam-series | n-series | -vis-series |
| :--- | :--- | :--- | :--- | :--- | :--- |
| person: | quis | ali-quis | quis-quam | nemo | qui-vis |
| thing: | quid | ali-quid | quid-quam | nihil | quid-vis |
| place: | ubi | ali-cubi | usquam | nusquam | ubi-vis |
| time: | quando | ali-quando | umquam | numquam | - |
| determiner: | qui | ali-qui | ullus | nullus | qui |
| dual determiner: | uter | - | - | neuter | uter-vis |

In addition, there is the specific-known determiner qui-dam 'a certain' (also quid-dam 'something', qui-dam 'somebody'); an old-fashioned negative-polarity series marked by piam (quis-piam 'anybody', quid-piam 'anything', uspiam 'anywhere'); and two series which are most commonly used as relative pronouns in non-specific free relatives, but may also be used as free-choice indefinites: the -cumque-series (qui-cumque 'whoever; anyone', ubi-cumque 'wherever; anywhere', etc.), and a reduplicated series (quis-quis 'whoever; anyone', ubi-ubi 'wherever; anywhere', etc.).
A.6.2. Origins. The etymologies of ali-, -dam,-piam, and -quam are uncertain. The suffix -vis is identical to vis 'you want', and -libet is identical to libet 'it pleases'. The suffix -cumque seems to go back to "quom-que 'anytime, ever'. The negative indefinites consist of the old negator ne plus a general noun (*ne-homo 'not man' > nemo; ne hilum 'not string' > nihil), or plus usquam/umquam/ullus of the -quam-series (cf. § 8.2.3.3). The origin of the roots $u s$ - and um-is also unclear, but ullus can be traced back to an extension of unus 'one' (un-elos $>$ un-lus $>$ ullus) (cf. § 8.3.2.1).
A.6.3. Distribution. The distribution of the five major series and the -dam-indefinites is shown in Figure A.6. The data are from Kühner and Stegmann (1914, I.1: 633ff.), Orlandini (1981, 1983), Hahn (1933), Serbat (1985), Mellet (1992, 1994). (For convenience, many of the examples are from the New Testament.)

Figure A.6.
specific specific irrealis
known unknown non-specific

| question | indirect <br> negation | direct <br> negation |
| :--- | :--- | :--- |
| conditional | comparative |  |
|  |  | free-choice |

The indefinite qui-dam is used when the referent is known to the speaker, whereas the ali-series is used when it is not known. Some counterexamples to this generalization can apparently
found in Latin texts, but I know of no better description of the distinction between ali- and -dam. In any event, -dam is absolutely never used non-specifically.
(A.39) specific known

Magister, vidimus quem-dam in nomine tuo ejicientem daemonia. Masterwe:saw whom-INDEF in name your casting.out devils
'Master, we saw someone casting out devils in thy name.' (NT, Mk 9.38)
(A.40) specific unknown

Tetigit me ali-quis. (NT, Lk 8.46)
touched me INDEF-who
'Somebody hath touched me (for I perceive that virtue is gone out of me).'
The ali-series is also used non-specifically in irrealis-contexts and in questions and conditionals.
(A.41) irrealis non-specific

At ille intendebat in eos, sperans se ali-quid accepturum ab eis but that gave.heed in them hoping self INDEF-what accept:FUT from them 'And he gave heed unto them, expecting to receive something of them.' (NT, Act. 3.5)

However, in questions and conditionals the bare interrogatives are more common. But bare interrogatives can be used as indefinites only when they are enclitic upon an element (such as $s i$ 'if', nит 'question particle') early in the sentences as shown in (A.42-43) (a). When an indefinite in a question or conditional cannot be enclitic, the ali-series is used (A.42-43 (b)).
(A.42) question
a. Num quid simile populus Romanus audierat? (Cic. Lael. 41) Q whatsimilar people Roman heard 'Had the Roman people heard anything similar?'
b. Licet mihi loqui ali-quid ad te? (NT, Acts 21.37) is.allowed to:me to:speak INDEF-what to you 'May I say something to you?'
(A.43) conditional
a. Si quid petieritis me in nomine meo, hoc faciam. (NT, John 14.14) if what you:ask me in name my this I:will:do 'If ye shall ask anything in my name, I will do it.'
b. Et si quid ali-quemdefraudavi, reddo quadruplum. (NT, Lk 19.8) and if what INDEF-whom I:deceived I:return fourfold 'And if I have taken anything from any man by false accusation, I restore him fourfold.'

The -quam-series is used in all negative-polarity contexts, except direct negation.
(A.44) question/conditional
a. Aut quomodo potest quis-quam intrare in domum fortis... or how can who-INDEF enter in house of:strongman nisiprius alligaverit fortem? (NT, Mt 12.29) unless before he:will:bind strongman 'Or else how can anyone enter into a strong man's house...except he first bind the strong man.'
b. Si quis-quam est timidus in magnis periculosis-que rebus, is ego sum. if who-INDEF is timid in big dangerous-and things this I am 'If anyone is timid in important and dangerous situations, it is me.' (Cic. Fam. 6.14.1)
comparative
Ac videte quanto taetriorhic tyrannus Syracusanis fuerit quam and you:see how.much more:horrible this tyrant for:Syracusans was than quis-quamsuperiorum. (Cic. Verr. 4.123)
who-INDEF of:earlier.ones
'And you see how much more horrible this tyrant was for the Syracusans than any of the earlier ones.'
indirect negation
Et non sinebat utquis-quamtransferret vas per templum.
and NEG admitted that who-INDEFtransferred vessel through temple
'And he would not admit that any man should carry any vessel through the temple.' (NT, Mk 11.16)

The $n$-indefinites occur only in the function of direct negation. As in standard English, there is no verbal negation in such sentences. When more than one indefinite is in the scope of negation, only the first is from the $n$-series; the others are from the -quam-series (again, as in standard English).
(A.647) direct negation
a. Nemo potest duobus dominis servire. (NT, Mt 6.24)
nobody can two masters serve
'Nobody can serve two masters.'
b. Neminiquid-quam dixerunt. (NT, Mk 16.8)
to:nobody what-INDEF they:said
'They did not say anything to anybody.'
Here are some examples of the free-choice function, where the -vis-series (A.48a), the -libetseries (A.48b), the -cumque-series, and the reduplicated interrogatives can be used.
(A.48) free choice
a. Mihi utrum-vis satis est. (Cic. Off. 3.33) to:me which-INDEF enough is 'Either is sufficient for me.'
b. Utrum-libetelige; alterum incredibileest, alterum nefarium. (Quint. 81) which-INDEF choose one incredible is other sinful 'Choose either: one is incredible, the other sinful.'

## A.7. Portuguese

A.7.1. Inventory. Portuguese (Romance, Indo-European) has three major series of indefinite pronouns: (i) the non-emphatic alg-series, (ii) the non-specific qualquer-series, and (iii) the negative $n$-series.

|  | interrogative | alg-series | qualquer-series | n-series |
| :--- | :---: | :--- | :--- | :--- |
| person: | quem | alguém | qualquer pessoa | ninguém |
| thing: | que | alguma coisa, algo | qualquer coisa | nada |
| place: | onde | algures, em algum lugar | em qualquer lugar | nenhures |
| time: | quando | alguma vez | em qualquer altura | nunca, jamais |
| manner: | como | de algum modo | de qualquer modo |  |
| determiner: | que, qual | algum | qualquer | nenhum |

A.7.2. Origins. The alg-series goes back to the Latin ali-series (cf. A.6) (algum < *alic-unus, alguém < *ali-quem, algo < *ali-quod, algures < alicubi). Qualquer is from qual 'which' plus quer 'wants' (§ 6.2.2).
A.7.3. Distribution. The distribution of the three series is shown in Figure A.7. The data are from my own observations and from a native speaker (Lourenço C. Finatti). (My data are mostly from Brazilian Portuguese. It is possible that European Portuguese differs from this in some respects.)

Figure A.7.

| question | indirect <br> negation | direct <br> negation |
| :--- | :--- | :--- |
| conditional | comparative |  |

The alg-series is used in all non-emphatic functions. In the specific-known function, only the alg-series is possible, but in other functions the qualquer-series is a possible alternative.
(A.49) specific known

O João telefonou e disse alguma coisa/ *qualquer coisa-

ART João phoned and said some thing any thing
adivinhe o que!
guess what
'João called and said something - guess what!'
(A.50) specific unknown
a. Senti que alguémme observava.

I:felt that someone me observed
'I felt that someone was observing me.'
b. Ivan disse qualquer coisa em russo que não entendi. Ivan said any thing in Russian that not I:understood 'Ivan said something in Russian that I did not understand.'
(A.51) irrealis non-specific (possibility)

Alguém/ qualquer pessoa pode passar aí e apanhar a caixa.
someone any person canpass here and take the box 'Someone [non-specific] can come along here and take the box.'
(A.52) question/conditional
a. Você ouve alguma coisal qualquer coisa? you hear some thing any thing
'Can you hear anything?'
b. Se você ouvir alguma coisal qualquer coisa, acorde-me. fi you hear some thing any thing wake-me 'If you hear anything, wake me up.'

In the comparative and free-choice functions, only the qualquer-series is used.
(A.53) comparative

Eu amo minha filha mais doquequalquer outra pessoa.
I love my daughter more than any other person
'I love my daughter more than anyone else.'
(A.54) free choice

Pelo Bäbel ele é capaz de fazer qualquer coisa.
for:ART Babel he is capable of doing any thing
'For Babel he is capable of doing anything.'
The qualquer-series may also be used in the negation functions (cooccurring with verbal negation in the direct-negation function). However, the $n$-series is more common in both functions. The $n$-series also cooccurs with verbal negation, except when an $n$-indefinite precedes the verb.
(A.55) indirect negation

Liliana perguntou isso sem encenar qualquer/ nenhum charme sensual.
Liliana asked that without showing any no charm sensual
'Liliana asked this without showing any sensual charm.'
(A.56) direct negation
a. Não contém qualquer sentimento nobre. not contains any feeling noble 'It does not contain any noble feeling.'
b. Ninguém veio./ Não veio ninguém. nobody came not came nobody 'Nobody came.'

## A.8. Catalan

A.8.1. Inventory. Catalan (Indo-European, Romance) has three rather heterogeneous series of indefinite pronouns which are synchronically unrelated to interrogatives: (i) the non-negativepolarity algun-series, (ii) the negative-polarity cap-series, and (iii) the qualsevol-series.

|  | interrogative | algun-series | cap-series | qualsevol-series |
| :--- | :--- | :--- | :--- | :--- |
| person: | qui | algú | ningú | qualsevol |
| thing: | què | alguna cosa | res, gens | qualsevol cosa |
| place: | on | en algun lloc | enlloc |  |


| time: | quan | alguna vegada | mai, en ma vida |
| :--- | :--- | :--- | :--- |
| determiner: | quin | algun | qualsevol |

A.8.2. Origins. The algun-series is based on the determiner algun plus a general noun (cosa 'thing', lloc 'place', etc.). Algun is from late Latin alicunus 'some(one)' (cf. French aucun, Latin aliquis). Ningú is from Latin nec unus 'not even one' (cf. § 8.3.1); res is from Latin res 'thing'; gens is from Latin gens 'people'; enlloc is from in loco 'at a place'; mai is from magis 'more'; en ma vida is literally 'in my life'; cap is said to be from caput 'head', but the semantic development is obscure. Qualsevol (cf. Italian qualsivoglia) is from Latin qualis 'which, what kind' plus vol'want'.
A.8.3. Distribution. The distribution of the three series is shown in Figure A.8. The data are from Lleó (1983) (L83), Solà (1973) (S73), Espósito (1988) (E88), and Hualde (1992) (H92).

Figure A.8.
specific
known
 unknown

| question | indirect <br> negation |
| :--- | :--- |
| conditional | comparative |

direct
negation
free-choice
The algun-series is used in non-negative polarity contexts.
(A.57) specific

Alguna vegada he vist algú en algun lloc.(S73:92)
some time I:have seen someone in some place 'I once saw somebody somehwere.'
(A.58) irrealis non-specific (future)

Algun diaho entendràs.
some day it you'll.understand
'Some day you'll understand.'
In negative-polarity contexts, the cap-series is used, but except in the direct-negation function, the algun-series is a possible alternative.
(A.59) question/conditional
a. Hi ha res/ alguna cosa de nou? (E88: 105) there exists anything some thing of new 'Is there anything/ something new?'
b. Si hi hagués ningúl algúde Barcelona, li podríem demanar. if there existed anyone someone from Barcelona him we:coulf ask 'If there were anyone/ someone from Barcelona, we could ask him.' (H92: 163)
(A.60) indirect negation

Nega que hagui arrivat ningú/algú. (E88: 105)
denies that have arrived anyone someone
'She denies that anyone has arrived.'
In the direct-negation function, only the cap-series may be used. When the indefinite follows the verb, it always cooccurs with verbal negation. When the indefinite precedes it, the prescriptive norm also requires verbal negation, but in the colloquial language, verbal negation is always absent (cf. Solà (1973), Espósito (1988) for discussion).
(A.61) direct negation
a. No he vist mai ningú enlloc. (S73: 93)
not I:have seen ever anyone anywhere
'I have never seen anybody anywhere.'
b. Ningú (no) ens ha vist. (S73:93)
nobody not us has seen
'Nobody has seen us.'
In the comparative function, both the cap-series and the qualsevol-series are possible (José Hualde, p.c.).
(A.62) Aqui el clima es mes agradable que here the climate is more pleasant than en qualsevol altre lloc/ enlloc d' Europa. in anyother place anywhere of Europe 'Here the climate is more pleasant than anywhere else in Europe.'

An example for qualsevol in the free-choice function is the following:
(A.63) free choice

La negació expressada per l'adverbi no pot recaure no sobre tota la proposició...sinó sobre una altra qualsevol de las sevas parts. (S73: 94-5)
'The negation expressed by the adverb no can have scope not over the whole sentence, but over any other of its parts.'

## A.9. French

A.9.1. Inventory. French (Romance, Indo-European) has five major series of indefinite pronouns: (i) the non-emphatic quelque-series, (ii) the negative-polarity series of personne etc., (iii) the free-choice series marked by $n^{\prime}$ importe, and (iv-v) the two emphatic series marked by que ce soit and -conque.

|  | interrogative | quelque-series | personne-series | -conque-series |
| :--- | :--- | :--- | :--- | :--- |
| person: | qui | quelqu'un | personne | qui-conque |
| thing: | quoi | quelque chose | rien |  |
| place: | où | quelque part | nulle part |  |
| time: | quand | (en quelque temps) | jamais |  |
| manner: | comment | (en quelque sorte) | aucunement |  |
| determiner: | quel | quelque | aucun | quel-conque |

The n'importe-series and the que ce soit series are regularly derived from the interrogatives (n'importe qui, n'importe quoi, etc., and qui que ce soit, quoi que ce soit, etc., but note that the determiner here is quelque ... que ce soit). In addition, there is a marginal je ne sais-series (cf. § 6.2.1.1).
A.9.2. Origins. On the origin of the determiner quelque, see Foulet (1919) (que is the general subordinator, § 6.2.3.1). Personne and rien go back to earlier generic nouns (Latin persona 'person', rem 'thing(ACC)'). Aucun is from late Latin alicunus (cf. Portuguese algum, Catalan algú). Nul continues the Latin negative pronoun nullus. Jamais is from jam 'already, anymore' + magis 'more'. N'importe literally means 'it doesn't matter' (§ 6.2.4). The indefiniteness marker conque seems to come from qu'onques 'that ever' (\$ 6.2.3.1), although some have claimed that it goes back directly to Latin -cumque (Foulet 1919). The marker que ce soit literally means 'that it be' (§ 6.2.3.1).
A.9.3. Distribution. The distribution of the three series is shown in Figure A.9. The data are from Gaatone 1971 (G71), Culioli (1983), and my own observations.

## Figure A.9.

specific specific irrealis
known unknown non-specific

| question | indirect <br> negation | direct <br> negation |
| :--- | :--- | :--- |
| conditional | comparative |  |
|  |  | free-choice |

The quelque-series is used in all non-emphatic functions.
(A.64) specific known/unknown
a. Quelqu'un m'attend. C'est lui que j'épouserai. 'Someone is waiting for me. It's him that I will marry.'
b. Quelqu'un està la porte. Je ne sais pas qui. 'Somebody is at the door. I don't know who.'
(A.65) irrealis-non-specific (imperative, 'want')

Elle veut épouser quelqu'un aux cheveux noirs.
'She wants to marry someone with black hair.'

However, as Culioli (1983) notes, the determiner quelque behaves somewhat differently from quelqu'un etc. in that it can only be used non-specifically.

In the question and conditional functions, the personne- and que ce soit-series are also possible, but only in rhetorical questions that imply a negative answer.
(A.66) question
a. As-tu écouté quelque chose?
'Have you heard anything?'
b. Si l'art n'était vraiment qu'un prolongement de la vie, valait-il de lui rien sacrifier? (G71: 169)
'If art were really only a continuation of life, would it be worth sacrificing anything for it?'
c. Comment peut-on en conclure quoi que ce soit sur l'ordre de la pensée? 'How can one conclude anything from it about the order of thoughts?'
(A.67)
conditional
a. Je vous rends responsable si rien/quelque chose s'ébruite dans la presse. 'I hold you responsible if anything transpires in the media.'
b. Éveillez-moi s'il arrive quoi que ce soit.
'Wake me up if anything happens.'
The personne-series is most often used in the direct-negation function, cooccurring with the preverbal negative particle ne, but not with the postverbal negative particle pas. Furthermore, it is used in the indirect-negation and comparative functions. In all these functions, the que ce soitseries is a possible alternative.
(A.68) direct negation
a. Je ne vois rien.
'I cannot see anything.'
b. Personne $n^{\prime}$ jamais dit rien.
'Nobody ever said anything.'
c. Je n'ai vu qui que ce soit. (Muller 1991: 256)
'I haven't seen anybody.'
(A.69) indirect negation
a. Je doute que personne y réussisse. 'I doubt that anybody will succeed in it.'
b. J'hésite à rien écrire sur cela/à écrire quoi que ce soit sur cela. 'I hesitate to write anything about that.'
(A.70) comparative
a. Il parle mieux qu'aucun orateur.
'He speaks better than any orator.'
b. Je préfere de beaucoup fermer les yeux que lui reprocher quoi que ce soit qui puisse vous ennuyer.
'I much prefer to close my eyes than to blame him for anything that could annoy you.'

The que ce soit-series is also used in the free-choice function.
(A.71) free choice

Vous pouvez dire quoi que ce soit.
'You can say anything.'
The range of functions of the -conque-series (i.e. quiconque and quelconque) is very similar to that of the que ce soit-series.
(A.72) a. Demandez à quiconque des assistents! (free choice)
'Ask any of the assistants!'
b. Je le sais mieux que quiconque. (comparative)
'I know it better than anyone.'
c. Il n'est pas permis de parler de ceci à quiconque. (indirect negation)
'It isn't possible to talk about this to anyobody.'
d. Si quiconque insiste pour me parler, dites qu'on m'écrive. (conditional)
'If anyone insists on talking to me, tell them to write to me.'

The n'importe-series is used in the free-choice and comparative functions.
(A.73) a. Tu peux dire n'importe quoi.
'You can say anything.'
b. Le général avait compris assez tôt que cette guerre, plus que n'importe quelle guerre dans le passé, était une guerre de réserves d'hommes et de matériel.
'The general had understood pretty soon that this war, more than any war in the past, was a war of human and material resources.'

## A.10. Italian

A.10.1. Inventory. Italian (Indo-European, Romance) has a rather heterogeneous system, consisting of three major series. Of these only one, the free-choice series in -unque, is formally homogeneous, but it is quite incomplete. The other two are the negative nessunо-series and the general qualche-series.

| person: | interrogative <br> chi <br> thing: | che | qualche-series <br> qualcuno <br> qualche cosa, | nessuno-series <br> nessuno <br> niente, nulla |
| :--- | :--- | :--- | :--- | :--- |
| place: | dove | qualcosa <br> in qualche luogo | in nessun luogo <br> chiunque | - |
| time: | quando <br> manner: <br> determiner: | come <br> quale | qualche volta <br> in qualche modo | <mai> |

There is an important determiner qualsiasi 'any' which forms a series of its own. Other indefinites are archaic and therefore marginal: two forms in -chessia (chicchessia 'anyone', checchessia 'anything'), the determiners qualsivoglia 'any' and veruno 'any', as well as the three negative indefinites from the stem alcun- (alcuno 'nobody', alcunché 'nothing', alcuno 'no').
A.10.2. Origins. The etymology of Italian qualche is analogous to French quelque. Nessuno is from the negation nec plus uno 'one'. Nulla is from Latin nulla (res) 'no (thing)', and niente is probably from nee gentem 'not people' (cf. the discussion in Zanuttini (1987)). Mai is from Latin magis 'more'. The suffix -unque is identical to old Italian unque 'ever' (< Latin unquam 'ever'). The forms in -chessia are analogous to the French forms in que ce soit.
A.10.3. Distribution. The distribution of the three series is shown in Figure A.10. The data are from various reference works (e.g. Brunet 1981), Longobardi (1989), and native speakers (Paolo Ramat, Davide Ricca). See also Zanuttini (1987, 1991).

| Figure A.10. |  | question | indirect <br> negation | direct <br> negation |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| specific <br> known | specific <br> unknown | irrealis <br> non-specific | conditional | comparative | free-choice |

The most general series is the qualche-series.
(A.74) specific known

Qualcuno è venuto - indovina chi!
'Someone has come - guess who!'
(A.75) specific unknown

Non trovo la penna, eppure in qualche parte l'avrò messa.
'I can't find the pen, and yet I must have put it somewhere.'
(A.76) irrealis non-specific (imperative)

Compra qualcosa per me.
'Buy something for your niece.'

