Code-switching among Qaqet-speaking adults in Kamanakam, East New Britain Province, Papua New Guinea

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Abstract

This thesis provides a description of the code-switching practices of adult bilingual speakers of Qaqet and Tok Pisin in Kamanakam, East New Britain Province, Papua New Guinea. In this study, code-switching is approached from a sociolinguistic and conversation analytic perspective. It takes the distinction of situational and conversational code-switching as an overarching approach. The categories are an integral part of the major code-switching typologies of the last 50 years and have therefore proven to be very robust.

The data collection process focused on two focal families and their social network, ranging from uncontrolled to controlled methods. They include participant observation, sociodemographic and sociolinguistic surveys, sociolinguistic interviews, wiring method, naturalistic audiovisual recordings, and staged audiovisual recordings.

This study shows that Qaqet/Tok Pisin code-switching is dominantly observed in non-public settings, whereas in public settings, Tok Pisin is the dominant language. The major factor for situational code-switching is the language competence of the interlocutor, established between speaker and interlocutor in previous interactions through habitual language use. In addition, a number of conversational strategies are identified in monolingual and code-switched discourse. It is argued that code-switching serves here as a further cue to other already present cues (e.g., prosodic ones).

For Qaqet/Tok Pisin speakers in Kamanakam, code-switching is an important means to facilitate daily communication in a multilingual environment, where people have different competencies of Qaqet. In addition, they use code-switching as a further tool to structure their discourse.

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Abbreviations and conventions

The interlinearization follows the Leipzig Glossing Rules. The following abbreviations are used:

1	first person
2	second person
3	third person
ART	article
ART.ID	article (inherently identifiable referents)
ASSOC	associative
AWAY	away from deictic center (directional)
BACK	back to deictic center (directional)
BEN	benefactive
COMPL	complementizer
COMPLETIVE	completive
CONJ	conjunction
CONT	continuous (aspect)
DEM	demonstrative
DEONT	deontic
DIM	diminutive
DIR	directional
DIST	distal
DU	dual
EMPH	emphatic
EXCL	exclusive
F	feminine
FUT	future
H	human
HAB	habitual
INCL	inclusive
INTJ	interjection
INTRG	interrogative
LOC.PART	locative (location at part of a whole)
M	masculine
N	neuter
NAME	proper name
NC	noun class
NCONT	non-continuous (aspect)
NEG	negation
NM	noun marker

NPST	non-past
NSPEC	non-specific
OBJ	object
PL	plural
PLACE	locative (location at a place)
POSS	possessive
PRED	predicate marker
PREP	preposition
PROX	proximal
PST	past
PTCL	particle
PURP	purposive
RCD	reduced (noun class)
REDUP	reduplication
SBJ	subject (tr/intr)
SG	singular
SIM	simultaneous conjunction
TR	transitive marker
??	unknown element

The following notation and transcription conventions are used in the representation of example sentences:

..	hesitation pause
[…]	omission of material
xxx	unidentifiable utterance

The source of presented examples is added in brackets after the free translation and may look like this: (CodeFSS_KJS20160901_1; IU 386–388). Here, 'Code' stands for the data type/name of the corpus: naturalistic code-switching recordings; 'FSS_KJS' stands for the speaker ID of the recorders: FSS and KJS; '20160901' stands for the recording date: 1 September 2016; '_1' stands for the session part of the recording; and 'IU 396–388' refers to the intonation unit number in the recording of which the example was extracted.

Chapter 1

Introduction

This study provides an analysis of the code-switching behavior of adult Qaqet/Tok Pisin bilinguals living in Kamanakam ward, East New Britain Province, Papua New Guinea (PNG). In this study, code-switching is mainly approached from a sociolinguistic and conversation analytical perspective. The intention is to shed light on what Fishman (1965: 67) has summarized as "*who* speaks *what* language to *whom* and *when*".

Qaqet (lit. 'people') is the self-designation the Qaqet people use to refer to themselves and their language. Qaqet is spoken by an estimated 10,000 people in the Gazelle Peninsula in East New Britain Province, PNG (Hellwig 2018: 1). Typologically, it is a non-Austronesian Baining language, related to five other Baining languages including Mali, Qairaq, Simbali, Ura and possibly Makolkol (2018: 1).

Tok Pisin can be considered a pidgin language that is on its way to become a creole language as more and more Papua New Guinean children learn it as their first language (Smith 2008: 192). In PNG, Tok Pisin has become the most widely recognized lingua franca. In 2004, Ethnologue (2021) estimated 120,000 L1 and 4 million L2 speakers from a total population that the national population and housing census of PNG (2013) has estimated to be 5,190,786 in the year 2000 and 7,275,324 in the year 2011. As has been described for other local languages in PNG (e.g., Berghäll 2015: 1; Gerstner-Link 2018: 7), Tok Pisin has come to be frequently used among the Qaqet people who live in more accessible areas of the Gazelle Peninsula.