In the question (but not the conditional!) function and in indirect-negation functions, the nessuno-series is also possible.
(A.77) question

Vedi qualcosa/niente?
'Can you see anything?'
conditional
Se senti qualcosa <*niente>, svegliami.
'If you hear anything, wake me up.'
indirect negation
Non è necessario che venga nessuno/che qualcuno venga.
'It is not necessary that anyone come.'
The -unque-series is restricted to the free-choice and comparative functions.
(A.80) free choice

Puoi andare dovunque.
'You can go anywhere.'
(A.81) comparative

Christie ha scritto più romanzi che chiunque altro in questo secolo.
'Christie has written more novels than anyone else in this century.'
In the direct-negation function, only the nessuno-series is possible. When the negative pronoun follows the verb, it cooccurs with verbal negation (except in colloquial northern Italian), but when it precedes the verb, verbal negation is not possible.
(A.82) direct negation
a. Non ho veduto nulla.
'I have not seen anything.'
b. Nessuno (*non) è venuto.
'Nobody has come.'
c. Nessun professore ha scritto mai nessun libro.
'No professor has ever written any book.'
Alcuno/alcunché may replace nessuno/niente only in the direct/indirect negation function, not in the question function.

## A.11. Romanian

A.11.1. Inventory. Romanian (Indo-European, Romance) has four major series of indefinite pronouns, three of them derived from interrogatives: (i) the non-emphatic -va-series, (ii) the free-choice ori-series, (iii) the negative $n i$-series, and (iv) the oare-series.

|  | interrogative | -va-series | ori-series |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| person: | cine | cine-va | ori-cine | oare-series | ni-series |
| oare-cine | nimeni |  |  |  |  |
| thing: | ce | ce-va | ori-ce | oare-ce | nimic |
| place: | unde | unde-va | ori-unde | oare-unde | nica ieri |
| time: | cind | cind-va | ori-cind | oare-cind | niciodatan, nici-cind |
| manner: | cum | cum-va | ori-cum | oare-cum | nici-cum |
| amount: | cit | cit-va | ori-cit | oare-cit | oiti |
| determiner: | care | care-va | ori-care | oare-care | nici un |

In addition, there is the indefinite determiner vre-un 'any' (Graur 1939).
A.11.2. Origins. The particle ori also means 'or' and derives from Latin velis 'you want (subjunctive)'. The particle oare also occurs as a question particle and as a disjunctive particle ('be it ... be it'); it derives from late Latin "volet 'wants' (classical vult) > voare > oare. The suffix $v a$ has the same origin (voare $>$ vare $>v a$ ), or perhaps it derives from vrea, which also means 'want'. Some of the members of the $n i$-series are from nici 'neither, not even' plus interrogative or general noun (dată 'time'), but nimeni goes back directly to Latin nemo (Accusative neminem). Nimic is from nec mica 'not even a bit'.
A.11.3. Distribution. The distribution of the three series is shown in Figure A.11. The data are from Manoliu-Manea (1966), Berea Gă geanu (1980), Graur (1939), various reference works, the New Testament, and a native speaker (Beatrice Primus).

| Figure A.11. |  | question | indirect <br> negation | direct <br> negation |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| specific <br> known | specific <br> unknown | irrealis <br> non-specific | conditional | comparative |  |

The -va-series is used in non-emphatic functions.
(A.83) specific (known, unknown)
a. Am cumpa*rat ce-va, ghici ce! I:have bought what-INDEF guess what 'I have bought something, guess what!'
b. Cine-va te-a ca*utat la telefon, dar nu i-am int3eles numele. who-INDEF you-has asked on phone but not him-have understood name 'Somebody asked for you on the phone, but I didn't understand the name.'
(A.84) irrealis non-specific ('want')

As3 vrea ce-va mîncare s3i bă utură.
INTJ want what-INDEF to.eat and drink
'I want something to eat and to drink.'
(A.85) question/ conditional
a. Ai fost vreodata*/cind-va la Chis3ina*u?
have been ever when-INDEF at Chis3ina*u
'Have you ever been to Chis3ina*u?'
b. Dacă auzi ce-va/ *ori-ce, trezes3te-ma*.
if you.hear what-INDEF wake-me
'If you hear anything, wake me up.'

The ori-series is used in the comparative and free-choice functions.
(A.86) comparative

Niculina fuge mai repede decît ori-ce/ *vre-o fata* din clasa*.
Niculina runs more fast thanINDEF-what INDEF-one girl in class
'Niculina runs faster than any girl in her class.'
(A.87) free choice

Se gă seste in ori-ce pră vălie.
REFL getsin INDEF-what shop
'You can get it in any shop.'
The $n i$-series is used for direct and indirect negation. In the direct-negation function, it cooccurs with verbal negation.
(A.88) indirect negation

Nu mai îndrăzneau să-l întrebe nimic. (NT, Lk 20.40)
NEG more they.dared SBJV-him ask nothing
'They did not dare to ask him anything anymore.'
(A.89) direct negation

Nune angajează nimeni. (NT, Mt 20.7)
NEG us hired nobody
'Nobody has hired us.'
The determiner vre-un is used in questions/conditionals, and in indirect negation (cf. Graur (1939) for discussion).
(A.90) question

Ai vre-un prieten care te-ar putea ajuta?
you.have INDEF-one friend who you-would be.able help
'Do you have any friend who could help you?'
(A.11.8) indirect negation
$N u$ este probabil să aibă loc nici o/ vre-o nouă
NEG is probably SBJV have place NEG one INDEF-one new
intrevedere cud. Molotov. (Graur 1939: 174)
interview with Mr. Molotov
'It's unlikely that there will be any new interview with Mr. Molotov.'

## A.12. Modern Greek

A.12.1. Inventory. Modern Greek (Greek, Indo-European) has three main series of indefinite pronouns. One of these is based on interrogative pronouns (the specific $k a$-series), one is based on relative pronouns (the free-choice series marked by -dhípote), and one is formally very heterogeneous (the non-specific típota-series).

|  | interrogative | ka-series | típota-series | -dhípote-series |
| :--- | :--- | :--- | :--- | :--- |
| person: | pjos | ká-pjos | kanénas, kanís | opjos-dhípote |
| thing: | ti | ká-ti | típota | oti-dhípote |
| place: | pu | ká-pu | puthená | opu-dhípote |
| time: | póte | ká-pote | poté | opote-dhípote |
| manner: | pos | ká-pos | (me kanénan trópo) |  |

A.12.2. Origins. The prefix $k a$ - comes from kan 'even, at least' (<kaì eán 'even if'). The típotaseries is quite diverse not only synchronically, but also in terms of its origins: Kanénas consists of kan plus énas 'one'; the suffix -pota in típota probably goes back to poté 'ever, never'; poté survives from Ancient Greek, where indefinites were identical to interrogatives except that they were unstressed or had final stress. Likewise, puthená is said to go back to póthen 'whence'. The -dhípote-series is not originally part of the Demotic (i.e. vernacular) language - it came into the modern standard language from the older archaizing Katharévousa variety and can effectively be regarded as a borrowing from Ancient Greek de pote (consisting of the ' emphatic' particle dè plus poté 'ever').
A.12.3. Distribution. The distribution of the three series is shown in Figure A.12. The data are from my own observations, Veloudis (1982), Dhelverúdhi (1989), Giannakidou (1993, 1994a, b, c), Tsimpli and Roussou (1993) and from native speakers (Anastasia Christofidou, Soteria Svorou, Axel Theofilidis, Artemis Alexiadou).

Figure A.12.

| specific | specific | irrealis |
| :--- | :--- | :--- |
| known | unknown | non-specific |


| question | indirect <br> negation | direct <br> negation |
| :--- | :--- | :--- |
| conditional | comparative | free-choice |

The $k a$-series is used in all non-emphatic functions (except apparently 'specific known'). However, in the non-specific functions (irrealis, question, conditional) the tipota-series is preferred.
(A.91) specific known/unknown

$$
\begin{array}{ccc}
\text { a. *Ká-pjos tilefónise. Mándepse pjos! } \\
\text { INDEF-who } & \text { phoned guess:IMPV } & \text { who }
\end{array}
$$

'Someone called. Guess who!'
b. Ká-pjos tilefónise. Dhen kséro pjos.

INDEF-who phoned not I:know who
'Someone called. I don't know who.'
(A.92) irrealis non-specific (imperative, 'want')

| a. Fére | típotal ká-ti | na fáme! |  |
| :--- | :--- | :--- | :--- | :--- |
| bring:IMPV anything | INDEF-what | SBJV | we:eat |
| 'Bring something to eat!' |  |  |  |

b. Théli na pandreftíkanénan/ ká-pjon pu na milái ghaliká. wants SBJV she:marry anyone INDEF-whom who SBJV speak French 'She wants to marry someone [non-specific] who speaks French.'
question / conditional
a. Ídhes
típotal ká-ti?
you:saw anything INDEF-what
'Did you see anything/ something?'
b. An dhís típotal ká-ti, pes mu.
if you:see anything INDEF-what say:IMPV me
'If you see anything/ something, tell me.'
The tipota-series is also used in the negation functions, cooccurring with verbal negation in the case of direct negation. See $\S 5.7 .3$ and $\S 8.2 .5$ for the role of stress.
(A.94) direct negation

Kanis dhen mu ipe típota.
anyone not me said anything
'Nobody told me anything.'
(A.95) indirect negation

Dhen nomizo óti irthe kanís.
not I:think that came anyone
'I don't think that anyone came.'
The -dhipote-series is used in the free-choice function and in the comparative function.
(A.96) free choice

Opjos-dhípote borí na lísi aftó to próvlima.
who-INDEF can SBJV solve this the problem
'Anyone can solve this problem.'
(A.97) comparative

To aghóri borí na tréksi ghrighorótera apó opjon-dhípote sto sxolío tu. theboy can SBJV he:run faster from whom-INDEF in:the school his 'The boy can run faster than anyone in his school.'

The -dhipote-series is also possible in the conditional function with an emphatic value, but not in the question function.
(A.98) question/ conditional
a. *Ídhes oti-dhipote?
you:saw what-INDEF
'Did you see anything at all?'
b. An dhis oti-dhípote, pes mu.
if you:see what-INDEF say:IMPV me
'If you see anything at all, tell me.'

## A.13. Bulgarian

A.13.1. Inventory. Bulgarian (Indo-European, Slavic) has three major series of indefinite pronouns, all of them derived from interrogatives: (i) the general nja-series, (ii) the negative niseries, and (iii) the free choice series in -to $i$ da $e$.

|  | interrogative | nja-series | ni-series | -to i da e-series |
| :--- | :--- | :--- | :--- | :--- |
| person: | koj | nja-koj | ni-koj | koj to i da e |
| thing: | š to | ne-š to | ni-š to | š to to i da e |
| property: | kakâv | nja-kakâv | ni-kakâv | kakâv to i da e |
| place: | kâde | nja-kâde | ni-kâde | kâde to i da e |
| time: | koga | nja-koga | ni-koga | koga to i da e |
| manner: | kak | nja-kak | ni-kak | kak to i da e |
| amount: | kolko | nja-kolko | ni-kolko | kolko to i da e |

The nja-series has an alternative form where the particle si follows the base (njakoj si, neš to si, etc.). The -to $i$ da e-series has the more emphatic alternative form -to i da bilo (kojto i da bilo, etc.). Marginal series are the ne znam si-series (ne znam si koj 'someone', lit. 'I don't know who'), the -gode-series (koj-gode 'anyone', etc.), and the -da e-series (koj da e, etc.).
A.13.2 Origins. The nja- and ni-series go back to Old Church Slavonic ně - (cf. § 6.2.1) and ni(cf. §8.3.1). The -to i da e-series originates in a parametric concessive conditional clause (cf. Kojto
$i$ da e, mož e da vleze. 'Whoever she is, she may come in.'). The particle $s i$ is perhaps cognate with Polish -ś (cf. A.15) .
A.13.3. Distribution. The distribution of the three series is shown in Figure A.13. The data are from Blaž ev (1980), Donč eva (1970) (D70), Dogramadž ieva (1974), Kirova (1986), Mostovska (1988), Nicolova (1972, 1978, 1986), Guentchéva (1981), and from native speakers (Tania Kuteva, Pavlina Vlajkova). See also Paš ov (1965), Xaralampiev (1977).

Figure A.13.

| specific | specific | irrealis |
| :--- | :--- | :--- |
| known | unknown | non-specific |


| question | indirect <br> negation |
| :--- | :--- |
| conditional | comparative |

direct negation comparative

The nja-series can be specific or non-specific:
(A.99)
specific unknown
Govorix včera s nja-koga v avtobusa.
I:talked yesterday with INDEF-whom in the:bus
'Yesterday I talked to someone on the bus.'
(A.100) specific known

Nja-koj se obadi, otgatni koj.
INDEF-who REFL called guess:IMPV who
'Somebody has called, guess who.'
(A.101) irrealis non-specific ('want')

Kogato edin čovek iska da vârši ne-š to - daj mu rabota.
when one person wants SBJV he:do INDEF-what give:IMPV him work 'When a person wants to do something - give him or her work.' (D70: 445)

In conditionals, but not in questions, the more emphatic -to $i$ da $e$-series may alternatively be used.
(A.102) question/ conditional
a. Vidja li ne-što <*kakvo-to ida e>?
you:saw $Q$ INDEF-what what-INDEF
'Did you see anything (at all)?'
b. Ako vidiš ne-što/ kakvo-to idae, kaži mi. if you:see INDEF-what what-INDEFtell:IMPV me 'If you see anything / anything at all, tell me.'

The -to $i$ da $e$-series is also used in the free-choice, comparative, and indirect-negation functions.
(A.103) free choice

Možeš da vzemeš koj-to idae moliv.
you:can SBJV you:take which-INDEF pencil
'You can take any pencil.'
(A.104) comparative

Na mene poveče, otkolkoto i na kogo-to ida bilo
to me more than even to whom-INDEF
drug mi e čužd pokaznijat patos. (D70: 449)
other me is alien ostentatious pathos
'Ostentatious pathos is more alien to me than to anyone else.'
(A.105) indirect negation

Momč e-to go napravi bez kakva-to ida el ni-kakva pomošt.
boy-the it didwithout which-INDEF NEG-which help 'The boy did it without any help.'

The $n i$-series is used in the direct-negation function (cf. A.106), and also in some cases in the indirect-negation function (cf. A.105).

```
(A.106) direct negation
    Ni-koj ne mi kazani-što.
    NEG-who not me told NEG-what
```

'Nobody told me anything.'

## A.14. Serbian/Croatian

A.14.1. Inventory. Serbian / Croatian (Slavic, Indo-European) has four major series of indefinite pronouns, all of which are derived from interrogatives: (i) the non-emphatic ne-series, (ii) the negative-polarity series marked by $i$-, (iii) the free-choice and negative polarity series marked by bilo, and (iv) the negative $n i$-series.

|  | interrogative | ne-series | i-series | ni-series | bilo-series |
| :--- | :--- | :--- | :--- | :--- | :--- |
| person: | ko | ne-ko | i-tko | ni-(t)ko | ko bilo |
| thing: | š to | ne-š to | i-š ta | ni-š to | š to bilo |
| property: | kakav | ne-kakav | i-kakav | ni-kakav | kakav bilo |
| place: | gdje | ne-gdje | i-gdje | ni-gdje | gdje bilo |
| time: | kada | ne-kada, ne-gda | i-kad(a), i-gda | ni-kada | kada bilo |
| manner: | kako | ne-kako | kako | ni-kako | kako bilo |
| determiner: | koji | ne-koji, ne-ki | koji | ni-koji | koji bilo |

A.14.2 Origins. The prefix ne- has the same origin as Russian ne-, Bulgarian nja- and Polish nie(§6.2.1). The prefix $i$ - is from the conjunction and focus particle $i$ 'and; also; even' (§7.1.1). For $n i-$, see § 8.3.1 (cf. Russian ni-). The particle bilo is the perfect tense of 'be', so the bilo-series is an example of an 'it-may-be' indefinite (§ 6.2.3).
A.14.3. Distribution. The distribution of the three series is shown in Figure A.14. The data are from Progovac (1988, 1990, 1991, 1992, 1994) and reference works.

Figure A. 14.

| specific | specific <br> known <br> unknown | irrealis <br> non-specific | question | indirect <br> negation | negation |
| :--- | :--- | :--- | :--- | :--- | :--- |
| conditional | comparative | free-choice |  |  |  |

The $n e$-series is used in the specific and irrealis non-specific functions.
(A.107) specific

Mira voli ne-koga. (P91:569)
Mira loves INDEF-whom
'Mira loves someone.'
(A.108) irrealis non-specific

Daj mi ne-što!
give me INDEF-what
'Give me something!'
The $i$-series is used in negative-polarity contexts, i.e. in the question/conditional, indirectnegation and comparative functions. In all these functions, the bilo-series is a possible alternative.
(A.109) question/ conditional
a. Da li je i-ko/ bilo ko doš ao? (P90: 130-1)

Q Q AUX INDEF-who INDEF who come
'Did anyone come?'
b. Ako je i-kol bilo ko doš ao, poč n-i-te! (P90: 130) if AUX INDEF-who INDEF who come start-IMPV-2PL
'If anyone has come, start!'
c. Jesi li ne-koga naš ao? have.you Q INDEF-whom found
'Did you find anyone?'
(A.110) indirect negation

Milan ne turdi da je i-kol bilo ko/ *ni-ko došao. Milan NEG claims that AUX INDEF-who INDEF who INDEF-who come 'Milan does not claim that anyone has come.' (P90:130-1)
(A.111) comparative (cf. § 4.7.1)

Marija je pametnija \{nego i-ko/ od bilo koga\} u razredu. Marija is smarter than INDEF-who from INDEF who:GEN in class 'Marija is smarter than anyone in her class.'

The bilo-series is also used in the free-choice function.
(A.112) free choice

Bilo ko može istući malo dete. (P90: 130)
INDEF who can beat small child
'Anyone can beat a small child.'
In the direct-negation function, only the $n i$-series is used, cooccurring with verbal negation.
(A.113) direct negation

Milan ne voli ni-koga <*i-koga>. (P91: 568)
Milan NEG loves INDEF-whom INDEF-whom
'Milan does not love anyone.'

## A.15. Polish

A.15.1. Inventory. Polish (Indo-European, Slavic) has three major series of indefinite pronouns, all derived from interrogatives: (i) the general ś-series, (ii) the free-choice series in -kolwiek, and (iii) the negative $n i$-series. The marginal nie-series is also shown in the following table:

|  | interrogative | ś-series | -kolwiek-series | ni-series | nie-series |
| :--- | :--- | :--- | :--- | :--- | :--- |
| person: | kto | kto-'s | kto-kolwiek | ni-kto | - |
| thing: | co | co-ś | co-kolwiek | nic | nie-co |
| quality: | jaki | jaki-'s | jaki-kolwiek | ni-jaki | nie-jaki |
| place: | gdzie | gdzie-ś | gdzie-kolwiek | ni--gdzie | - |
| time: | kiedy | kiedy-ś | kiedy-kolwiek | ni-gdy | nie-kiedy |
| manner: | jak | jako-s' | jak-kolwiek | ni-jak | (niejako) |
| determiner: | który | który-ś | który-kolwiek | z\%aden | nie-który |

The three major series are quite regular, except for a few phonological alternations (jak: jako-s, kiedy : ni-gdy) and the negative determiner $z \%$ aden (from a different root). The nie-series is incomplete. A variant of it is the X-nie-X-series: gdzie-nie-gdzie 'here and there', kiedy nie-kiedy 'once in a while', co nie-co 'a little something' (§ 8.3.4.2). There are three further marginal freechoice series, formed with byle (byle kto 'anyone', etc.), lada (lada kto 'anyone'), and (nie) $b a 4 d z z$ (kto (nie) ba $4 d z$ 'anyone', etc.) . Finally, the bare interrogatives are commonly used as indefinites in the colloquial language (cf. §7.3.2).
A.15.2. Origins. The suffix -s' (<-si, cf. Czech -si) perhaps goes back to *sit '(it) be' (cf. § 6.2.3). The origin of the suffix -kolwiek (cf. Slovak -kol'vek, Czech -koli(v(ě k)), Sorbian -kuli) is not clear (cf. Cieś likowa (1965: 80-3) for some discussion), but a plausible possibility is that koli is identical to the older interrogative-indefinite pronominal adverb koli 'when?; ever', and -wiek is derived from wiek 'age'. The prefix nie- is identical to Russian ne-, Bulgarian nja- (cf. § 6.2.1), and (nie) ba $4 d z$ is identical to Russian -nibud'. Byle (also 'if only') seems to be connected with the modal hypothetical particle by (originally a subjunctive form of być 'be'), and the origin of lada is unknown.
A.15.3. Distribution. The distribution of the three series is shown in Figure A.15. The data are from Grzegorczykowa (1972a) (G72), various reference works, and a native speaker (Thomas Bak). See also Grzegorczykowa (1972b) and Mostovska (1988).

Figure A. 15.

| specific | specific | irrealis |
| :--- | :--- | :--- |
| known | unknown | non-specific |


| question | indirect <br> negation | direct <br> negation |
| :--- | :--- | :--- |
| conditional | comparative |  |

The s'-series is used in all functions from 'specific-known' to 'indirect negation'.
(A.114) specific known/unknown

Kto-s' do ciebie zadzwonil, [zgadnij ktol ale nie zrozumialam nazwisko]. who-INDEF to you called guess whobut not I:understood name 'Someone called you, [guess who/but I didn't understand the name].'
(A.115) irrealis non-specific (possibility)

Zawsze moz5na sie czego-ś nauczyć.
always one.can REFL what-INDEF teach
'One can always learn something.'
In the question/conditional and in the indirect-negation functions, the -kolwiek-series is a possible more emphatic alternative (except in questions, where it sounds a bit odd).
(A.116) question/conditional
a. Widzisz kogo-ś <?kogo-kolwiek>? you:see whom-INDEF whom-INDEF
'Can you see anybody?'
b. Jezeli co-śl co-kolwiek zobaczysz, odrazu mnie obudz.. if what-INDEF what-INDEF you:see immediately me wake:IMPV 'If you see anything, wake me up immediately.'
(A.117) indirect negation

Nie sadze 4 , ze kto-s'/ kto-kolwiek przyszedl.
not I:think that who-INDEF who-INDEF came 'I don't think that anybody came.'