In the course of collecting data for this study, I spent a total of about 10 months in Kamanakam over three field trips:

- 20 June – 20 August 2015

- 10 August – 7 November 2016 / 27 November 2016 – 3 March 2017

- 1 August – 28 September 2018

The trips included regular visits to Kokopo town and adjacent areas of Kamanakam, such as Ragaga ward, as well as a visit to the more remote Raunsepna ward.

This study is part of the project "Documenting child language: The Qaqet Baining of Papua New Guinea" (Volkswagenstiftung, April 2014 – March 2019) led by Prof. Dr. Birgit Hellwig. The aim of this project was to create a longitudinal and cross-sectional corpus in order to document and to compare child language among the Qaqet-Baining in two acquisition scenarios: in the more remote Raunsepna where children still acquire Qaqet as their first language and in the more accessible Kamanakam where Qaqet has come to be acquired together with Tok Pisin.

For the Kamanakam setting, my colleague Carmen Dawuda, PhD, was looking for an area in Kamanakam that is predominately inhabited by Qaqet-speaking people. Within this area, she was in search of two Qaqet speaking focal families, who would have a child in the age range of about 2 years, and who would like to participate in our project. In the town of Kerevat, about 35 kilometers east of Kamanakam, she was invited by a member of what would later become our host family. The family resided in the hamlet Ngamarana.

For the longitudinal study, the children were to be recorded 1 hour per week for approximately 2 years. At the same time, the study was being mirrored with three other families in Raunsepna. Among the potential candidates for the Kamanakam-based study was one family (focal family A) living in the hamlet Saqalames and another family (focal family B) in the hamlet Lanivaqa. They live in a Qaqet-speaking social network and are – with exception of one Tolai-speaking parent – speakers of Qaqet, while at the same time also fluent in Tok Pisin. The parents work as subsistence farmers just like the majority of the Qaqet inhabitants of Kamanakam. When they agreed to participate in the longitudinal study, the adults of each family were also asked about the possibility of participating in a cross-sectional study on their own language use. Fortunately, they also declared their consent for the latter.

Over the course of my three field trips, different types of data were collected for the parents themselves and their adult social network. Chapter 2 from p. 15 presents in detail the data types that were ultimately used from the three field trips. As naturalistic audiovisual recordings form a central basis for the analysis, this chapter provides a detailed description of how these data were processed, i.e. transcribed, segmented and annotated.

In Chapter 3 from p. 63, the study presents an overview of the sociolinguistic situation of Kamanakam. The profile is centered around the four focal hamlets Saqalames, Lanivaqa, Altiaqa and Ngamarana. Further, it will be shown how the focal families fit into the sociolinguistic profile of these four focal hamlets.

From a structural point of view, this study relies on the intonation unit as the basic unit of analysis. Based on this notion, two (switching) scenarios have been identified: inter-intonation unit code-switching and what will be called mixed intonation units. For the latter, Chapter 4 from p. 89 presents an analysis of whether other-language inserted material should be treated as instances of intra-intonation unit code-switching or borrowing.

As for instances of inter-intonation unit code-switching, they are analyzed within Gumperz's framework of situational code-switching and conversational code-switching. For the former, Chapter 5 from p. 117 provides an analysis of code-switching with respect to the factors setting, participant and topic. For the latter, Chapter 6 from p. 175 identifies and describes a set of conversational strategies, which can be observed in the presence of code-switched as well as in monolingual language use. Chapter 7 from p. 273 concludes this study with a summary and discussion as well as suggestions for future research.

In the following sections, this chapter provides a brief overview of code-switching approaches and previous research relevant to this study. Section 1.1 presents in more detail the major code-switching approaches developed in sociolinguistics and conversation analysis (see Section 1.1.1 from p. 3) as well as studies in social psychology (see Section 1.1.2 on p. 7) and contact linguistics (see Section 1.1.3 on p. 8). The overview is concluded with a summary of how the above frameworks have informed the approach used in this study (see Section 1.1.4 from p. 8).

Section 1.2 presents an overview of the former research on the Qaqet people and language (see Section 1.2.1 from p. 11), the Tok Pisin language (see Section 1.2.2 from p. 12) as well as earlier studies of code-switching in PNG (see Section 1.2.3 on p. 13).