The -kolwiek-series is most typically used in the free-choice function, as well as the comparative function.
(A.118) free choice

Moz\%esz mnie odwiedzić o której-kolwiek godzinie.
you:can me visit at which-INDEF hour
'You can visit me at any time.'
(A.119) Graz\%ynanapisala wie4cej ksia4z\%ek niz\% jaki-kolwiek inny autor. Graz\%yna wrote more booksthan which-INDEF other author 'Grazyna has written more books than any other author.'

The ni-series occurs only in the direct-negation function, cooccurring with verbal negation.
(A.120) Ni-kt ni-c nie wie. NEG-who NEG-what not knows 'Nobody knows anything.'

## A.16. Russian

A.16.1. Inventory. Russian has seven major series of indefinite pronouns: (i-ii) the specific toand koe-series, (iii)-(iv) then non-specific-nibud'- and -libo-series, (v) the negative ni-series, (vi) the negative-polarity series marked by WH by to ni bylo, and (vii) the free-choice series marked by ugodno. In the following table, the by to ni bylo-series is omitted for lack of space.

|  | interrogative | -to-series | -nibud'-series | -libo-serie | $n i$-series |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| son | kto | kto-to |  | kto-lib | ni-kto |  |
| ing: | č to | č to-to | č to-nibu | č to-lib | ni-č | koe-č to |
| ace: | gde | gde-to | -nibu | gde-lib | ni-g | e-8 |
|  | kogd | kogda- | 若 | kogda-lib | i-kog | e-kog |
|  | kak | kak-to | br | kak-libo | i-kak | koe-kak |
| eterminer | skol'ko | skol'ko-to | skol'ko-nibud' | - | ni-skol'ko |  |
| eterminer | er: kakoj | kakoj-to | kakoj-nibud | kakoj-lib | ni-kak | koe-k |

In addition, there are some forms of the marginal ne-series (ne-kto 'somebody', ne-č to 'something', ne-kogda 'once', ne-skol'ko 'several'), and some little grammaticalized series (xot' kto 'anyone'; Bog vest' kto 'God knows who'). The determiner ljuboj 'any' is the only member of its series.
A.16.2. Origins. On the diachrony of Russian indefinite pronouns, see especially Malovickij (1971: 60-111). The origin of -to is unclear, but it is probably identical with to 'now' (< Old Russian $t \breve{u}, \neq$ to 'that'). The suffix -nibud' goes back to ni budi 'it may be' (§ 6.2.3.1), and -libo (Old Russian ljubo) comes from ljubo 'dear, pleasant' (§ 6.2.2.1). Ni means 'neither, not even' (§ 8.3.1). Koe is the neuter form of $k o j$ 'which?' - why it is used as an indefiniteness marker is not clear to me. Ugodno is from ugodno 'suitable, pleasing' (§ 6.2.2.1), and by to ni bylo is a more modern form of ni budi (§ 6.2.3.1).
A.16.3. Distribution. The distribution of the three series is shown in Figure A.16. The data are from my own observations, from native speakers (especially Maria Koptjevskaja-Tamm, Vera Podlesskaya, Elena Kalinina), and from the huge literature on Russian indefinites. Some references are Galkina-Fedoruk (1963), Veyrenc (1964), Seliverstova (1964, 1988), Rybák (1965, 1975), Dahl (1970), Malovickij (1971), Ruž ič ka (1973), Paduč eva (1974, 1985), Ward (1977), Fontaine (1978), Ponomareff (1978), Kobozeva (1981), Markowich and Paillard (1981), Giusti (1982), Paillard (1983, 1984), Nikolaeva (1983, 1985), Bonnot-Saoulski (1983), Kreisberg (1986), Kuz'mina (1989).

Figure A.16.

| specific |  |
| :--- | :--- |
| unknown | irrealis |
| non-specific |  |


| question | indirect <br> negation | direct <br> negation |
| :--- | :--- | :--- |
| conditional | comparative |  |

free-choice

The -to-series is mainly used specifically, when the referent is not known to the speaker.
(A.121) specific unknown

Kto-to postuč al v dver'.
'Somebody knocked at the door.'
In the irrealis-non-specific and question/conditional functions, normally the -nibud'-series is used, for which the -libo-series is a more formal alternative.
(A.122) irrealis non-specific (imperative, future)
a. Spojte nam kakoj-nibud'/kakoj-libo romans.
'Sing some romance for us.'
b. My vstretimsja gde-nibud'/gde-libo.
'We'll meet somewhere.'
(A.123) question/ conditional
a. Zvonil li mne kto-nibud'/kto-libo?
'Did anyone call me?'
b. Esli č to-nibud'/č to-libo sluč itsja, ja skaž u mame.
'If anything happens, I'll tell mom.'
The -to-series is also not excluded from the above contexts, though it is associated with a different pragmatics in questions and conditionals (§ 4.7.3). In the irrealis contexts, -toindefinites show a strong tendency to be interpreted specifically if such an interpretation is possible, cf. (A.124). However, a non-specific reading seems to be possible as well, although the -nibud'-series is clearly preferred in this case.
(A.124) irrealis context: specific/non-specific
a. Ona xoč et vyjti zamuž za kogo-to iz Ameriki.
'She wants to marry someone [specific] from America.'
b. Ona xoč et vyjti zamuž za kogo-nibud'/kogo-to iz Ameriki.
'She wants to marry someone [non-specific] from America.'
The -libo-series has a wider application than the -nibud'-series: it is also used in the indirectnegation and comparative functions, where -nibud' is not possible. However, -libo can be replaced by by to ni bylo in these cases.
comparative
Zdes' prijatnee ž it' č em gde-libo/gde by to ni bylo v mire.
'Here it is more pleasant to live than anywhere in the world.'
(A.126)
indirect negation
a. Otsutstvujut kakie-libo/kakie by to ni bylo ukazanija o sposobe ix primenenija. 'Any indications about the mode of their use are lacking.'
b. bez kakoj-libo/kakoj by to ni bylo poтоšč i 'without any help'

The by to ni bylo-series is also possible as an emphatic variant in conditionals, but not in questions.
(A.127)
a. Esli ty uslyš iš' č to by to ni bylo, razbudi menja. 'If you hear anything (at all), wake me up.'
b. *Slyš ala li ty č to by to ni bylo?
'Did you hear anything (at all)?'
In the free-choice function, either the determiner ljuboj or the ugodno-series is used. Marginally the by to ni bylo-series is also possible.
(A.128) free choice

Ty mož eš' kupit' ljubuju/kakuju ugodno/? ${ }^{\text {hakuju }}$ by to ni bylo knigu. 'You may buy any book.'

In the direct-negation function, only the $n i$-series is possible.
(A.129) direct negation

Nikogda ja ne zabudu tebja.
'I will never forget you.'
The koe-series may be used when the referent is specific and the speaker knows its identity, as in (A.130) (cf. § 3.2.4).
(A.130) specific known

Nam nado pogovorit's toboj koe oč čm.
'You and I have to talk about something.'

## A.17. Lithuanian

A.17.1. Inventory. Lithuanian (Indo-European, Baltic) has five major series of indefinite pronouns, all of them derived from interrogatives: (i) the specific $k a z ̌$-series, (ii) the non-specific nors-series, (iii) the free-choice series in bet-, (iv) the negative nie-series, and (v) the kai-series.

|  | interrogative |  | kaž-series | nors-series | bet-series | nie-series |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | kai-series

There is also a marginal X-ne-X-series (kas-ne-kas 'someone', kuris-ne-kuris 'some', cf. §8.3.4), and the determiner joks 'any', which forms a 'series' of its own.
A.17.2. Origins. The prefix $k a \check{z}$ - has the variant kaž in (kaž in kas, etc.), which shows that it goes back to kas ž ino $k$ - 'who knows wh-' (cf. § 6.2.1). The indefiniteness marker nors is identical to nors 'although; if only, at least', and it goes back to a converb form (noris) of the verb nore\%ti 'want'. The marker bet is identical to bet 'but, nevertheless', but there may also be a connection to bent 'at least, even'. The prefix nie- is a phonological variant of ne 'neither, not even'. The marker kai is identical to kai 'when'.
A.17.3. Distribution. The distribution of the three series is shown in Figure A.17. The data are from Pilka (1984) (P84), Ambrazas (1985), and native speakers (Emma Geniuš iene\%, Greta Lemanaite\%) .

| Figure A.17. |  | question | indirect <br> negation | direct <br> negation |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| specific <br> known | specific <br> unknown | irrealis <br> non-specific | conditional | comparative |  |

The $k a z \check{z}$-series is primarily used in the specific-unknown function, but it is also possible in the question / conditional function. In non-specific functions, the nors-series is generally used, see § 3.2.3, examples (69), (71), (75), (77), (79), (82). In questions (cf. ex. 88) and conditionals, the norsseries is normal:
(A.131) conditional

Jei tu ka nors/ kaž-ka matai, pasaky-kman.
if you what INDEF INDEF-what see tell-IMPV to:me
'If you see anything/ something, tell me.'
In the indirect-negation function, only the nors-series is possible.
(A.132) indirect negation

Ne-langva rasti ka4 nors kas pade\%tu4 jums.
NEG-possible find whom INDEF who helpyou
'It's impossible to find anyone who would help you.'
The direct-negation function is generally expressed by the nie-series, which cooccurs with verbal negation.
(A.133) direct negation

Nie-kas man nie-ko ne-saki.
NEG-who to:me NEG-what NEG-told
'Nobody told me anything.'
The free-choice and comparative functions are expressed by the bet-series. In the comparative function, the nors-series is also possible.
(A.134) free choice

Bet kas gali paaiškinti š ia problema.
INDEF who can solve this problem
'Anybody can solve this problem.'
comparative
Aš esme suprantu geriau negu kas nors/ bet kas kitas. (P84: 146)
I essence understand better than who INDEF INDEF who other
'I understand the essence better than anyone else.'
The single determiner joks is used in both the direct-negation and the indirect-negation functions:
(A.136) direct negation

Ž irardo ne-atskleidžia jokiu nauju savo talento pusiu. (P84: 87)
Girardeaux NEG-shows any new her talent's sides
'Girardeaux does not show any new sides of her talent.'
(A.137) indirect negation

Dauguma meteoru pasirodo nakti be jokiul kokiu nors
majority of:meteors appear at:night without any which INDEF
desninguти. (P84: 87)
regularities
'The majority of meteors appear at night without any regularities.'
The kai-series indicates that the referent is known to the speaker, much like the Russian koeseries (see ex. 100 in $\S 3.2 .4$ ).

## A.18. Latvian

A.18.1. Inventory. Latvian (Indo-European, Baltic) has three major series of indefinite pronouns, all derived from interrogatives: (i) the general kaut-series, (ii) the negative ne-series, and (iii) the free-choice jeb-series.

|  | interrogative | kaut-series | ne-series | jeb-series |
| :---: | :---: | :---: | :---: | :---: |
| person: | kas | kaut kas, kāds | ne-viens | $j e b-k \bar{a} d s$ |
| thing: | kas | kaut kas | ne-kas | jeb-kas |
| place: | kur | kaut kur | ne-kur | jeb-kur |
| time: | kad | kaut kad | ne-kad | jeb-kad |
| manner: | $k \bar{a}$ | kaut kā | $n e-k \bar{a}$ |  |
| determiner: | $k \bar{a} d s$ | kaut kā ds | $n e-k \bar{a} d s$ | $j e b-k \bar{a} d s$ |
|  | kurš |  |  | jeb-kurš |

There is also a marginal $X n e$ - $X$-series (kur ne-kur 'here and there', $k \bar{a} d s n e-k \bar{a} d s$ 'some(one) or other'), and the bare interrogatives may also be used as indefinites (especially $k \bar{a} d s$ in the meaning 'somebody').
A.18.2. Origins. The particle kaut also means 'at least, even', cf. § 7.1. The particle jeb also means 'or', cf. § 7.2. The prefix ne- seems to be identical to the verbal prefix ne- 'not'.
A.18.3. Distribution. The distribution of the three series is shown in Figure A.18. The data are all from reference works and from a native speaker (Ivonna Wagner).

Figure A. 18.

| specific | irrealis <br> non-specific | question | indirect <br> negation | direct <br> negation |
| :--- | :--- | :--- | :--- | :--- |
|  |  | conditional | comparative | free-choice |

The kaut-series is used in all non-emphatic functions:
(A.138) specific

Vinš kaut kur aizgājis.
he INDEF where left
'He went somewhere.'
(A.139) irrealis non-specific (imperative)

Nopē re kaut ko.
buy INDEF what
'Buy something.'
(A.140) question/ conditional
a. Vai tu gatavojies kaut kur braukt?
$Q$ you you:are:prepared INDEF where to:go
'Are you going to go anywhere?'
b. Ja kāds atnāk(tu), saki, lai vinš pagaida.
if who arrives say:IMPV let he wait
'If anyone comes, say that he should wait.'
c. Ja kaut kur <*jeb-kur> ejat, tad pasakiet man.
if INDEF where INDEF-where you:go then tell:IMPVme
'If you go anywhere, tell me.'
The jeb-series is used in the free-choice, comparative, and indirect-negation functions.
(A.141) free choice

Varat nākt jeb-kurā laik $\bar{a}$.
you:can to:come INDEF-which time:LOC
'You can come at any time.'
(A.142) comparative

Tas vinu iepriecinā ja vairā $k$ nek $\bar{a}$ jeb-kas cits.
that him delighted more than INDEF-what other
'It made him more glad than anything else.'
(A.143) indirect negation (cf. § 4.7.2)
a. bez jeb-kā dā $m$ pārmainā $m$
without INDEF-which changes
'without any changes'
b. Es nedoma@ju, ka ka@ds atna@ks.

I not.think that who came
'I don't think that anybody came.'
In the direct-negation function, the $n e$-series cooccurs with verbal negation.
(A.144) direct negation

Vinu ne-kas ne-interesē.
him NEG-what NEG-interests
'Nothing interests him.'

## A.19. Irish

A.19.1. Inventory. Irish has three series of indefinite pronouns, all of them derived from generic nouns: (i) the non-emphatic éigin-series, (ii) the negative-polarity series marked by aon, and (iii) the emphatic ar bith-series.

|  | interrogative | éigin-series | aon-series | ar bith-series |
| :---: | :---: | :---: | :---: | :---: |
| person: |  | duine (éigin), neach | aon duine | duine ar bith |
| thing: | cad, cén | rud (éigin), ní | aon rud/ní | rud ar bith |
| place: | cá, cár | in áit éigin, i mball éigin | in aon bhall, in aon áit | in áit ar bith |
| time: | cathain |  |  |  |
| manner: | conas | ar chaoi éigin, ar dhóigh éigin | in aon chor | ar chor/dhóigh ar bith, ar chaoi ar bith |
| determiner: | cé | éigin | aon | ... ar bith |

In addition, there is one isolated indefinite pronoun dada 'anything', and several expressions for 'ever': riamh, go brách (referring to past events), choíche, go deo (referring to future events).

Irish indefinites show a very low degree of grammaticalization, and perhaps only two indefinite determiners (éigin, aon) and one indefinitizing prepositional phrase (ar bith)should be recognized. ${ }^{i}$ However, the above paradigm makes it easier to see the parallels with other languages (where some slots are also occupied by little grammaticalized expressions).
A.19.2. Origins. Aon is originally 'one', ar bith is 'in the world', dada is 'jot, tittle'.
A.19.3. Distribution. The distribution of the three series is shown in Figure A.19. The data are from Ó Dónaill (ed.) (1977) (D77), De Bhaldraithe (ed.) (1959) (B59), and a native speaker (Dónall P. Ó Baoill).

Figure A.19.

| specific | specific <br> unknown <br> known | irrealis <br> non-specific | question | indirect <br> negation | negation |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  | conditional | comparative |  |

The éigin-series is used in specific and irrealis non-specific functions (perhaps there is a preference to omit éigin and use the bare generic nouns when the referent is known to the speaker):
(A.145) specific known/unknown
a. Tá rud agam le ráleat. (NT, Lk 7.40) is thing on:me for telling to:you 'I have something to tell you.'
b. Dúirt duine éigin liom é. (B59: 683) told person certain to:me he 'Somebody told me.'
(A.146)
irrealis non-specific (modal, imperative)
a. Caithfear teacht ar réiteach éigin eile. (B59: 682)
must:FUT coming on solution certain other
'Some other solution will have to be found.'
b. Abair rud éigin. (B59: 683)
say:IMPV thing certain
'Say something.'
In all negative-polarity functions, the aon-series or the ar bith-series may be used:
(A.147) questions
a. An bhfuil aon airgead/ airgead ar bith agat?

Q is any money money on world at:you
'Do you have any money?'
b. An bhfuil dadale rá agat? (D77:361)

Q is anything for telling at:you
'Do you have anything to say?'
c. An bhfeiceann tú duine ar bith ansin thall? Q see you person on world there over 'Do you see anyone over there?'
(A.148) conditionals
a. Má thagann aon duine aси ... (B59: 28)
if comes any person at:them
'If any of them should come ...'
b. Má thagann sé go deo/ choíche ... (B59: 229) if comes he ever 'If he ever comes ...'
c. Má chuir sé fearg ort ar dhóigh ar bith ... (B59: 28) if putshe anger on:you on manner on world 'If he has in any way offended you ...'
(A.149) indirect negation
a. Ní mheasaim gur tháinig aon duine/ duine arbith acu. (B59: 28) NEG I:thinkthat arrived anyperson man on world at:them 'I don't think any of them has arrived.'
b. Niorbh áilleis gombeadh fios ag aon duine. NEG:was desire with:him that be knowledge at any person 'He didn't want anyone to know it.' (NT, Mk 9.30)
(A.150) comparative
a. Tháinig an bháisteach níos tréine ná riamh. (B59: 229) arrived the rain more power than ever 'It started to rain, faster than ever.'
b. chomh maith le aon duinebeo (B59: 28) as good with any man living 'as good as any man'

In the direct-negation function, the indefinites cooccur with verbal negation.
(A.151) direct negation
a. Níor labhair aon duine/ duine ar bith liom. (B59: 477) NEG spoke any person person on world with:me 'Nobody spoke to me.'
b. Ní dúirt siadaon níl dadal rud arbith le haon duine. NEG said they any thing anything thing on world to any person 'They didn't say anything to anybody.'
c. Ní labhair sé riamh air. (D77: 997) NEG spoke he ever on:it 'He never spoke of it.'

In the free-choice function, too, either the aon-series or the ar bith-series is used:
(A.152)
a. Tar lá arbith/ aon lá
(a thogrós tú). (B59: 28) come day on world any day that like you
'Come any day (you like).'
b. Íosfaidh sé rud arbith/ aon rud/ *dada. (B59: 28)
eats:HAB he thing on world any thing anything 'He eats anything.'

The indefinite dada and the various worlds for 'ever' are only used in the negative-polarity functions. They are not possible in the free-choice function.

## A.20. Ossetic

A.20.1. Inventory. Ossetic (Indo-European, Iranian) has five major series of indefinite pronouns, all of them based on interrogative pronouns: (i) the specific -dær-series, (ii) the nonspecific $i s$-series, (iii)-(iv) the two negative series in $n i$ - and $m a$-, and (v) the free-choice series in -dæriddær.

| person: | rogative či (obl $k \times j)$ | -dær-series či $i$-dær | $i s$-series $i s-c ̌ i$ | $n i$-series $n i-c ̌ i$ | ma-series ma-či | -dæriddær-series |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | či (obl. kæj) | č i-dær | $i s-c ̌ i$ | $n i-c ̌ i$ | $m a-c ̌ i$ | či-dæriddær |
| thing: | cy (obl. cæj) | cy-dær | is-ty | ni-cy | ma-cy | cy-dæriddær |
| place: | kæm | kæm-dær | is-kæm | ni-kæm | ma-kæm | kæm-dæriddær |
| time: | kæd | kæd-dær | is-kæd | ni-kæd | ma-kæd | kæd-dæriddær |
| manner: | kuyd | kuyd-dær | is-kuyd | ni-kuyd | ma-kuyd | kuyd-dæriddær |
| determiner | kæсу | kæcy-dær | is-kæcy | ni-kæ宀 | ma-kæсу | kæcy-dæriddær |

There is another free-choice series marked by -fændy which s eems to be equivalent to the $d æ r i d d æ r$-series: č i-fændy 'anyone', cy-fændy 'anything', etc.
A.20.2. Origins. The suffix - $d æ r$ is identical to the focus particle $d æ r$ 'also, even'. the prefix is- is originally the 3rd person singular of 'be'. I have no information on the origin of $d æ r i d d æ r$. The two negative prefixes are related to the negative particles næ 'not' and ma 'not'.
A.20.3. Distribution. The distribution of the three series is shown in Figure A.20. The data are from Kulaev (1958) (K58), Axvlediani (1963), Bagaev (1965), and a native speaker (Zarema Xubecova) .

Figure A. 20.

| specific | irrealis <br> non-specific | question | indirect <br> negation | direct <br> negation |
| :--- | :--- | :--- | :--- | :--- |
|  |  | conditional | comparative |  |
|  |  |  |  | free-choice |

The -dær-series is used only in specific functions:
(A.153) specific

Сy-dær тæ qygdær-y. (K58: 52)
what-INDEF me bother-PRES.3SG
'Something bothers me.'
The is-series is used in non-specific functions, in irrealis contexts, in questions and conditionals, and in indirect-negation contexts.
(A.154) irrealis non-specific (imperative)
a. Мæпæт dær ma is-ty ratt.

I:DAT also PT INDEF-what give(IMPV) 'Give me something, too.'
(A.155) question/conditional
a. Dy is-kæj uyn-ys?
you INDEF-who see-PRES.2SG
'Do you see anybody?'
b. Dy is-ty kuy ssar-i-s, uæd тæпæт dær æxsyzgon uaid. you INDEF-what if find-SBJV-2SG then I:DAT also glad will:be 'If you find anything, I'll be glad.'
(A.156) indirect negation

Æz dyzærdyg kæn-yn, is-či ærbасæu-dzæn ævi næ.
I doubt do-PRES.1SG INDEF-who come-FUT(3SG) or not
'I doubt that anyone will come.'

The -dæriddær-series is used in the free-choice and comparative functions.
(A.157) free choice

Aj xиymætæg xyncinag u, či-dæriddær dær æj baxync-dzæn.
this simple problem is who-INDEF also it solve-FUT(3SG)
'This is a simple problem, anyone will solve it.'
(A.158) comparative

Uуј jæ k'lasy kæmæj-dæriddær zonddžyn-dær u.
he his class who:ABL-INDEF smart-COMPR is
'He is smarter than anyone in his class.'
In the direct-negation function, the $n i$-series or the $m a$-series is used. The choice depends on the modality of the clause, like the choice between the corresponding verbal negators $n æ$ and $m a$. $N \not x$ is used in indicative clauses, and $m a$ is used in imperative and subjunctive clauses. Ossetic is like Latin, standard English and standard German in that negative pronouns do not cooccur with verbal negation. (However, unlike Latin, English and German, Ossetic allows more than one negative pronoun in one clause, see § 8.2.6.1.)
(A.159) direct negation
a. Æz иym ni-kæj uyd-t-on.

I there NEG-who see-PAST-1SG
'I didn't see anyone there.'
b. Ma-kædæm acu.

NEG-where go(IMPV)
'Don't go anywhere.'

## A.21. Persian

A.21.1. Inventory. Persian (Indo-European, Iranian) has only two series of indefinite pronouns: (i) the generic-noun-based - $i$-series, and (ii) the negative hic -series.

|  | interrogative | $i$-series | hič -series |
| :---: | :---: | :---: | :---: |
| person: | ki | kas-i | hič kas(-i) |
| thing: | če | čiz-i | hič č $\operatorname{iz}(-i)$ |
| place: | koj̃â | j $\hat{a}-y i$ | hič j $\hat{a}(-y i)$ |
| time: | key | vaqt-i | hič vaqt |
| manner: |  |  | hič gune |
| determiner: | kodâm | yek X-i | hič (yek) |

The indefinites of the $i$-series may also be preceded by yek 'one' (yek kas-i, yek č iz-i, yek j $\hat{j}$ - $y i$, etc.).
A.21.2. Origins. The $i$-series is nothing but generic nouns ('person', 'thing', 'place', etc.) suffixed with the indefinite article $-i$. The determiner yek is identical to yek 'one'. The hič-series is also based on generic nouns. The particle hič originally meant 'anybody' and appears to go back to Old Persian aiva 'one' plus č iy (an emphatic particle cognate with Sanskrit cit, cf. A.22.2).
A.21.3. Distribution. The distribution of the two series is shown in Figure A.21. The data are from reference works and from a native speaker (Parviz Rostampour) .

## Figure A.21.

specific specific irrealis known unknown non-specific

| question | indirect <br> negation | direct <br> negation |
| :--- | :--- | :--- |
| conditional | comparative |  |
|  |  | free-choice |

The $i$-series can be used in all functions except for the comparative and free-choice functions.
(A.160) specific known/unknown

Diruz kas-i-râ dar otobus did-am.
yesterday person-INDEF-ACC on bus see:PAST-1SG
'Yesterday I saw someone [known/unknown] on the bus.'
(A.161) irrealis non-specific (imperative)

Yek vaqt-i be xâne-ye mâ bey-âyid.
one time-INDEF to house-LK we SBJV-come:IMPV
'Come to our house sometime.'
In the question function, but not in the conditional function, hič is also possible (yielding an emphatic reading).
(A.162) question/conditional
a. Âyâ (hič)čiz-i
mi-š anav-i?
Q INDEF thing-INDEF IMPF-hear-2SG
'Can you hear anything?'
b. Agar (*hič) čiz-i šanid-i, be man be-gu.
if INDEF thing-INDEF hear-2SG to me SBJV-say
'If you hear anything, tell me.'
(A.163) indirect negation

Fekr na-mi-kon-am (ke) Sorâyâ (hič) čiz-i šanide bâšad. thinking NEG-IMPF-do-1SG that Soraya INDEF thing-INDEF heard has 'I don't think that Soraya heard anything.'

While hič in the question and indirect-negation functions is possible, but not preferred, it is quite normal in the direct-negation function. However, not even here it is required. (For the case of two negated indefinites in one clause, see § 8.2.6.2.)
(A.164) direct negation

| Hič kas(-i)/ | kas- $\boldsymbol{i}$ | zang | na-zad. |
| :--- | :--- | :--- | :--- | :--- |
| INDEF person-INDEF | person-INDEF | ring | NEG-hit |
| 'Nobody called.' |  |  |  |

For the free-choice and the comparative series, har 'every' has to be used:
(A.165) Har kas(-i) mi-tavânad inmas?ale-râ hall konad. every person-INDEF IMPF-can this problem-ACC solving do 'Anyone can solve this problem.'
(A.166) Pesar az har kas-i
tondtar mi-davad. boy than every person-INDEF faster IMPF-runs 'The boy runs faster than anyone.'

## A.22. Hindi/Urdu

A.22.1. Inventory. Hindi/ Urdu (Indo-European, Indic) has only two major series of indefinite pronouns: (i) the koii-series, which is morphologically similar to, but not synchronically derivable from, the interrogative pronouns; (ii) the bhii-series, derived from the koii-series.

|  | interrogative | koii-series | bhii-series |
| :--- | :--- | :--- | :--- |
| person: | kaun (obl. kis) | koii (obl. kisii) | koii bhii |
| thing: | kyaa | kuch | kuch bhii |
| place: | kahã | kah | kahi bhii |
| time: | kab | kabhii | kabhii bhii |

Besides these, there is a peripheral X na X series (koii na koii 'someone or other', kuch na kuch 'something or other'), cf. § 8.3.4.2.
A.22.2. Origins. The indefiniteness marker bhii is identical to the focus particle bhii 'also, even'. The koii-series is etymologically derived from the interrogative series: koii < Sanskrit ko 'pi, sandhi form of kah5 api (kah5 'who', api 'particle'), kuch < Sanskrit kim \%cit (kim \% 'what', cit, a particle) (Beames 1875, vol. II: §72).
A.22.3. Distribution. The distribution of the three series is shown in Figure A.22. The data are from Bhatia (1978) (B78), Davison (1978a) (D78), (1978b), Mahajan (1990), and a native speaker (Sangeeta Sharma). See also Dayal (1995) on bhii.

| specific | specific <br> known | irrealis <br> non-specific | question | indirect <br> negation | negation |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  | conditional | comparative | free-choice |

The koii-series may be used in all functions except the comparative and the free-choice functions. However, in the direct-negation function the bhii-series seems to be preferred.
(A.167) specific known/unknown

'Someone has phoned, but I won't tell you who/but I don't know who.'
(A.168) indirect negation

Mujhe nahĩ lag-taa hai ki kal koii (bhii) aaege. (D78:37)
I:DAT NEG seem-IMPF is that tomorrow someone INDEF he:will:come
'It doesn't seem to me that anyone will come tomorrow.'
(A.169) direct negation
a. Ghar mé koii (bhii) nahĩ hai. (B78: 69)
house in someone INDEF NEG is
'No one (at all) is at home.'
b. Kisii-nekuch nahi dekh-aa. (D78: 29)
someone-ERG something NEG see-PFV
'Nobody saw anything.' (Or: 'Someone saw nothing.')

In irrealis contexts, the bhii-series is always non-specific.
(A.170) irrealis non-specific ('want', imperative)
a. Wah kisii-ko/ kisii-ko bhii fon kar-naa caah-tii hai. she someone-DAT someone-DAT INDEF phone do-INF want-IMPF is 'She wants to phone someone (specific/non-specific).'
b. Kisii-ko (bhii) fon kar-o! someone-DAT INDEF phone do-IMPV 'Phone someone!'

In questions and conditionals, the bhii-series differs from the koii-series in being more emphatic ('any ... at all').
(A.171) question/ conditional
a. Kyaa aap-ne kisii-ko/ kisii-ko bhii dekh-aa? (D78: 27-8) Q you-ERG someone-DAT someone INDEF see-PFV
'Did you see somebody / anybody?'
b. Agar koii (bhii) fon kare, mujhe bataanaa. if someone INDEF phone calls I:DAT tell 'If anybody (at all) calls, tell me.'

The free-choice and comparative functions are only expressed by the bhii-series:
(A.172) comparative

Yeh larkaa apne vidyaalay ke kisii bhii larke se zyaada tez this boy his class of someone INDEF boy from more fast daur-taa hai.
run-IMPF is
'This boy runs faster than anyone in his class.'
(A.173) free choice

Ghar mẽ koii bhii aa sak-taa hai. (B78:70)
house in someone INDEF come can-IMPF is
'Anyone can come into the house.'

## A.23. Turkish

A.23.1. Inventory. Turkish (Turkic) has three major series of indefinite pronouns, all of them based on generic nouns and bir 'one': (i) the non-emphatic bir-series, (ii) the negative hiç-series, and (iii) the free-choice series marked by herhangi:

|  | interrogative | bir-series | hiç-series | herhangi-series |
| :--- | :--- | :--- | :--- | :--- |
| person: | kim | biri(si) | hiçbiri,hiç kimse | herhangi biri |
| thing: | ne | bir s3ey | hiç bir s3ey | herhangi bir s3ey |
| place: | nerede | bir yerde | hiç bir yerde | herhangi bir yerde |
| time: | ne zaman | bir zaman | hiç bir zaman | herhangi bir zaman |
| manner: | nasıl | bir s3ekilde | hiç bir s3ekilde | herhangi bir s3ekilde |
| determiner: | hangi | bir | hiç bir | herhangi bir |

In addition, there is the isolated indefinite (bir) kimse 'someone, anyone', which can only be used non-specifically.
A.23.2. Origins. Bir is identical to the numeral 'one'. Some of the combinations of bir plus generic nouns are strongly lexicalized; bir s $3 \mathrm{e} y$ is felt as a single word (cf. § 1.2.2). The indefiniteness marker hiç was borrowed from Persian (cf. A.21). Herhangi consists of her 'every' (also borrowed from Persian) and hangi 'which?'. Kimse seems to be derived from kim 'who' and the conditional suffix -se.
A.23.3. Distribution. The distribution of the three series is shown in Figure A.23. The data are from Xovratovič (1989) and from a native speaker (Fethi Inan).

Figure A. 23.
specific specific irrealis
known unknown non-specific

| question | indirect <br> negation | direct <br> negation |
| :--- | :--- | :--- |
| conditional | comparative | free-choice |

In the specific-known function, only the bir-series is possible:
(A.174) specific-known

San-a biri(si) telefon et-ti.Bil, bakalim, kim. you-DAT one phone do-PAST know we'll.see who 'Someone phoned you. Guess who.'

In all the functions from specific-unknown to direct negation, either the bir-series or the herhangi-series are possible.
(A.175) specific-unknown

San-a biri(si)/ herhangi biri telefon et-ti. Kim ol-duǧ-u-nu
you-DAT one any one phone do-PAST who be-REL-3SG-ACC
bil-m-iyor-um.
know-NEG-IMPF-1SG
'Someone phoned you. I don't know who.'
(A.176) irrealis non-specific (imperative)

Herhangi bir yer-e/bir yer-e telefon et!
any one place-DAT one place-DAT phone do(IMPV)
'Call somewhere (or other)!
(A.177) question/conditional
a. Herhangi bir s3ey/bir s3ey/ hiç bir s3ey duy-du-n mu? any one thing one thing INDEF one thing hear-PAST-2SG Q 'Did you hear anything?'
b. Herhangi biri/ biri telefon ed-er-se,ban-a hemen söyle.
any one one phone do-AOR-COND I-DAT straight.away say(IMPV) 'If anyone calls, tell me immediately.'

In the question function (cf. A.177a) and in the negation functions, the hiç-series is another possible alternative.
(A.178) indirect negation

Kimse-nin/ herhangi biri-nin/hiç kimse-nin gel-me-si anyone-GEN any one-GEN INDEF anyone-GEN come-MASD-3SG gerekli deǧil.
necessary NEG.is
'It is not necessary for anyone to come.'
In the direct-negation function, the hiç-indefinites are the most usual form. They always cooccur with verbal negation. (For the case of two negated indefinites in one clause, see § 8.2.6.2.)
(A.179) direct negation

Hiç bir s3ey/herhangi bir s3ey/ bir s3ey gör-me-di-m. INDEF one thing anyone thing onething see-NEG-PAST-1SG
'I didn't see anything.'
In the free-choice and comparative functions, only the herhangi-series is possible:
(A.180) free choice

Herhangi biri bu problem-i çöz-ebil-ir.
any one this problem-ACC solve-ABIL-AOR(3SG)
'Anyone can solve this problem.'
(A.181) comparative

Murat sinıf-in-da-ki herhangi birin-den dahahizlı kos3-ar.
Murat class-3SG-LOC-ATTR any one-ABL more fast run-AOR
'Murat runs faster than anyone in his class.'

## A.24. Kazakh

A.24.1. Inventory. Kazakh (Turkic) has four major series of indefinite pronouns, three of which are based on interrogatives: (i) the non-emphatic bir-series, (ii) the specific älde-series, (iii) the negative eš-series, and (iv) the free-choice series marked by bolsa da.

|  | interrogative | bir-series | älde-series <br> person: <br> kim <br> nirew | eš-series <br> eš-kim | bolsa da-series <br> kim bolsa da |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ne | birngim | birnärse, | älde-ne | eš-närse | ne bolsa da |

A.24.2. Origins. The bir-series is based on bir 'one' and generic nouns (except for birew and birnärse, birdeme, whose origin is not clear to me). The prefix eš- is etymologically identical to Turkish hiç and goes back to Persian hič (Section 21). The origin of the prefix älde- is obscure, but a connection with Tatar and Bashkir ällä 'possibly; question particle; indefiniteness marker' seems possible.
A.24.3. Distribution. The distribution of the four series is shown in Figure A.24. The data are from a native speaker (Kusain Rsaldinov) and from Sauranbaev (ed.) (1954) (S54).

Figure A. 24.
specific specific irreali
known unknown non-specific

| question | indirect <br> negation | negation |
| :--- | :--- | :--- |
| conditional | comparative |  |
|  |  | free-choice |

The älde-series is used only in specific functions.
(A.182) specific
a. Älde-qajdan maš ina-nyN gudag-y estil-di. (S54: 151) INDEF-where car-GEN honk-3SG sound-PAST 'Somewhere the honk of a car sounded.'
b. Ol älde-qandaj dälel-der keltir-di. (S54:319) he INDEF-which argument-PL adduce-PAST(3SG) 'He adduced some arguments or other.'

The bir-series is used in specific functions, both known and unknown.
(A.183) specific known/ unknown

Birew telefon soq-ty $\quad$ byraq kim ekenin bil-me-j-min.
someone phone hit-PAST but who [?] know-NEG-PRES-1SG

- kim ekenin tapšy.
who [?]guess(IMPV)
'Someone called - but I don't know who.'
- guess who.'

It is also used non-specifically in irrealis contexts, in questions and conditionals, and in indirectnegation contexts.
(A.184) irrealis non-specific (imperative, hortative)

Biržer-de kezde-ser-miz.
one place-INESS meet-FUT-1PL
'Let's meet somewhere.'
(A.185) question/ conditional
a. Birew <* $̈ l$ lde-kim>kel-di me?
someone INDEF-who come-PAST(3SG) Q 'Did anyone come?'
b. Birew <*älde-kim> kel-se, ma-Van ajt. someone INDEF-who come-COND(3SG) I-DAT tell(IMPV) 'If anyone comes, tell me.'
(A.186) indirect negation

Birew kel-didep sen-be-j-min.
someone come-PAST(3SG) that think-NEG-PRES-1SG
'I don't think that anyone came.'
In the direct-negation function, only the $e \check{~}$-series is possible, cooccurring with verbal negation.
(A.187) direct negation
$\begin{array}{lll}\text { a. Eš-kim eš-närse } & \text { de-me-di. } \\ \text { NEG-who NEG-anything } & \text { say-NEG-PAST(3SG) } \\ \text { 'Nobody said anything.' } & \end{array}$
The bolsa da-series is used in the free-choice function, and also (though much less commonly than the bir-series) in questions and conditionals. (I lack data for the comparative function.)
(A.188) free choice

SeniN kim-di bolsa da šaqyru-Na bolady.
you who-ACC INDEF invite-MASD may
'You may invite anyone.'
(A.189) Bir waqyt-tal qašan bolsa da seniN Moskva-da bol-ǧa-nyN bar ma? one time-INESS when INDEF you Moscow-INESS be-PAST-2SG is Q 'Have you ever been to Moscow?'

## A.25. Yakut

A.25.1. Inventory. Yakut (Turkic) has four major series of indefinite pronouns, all of which are derived from interrogatives: (i) the specific ere-series, (ii) the non-specific eme-series, (iii) the negative $d a$-series, and (iv) the free-choice series marked by baVarar.

| person: | kim | kim ere | kim eme | kim da | kim baVarar |
| :--- | :--- | :--- | :--- | :--- | :--- |
| thing: | tuox | tuox ere | tuox eme | tuox da | tuox baVarar |
| place: | xanna | xanna ere | xanna eme | xanna da | xanna baVarar |
| time: | xahan | xahan ere | xahan eme | xahan da | xahan baVarar |
| manner: | xajdax | xajdax ere | - | xajdax da | xajdax baVarar |
| determiner: | xannyk | xannyk ere | - | xannyk da | xannyk baVarar |
|  | xaja | xaja ere | xaja eme | xaja da | xaja baVarar |

A.25.2. Origins. The particle ere is also used with the meaning 'or' (cf. § 7.2). The particle eme is also used with the meaning 'at least' (cf. § 7.1). The particle da is also used with the meaning 'and, also, even' (cf. § 7.1). The indefiniteness marker baVarar is derived from baVar 'want'.
A.25.3. Distribution. The distribution of the four series is shown in Figure A.25. The data are from Afanas'ev and Xaritonov (1968) (AX68) and from Ubrjatova (ed.) (1982) (U82).

Figure A. 25.

| specific | irrealis <br> non-specific | question | indirect <br> negation |
| :--- | :--- | :--- | :--- |
|  |  | conditional | comparative |

direct
negation
free-choice

The ere-series is restricted to specific functions.
(A.190) specific

Kim ere eji-exe kiir-e syld'y-byt-a. (AX68: 250)
who INDEF you-DAT enter-CONV go-PERF-3SG
'Someone has come to you.'
The eme-series is used in non-specific functions in irrealis contexts, questions and conditionals.
(A.191) irrealis non-specific (future)

Xojut kim-inen eme tug-u eme yyt-ya-m. (U82: 200)
afterwards who-INSTR INDEF what-ACC INDEF send-FUT-1SG
'Afterwards I'll send something with someone.'
(A.192) question/ conditional
a. En xahan eme Moskva-Va syld'y-byt-y N duo? (AX68: 229)
you when INDEF Moscow-DAT go-PERF-2SG $Q$
'Have you ever been to Moscow?'
b. Kim eme kel-leVine, mii-gin üle-t-igerbar-byt-a die. who INDEF come-COND I-ACC work-3SG-DAT go-PERF-3SG say(IMPV) 'If anyone comes, say that I went to work.' (AX68: 250)

The $d a$-series is used in the direct-negation function (cooccurring with verbal negation), the comparative function and the free-choice function. Unfortunately, I lack data on the indirectnegation function, but my implicational map predicts that the da-series is also possible in this function.
(A.193) direct negation

Kini-ni tuox da interiehirge-ppet. (AX68:336)
he-ACC what INDEF interest-NEG.3SG
'Nothing interests him.'
(A.194) comparative

AjylVa kiergel-in kim-ten da syanalyy-r. (U82: 209)
nature beauty-3SG:ACC who-ABL INDEF appreciate-3SG
'He appreciates nature's beauty more than anyone.'
The baVarar-series may also be used in the free-choice function.
(A.195) free choice

Kini-tten tug-u
baVarar küüt-ü̈̈-xxe
he-ABL what-ACC INDEF expect-MASD-DAT possible
'One can expect anything from him.'