1.1 The study of code-switching

Crystal (2003: 17) estimates that about "two-thirds of the children on earth grow up in a bilingual environment, and develop competence in it". It could therefore be argued that the majority of the world's citizens, who are bilingual or multilingual, find themselves in a situation where using more than one language is part of their daily life. As a consequence, the use of two or more languages may lead a bi- or multilingual person to switch between these languages at certain points. It is this phenomenon which has come to be known as *code-switching* in the scientific literature. For a broad definition of the term, I refer to Schieffelin (1994: 20) who defines code-switching as:

> "the use of two different languages and/or dialects (codes) by the same speaker within the same speech situation or conversation".

According to Gardner-Chloros (2009a: 9f.), many of the code-switching studies have been carried out around the following approaches:

- Sociolinguistic/ethnographic descriptions of code-switching situations

- Pragmatic/conversation analytic approaches

- Grammatical analyses of samples of code-switching and the search for underlying rules, models and explanations to explain the patterns found

Bailey (2000: 166) notes that the first two "are not always differentiated so clearly" from each other. However, they form the basis for a number of the major frameworks that have been developed for the study of code-switching. These frameworks have either informed, or been employed in, this study and are discussed below under one heading. Other disciplines that have developed approaches to the study of code-switching include psycholinguistics, language acquisition research, social psychology and contact linguistics. Certain approaches in social psychology and contact linguistics are among the disciplines relevant to this study, which is why they are briefly discussed as well.

1.1.1 Approaches in sociolinguistics and conversation analysis

This section presents some of the most prominent sociolinguistic/ethnographic and conversation analytic/pragmatic approaches relevant to the study of code-switching. They include the semantic approach of Blom and Gumperz (1972) and Gumperz (1982) as well as Auer's (1984a) conversational analytic approach, Zentella's (1981) integrated approach and Myers-Scotton's (1995) markedness model. Bailey (2000: 172) recognizes how the functional categories of these major code-switching typologies largely overlap with the three functional categories (*situational, metaphorical* and *conversational*) that Gumperz and his associates originally introduced:

> "Despite differences in theoretical orientation and the labels given to categories of switches, prominent analysts' code switching functions/categories overlap significantly with the three of Gumperz."

Table 1.1 reproduces a table originally prepared by Bailey (2000: 173). The latter compares the functional categories of the above presented models in relation to the three categories of Gumperz. The table includes the original model of Blom and Gumperz (1972), a refined version of the original model presented by Gumperz (1982) as well as the approaches of Auer (1984a), Myers-Scotton (1995) and Zentella (1997).

Table 1.1: Overlapping typologies of code-switching, following Bailey (2000: 173)

	Functional category		
	Situational	Metaphorical	Unmarked discourse contextualization
Blom and Gumperz (1972)	'situational'	'metaphorical'	Ø
Gumperz (1982)	'diaglossia, situational'	'conversational'	'conversational'
Auer (1984a)	'participant related'	Ø	'discourse related'
Myers-Scotton (1995)	'sequential unmarked choices'	'code-switching as a marked choice'	'code-switching as the unmarked choice'
Zentella (1997)	'on the spot observables'	Ø	'in the head communicational factors'

Table 1.1 shows that, although each model draws from different disciplines, all approaches integrate Gumperz's (1982) distinction of situational and conversational code-switching into their models. This could be interpreted in the sense that Gumperz's categories have proven to be very robust. Or to put it differently: despite new insights into the study of code-switching that have led to the recognition of other types of code-switches than the two formulated by Gumperz, the latter are still an integral part of the major models concerned with the investigation of the speaker's motivations for code-switching.

Semantic approach

In sociolinguistics, Blom and Gumperz (1972) have had a great impact on the study of code-switching. They introduced a distinction of two different types of code-switching, that is, situational and metaphorical code-switching. Situational code-switching has come to be associated with speaker-external factors, such as, setting, topic and participants (Myers-Scotton 1995: 52). Metaphorical code-switching on the other hand, mostly congruent with Gumperz' (1982) later coined term conversational code-switching (Myers-Scotton 1995: 53), is not dependent on these external factors (McCormick 2001: 449). According to Bailey (2000: 171), metaphorical code-switching, in contrast to conversational code-switching, is based on a diglossic notion of 'we' vs. 'they' codes. This type of code-switching can only be observed in situations where codes are compartmentalized or politically charged (2000: 171). However, metaphorical code-switching "fails to explicitly define the link(s) between code choice and social meaning" (2000: 171). Gumperz' conversational code-switching accounts for both metaphorical and/or discourse management functions (2000: 171). Gumperz (1982: 75-84) identifies a number of discourse management (or conversational) functions of code-switching, such as quotation, addressee specification, interjection, reiteration, message qualification, personalization vs objectivization. Since then, a lot of studies have identified similar conversational functions of code-switching in various cultural settings (e.g., Huerta 1978; McClure 1981: 106-111; Tay 1989: 411f.; Kulick and Stroud 1990: 214-18).