## A.26. Hungarian

A.26.1. Inventory. Hungarian (Finno-Ugrian) has four major series of indefinite pronouns, all of them derived from interrogatives: (i) the general vala-series, (ii) the negative sem-series, and (iii-iv) the two free-choice series in akár- and bár-

|  | interrogative | vala-series | sem-series | akár-series | bár-series |
| :--- | :---: | :--- | :--- | :--- | :--- |
| person: | ki | vala-ki | sen-ki | akár-ki | bár-ki |
| thing: | mi | vala-mi | sem-mi | akár-mi | bár-mi |
| property: | milyen | vala-milyen | sem-milyen | akár-milyen | bár-milyen |
| place: | hol | vala-hol | se-hol | akár-hol | bár-hol |
| time: | mikor | vala-mikor | sem-mikor | akár-mikor | bár-mikor |
| manner: | hogy(an) | vala-hogy(an) | se-hogy(an) | akár-hogy(an) | bár-hogy(an) |
| amount: | hány | - | se-hány | akár-hány |  |
|  | mennyi | - | se-mennyi | akár-mennyi | bár-mennyi |
| determiner: | mely(ik) | mely(ik) | - | akár-mely(ik) | bár-mely(ik) |

There is also a marginal né-series (né-mi 'something, a little', né-hol 'in some places, here and there', né-hány 'some, a few', né-melyik 'some').
A.26.2. Origins. The indefiniteness prefix vala- is probably related to van/vol- 'be'. The prefix akár- is identical to akár 'or; at least', related to akar 'want'. The prefix bár is identical to bár 'although; if only'. The prefix sem- (se-) is identical to sem 'not either, neither' (< is 'too' plus nem 'not'). The prefix né- was borrowed from Slavic (cf. Russian ne-Polish nie-, Bulgarian nja-).
A.26.3. Distribution. The distribution of the three series is shown in Figure A.26. The data are from Stephanides $(1983,1985)(S 85)$, Hunyadi $(1987)$, dictionaries, the New Testament, and a native speaker (Edith Moravcsik). (See also Szarvas (1892), Beke (1914).)

| Figure A.26. |  | question | indirect <br> negation | direct <br> negation |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| specific <br> known | specific <br> unknown | irrealis <br> non-specific | conditional | comparative | free-choice |

The vala-series is used in all functions from 'specific' to 'indirect negation'.
(A.196) specific unknown

Vala-hol már tolál-koz-t-unk.
INDEF-where already meet-REFL-PAST-1PL
'We have met somewhere before.'
(A.197) specific known

Mester, lát-ánk vala-ki-t, a ki a te nev-ed-del
master see-1PL INDEF-who-ACC who ART you name-2SG-INSTR
ördög-ök-et üz. (NT, Mk 9.38)
devil-PL-ACC drive
'Master, we saw one casting out devils in thy name.'
(A.198) irrealis non-specific

Majd csak meglesz-ünk vala-hogy.
later onlymanage-1PL INDEF-how
'We'll manage somehow.'
The sem-series can only be used in the direct-negation function:
(A.199) direct negation
$\begin{array}{llll}\text { a. Nem lát-t-am } & \text { sem-mi-t <*akár-mi-t, *bár-mi-t>. } \\ \text { NEG see-PAST-1SG INDEF-what-ACC } \\ \text { 'I did not see anything.' } & \\ \begin{array}{llll}\text { b. Sen-ki-nek } & \text { sem-mi- } \boldsymbol{t} & \text { sem } & \text { szólának. (NT, Mk 16.8) } \\ \text { INDEF-who-DAT } & \text { INDEF-what-ACC } & \text { NEG say:3PL }\end{array}\end{array}$
'Neither said they any thing to any man.'
The akár- and bár-series are used mainly in the free-choice function, but also in the comparative function, the indirect-negation function, and with an emphatic value in the conditional function. However, these series cannot be used in questions.
(A.200) free choice

Akár-ki tanul-hat-ott.
INDEF-who learn-POT-PAST(3SG)
'Anybody could learn.'
(A.201) comparative

Itt jobb a klíma, mint akár-hol/bár-hol Európá-ban.
here better ART climate than INDEF-where Europe-INESS
'Here the climate is better than anywhere in Europe.'
(A.202) indirect negation

Nem hisz-em, hogy vala-kil bár-ki/akár-kilát-t-a volna.
NEG think-1SG that INDEF-who INDEF-who see-PAST-3SG SBJV
'I don't think that anybody has seen it.' conditional
Ha bár-mi-t/akár-mi-t/vala-mi-t hal-asz, ébressz fel.
if INDEF-what-ACC hear-2SG wake up
'If you hear anything (at all), wake me up.'
(A.204)
question
Hall-ott-ál vala-mi-t <*akár-mi-t, *bár-mi-t>?
hear-PAST-2SG INDEF-what-ACC INDEF-what-ACC INDEF-what-ACC
'Did you hear anything?'

## A.27. Finnish

A.27.1. Inventory. Finnish (Finno-Ugrian) has three main series of indefinite pronouns, two of which are derived from interrogatives: (i) the mainly negative -kaan-series and (ii) the freechoice series marked by hyvänsä. The non-emphatic -kin-series (iii), by contrast, is based on relative pronouns.

|  | interrogative | series | series | series |
| :--- | :--- | :--- | :--- | :--- |
| person: | kuka | jo-ku(jo-n-ku-n) | kuka-an | kuka hyvänsä |
| thing: | mikä, mitä | jo-kin, jota-kin | mikä-än | mikä hyvänsä |
| place: | missä | jossa-kin | missä-än | missä hyvänsä |
| time: | milloin | jolloin-kin | milloin-kaan | milloin hyvänsä |
| manner: | miten, kuinka | joten-kin | miten-kaan | miten hyvänsä |
| dual determiner: | kumpi ('which of two') | jompi-kumpi | kumpi-kaan | kumpi hyvänsä |

Note that the members joku and jompikumpi of the -kin-series do not contain the suffix -kin, but are compounds of the roots jo- and ku- and inflect doubly: joku, Partitive jotakuta, Inessive jossakussa, etc.; jompikumpi, Partitive jompaakumpaa, etc. An equivalent of hyvänsä is tahansa. In addition, there is eräs 'a certain'.
A.27.2. Origins. The suffix -kin also means 'also, even'. The suffix -kaan also means 'not either; not even'. Hyvänsä is somehow related to hyvä 'good', and tahansa is somehow related to tahtoa 'want'.
A.27.3. Distribution. The distribution of the three series is shown in Figure A.27. The data are from native speakers (Juhani Rudanko, Angela Bartens, Hannu Tommola). See also Karttunen and Peters (1980).

| Figure A.27. |  | question | indirect <br> negation | direct <br> negation |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| specific <br> known | specific <br> unknown | irrealis <br> non-specific | conditional | comparative |  |
|  |  |  |  | free-choice |  |

The -kin-series is used in non-emphatic functions, but not in the specific-known function, where eräs 'a certain' must be used.
(A.205) specific known
a. *Joku soitt-i. Arvaa kuka (se oli)? someone call-PAST(3SG) guess:IMPV who it was 'Someone called. Guess who (it was).'
b. Eräs ystäväni kerto-i sen. certain friend tell-PAST(3SG) it 'A certain friend told him.
(A.206) specific unknown

Joku soitt-i, mutta en saa-nut
someone call-PAST(3SG) but NEG:1SG get-PAST.PTCP
nime-stä selväü.
name-ELAT clear:PRTV
'Someone called, but I didn't understand the name.'
(A.207) irrealis non-specific ('want')

Hän haluaa mennä naimisiin jonkun kanssa, jolla on tumma tukka.
shewants go marriage someone with who-on is dark hair
'She wants to marry someone [non-specific] with black hair.'
In questions, the -kaan-series is a possible alternative (cf. Schmid 1980: 139), but the hyvänsäseries is impossible. In conditionals, the hyvänsä-series is a possible (more emphatic) alternative, but the -kaan-series is impossible.
(A.208) question

Soitt-i-ko joku/ kuka-an/ *kuka hyvänsä?
call-PAST(3SG)-Q someone who-INDEF who INDEF
'Did someone/ anyone call?'
(A.209) conditional

Jos joku/ kuka hyvänsä/ *kuka-an soittaa, sano minulle.
if someone who INDEF who-INDEF calls tell(IMPV) I:on
'If someone/ anyone at all calls, tell me.'
The -kaan-series is used in the negation functions and in the comparative function. In the directnegation function, it cooccurs with verbal negation.
(A.210) direct negation

Kuka-an ei kerto-nut minulle mitä-än.
who-INDEF NEG:3SG tell-PAST.PTCP I:on when-INDEF
'Nobody told me anything.'
(A.211) indirect negation

Epällen että poika varast-i mitä-än.
I:doubt that boy steal-PAST(3SG) what-INDEF
'I doubt that the boy stole anything.'
(A.212) comparative

Ilmasto on täällä mielyttävä-mpi kuin missä-än muualla Euroopa-ssa.
climate is here pleasant-COMPR than where-INDEF else Europe-INESS 'Here the climate is more pleasant than anywhere in Europe.'

The hyvänsä- ( or tahansa-) series is used mainly in the free-choice function.
(A.213) free choice

Kuka tahansa osaa natkaista tämän ongelman.
who INDEF can solve this problem
'Anyone can solve this problem.'
Since the hyvänsä-series also occurs in the conditional function (cf. A.209), the implicational map predicts that it can be used in the comparative function. This is indeed the case, but only in the standard of equative comparison:
(A.214) comparative
Tä̈llä on yhtä mukavaa kuin

here is as pleasant as | missä tahansa |
| :--- |
| where |
| INDEF | mualla.

'It is as pleasant here as anywhere else.'
In the standard of comparison of inequality, the -kaan-series is used, cf. (A.212). In my data Finnish is the only case of a language where comparison of equality behaves differently from comparison of inequality. Maybe this case shows that eventually the map will have to be refined, with the equative comparative being further away from the negation functions.

## A.28. Nanay

A. 28.1. Inventory. Nanay (Manchu-Tungusic) has three major series of indefinite pronouns: the specific -nuu-series, (ii) the non-specific-daa-series, and (iii) the free-choice series marked by -daa xem aja. The data are given in § 4.3.3.

## A.29. Lezgian

A.29.1. Inventory. Lezgian (Nakh-Daghestanian) has three major series of indefinite pronouns, two of which are derived from interrogatives: (i) the general sa $X$ jat'ani-series, and (ii) the freechoice $\hat{x}$ ajit'ani-series. The third series is the negative sa $X$-ni-series.

|  | interrogative | jat'ani-series | $\hat{x}$ ajit'ani-series | sa X-ni-series |
| :---: | :---: | :---: | :---: | :---: |
| person: | wuž/ni- | sa wuž jat'ani | wuž $\mathfrak{x}$ ajit'ani | sa kas-ni |
| thing: | wuč/kü- | sa wuč jat'ani | wuč $\hat{x}$ ajit'ani | sa zat'-ni |
| property: | hiô tin | sa hix̂ tin jat'ani | hiôtin ... $\hat{x}$ ajit'ani | - |
| place: | hina | sa hina jat'ani | hina $\hat{x}$ ajit'ani | sana-ni |
| time: | mus | sa mus jat'ani | mus $\hat{x}$ ajit'ani | sadra-ni |
| manner: | $h i k^{\prime}$ | sa hik' jat'ani | hik' $\hat{x}$ ajit'ani | sak'-ni |
| determiner: | hi | sa hi jat'ani | hi ... $\hat{x}$ ajit'ani | sa...-ni |

The sa in the sa $X$ jat'ani-series and in sa kas-ni/sa zat'-ni may optionally be absent. Perhaps also a special specific sa-series (sa kas 'somebody', sa zat' 'something', sadra 'once', etc.) must be recognized.
A.29.2. Origins. $S a$ is identical to the numeral sa 'one'. Both jat'ani and $\hat{x}$ ajit'ani consist of 'be' ( $j a$ 'be (standard copula)', $\hat{x}$ un 'become; be'), the conditional suffix $-t^{\prime} a$, and the focus marker $-n i$ 'also, even'. Kas is 'person', zat' is 'thing'.
A.29.3. Distribution. The distribution of the three series is shown in Figure A.29. The data are from Haspelmath (1993a: 194-9).

Figure A.29.

| specific | specific | irrealis |
| :--- | :--- | :--- |
| known | unknown | non-specific |


| question | indirect <br> negation | direct <br> negation |
| :--- | :--- | :--- |
| conditional | comparative | free-choice |

The sa $X$ jat'ani is used for all functions from specific-known to question/ conditional:
(A.215) specific known/ unknown
a. Za wa-z sa wuč jat'ani luhu-da. I:ERG you-DAT one what INDEF say-FUT 'I'll tell you something.'
b. Gila čar-ar wučiz jat'ani xükwe-zma-č. now letter-PL why INDEF come-CONT.IMPF-NEG 'Now the letters don't come anymore for some reason.'
(A.216) irrealis non-specific (imperative)

| Sa ni-z | jat'ani | ewer | ce! |
| :--- | :--- | :--- | :--- |
| one who-DAT | INDEF | call | give:IMPV |

'Call someone!'
(A.217) question/ conditional
a. Wa-z sa wuč jat'ani you-DAT one what:ABS
$a k u-r-t^{\prime} a, \quad z a-z$
INDEF
lah!
I-DAT say:IMPV
'If you see anything, tell me.'
b.Sa wuž jat'ani ata-nwa-ni?
one who:ABS INDEF come-PERF-Q
'Has anyone come?'
The $\hat{x}$ ajit'ani-series is used in the free-choice and comparative functions.
(A.218) free choice

Ada-qh galaz kwe-kajx $\mathrm{x}^{h} \mathrm{jit}^{\prime}$ ani sühbet iji-z že-da.
she-POSTESS with what-SUBEL INDEF talk do-INF can-FUT
'With her one can talk about anything.'
(A.219) comparative

Jusuf.a ne-laj $\hat{x}$ ajit'ani $q^{h_{\text {san-diz }}}$ mani-jar luhu-zwa.
Jusuf(ERG) who-SUPREL INDEF good-ADV song-PL say-IMPF 'Jusuf sings better than anyone.'

The sa X-ni-series is used in the indirect-negation and direct-negation functions (cooccurring with verbal negation in the latter).
(A.220) direct negation

Däwe mad sadra-ni sakasdi-z-ni q'ismet ta-र्x u-raj.
war again once-even one person-DAT-even destiny NEG-be-OPT
'May war never again be anyone's destiny.'
(A.221) indirect negation

Ča-z sada-z-ni hič sa č'aw.u-z-ni däwe $\hat{x} a-n a$
we-DAT one-DAT-even ever one time-DAT-even war be-AOR.CONV
$k^{\prime} a n-d a-c ̌$.
want-FUT-NEG
'None of us wants there ever to be war.'

## A.30. Maltese

A.30.1. Inventory. Maltese (Afro-Asiatic, Arabic) has two series of indefinite pronouns which are not related to interrogatives: (i) the non-negative $x i$-series, and (ii) the negative $e b d a$-series.

|  | interrogative | xi-series | ebda-series |
| :--- | :--- | :--- | :--- |
| person | min | xi liadd | liadd |
| thing | xi | xi $\dot{\text { a }} \dot{\mathrm{g}} a$ | xejn |
| place | fejn | xi mkien | imkien |
| time | meta | xi darba | qatt |
| manner | kif | b'xi mod (u manjiera) $^{\text {determiner }}$ | liema |

There is also a marginal free-choice determiner kwalunkwe 'any' (a recent loan from Italian qualunque).
A.30.2. Origins. The determiner $x i$ goes back to Classical Arabic š ay? 'thing, something'. Some of the second elements in the $x i$-series are synchronically existing generic nouns (İaga 'thing', darba 'time, i.e. French fois', mod 'manner'). The root Iadd goes back to Classical Arabic ?alad 'one' (related to waalid, Maltese wieled 'one'), and mkien goes back to makaan 'place'. Qatt goes back to Arabic qattu 'never', and ebda goes back to ?abadan '(n)ever', the adverbail accusative of ?abad 'eternity'.
A.30.3. Distribution. The distribution of the two series is shown in Figure A.30. The data are from Haspelmath and Caruana (to appear).

| Figure A.30. |  | question | indirect <br> negation | direct <br> negation |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| specific | specific <br> unknown | irrealis <br> non-specific | conditional | comparative |  |
|  |  |  | free-choice |  |  |

The $x i$-series is used in non-negative functions.
(A.222) $X i \quad$ ladd qed jaildem fil-g̀ nien.

INDEF anyone PROG he:work:IMPF in:the-garden
'Somebody is working in the garden.'
(A.223) irrealis non-specific (future)

| Xi darba | is-sena | d-diella | mmur |
| :--- | :--- | :--- | :--- |$\quad$| l-Afrika. |
| :--- |
| INDEF time the-year |
| the-entering |
| 'I'll go to Africa sometime next year.' |

(A.224) question/ conditional
a. Jekk tara $x i \quad \operatorname{lag} \boldsymbol{a}{ }^{*}{ }^{*} x e j n>, g$ gidli. if you:see:IMPF INDEF thing anything tell:me:IMPV 'If you see anything, tell me.'
b. Rajt xi lag $a<^{*} x e j n>$ ?
you:see:PERF INDEF thing anything
'Did you see anything?'

The ebda-series is used in the negative and comparative functions.
(A.225) Comparative

Dan huwa l-isbai inkwatru li ladd qatt pinga. this it the-beautiful:COMP picture that anyone ever he:paint:PERF 'This is the most beautiful painting that anyone has ever painted.'
(A.226) Indirect negation

It-tifla glamlitha minglajr ebda glajnuna.
the-girl she:do:it:PERF without any help
'The girl did it without any help.'
(A.227) Direct negation (see also § 8.2.1)

It-tifla ma rat xejn.
the-girl NEG she:see:PERF anything
'The girl didn't see anything.'
The free-choice function is not expressed by indefinite pronouns. Either universal pronouns are used (kulladd 'everyone'), or circumlocutions like min trid 'whoever you want' (cf. § 3.3.3-4). The use of kwalunkwe 'any' is marginal.

## A.31. Hebrew

A.31.1. Inventory. (Modern) Hebrew (Afro-Asiatic, Semitic) has three major series of indefinite pronouns: (i) the -š ehu-series, which is derived from interrogative pronouns, (ii) the negativepolarity $i \check{s}$-series (iš 'man', davar 'thing'), (iii) the kol-series, and (iv) the negative af/š um-series.

|  | interrogative | -š ehu-series | iš-series | kol-series | $\mathrm{af} / \mathrm{s}$ um-series |
| :---: | :---: | :---: | :---: | :---: | :---: |
| person: | $m i$ | mi-š ehu/-š ehi | is |  | af elad |
| thing: | ma | ma-š ehu | davar |  | šum davar |
| place: | eyfo | eyfo-š ehu |  | kol makom | be-š um/af makom |
| time: | matay | paiam, matay-š ehu |  | kol zman | af pȧam, leiolam |
| manner: | ex | ex-š ehu |  |  |  |
| determiner: | eyze/eyzo | eyze-š ehu |  | kol | af, š um |

Besides š um davar 'nothing', there are also two non-derived expressions: klum 'nothing', and me? ? $u$ a 'nothing', which behave in the same way. The kol-series and the iš-series almost occur in complementary distribution, so they could perhaps be regarded as forming one formally heterogenous series.
A.31.2. Origins. Two of the three series are formally rather heterogeneous. Pronouns from the negative $a f / \check{s} u m$-series are generally made up of one of the determiners af and šum plus a generic noun (eliad 'one', davar 'thing', makom 'place', pa¿am 'time, fois'), but le eolam is literally 'in eternity'. Two of the pronouns of the iš -series are originally general nouns (iš 'man', davar
'thing'), and kol 'any' is originally 'all'. The suffix of the -šehu-series stems from a parametric concessive conditional clause (cf. mi-š ehu yihiye 'whoever he is...'; cf. § 6.2.3).
A.31.3. Distribution. The distribution of the three series is shown in Figure A.31. The data are from Glinert (1982) (G82), (1989) (G89), and a native speaker (David Gil) .

| Figure A.31. |  | question | indirect <br> negation | direct <br> negation |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| specific <br> known | specific <br> unknown | irrealis <br> non-specific | conditional | comparative | free-choice |

The -š ehu-series is normal for the specific functions and up to the indirect-negation function.
(A.228) specific

Ra?i-ti mi-š ehu <*iš>.
saw-1SG who-INDEF person
'I saw somebody.'
(A.229) irrealis non-specific

Ti-r?e ma-šehu <*davar>.
2sg-will:see what-INDEF thing
'You will see something.'
In the question, conditional and indirect-negation functions, the -š ehu-series and the $i \check{s}$-series overlap. The $i \check{s}$-series is rather formal or literary - the colloquial language prefers the -šehuseries.
(A.230) conditional
a. Im ti-r?e ma-šehu, t-agid li. (informal) if 2SG-will:see what-INDEF 2SG-will:tell to:me
b. Im ti-r?e davar, haged li. (formal)
if 2SG-will:see thing tell:IMPV to:me
'If you see anything, tell me.'
(A.231) question

Ha?im amr-u zot le-iš/ -mi-šehu? (G82: 463)
Q said-3PL thatto-person who-INDEF
'Did they tell this to anyone?'
(A.232) indirect negation ${ }^{\text {ii }}$

Ani lo iloš evet še-nir?a iš/ mi-š ehu ba-reliov.
I NEG think:F that-was:seem(3SG) person who-INDEF in:the-street
'I don't think that anyone was seen in the street.'
When the negation is in the same clause, either the $i \check{s}$-series or the $\mathrm{af} / \check{s} u m$-series may be used:
(A.233) direct negation
$\begin{array}{llll}\text { a. Lo } & \text { ra? } \boldsymbol{i}-\mathrm{ti} & \text { iš/ afelad. } \\ \text { NEG } & \text { saw-1SG person } & \\ \text { INDEF }\end{array}$ 'I did not see anybody.'
b. Lo ra?i-ti kol/ šum student. NEG saw-1SG any any student 'I did not see any student.'
c. Af elad/ iš lo ba. (G82: 434 ,)

INDEF one person NEG came(3SG)
'Nobody came.'
For the free-choice function, kol 'every, any' or kol...š ehu is used:
(A.234)
a. Ti-ršom kol ktovet šehi. (G82: 445) 2SG-will:note any address INDEF
'Note down any address.'
b. Ani muxan la-gur be-dira kol-šehi. (G89) I willing to-live in-apartment any-INDEF
'I am willing to live in any apartment.'

## A.32. Hausa

A.32.1. Inventory. Hausa (Chadic, Afro-Asiatic) has two series of indefinite pronouns, (i) the emphatic koo-series which is based on interrogative pronouns, and (ii) the non-emphatic waniseries, which consists of the determiner wani plus generic nouns.

|  | interrogative | koo-series | wani-series |
| :--- | :--- | :--- | :--- |
| person: | wàa, wàanee | koo-waa | wani/wata |
| thing: | mèe, mèenee | koo-mee | wani àbù ('some thing') |
| place: | inaa | koo-'inaa | wani wurii ('some place') |
| time: | yàushèlyàushe | koo-yàushè, -yàushe | wani lookàcii ('some time') |
| manner: | yàayàa | koo-yàayàa |  |
| determiner: | wànè/wàcè | koo-wànèl-wàcè | wani/wata |

A.32.2. Origins. The particle $k o o$ has a plethora of other uses, described in Meyers (1974): 'or', question particle, 'whether', 'even', 'even though'. In all likelihood, its use as a scalar additive focus particle ('even') is responsible for its use as indefiniteness marker. The determiner wani is from the same pronominal root wa- as the interrogatives wàa, wànè (cf. Attouman and Caron 1984: 12-13), but it need not be interrogative-based because this root is also used for demonstratives (wannàn 'this') and relatives (wandà '(the one) which').
A.32.3. Distribution. The distribution of the three series is shown in Figure A.32. The data are from Ma Newman (1990) (M90), Attouman and Caron (1984) (AC84), Abraham (1946) (A46), and Marit Lobben (p.c.).

Figure A.32.

|  | question | indirect <br> negation | direct <br> negation |
| :--- | :--- | :--- | :--- |
| irrealis <br> non-specific |  | comparative |  |
|  |  |  | free-choice |

The wani-series is used in all non-emphatic functions.
(A.235) specific

Wani àbù yaa sàamee shi. (M90: 252)
some thing 3SG:PAST happen him
'Something has happened to him.'
(A.236) irrealis non-specific (future)

Wata raanaa sáà daawoo. (M90: 252)
some day 3PL:FUT return
'Some day they'll return.'
(A.237) question/ conditional
a. Kaa ga wani mùtûm à oofis? (M90: 252)

2SG:PAST see some man in office
'Did you see someone at the office?'
b. Ìdan kaa jî̀ wani àbù, kà taashè ni. if 2SG:PERF hear some thing 2SG:SBJV wake me 'If you hear anything, wake me up.'

The koo-series is used in the comparative and free-choice functions.
(A.238) comparative

Yaa san tà fiye dà koo-waa. (M90: 11)
3SG:PAST know her better than INDEF-who
'He knows her better than anyone else.'
(A.239) free choice

Anàa saamùn-sà koo-'ìnaa. (M90: 12)
one:PRES get-3SG INDEF-where
'You can get it anywhere.'

It is also used in the direct-negation function (cooccurring with verbal negation), but only after the negation, i.e. in non-subject position. (Unfortunately, I lack data on the indirect-negation function. When the negated indefinite is in subject position, a paraphrase must be used (cf. § 8.2.5).
(A.240) direct negation

Bà mù hàdu dà koo-waa à hanyàa ba. (M90: 11)
NEG 1PL:PAST meet to INDEF-who on road NEG
'We didn't meet anyone on the road.'
The koo-series is apparently also used in questions. Abraham (1946) has examples like the following:

| a. Koo-mèe $\quad$ ya | batà? (A46: 535) |
| :--- | :--- | :--- |
| INDEF-what 3SG:PAST lost |  |
| 'Is anything lost?' |  |
| b. Koo-wàa ya | zoo? (A46: 541) |
| INDEF-who 3SG:PAST | come |
| 'Has anyone come?' |  |

In these examples, koo-mèe and koo-wàa have a low tone on the root syllable, and it appears that this tonal difference corresponds to a functional difference. The high-tone counterpart of (A.241a) has a different meaning.

Koo-mee ya batà?
INDEF-what 3SG:PAST lost
'Is everything lost?'
Unfortunately, my data do not allow me to come to any clear conclusions with respect to this question, but these data are reminiscent of the accentual contrasts observed in § 5.7.3.

## A.33. Swahili

A.33.1. Inventory. Swahili (Niger-Congo, Bantu) has only two major series of indefinite pronouns: (i) a series consisting of generic nouns, and (ii) a free-choice and negative series consisting of the determiner CL-o CL-ote (where CL stands for a gender prefix).

|  | interrogative | generic-noun-series | CL-o CL-ote-series |
| :--- | :--- | :--- | :--- |
| person: | nani | mtu ('person') | mtu ye yote |
| thing: | nini | neno, ,itu ('thing') | kitu cho chote, neno lo lote |
| place: | wapi | mahali ('place') | mahali po pote |
| time: | lini | wakati ('time') | wakati wo wote |
| manner: | $-j e$ | kwa nja yo yote, vyo vyote |  |
| determiner: | $-p i$ | -moja ('one') | CL-o CL-ote |

It is quite conceivable that the generic nouns have not yet been grammaticalized as pronouns yet. I describe them as an indefinite series for the sake of comparability with the other languages.

In the CL-o CL-ote-series, the generic noun may also be omitted when the gender and the context make it clear which generic noun is to be understood. Thus, po pote is common for mahali po pote (because this gender is restricted to a few nouns), ye yote, cho chote and lo lote are possible variants, but *wo wote 'ever' is not possible because this gender is too large.

Another indefinite determiner is fulani 'a certain' (from Arabic fulaan).
A.33.2. Origins. All I can say about CL-o CL-ote is that it is based in CL-ote, which means 'all, whole' (e.g. daftari yote 'the whole notebook', wanafunzi wote 'all the pupils').
A.33.3. Distribution. The distribution of the two series is shown in Figure A.33. The data are from various reference works and from the New Testament.

Figure A. 33.

| specific | specific | irrealis |
| :--- | :--- | :--- |
| known | unknown | non-specific |

conditional comparative

Generic nouns can be used in all functions except the free-choice and the comparative functions.
(A.243) specific
a. Mtu a-li-ni-gusa. (NT, Lk 8.46)
man 3SG-PAST-me-touch
'Somebody has touched me.'
b. A-па пепо la ku-mw-arifu.

3SG-has word of INF-him-tell
'She has something to tell him.'
(A.244) irrealis non-specific (subjunctive complement)

Yesu a-li-mw-ambia... kwamba a-wa-pe maskini kitu.
Jesus 3SG-PAST-him-tell that 3SG-them-give:SBJV poor thing
'Jesus told him to give something to the poor.' (NT, John 13.29)
(A.245) question/ conditional
a. Wa-ona kitu? (NT, Mk 8.23)

2SG-see thing
'Do you see anything?'
b. Kата mtu a-ki-wa-ambia neno, seme-ni, Bwana a-na haja na-o. if man 3SG-if-you-tell word say-PL Lord 3SG-has need with-3PL 'AIf anyone says anything to you, say, the Lord needs them.' (NT, Mt 21.3)
(A.246) indirect negation

Tokea hapo ha-i-ja-siki-wa ya kuwa mtu a-me-ya-fumbua macho ya kipofu. since then NEG-hear-PASS thatman 3SG-PERF-them-open eyes of blind 'Since the world began was it not heard that any man opened the eyes of one that was born blind.' (NT, John 9.32)

In the direct-negation function, bare generic nouns can only be used postverbally (A.247). If the indefinite is the subject, a different strategy has to be resorted to (§ 8.2.5).
(A.247) direct negation

Wala ha-wa-kumw-ambia mtu neno. (NT, Mk 16.8)
and NEG-them-him-say man thing
'And they did not say anything to anybody.'
The CL-o CL-ote-series can be used in the free-choice and negative functions, as well as in questions (at least rhetorical questions) and conditionals, where it seems to have emphatic value. I have no data for the comparative function, but I predict that CL-o CL-ote is possible there as well.
(A.248) free choice

Daktari yule a-ta-ponya magonjwa yo yote.
doctor that 3SG-FUT-cure disease any
'That doctor will cure any disease whatsoever.'
(A.249) direct negation

Ninyi ha-m-jui neno lo lote. (NT, John 11.49)
you NEG-it-know word any
'You don't know anything.'
(A.250) question/ conditional
a. A-li-mw-ambia malaika yupi wakati wo wote, Ndi-we mwana-ngu? 3SG-past-him-say angel which time any you-are son-1SG 'To which of the angels did he ever say, You are my son?' (NT, Heb 1.5)
b. M-ki-ni-ombaneno lo lote kwa jina langu, ni-ta-li-fanya. you-COND-me-ask word any by name mine 1SG-FUT-it-do 'If you ask anything in my name, I will do it.' (NT, John 14.14)

## A.34. Georgian

A.34.1. Inventory. Georgian (Kartvelian) has five series of indefinite pronouns, all of them derived from interrogatives: (i) the specific -Vac-series, (ii) the non-specific-me-series, and (iii)(iv) the three negative series marked by $\operatorname{ar}(a)-$, $\operatorname{ver}(a)$ - and $\operatorname{nur}(a)$. (Below only the ara-series is given.)

|  | interrogative | $-\boldsymbol{V} a c-$-series | $-m e-s e r i e s$ | ara-series |
| :--- | :--- | :--- | :--- | :--- |
| person: | vin | vi-Vac | vin-me | ara-vin |
| thing: | ra | ra-Vac | ra-me | ara-peri, ara-ra |
| place: | sad $(a)$ | sad-Vac | sad-me | ar-sad |
| time: | rodis | rodis- $\boldsymbol{V a c}$ | rodis-me | ara-sodes |
| manner: | rogor | rogor- $\mathbf{V a c}$ | rogor-me |  |
| determiner: | romeli | romeli-Vac | romeli-me | ara-vitari |

A.34.2. Origins. The origin of $-m e$ is unknown. The suffix - Vac consists of $-\boldsymbol{V} a$ 'only' and $-c(a)$ 'also'. The prefixes ara-, vera- and nura-derive from the negative particles ar, ver and nu 'not'.
A.34.3. Distribution. The distribution of the four series is shown in Figure A.34. The data are from Tschenkéli 1958 (T58), Vogt 1971 (V71), Revaz Tchantouria, Winfried Boeder (p.c.) and dictionaries (cf. also Apridonidze 1972, Topuria 1925).

| Figure A.34. |  | question | indirect <br> negation | direct <br> negation |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| specific <br> known | specific <br> unknown | irrealis <br> non-specific |  | conditional | comparative |

The - Vac-series is restricted to specific functions.
(A.251) specific known/unknown
a. Es c'ignisad-Vac v-iš ove. (V71: 47)
this bookwhere-INDEF 1SG-found 'I found this book somewhere [I could say where].'
b. Movida vi-Vac <*vin-me> rusi. (V71: 47)
came who-INDEF who-INDEFRussian
'Some Russian person has come [I don't know him / her].'
In all non-emphatic non-specific functions, including indirect negation and comparative, the -me-series is used.
(A.252) irrealis non-specific (imperative, modal, future, distributive)
a. DauJaxet vi-s-me! call:IMPV:PL who-DAT-INDEF 'Call somebody!'
b. Es c'igni sad-me unda v-iš ovo. (V71: 47)
this book where-INDEF necessary 1SG-find:SBJV 'I have to find this book somewhere.'
(A.253) question/ conditional
a. Mosula vin-me <*vi-Vac>? (V71: 47)
came who-INDEF who-INDEF 'Has anyone come?'
b. Tu vin-me movides, utxari. if who-INDEF comes tell:IMPV 'If anyone comes, tell (me).'
(A.254) indirect negation

Vera-prit verdaitanxmes rom rogor-me sad-me sc'avla NEG-way NEG persuade:him that how-INDEF where-INDEF study ganegrJo.
he:continue:SBJV
'They couldn't persuade him to continue his studies anywhere in any way.'
(A.255) comparative

Man kartuli ena uk'et icis vidre sxva vin-me-m. he:ERG Georgian language better knows than other who-INDEF-ERG 'He knows Georgian better than anyone else.'

In the direct-negation function, one of the three negative series (ara-, vera-, nura-) is used, normally together with verbal negation (though this may optionally be omitted). $A r$ is the unmarked negator, ver contains an additional semantic component of possibility, and $n u$ is used in prohibitive sentences.
(A.256) a. Me ara-sodes ara-vis-gan ara-pers ar mi-v-iVeb. (T58: 223)

I NEG-when NEG-who-from NEG-thing NEG PREV-1SG-get
'I'll never get anything from anybody.'
b. Mas ara-vis-tvis utkvams.
he NEG-who-for has:told
'He hasn't told anybody.'
c. Nura-vi-s $n u \quad e^{\prime} q^{\prime} v i!(V 71: 48)$

NEG-who-DAT NEG tell
'Don't tell anybody!'
The free-choice sense is expressed by means of the adjective nebismieri 'arbitrary, any', which can hardly be considered an indefinite pronoun. Other possibilities are the universal quantifier q'vela 'every' and the free relative clause vinc ginda 'whoever you want'.

## A.35. Kannada

A.35.1. Inventory. Kannada (Dravidian) has three series of indefinite pronouns, all of them derived from interrogatives: (i) the specific-oo-series, (ii) the non-specific-aadaruu-series, and (iii) the negative and free-choice-uu-series.

|  | interrogative | -oo-series | -aadaruu-series | -uu-series |
| :--- | :--- | :--- | :--- | :--- |
| person: | yaaru | yaar-oo | yaar-aadaruu | yaar-uu |
| thing: | eenu | een-oo | een-adaruu | een-uu |
| place: | yalli, elli | elliy-oo | elliy-aadaruu | elliy-uu |
| time: | yaavaaga | yaavaagal-oo | yaavaagal-aadaruu | yaavaagal-uu |
| manner: | heege | heeg-oo | heeg-aadaruu | heeg-uu |
| amount: | yas 5 t 5 u, es 5 t 5 u | es5t5-oo | es5t5-aadaruu | es5t5-uu |
| determiner: | yaava-nu/-l5u | yaava-n-ool-l5-oo | yaavanaadaruu | yaava X-uu |

A.35.2. Origins. The suffix -oo is identical to -oo 'or; question marker'. The suffix -aadaruu also has the meaning 'even, German auch nur' and consists of $a a-d$ - 'be(come)', -are 'if' and -uu (i.e., the original meaning is 'even if it be(come)'). The suffix -uu is identical to -uи 'also, even'.
A.35.3. Distribution. The distribution of the three series is shown in Figure A.35. The data are from Bhat (1981) (B81), Sridhar (1990) (S90), and native speakers (Anilkumar Belvadi, D.N.S. Bhat) .

Figure A. 35.
specific specific irrealis known unknown non-specific

| question | indirect <br> negation | direct <br> negation |
| :--- | :--- | :--- |
| conditional | comparative | free-choice |

The -oo-series is only used in the specific-unknown function - it cannot be used if the speaker knows the identity of the referent.
(A.257) specific unknown

| Yaar-oo <*yaar-uu, *yaar-aadaruu> | bandaru; | (*yaaru <br> who-INDEF | whhisi.) (B81: 7) |
| :--- | :--- | :--- | :--- |
| came | who | guess |  |

The non-specific-aadaruu-series is used in irrealis and question/conditional functions.
(A.258) irrealis non-specific (imperative)

Ellig-aadaruu <*ellig-oo> hoogu. (B81: 6)
where-INDEF go
'Go somewhere.'
(A.259) question/ conditional
a. Raamи ellig-aadaruи <*ellig-oo, *ellig-uи> hoodan-oo? (B81: 6) Ramu where-INDEF go-Q
'Did Ramu go anywhere?'
b. Yaar-aadaruu <*yaar-oo, *yaar-uu> band-are who-INDEF come-COND heel5-utt-eene. (B81: 7) 'I'll tell you if anyone comes.'

The -uu-series is used in the free-choice function, in the direct- and indirect-negation functions (cooccurring with verbal negation in the latter), and in the comparative function (although ella 'all' is preferred there).
(A.260) free choice

Raamu ellig-uи hoodaanu. (B81: 4)
Ramu where-INDEF may.go
'Ramu may go anywhere.'
(A.261) direct negation

Illige yaar-uu
baral-illa. (S90: 256)
hither who-INDEF come-NEG
'No one came here.'
(A.262) indirect negation

Yaar-uu baruvuduavaś ya illa.
who-INDEF come:MASD necessary NEG
'It is not necessary for anyone to come.'
(A.263) comparative

| Illi | have | beere | yaava | kad $5 e-$-g-intal-uu | cann-aag-ide. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| here | climate | other | which | place-DAT-than-INDEF | good-become-is |

'Here the climate is better than in any other place.'
(Better: beer-ell-aa kad5e-g-intal-uu 'than in all other places'.)

## A.36. Chinese

A.36.1. Inventory. Mandarin Chinese (Sino-Tibetan) makes extensive use of the bare interrogatives as indefinites. In addition, two series are derived by the words $d \bar{o} u$ and $y \check{e}$, and the determiner rènhé 'any' can be considered a series of its own.

|  | interrogative | dō u-series | yě -series |
| :--- | :--- | :--- | :--- |
| person: | shéi | shéi dō $u$ | shéi yě |
| thing: | shénme | shénme dō u | shénme yě |
| place: | năr, shénme diffang | shénme dífang dōu | shénme difang yě |
| time: | shénme shihou |  |  |
| manner: | zénme |  |  |
| determiner: | něi | ně $i \ldots$ dō $u$ |  |

Generic nouns (e.g. ren 'person; someone') are also commonly used as indefinites.
A.36.2. Origins. Yě and dō u mean 'even, also; every, all'. Rènhé is composed of the old interrogative hé 'what?' plus rèn 'allow; appoint'. Perhaps the current meaning 'any' arose from an original meaning 'choose what' > 'anything' ('choose' is similar to 'appoint').
A.36.3. Distribution. The distribution of the three series is shown in Figure A.36. The data are from Li (1992) (L92), Li and Thompson (1981) (LT81), Tsai 1990 (T90), reference works, and native speakers (Fengxiang Li, Wenfang Zhang) .

| Figure A.36. |  | question | indirect <br> negation | direct <br> negation |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| specific <br> known | specific <br> unknown | irrealis <br> non-specific |  | conditional | comparative |

The bare interrogatives are used in all non-specific non-emphatic functions.
(A.264) irrealis non-specific (imperative) Chî diǎn shénme zài zǒu ba! (L92: 152) eat a.bit what then go PT 'Please eat a little something before you leave.'

As shown in detail in Li (1992), bare interrogativs are also used in contexts of uncertainty and inference.
(A.265) a. Tā hǎ oxiàng xǐ huan shénme. (L92: 131)
he seem like what
'He seems to like something.'
b. Tā kàndao (le) shénme le. (L92: 133)
he see PERF what perf
'He must have seen something.'
Examples of the question/conditional functions and the direct negation functions are given below (unfortunately, I lack data for the indirect negation function).
(A.266) question/ conditional
a. Shéi xǐhuan tā ma? (L92: 128)
who like him $Q$
'Does anyone like him?'
b. Nǐ yàoshì yào shénme dehuà, èn língr zhòu xíngle. you if want what press
'If you want something, ring the bell.'
In the direct-negation function, only shénme is perfect, shéi being less acceptable, and nage (N) 'which (N)' is unacceptable (Li 1992: 150):
(A.267) direct negation
a. Tā bù wèi shénme rén zuò shì. (L92:127)
he not for what man do thing
'He does not work for anyone.'
b. Tā bù xǐhuan shénme.
he not like what
'He does not like anything.'
c. ?Tā bù xǐhuan shéi.
he not like who
'He does not like anyone.'
d. *Tā bù xǐhuan nǎge (rén).
he not like which man
'He does not like anyone.'
However, bare interrogatives are not admissible in specific contexts that lack an element of uncertainty. ${ }^{\text {iii }}$ In such cases, generic nouns are used.
(A.268) specific (known/unknown)

Yǒu rén dǎ diànhuà le.
exist man hit phone PERF
(Wo bù zhìdao shì shéi./Cāi yì cāi shì shéi.)
Inot know is who guess one guess is who
'Someone called. (I don't know who./ Guess who.)'

The $d \bar{o} u$ - and $y \check{e}$-series are used interchangeably in the direct-negation function.
(A.269) direct negation
a. Wǒ shéi-yě bù rènshi. (LT81:529)

I who-INDEF not know
'I don't know anyone.'
b. Tā shéi-dō $u$ bù xinrren. (LT81:528)
she who-INDEF not trust
'She doesn't trust anyone.'
c. Wǒ shénme difang dōu/yě bù qù. I which place INDEF not? go? 'I'm not going anywhere.'
d. Shèi-dō u bù cōngmíng. who-INDEF not intelligent 'No one is intellingent.'

Two things are remarkable about these forms. First, they only occur preverbally, which Li and Thompson (1981:530) explain by the fact that $d \bar{o} u$ and $y \bar{e}$ are adverbs and hence must occur preverbally. If they are adverbs and follow their own syntactic rules, it may seem doubtful whether the combinations shéi-yě , shénme-dō u etc. can be regarded as single constituents at all, and hence whether yě and $d \bar{o} u$ can be considered as indefiniteness markers. ${ }^{\text {iv }}$ This is done here because they never non-adjacent to interrogative pronouns (i.e. *Ta dō u bu xìnren shéi is not a possible alternative to (A.36.6b)).

Second, shéi-dōu etc. are also used as universal quantifiers (e.g. wǒ shéi-dō u xǐ huan 'I like everyone'), so sentences (A.36.6a-d) should perhaps not be regarded as instances of indefinite pronouns, but as a rare type of replacement strategy: Instead of saying 'She doesn't trust anybody/She trusts nobody', Chinese says 'She doesn't trust everybody', with wide scope of 'everybody' (i.e. for every person $x$, she doesn't trust $x$ ). I have to leave this question open here.

The indefinite determiner rènhé is used (mainly in conjunction with the particle/adverb dō $u$ ) to render the free-choice and comparative functions.
(A.270) free choice
Rènhé shîhou nǐ dōu kěyǐ lái.
any time you INDEF can come
'You can come anytime.'
(A.271)
comparative
Tā pǎo de bǐ rènhé yìge nánshēng dōu kuài.
he run PT than any one boy INDEF fast
'He runs faster than any boy.'
Finally, the determiner rènhé may also be used in the direct-negation and indirect-negation functions.
(A.272) direct negation

Tā bù néng táo dào rènhé dìfang qu.
he NEG can escape to any place go
'He cannot escape anywhere.'
(A.273) indirect negation

Wō bù xiăngxin rènhé rén lái le.
Inot think any man come PERF
'I don't think that anyone came.'
These generalizations should be approached with some caution - my data on Chinese are less complete than I would have wished.

## A.37. Ancash Quechua

A.37.1. Inventory. Ancash Quechua uses only the bare interrogatives and one interrogativederived series, the non-specific -pis-series.

|  | interrogative | -pis-series |
| :--- | :--- | :--- |
| person: | $p i$ | pi-pis |
| thing: | ima | ima-pis |
| place: | may | may-pis |
| time: | imay | imay-pis |
| manner: | imanaw | imanaw-pis |

A.37.2. Origins. The suffix -pis also means 'also, even'.
A.37.3. Distribution. The distribution of the three series is shown in Figure A.37. The data are from a native speaker (Hernán Aguilár) (cf. also Parker 1976: 74-5). The data from Weber (1989), where a closely related dialect is described, are also taken into account.

Figure A. 37.

|  |  |
| :--- | :--- |
| specific | irrealis |
| unknown | non-specific |


| question | indirect <br> negation |
| :--- | :--- |
| conditional | comparative |

direct
negation
free-choice

The bare interrogative pronouns are used in the specific-unknown function.
(A.274) specific unknown
a. Ima-ta-chi wambra yurapa waqta-n-chaw riqa-rqa-n. what-ACC-VAL boy tree behind-3SG-LOC see-PAST-3SG 'The boy saw something behind the tree.'
b. Pi-wan-chi qanyanawtobus-chaw parla-rqu-u. who-COMIT-VAL yesterday bus-LOC talk-PAST-1SG 'I talked to someone on the bus yesterday.'

The -pis-series is used in all non-specific functions.
(A.275) irrealis non-specific (imperative, future)
$\begin{array}{llll}\text { a. Mana } & \text { musya-pti-iki-qa } & \text { pi-ta-pis } & \text { tapuku-y. } \\ \text { not } & \text { know-CONV-2SG-TOP } & \text { who-ACC-INDEF } & \text { ask-IMPV }\end{array}$
'If you don't know, ask somebody.'
b. Imay-pis Afrika-man-mi aywa-shaq.
when-INDEF Africa-ALL-VAL go-FUT.1SG
'I'll go to Africa sometime next year.'
(A.276) question/conditional
a. Ima-ta-pis rika-rqu-nki-ku?
what-ACC-INDEF see-PAST-2SG-Q
'Did you see anything?'
b. Ima-ta-pis rika-rnin-qa willa-ma-y.
what-ACC-INDEF see-2SG-TOP tell-1SG-IMPV
'If you see anything, tell me.'
(A.277) comparative

Ollqu wambra-m pi-piq-pis ras ayqiqninmi.
male boy-VAL who-ABL-INDEF fast runs
'The boy can run faster than anyone.'
(A.278) free choice

Pi-pis kay problema-ta-qa atinman-mi.
who-INDEF this problem-ACC-TOP solves
'Anyone can solve this problem.'
The -pis-series is also used in the negative functions. The scope of negation is indicated by the discontinuous negators mana/ama/ni ... -tsu.
(A.279) direct negation
a. Ama ima-pis
ni-y-chu. (Weber 1989: 21)
not what-INDEF say-IMPV.2SG-NEG
'Don't say anything!'
b. Pi-pis ni ima-ta-pis ni-ma-rqa-n-tsu.
who-INDEF not.even what-ACC-INDEF tell-1SG-PAST-3SG-NEG
'Nobody told me anything.'
(A.280) indirect negation

Мапа типа-shkaa-chu pi-pis musyanan-ta. (Weber 1989: 340)
notwant-PERF.1SG-NEG who-INDEF know-ACC
'I didn't want anyone to know.'

## A.38. Japanese

A.38.1. Inventory. Japanese has three series of indefinite pronouns, all of them derived from interrogatives: (i) the non-negative $k a$-series, (ii) the negative $m o$-series, and (iii) the free-choice -demo-series.

|  | interrogative | ka-series | mo-series | demo-series |
| :--- | :--- | :--- | :--- | :--- |
| person: | dare | dare-ka | dare-mo | dare-demo |
| thing: | nani | nani-ka | nani-mo | nani-demo |
| place: | doko | doko-ka | doko-mo | doko-demo |
| time: | itu | itu-ka |  | itu-demo |
| manner: | doo | doo-ka |  | doo-demo |
| amount: | ikura | ikura-ka |  | ikura-demo |
|  | ikutu | ikutu-ka |  | ikutu-demo |
| determiner: | dore | dore-ka | dore-mo | dore-demo |

A.38.2. Origins. The suffix $-k a$ is formally identical to $k a$ 'or; question particle' (cf. Tamba-Mecz 1984). The suffix -mo is formally identical to -то 'also'. The suffix -dето is is from de mo 'even if it is' (demo is also a focus particle 'even').
A.38.3. Distribution. The distribution of the three series is shown in Figure A.38. The data are from McGloin (1976) (M76), Ohno (1984) (O84), and native speakers (Masa Koizumi, Yoshiko Ono) , and various reference works. See also Yamada (1993), Chang and Labrune (1994).

| Figure A.38. |  | question | indirect <br> negation | direct <br> negation |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| specific <br> known | specific <br> unknown | irrealis <br> non-specific | conditional | comparative |  |
|  |  |  |  |  | free-choice |

The $k a$-series is used in non-negative functions.
(A.281) specific known/unknown

Dare-ka kara denwa at-takedo,
who-INDEF from phone be-PAST though
'Someone called,'

- dare kara da ka wakara-na-i. who from be:PRES Q know-NEG-PRES 'I don't know who.'
- dare kara da ka ate-te goran. who from be:PRES $Q$ figure.out-CONV try:IMPV 'guess who!'
(A.282) irrealis (hortative, distributive)

| a. Dare-ka ni ki-ite | mi-masyoo. |  |
| :--- | :--- | :--- | :--- |
| who-INDEF DAT | ask-CONV | try-POL:HORT |
| 'Let's ask somebody.' |  |  |

b. Minna-ga nani-ka-o tabe-ta. (O84: 238)
every-NOM what-INDEF-ACC eat-PAST
'Everybody ate something (non-specific).'
(A.283) question/ conditional
a. Rusutyиu-ni dare-ka <*dare-mo> ki-masi-ta ka? absence.duration-DAT who-INDEF who-INDEF come-POL-PAST Q
'Did somebody / anybody come while I was gone?' (M76: 409)
$\begin{array}{lllll}\text { b. Nani-ka } \quad<\text { *nani-mo> tabe-tara, eiga e ture-te } & \text { it-te } \\ \text { what-INDEF what-INDEF eat-COND movie to take-CONV go-CONV } \\ \begin{array}{ll}\text { age-na-i } & \text { yo. (M76: 415) } \\ \text { give-NEG-PRES ASS } & \\ \text { 'If you eat something/anything, I won't take you to the movie.' }\end{array}\end{array}$
The -mo-series is used in the negative functions and in the comparative function. In the case of direct negation, it cooccurs with verbal negation.
(A.284)
comparative
Kono syoonen-wa kono kurasu-no dare-yori-mo hayaku hasir-u.
this boy-TOP this class-GEN who-from-INDEF fast run-PRES 'This boy can run faster than anyone in his class.'
(A.285)
$\begin{array}{llll}\text { direct negation } \\ \text { Dare-mo } & \text { kanojo-o aisi-te } & \text { i-na-i. }\end{array}$
who-INDEF she-ACC love-CONV DUR-NEG-PRES
'Nobody loves her.'
(A.286) indirect negation

Kyoo-wa dare-mo ku-ru to omow-ana-i. (M76: 405)
today-TOP who-INDEF come-PRES SBOR think-NEG-PRES
'I don't think anybody is coming today.'
The demo-series is used in the free-choice function.
(A.287) free choice

Dare-demo deki-masu.
who-INDEF possible-POL-PRES
'Anybody can do it.'

## A.39. Korean

A.39.1. Inventory. Korean has six series of indefinite pronouns, three of which are derived from interrogatives: (i) the general -nka-series, (ii-v) the four free-choice series in -na and -tunci, which may be derived either from interrogatives or from general nouns, in which latter case they are preceded by the determiner $a m u$, and (vi) the negative -to-series, which is also derived from $a m u+$ general noun. In addition, bare interrogatives are also commonly used as indefinite pronouns.

|  | interrogative | -nka-series | -na-series | -tunci-series | amu X-to-series |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |
| person: | nwukwu | nwukwu-nka | nwukwu-na | nwukwu-tunci | amu (salam)-to |
| thing: | mues | mue-nka | mues-ina | mues-itunci | amu kes-to |
| property: | etten |  | etten ...-na | etten...-tunci |  |
| place: | eti | eti-sunka | eti-na | eti-tunci | amu kos-to |
| time: | encey | encey-nka | encey-na | encey-tunci | amu ttay-to |
| determiner: | enи |  | enu ...-na | enu ...-tunci | amu X-to |

For reasons of space, the $а т и X$-na-series and the $а т и X$-tunci-series are omitted from the above table - they are completely analogous to the amu X-to series. There is also an incomplete -toseries derived from interrogatives (nwukwu-to 'nobody', but *mues-to 'nothing').
A.39.2. Origins. The suffix -nka seems to come from $i-$ 'be' $+-n$ (present tense) $+-k a$ 'question particle'. The suffix -na is also used with the meanings 'or; for example; approximately'; it seems to come from the Adversative mood (marked by -(u)na) of $i$ - 'be'. The Adversative is also the mood used in parametric concessive conditional clauses, so nwukwu-na would come from 'whoever it may be' (cf. § 6.2.3). The suffix -tunci (also used in the sense 'or') has a similar origin: -tunci is a verbal suffix that can also be used in parametric concessive conditional clauses. The suffix -to also means 'also'.
A.39.3. Distribution. The distribution of the series is shown in Figure A.39. Since the indefinites derived frominterrogatives do not seem to differ in their distribution from the indefinites based
on aти $X$-, the two types are not distinguished. The data are from Martin and Lee (1986) (ML69), Chang and Labrune (1994) as well as from native speakers (Hee-Rahk Chae, Kyu-Ryun Choi, and Du-Pyo Hong). See also Lee (1983).

| Figure A.39. |  | question | indirect <br> negation | direct <br> negation |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| specific <br> known | specific <br> unknown | irrealis <br> non-specific | conditional | comparative |  |

The bare interrogatives are the most commonly used indefinites. The $-n k a$-indefinites are more formal, less colloquial.
(A.288) specific known/unknown
a. Nwu'-ka/ nwukwu-inka-ka kel-ess-ta. who-NOM who-INDEF-NOM call-PAST-DECL 'Somebody called. (I didn't catch her name. / Guess who.')
b. Kusonyen-un mues-ul/ mues-inka-lul po-ass-ta.
this boy-NOM what-ACC what-INDEF-ACC see-PAST-DECL 'The boy saw something.'
(A.289) irrealis non-specific (imperative, hortative)
a. Molu-myen, nwukwu-eykey/ nwukwu-nka-eykey mul-ela.
ignorant-CONV who-DAT who-INDEF-DAT ask-IMPV
'If you don't know, ask somebody.'
b. Eti ka-psita. (ML69: 411)
where go-HORT
'Let's go somewhere.'
(A.290) question/conditional
a. Kusonye-kamues-ul/ mue-nka-lul <*mues-ina/ *mues-itunci> this girl-TOP what-ACC what-INDEF-ACC what-INDEF what-INDEF chacu-myen, kunye emeni-eykey malha-lkesi-ta. find-CONV she mother-DAT tell-FUT-DECL 'If the girl finds anything, she will tell her mother.'
b. Chelswu mues-ul/ mue-nka-lul <*тиes-ina *mues-itunci> Chelswu what-ACC what-INDEF-ACC what-INDEF what-INDEF ilk-ess-ni?
read-PAST-Q
'Did Chelswu read anything?'
The -na- and -tunci-series are used interchangeably in the free-choice function.
(A.291) Nwukwu-nal nwukwu-tunci/ amu-nal amu-tunci $i$ muncey-lul
who-INDEF who-INDEF any-INDEF any-INDEF this problem-ACC
phul swu-iss-ta.
solve do-can-DECL
'Anybody can solve this problem.'
The -to-series is used in the indirect and direct negation functions. In the direct-negation function, it cooccurs with verbal negation. In the indirect-negation function, the bare interrogatives and the $-n k a$-series are also possible.
(A.292) indirect negation

Nwukwu-to/ nwukwu-lul/ nwukwu-nka-lul chacki-ka pulkanung ha-ta. who-INDEF who-ACC who-INDEF-ACC find-TOPimpossible be-DECL 'It's impossible to find anyone.'
(A.293) direct negation
a. Kusonye-nun amu-to/ nwukwu-to an po-ass-ta. this girl-TOP any-INDEF who-INDEF NEG see-PAST-DECL 'The girl did not see anybody.'
b. Amu-to amu kes-to malha-ci anha-ss-ta. any-INDEF any thing-INDEF say-CONV NEG-PAST-DECL

## 'Nobody said anything.'

Furthermore, the -to-series is used in the standard of comparison:
(A.294) comparative

Yeki-ka enu kos pota to te alumtap-ta. here-TOP which place than INDEF more beautiful-DECL 'Here it is more beautiful than anywhere.'

## A.40. Basque

A.40.1. Inventory. Basque has four major series of indefinites, all of them derived from interrogatives: (i) the non-emphatic bait-series, (ii) the negative-polarity series in $i$-, and (iii-iv) the two free-choice series in edo- and -nahi.

|  | interrogative | -bait-series | i-series | edo-series | nahi-series |
| :--- | :--- | :--- | :--- | :--- | :--- |
| person: | nor | nor-bait | i-nor | edo-nor | nor-nahi |
| thing: | zer | zer-bait | e-zer | edo-zer | zer-nahi |
| place: | non | non-bait | i-non | edo-non | non-nahi |
| time: | noiz | noiz-bait | i-noiz | edo-noiz | noiz-nahi |
| manner: | nola | nola-bait | i-nola | edo-nola | nola-nahi |
| determiner: | zein | - | - | edo-zein | zein-nahi |

In addition, non-standard dialects have an $X$ edo $X$-series (nor edo nor 'someone', zer edo zer 'something'), and a neh-series (nehor 'anyone', nehon 'anywhere', nehoiz 'ever'). When used in their negative function, the pronouns of the $i$-series may optionally be followed by ere ('even').
A.40.2. Origins. The suffix -bait is formally identical to the verbal prefix bait- 'because', but its relation to it is obscure. Other potential connections include ba- 'if', and bai 'yes; and'. The prefix edo- is identical to edo 'or, probably', and the suffix -nahi is identical to the stem nahi 'want'.
A.40.3. Distribution. The distribution of the three series is shown in Figure A.40. The data are from Saltarelli 1988 (S88), Aulestia 1989 (A89), and native speakers (Karmele Rotaetxe, José Hualde).

| Figure A.40. |  | question | indirect <br> negation | direct <br> negation |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| specific <br> known | specific <br> unknown | irrealis <br> non-specific | conditional | comparative | free-choice |

The bait-series is used in non-negative polarity environments.
(A.295) specific unknown

Nor-bait-i utzi nion argazki-makina eta ez naiz oroi-tzen who-INDEF-DAT lend I:it:to.him photo-machine and NEG I:it remember-HAB nor-i. (S88: ex. 1070)
who-DAT
'I lent the camera to someone and I do not remember to whom.'
(A.296) irrealis non-specific (intention, hypothetical)
a. Nora-bait joa-te-ko gogoa dut, baina ez dakit nora. where-INDEF go-HAB-REL thought I:have:it but NEG I:know:it where 'I have an urge to go somewhere but I do not know where.' (S88: ex. 976b)
b. Pozik hartu-ko nuke nor-bait-ek laguntzea. (S88: ex. 158)
gladly accept-FUT I:would who-INDEF-ERG helping
'I would gladly accept someone helping me.'
In the specific-known function, the bait-series is apparently not possble, and the numeral bat 'one' is used:
(A.297) specific known

Kanpoa-nzengoze-n-en-ean baten batek dei egin zizun.
away-LOC be-2SG-REL-LOC one:GEN one:ERG call make he:you:has
Esan nor.
say who
'Someone called while you were away. Guess who it was.'
The $i$-series is used in negative-polarity contexts: questions / conditionals, comparatives, direct and indirect negation. In the direct negation function, it cooccurs with verbal negation.
(A.298) question/ conditional
a. E-zer<??zer-bait> jan nahi al duzu? (A89: 206) INDEF-what what-INDEFeatwantQ you:it 'Would you like to eat something?'
b. E-zer<??zer-bait> ikusten ba-duzu, esaidazu. INDEF-what what-INDEF see COND-you:have tell:you:me 'If you see anything, tell me.'
(A.299)
comparative
Donostia-ko eguraldia i-non/ edo-nonbaino
Donostia-ATTR weather INDEF-where INDEF-where than atsegin-ago-a da.
pleasant-COMPR-ART is
The weather in San Sebastián is more pleasant than anywhere else.'
(A.300)
indirect negation
Ez dut uste[gizon hori i-noiz ikusi dud-anik. (S88:ex. 178)
NEG I:it believe [man that INDEF-when see I:him]-SBOR
'I don't believe that I've ever seen that man.'
(A.301) direct negation

I-nor-i i-noiz ez diozu deusik eman. (A89: 305)
INDEF-who-DAT INDEF-when NEG you:it:to.him anything give
'You haven't ever given anyone anything.'
The edo- and the -nahi-series are used in the free-choice and indirect-negation functions.
(A.302) free choice
a. Galde-tzen duzuna edo-zein liburu-tan aurki dezakezu. (S88: ex. 895) ask-HAB you:it INDEF-which book-LOC find you:can:it 'You can find what you are asking about in any book.'
b. Nor-nahi-keduki-ko du hik baino botere gehiago. (A89: 432) who-INDEF-ERG have-FUT he:it you:ERG than power more 'Anyone will have more power than you.'

[^7]> (i) Shéi-yě méi tingjian shénme.
> who-INDEF NEG:PFV hear what
> 'No one heard anything.'

## Appendix B: The data of the $\mathbf{1 0 0}$-language sample

1. The sample. The languages of the 100 -language sample are listed in Table 2 (for the selection of the sample from the world's languages, see § 2.4.3.2). The numbers in parentheses after genetic groupings are the numbers of languages from each grouping that the sample should contain according to the selection procedure. A number of the form ' $(n>m)$ ' means that the number should have been $n$, but due to readjustment (resulting from the lack of data for certain groupings) the actual number is $m$.

The geographic distribution of the languages of the 40-language sample and the 100 -language sample is shown on the map on p. 413.

Table 2. The languages of the 100-language sample

| I. Afro-Asiatic (6>7) |  |
| :---: | :---: |
| Ancient Egyptian (1): | Ancient Egyptian |
| Berber (1): | Kabyle |
| Chadic (1>2): |  |
| Biu-Mandara | Margi |
| West Hausa |  |
| Cushitic (1): Harar Oromo |  |
| Semitic (1>2): |  |
| West Amharic |  |
| East | Akkadian |
| Omotic ( $1>0$ ) |  |
| II. Altaic ( $2>3$ ) |  |
| Altaic proper ( $1>2$ ): |  |
| Mongolian-Tungusic: | Khalkha Mongolian |
| Turkic: | Bashkir |
| Korean-Japanese (1): | Ainu |
| III. Amerind (17>19) |  |
| Northern Amerind (5>7) |  |
| Almosan-Keresiouan (1): |  |
| Keresiouan: |  |
| Siouan-Yuchi | Lakhota |
| Iroquoian | Cayuga |
| Penutian (2) |  |
| Gulf: | Koasati |
| Mexican: Huastec |  |
| Oregon: | Takelma |
| Hokan (2) |  |
| Seri-Yuman: | Maricopa |
| Northern: | Eastern Pomo |
| Central Amerind (2) |  |
| Uto-Aztecan: | Classical Nahuatl |
| Oto-Manguean: | Mixtec |
| Chibchan-Paezan (2) |  |
| Chibchan (1): | Sumu |
| Paezan (1): | Paez |
| Andean (1>2): |  |
| Aymaran: | Jaqaru |
| Southern: | Mapuche |
| Equatorial-Tucanoan ( $4>2$ ) M |  |
| Macro-Tucanoan ( $2>0$ ) |  |
| Equatorial (2) |  |
| Kariri-Tupi: | Guarani |
| Macro-Arawakan: | Goajiro |
| Ge-Pano-Carib (3>4) |  |
| Macro-Carib (1>2): |  |


| Peba-Yaguan: | Yagua |
| :---: | :---: |
| Carib: Panare |  |
| Ge-Pano (2): |  |
| Macro-Panoan ( $1>0$ ): |  |
| Macro-Ge (1>2): |  |
| Unclassified: | Iatê |
| Ge-Kaingang: | Kaingang |
| IV. Australian (7) |  |
| Unclassified: | Mangarayi |
| Maran: | Warndarang |
| Bunaban: Gooniyandi |  |
| Pama-Nyungan ( $1>4$ ): |  |
| Dyirbalic: | Dyirbal |
| Kalkatungic:Kalkatungu |  |
| Wiradhuric: Yuwaalaraay |  |
| South-West: Djaru |  |
| V. Austric (15>17) |  |
| Miao-Yao (1): | Hmong Njua |
| Austro-Asiatic ( $2>3$ ) |  |
| Mon-Khmer (1>2) |  |
| North: | Xinh Mul |
| East: | Khmer |
| Munda (1): | Santali |
| Austro-Tai ( $12>13$ ) |  |
| Daic (1): Thai |  |
| Austronesian ( $11>12$ ) |  |
| Atayalic (1): Atayal |  |
| Tsouic (1>0) |  |
| Paiwanic (1): Paiwan |  |
| Malayo-Polynesian ( $8>10$ ) |  |
| Western Malayo-Polynesian ( $4>5$ ) |  |
| Meso-Philippine | Tagalog |
| Celebes | Bugis |
| BorneoMalagasy |  |
| Sundic Indonesian |  |
| Unclassified | Palauan |
| Central-Eastern Malayo-Polynesian (4>5) |  |
| Central Malayo-Polynesian ( $1>0$ ) |  |
| Eastern Malayo-Polynesian ( $3>5$ ) |  |
| S Halmahera-NW New Guinea ( $1>0$ ) |  |
| Oceanic ( $2>5$ ) |  |
| Siassi | Takia |
| Milne Bay-Central Province | Kilivila |
| Southern New Hebrides | Kwamera |
| Remote Oceanic |  |
| Micronesian | Yapese |
| Central Pacific | Samoan |
| VI. Caucasian ( $1>2$ ): |  |
| Nakh-Daghestanian | Lak |
| Abkhaz-Adyghean | Abkhaz |
| VII. Chukchi-Kamchatkan (1): | Koryak |
| VIII. Elamo-Dravidian (1): | Telugu |
| IX. Eskimo-Aleut (1): | W. Greenlandic Eskimo |
| X. Indo-Hittite ( $4>5$ ) |  |
| Anatolian (1): | Hittite |
| Indo-European ( $3>4$ ) |  |
| Indo-Iranian: | Pashto |
| Celtic: Welsh |  |
| Italic: Romantsch |  |
| Balto-Slavic: Upper Sorbian |  |

```
XI. Indo-Pacific (12>4)
    Trans-New Guinea
        Main section
            Central and Western
            East New Guinea Highlands
                Kalam Kobon
                East-Central Hua
    Madang-Adelbert Range
        Madang
    Sepik-Ramu Haruai
XII. Khoisan (1>0)
XIII. Na-Dene (1): Slave
XIV. Niger-Kordofanian (11>12)
    Kordofanian (1>0)
    Niger-Congo (10>12)
        Mande (1>2)
        Unclassified: Bobo
        Northern-Western:
        Niger-Congo proper (9>10)
        West Atlantic (1):
        Central Niger-Congo (8>9)
            North Central Niger-Congo (4>3)
                Kru (1>0)
                    Dogon (1):
                    Gur=Voltaic (1):
                    Adamawa-Ubangian (1):
            South Central Niger-Congo (4>6)
                    Ijo-Defaka (1>0):
                    Western (1):
                    Eastern (2>5)
                    Yoruba-Northern Akoko Yoruba
                    Lower Cross
                            Ibibio
                    Benue-Zambesi
                        Nyima
                            Wel
                                    Bantoid
                                    Broad Bantu
                                    Narrow Bantu
                                    Northwest Bantu
                                    Central Bantu
XV. Nilo-Saharan (5>6)
    Songhai Songhai
    Saharan Kanuri
    Maban Masalit
    East Sudanic (1>2)
        Eastern
            Nilotic
                            Dongolawi
                            Lango
    Central SudanicLogbara
XVI. Sino-Tibetan (3>4)
    Sinitic (1):
    Tibeto-Karen (2>3)
    Karen (1>0)
    Tibeto-Burman (1>3)
        Tibetic
        Burmic
            Kuki-Naga
            Burmese-Lolo
XVII. Uralic-Yukaghir (1>2)
    Yukaghir:
    Uralic:
XVIII. Yeniseyan (1):
XIX. Pidgins and Creoles (2):
    Pacific
    Indian Ocean
XX. Isolates:
```

| Sumerian (1): |  | Sumerian |
| :--- | :--- | :--- |
| Nahali (1): | Nahali |  |
| Burushaski (1): Burushaski | Basque |  |
| Basque (1): | Nivkh |  |
| Nivkh (1): |  |  |
| Hurrian $(1>0)$ |  |  |
| Meroitic $(1>0)$ |  |  |
| Etruscan $(1>0)$ |  |  |

2. The data. The following pages contain the data of the 100-language sample. The following abbreviations are used:

| Q | interrogative-based indefinite | N | north |
| :--- | :--- | :--- | :--- |
| G | generic-noun-based indefinite | S | south |
| sf | suffixed indefiniteness marker | W | west |
| pf | prefixed indefiniteness marker | E | east |
| rd | reduplication | PNG | Papua New Guinea |
|  |  |  |  |
| 'sth' | 'something' |  |  |
| 'sb' | 'somebody' |  |  |

The bibliographical references to the reference works consulted for the 100 language sample are not integrated into the main bibliography and follow immediately after the data.

1. Abkhaz
2. Ainu
3. Akkadian
4. Amele
5. Amharic
6. Atayal
7. Bambara
8. Bashkir
9. Basque
10. Bobo
11. Bugis
12. Burmese
13. Burushaski
14. Cayuga
15. Chinese
16. Djaru
17. Dogon
18. Dongolawi
19. Dyirbal
20. Ancient Egyptian
21. Ewe
22. Fula
23. Gbeya
24. Goajiro
25. Gooniyandi
26. W. Greenlandic
27. Guarani
28. Haruai
29. Hausa
30. Hittite
31. Hmong Njua
32. Hua
33. Huastec
34. Iatê
35. Ibibio
36. Babungo
37. Indonesian
38. Ingrian
39. Jaqaru
40. Kabyle
41. Kaingang
42. Kalkatungu
43. Kanuri
44. Ket
45. Khmer
46. Kilivila
47. Koasati
48. Kobon
49. Koromfe
50. Koryak
indefinite example
type
$\mathrm{N} a-\boldsymbol{J}^{\circ}$ "someone', $a-\boldsymbol{k}^{\prime \prime \prime}$ something'

$$
\begin{array}{lll}
\mathrm{Q}-\mathrm{sf}, \mathrm{Q} / \mathrm{rd} & \text { nen 'who' } & \text { nen-ka 'sb' } \\
\text { Q-sf } & \text { minû 'what' } & \text { min-ma 'sth' }
\end{array}
$$

G
Q-sf
Q
G
Q-sf, pf-Q
Q-sf, pf-Q
G
Q-sf, Q/rd
N,
$\begin{array}{ll}, \mathrm{Q} \text {-sf } & \text { badhu 'who' } \\ \mathrm{Q} & \text { men 'who; } \mathrm{sb}^{\prime}, \text { bo 'what; sth }\end{array}$
Q-sf so: 'who' so-kwa 'sb'
Q, Q-sf


G
G

## Q

G
G
G
G
$m \mathbf{O}^{\prime}$ thing; sth'
Q, Q-sf
Q-sf
G, Q
G
G, pf-Q
Q-sf
Q
G
Q, Q-sf
Q-sf
G
G
G Q-sf
Q-sf
Q-sf
G
Q
N minaNara'sth'
$\mathrm{G}, \mathrm{Q}-\mathrm{sf}$ avi ' $w$ what' avi-yaye 'anything'
pf-Q aпæ 'who' tam апæ 'sb'
$\mathrm{Q} \quad q w{ }^{\prime}$ 'what; sth'
$\mathrm{G}, \mathrm{pf}-\mathrm{Q} \quad$ te-tala ('man-one') 'sb'
Q ná:si 'what; sth'
G blap ('a man') 'sb'
G afo 'person; sb'
Q-sf meki 'who' meki-N'n 'b'

|  | S, O, V | N, G | Pr/Po | location | source |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | SOV | GN | Po | NW Georgia | Hewitt 1979:158 |
| 2. | SOV | GN | Po | Hokkaido (Japan) | Refsing 1986:103-109 |
| 3. | SOV | NG | Pr | Mesopotamia | Ryckmans 1960:35 |
| 4. | SOV | GN | Po | New Guinea | Roberts 1987:209 |
| 5. | SOV | GN | $\mathrm{Pr} / \mathrm{Po}$ | NC Ethiopia | Cohen 1936:125-26 |
| 6. | VSO | NG | Pr | N Taiwan | Egerod 1980 |
| 7. | SOV | GN | $\mathrm{Po} / \mathrm{Pr}$ | SW Mali | Bailleul 1981 |
| 8. | SOV | GN | Po | SW Urals (C Russia) | Juldaš ev 1966:182 |
| 9. | SOV | GN | Po | NE Spain, SW France | Saltarelli 1988 |
| 10. | SOV | GN | Po | W Burkina Faso | Le Bris and Prost 1981:42 |
| 11. | VSO | NG | Pr | SW Sulawesi (Indonesia) | Sirk 1979 |
| 12. | SOV | GN | Po | SWC Burma | Richter 1983 |
| 13. | SOV | GN | Po | N Jammu and Kashmir (India) | Berger 1974:26 |
| 14. | ? | ? | ? | New York State, S Ontario | Hans-Jürgen Sasse, p.c. |
| 15. | SVO | GN | Pr | China | Li and Th. 1981, Li 1992 |
| 16. | SVO/S | OV ? | ? | NE Western Australia | Tsunoda 1981 |
| 17. | SOV | GN | Po | SC Mali | Vladimir Plungian, p.c. |
| 18. | SOV | GN | Po | N Sudan | Armbruster 1960:176-77 |
| 19. | OSV | NG | - | NW Queensland (Australia) | Dixon 1972:265 |
| 20. | VSO | NG | Pr | Egypt | Gardiner 1957:79-80 |
| 21. | SVO | GN | $\mathrm{Po} / \mathrm{Pr}$ | S Benin, S Togo, SE Ghana | Westermann 1907:62 |
| 22. | SVO | NG | Pr | W Africa | Jungraithmayr \& A. '89:119 |
| 23. | SVO | NG | Pr | W C. Afr. Republic, NW Zaire | Samarin 1966 |
| 24. | VO | ? | Pr | NE Venezuela, N Colombia | Olza Zubiri and J. 1986:92 |
| 25. | SOV(?) | NG | Po | N Western Australia | McGregor 1990 |
| 26. | SOV | GN | Po | W Greenland | Fortescue 1984:254-56 |
| 27. | SVO | ? | Po | E Paraguay | Ortiz Mayans 1980 |
| 28. | SOV | GN | Po | NE Papua New Guinea, Madang Prov. | Bernard Comrie, p.c. |
| 29. | SVO | NG | Pr | NW Nigeria, S Niger | Kraft \& Kirk-Greene 1973 |
| 30. | SOV | GN | Po | ancient Anatolia | Friedrich 1940 |
| 31. | SVO | ? | Pr | S China, N Vietnam, Laos | Harriehausen 1990:132 |
| 32. | SOV | GN | Po | Eastern Highlands (PNG) | Haiman 1991 |
| 33. | VSO | GN(?) | Pr | E San Luis Potosí, N Veracruz (Mex.) | McQuown 1984 |
| 34. | OV | ? | Pr | Pernambuco (Brazil) | Lapenda 1968 |
| 35. | SVO | NG | Pr | SE Nigeria | Kaufman 1972 |
| 36. | SVO | NG | Pr | NW Cameroon | Schaub 1985:197 |
| 37. | SVO | NG | Pr | Indonesia | Kähler 1965 |
| 38. | SVO | ? | $\mathrm{Po} / \mathrm{Pr}$ | St. Petersburg region (W Russia) | Laanest 1966:109 |
| 39. | SOV? | GN | Po | SC Peru | Hardman 1983:133 |
| 40. | VSO | NG | Pr | N Algeria | Dallet 1985 |
| 41. | SOV? | ? | ? | S Brazil (Paraná, Sta Catarina, R.G. do S | ul) Wiesemann 1972 |
| 42. | SOV | GN | ? | W Queensland (Australia) | Blake 1979:105 |
| 43. | SOV | NG | Pr | NE Nigeria | Lukas 1937 |
| 44. | SOV | GN | Po | Yenisey river (Siberia) | Krejnovič 1968b:462 |
| 45. | SVO | NG | Pr | Cambodia | Huffman 1967:153-56 |
| 46. | SVO | GN/N | NG Pr | Trobriand Islands (SE PNG) | Senft 1986:67 |
| 47. | SOV | GN | Po | SW Louisiana (USA) | Kimball 1991:423-428 |
| 48. | SOV | GN | Po | C PNG (W Highlands \& Madang Pr.) | Davies 1981:156 |
| 49. | SVO | GN | Po/Pr | SC Burkina Faso | Rennison 1986 |
| 50. | SVO | ? | Po | Kamchatka peninsula (Russian Far E) | Ž ukova 1968:273 |


|  |  | indefinite <br> type | example |
| :---: | :---: | :---: | :---: |
|  | Kwamera | G | nari riti ('thing one') 'sth' |
|  | Lak | Q-sf | cu 'who' cu-unugu 'anyone' |
| 53. | Lakhota | Q, Q-sf | tuwe 'who; sb' tuwe-hci 'anyone' |
|  | Lango | G | Nat 'person; sb' |
|  | Logbara | G | àfa 'thing; sth' |
| 56. | Malagasy | G pf-Q/red | olona 'person; sb' iza 'who', na iza na iza 'anyone' |
|  | Mangarayi | Q | Ninja 'who; anybody' |
|  | Manipuri | Q-sf | $k$ 'dayd'shere' $\quad k$ 'dayd'-no 'somewhere' |
|  | Mapuche | Q, Q-sf | chem 'what; sth' chem-rume 'anything' |
|  | Margi | G pf-Q(-sf) | mdù 'person; sb' mi 'what', kó mì-yé) 'anything' |
|  | Maricopa | Q | mki 'who; sb' kawish 'what; sth' |
| 62. | Masalit | Q | Ngaw 'who; sb' |
| 63. | Mixtec | N, G | ñiylvl'people; sb', sa 'sth' |
| 64. | Khalkha Mongolia | neg xün ('o | person') 'sb' |
| 65. | Nahali | Q-sf | $n \bar{a} n i$ 'who' $n \bar{a} n i-k \bar{a}$ 'anyone' |
| 66. | Classical Nahuatl | Q-sf | $\bar{a} c^{\prime}$ who' $\quad a c-a h$ 'sb' |
| 67. | Newari | Q | su 'who; anyone' |
| 68. | Nivkh | Q-sf | $\boldsymbol{a N}$ 'who' ${ }^{\text {c }}$ - $\boldsymbol{N}$-lu, aN-laq 'sb' |
| 69. | Ntomba | G | moto $\mathbf{0} \mathrm{mO}$ ('person one') 'sb' |
| 70. | Harar Oromo | G | namá 'person; sb' |
| 71. | Paez | Q-sf | kim 'who' kim-pa 'sb' |
| 72. | Paiwan | G, Q-sf | tsautsau 'person;sb', a-nema 'what', nema-nga 'thing; sth' |
| 73. | Palauan | G | chad 'person; sb' |
| 74. | Panare | Q | ? |
| 75. | Pashto | Q | cok 'who; sb' |
| 76. | Eastern Pomo | Q | $c^{c} h_{i}{ }^{\prime}$ how; somehow' |
| 77. | Romantsch | pf-Q | tgi 'who' insa-tgi'somebody' |
| 78. | Samoan | G | se tangata 'sb' ('any man'); se mea 'sth' ('any thing') |
| 79. | Santali | Q | ? |
| 80. | Seychelles Creole | G | keksoz 'thing; sth' |
| 81. | Slave | G | t'asii 'thing; sth', léé 'sb' (lée 'one') |
|  | Songhai | G | boro 'person; sb' |
| 83. | Upper Sorbian | pf-Q, Q-sf | š to 'what', ně -š to 'sth', š to-ž kuli 'anything' |
| 84. | Sumerian | Q-sf | ana 'what' na.me 'anything' (<ana-me) |
| 85. | Sumu | G | di (as) 'sth' (thing (one)) |
| 86. | Tagalog | Q-sf | sino 'what' sinu-man 'anything' (§2.3.2) |
| 87. | Takelma | Q | nek ${ }^{\text {c ' }}$ who, sb' |
| 88. | Takia | G | tamol 'man; sb'; mel 'thing; sth' |
|  | Telugu | Q-sf | evaru 'who' evar-oo 'sb' |
| 90. | Thai | Q | khray 'who; anyone' |
| 91. | Tok Pisin | G | wanpela man ('one person') 'sb' |
| 92. | Warndarang | Q, pf-Q | -ngaNa 'what; sth'; ra-ngaNa 'sth' |
| 93. | Welsh | G | peth 'thing', rhyw-beth 'sth' |
| 94. | Yagua | Q | táá(ra) 'what?', tara 'sth'; chiú(ra) 'who', tiì 'sb' |
| 95. | Yapese | N, G | beaq 'sb'; ba-nean 'sth' (ba 'a', nean 'thing') |
| 96. | Yoruba | G | ohun 'thing; sth' |
| 97. | Yukaghir | pf-Q | kin 'who' me-kin 'sb' |
| 98. | Yuwaalaraay | Q-sf | Na:n- 'who' Na:n-du-wa: (ERG) 'somebody' |
|  | Xinh Mul | Q | nôh 'who; sb' |
|  | Xhosa | G | umntu 'man; sb', into 'thing; sth' |


|  | S, O, V | N, G | $\operatorname{Pr} /$ Po | location | source |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 51. |  |  |  |  |  |
| 5VO | NG | $\operatorname{Pr}$ | Tanna Island (S Vanuatu) | Lindstrom 1986:183 |  |
| 53. | SOV | GN | $\operatorname{Po}$ | SC Daghestan (S Russia) | Murkelinskij 1967:498 |
| 54. | GVO | NG | $\operatorname{Pr}$ | N and S Dakota (USA) | N Uganda |

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[^0]:    'Unter den mannigfaltigen Wegen, welche das vergleichende Sprachstudium einzuschlagen hat, um die Aufgabe zu lösen, wie sich die allgemeine menschliche Sprache in den besonderen Sprachen der verschiedenen Nationen offenbart? ist einer der am richtigsten zum Ziele führenden unstreitig der, die Betrachtung eines einzelnen Sprachtheils durch alle bekannten Sprachen des Erdbodens hindurch zu verfolgen. ${ }^{\text {i }}$

[^1]:    ${ }^{i}$ 'Among the manifold ways that comparative linguistics must pursue towards a solution of the question of how the general human language is manifested in the particular languages of the different nations, indisputably one of the most successful ones is examining a single part of language throughout all the known languages of the earth.'

[^2]:    ${ }^{\text {i }}$ If one wants to use pronoun only in its etymological sense ('noun-substitute'), as suggested e.g. by Jespersen (1924: 83), one has to come up with a new cover term comprising pro-nouns, pro-adverbs, pro-adjectives, etc. The term pro-form is sometimes used in this sense, e.g. by Vater (1975). I go along with the tradition in ignoring the etymology of pronoun and regarding it as a term with no internal structure, so that combined terms like pronominal adverb, pronominal verb, etc., are not contradictory.
    ${ }^{\text {ii }}$ I call such words mid-scalar quantifiers because they can be arranged on a scale from maximal to minimal quantity (all - most - many - several - few - none, cf. Horn (1972: 61)), where they occupy the middle.
    iii Descriptively and/or diachronically oriented studies had appeared sporadically earlier, e.g. Gessner (1895) (Spanish), Einenkel (1903) (English), Etzrodt (1909), Ohlhoff (1912), Foulet (1919) (French).
    ${ }^{\text {iv }}$ Note also that a typological approach that seeks to discover universal properties (like this book) is really interested in the notion of a POSSIBLE HUMAN LANGUAGE (in contrast to what Nichols (1992) calls 'population typology', which deals with existing languages), and we have no way of being sure that the existing diversity at the end of the second millennium CE is represenatative of the possible diversity. Inevitably, thus, our 'representative samples' are only gross approximations.

[^3]:    ${ }^{x}$ Examples of such grammars are Dixon (1988) (Boumaa Fijian) and Foley (1991) (Yimas). Some grammars also explicitly deny the existence of indefinite pronouns, e.g. Berchem (1991: 79-84) (Somali), Noonan (1992: 242) (Lango).
    ${ }^{\text {xi }}$ For example, Berchem (1991: 79-84) explicitly and emphatically denies the existence of indefinite pronouns in Somali (cf. the generic nouns in (118c)). However, he also says that only a limited number of generic nouns may take the negative suffix -na and function as negative pronouns, as in Nin-na ma iman (person-NEG NEG came) 'Nobody came.' This limitation to a few nouns is evidence that a closed class of negative pronouns has developed.

[^4]:    ${ }^{i}$ Note that I follow the convention (used in Comrie (1976), Bybee et al. (1994), and others) of capitalizing language-particular grammatical categories.
    ${ }^{\text {ii }}$ See the works by modern Gesamtbedeutung semanticists like William Diver, Erica García, Robert Kirsner, Yishai Tobin, and others. None of them has anything to say on cross-linguistic variation. (An interesting exception to this generalization is David Gil's work (e.g. 1993), general meanings are investigated cross-linguitically.)
    iii Implicational maps are different from implicational hierarchies in that hierarchies make predictions for all cases that are higher than an element on the hierarchy, whereas maps make predictions only about adjacency. Thus, implicational maps represent weaker generalizations than implicational hierarchies.
    ${ }^{\text {iv }}$ Hoeksema (1983) shows that clausal comparatives, but not nominal comparatives, are semantically 'anti-additive' (in Boolean terms), like indirect-negation contexts, so this distribution is expected.

[^5]:    a. Doroga konč itsja gde-to.

[^6]:    ${ }^{i}$ E.g. Amharic and Masalit have interrogative-based indefinites in Africa; Mongolian and Welsh have generic nouns in Eurasia. But at least the case of Welsh probably represents a subregularity: In those parts of Eurasia that are closest to Africa, i.e. southwestern Europe, generic nouns are fairly widespread. This observation is intriguing, because it implies the question whether this connection can be attributed to influence from African languages (perhaps an Afro-Asiatic substratum of Celtic?).

[^7]:    ${ }^{\text {i }}$ But note that expressions such as aon duine acu 'anyone of them' (A.149a) are possible, which suggests that the phrase aon duine does have pronominal status. Partitive phrases are generally not possible with true nouns (*‘a person of them').
    ${ }^{\text {ii }}$ The situation in indirect-negation contexts seems to be complicated, with different negators behaving differently, see the discussion in Glinert (1982: § 6).
    iii Thus, Li 1992:127 stars sentence (i):
    (i) *Tā xǐ huan shénme.
    he like what
    'He likes something.'
    ${ }^{\text {iv }}$ Notice also that $y \bar{e}$ and $d \bar{o} u$ can occur only once per sentence. Thus, the second negative indefinite in (i) must be a bare interrogative.