Conversation analytic approach

According to Liddicoat (2007: 4), the conversation analytic approach was developed in the early 1960s by Harvey Sacks in his lectures on conversation (see Sacks and Jefferson 2006). In the course of the work of Harvey Sacks and his colleagues Emanuel Schegloff and Gail Jefferson, conversation analysis emerged from sociology as an independent field in the late 1960s and early 1970s (Liddicoat 2007: 4). It was influenced by the work of Harold Garfinkel on ethnomethodology and Erving Goffman (1981, etc.) who further developed its ideas by putting emphasis on studying actual instances of social interaction (Liddicoat 2007: 2ff.). Conversational analysis was concerned with monolingual language use, predominantly of English. Early attempts to bring conversation analysis to bilingual data was made in the early 1980s by Valdés and Pino (1981) who compared conversational interaction of bilingual Mexican-American speakers with that of monolingual English-speaking Americans and monolingual Spanish-speaking Latin Americans (Cashman 2001: 121f.). From the 1980s, Peter Auer (1984a, 1988, 1995) explicitly introduced conversation analysis to the study of code-switching. Auer used the conversation analytic approach to further develop Gumperz's interactional perspective on code-switching (Cashman 2001: 125). In his approach, Auer distinguishes between participant-related and discourse-related code-switching. The former contextualizes some features of the code-switching speaker, in that it "covers instances of diverging language preferences and competences" (Auer 1999: 310). The latter indexes some aspects of the situation, in that it "represents a metapragmatic comment on the ongoing interaction which marks it as bilingual" (1999: 310). In one of his early papers, Auer (1984b) breaks down his critique of Gumperz's approach to three points. Firstly, he critiques Gumperz' distinction of situational and metaphorical (conversational) code-switching. In doing so, he does not reject the two types of code-switching per se, but rather sees the distinction between the two as a continuum (1984b: 91). He notes:

> "at the 'situational code-switching' end, the relationship between language choice and situational features is less rigid, more open to re-negotiation, than a one-to-one relationship, at the 'metaphorical code-switching' end, things are less individualistic, less independent of the situation."

Auer (1984b: 95) further explains that all types of conversational code-switching (help to) produce changes in the definition of the situation. Secondly, he (1984b: 91f.) argues that Gumperz's model is monodirectional in the sense that:

> "meaning is generated by situational code-switching, becomes associated with the two codes, and is then used in those case [sic] of language alternation that cannot be interpreted situationally".

What Auer instead proposes in his model is bidirectionality which means "[t]he languages of a bilingual community acquire, maintain, or change their meanings in and by usage" (Auer 1984b: 92). Thirdly, Auer (1984b: 93ff.) critiques Gumperz use of participants' reports in order to make inferences about the meaning of particular switches. Here, Auer (1984b: 95) proposes that the interpretation of particular switches should be mainly left to the researcher. He explains his view with the fact that interview data from participants giving metacomments on particular switches may largely be "uncontrolled and uncontrollable" (Auer 1984b: 95).

Integrated approach

Zentella (1981, 1990, 1997) combines ethnographic and quantitative methods in her study of Hispanic children's Spanish/English code-switching living in the South Bronx of New York

(1981: 40). In this community, she describes code-switching to be dependent on three factors which she calls 'on the spot', 'in the head' and 'out of the mouth'. The first factor is determined by "changing configurations" of the setting and the participants (1981: 148). The second factor refers to "factors which come into play when the speaker, attuned to the total social context, makes language choices that are meant to achieve his/her communicative intentions" (1981: 205). For this factor, Zentella observes 24 conversational strategies which can be subsumed under the three major categories 'crutching', 'footing' and 'control and appeal' (1981: 227). Crutching refers to code-switching which is triggered by lexical need (1981: 227f.). The concept of footing Zentella borrows from Goffman (1979: 5) according to whom:

> "[a] change in footing implies a change in the alignment we take up to ourselves and the others present as expressed in the way we manage the production or reception of an utterance."

In the context of code-switching, Zentella uses the term footing to refer to "strategies that involve a change in the speaker's role", for example, when shifting from narrator to evaluator or when checking for approval or attention (Zentella 1981: 230). Control and appeal also involves footing but "in a more purposeful manner" (1981: 235). Here, code-switching is used for manipulative strategies that are "meant to convince or control the interlocutor" (1981: 236).

The third factor refers to linguistic factors that can be observed to play a role in the children's code-switching (1981: 263). They include (1981: 264):

- The language of the preceding utterance

- The language of the code-switch

- The speaker's knowledge of the switched word(s)/construction(s)

- The syntactic constituent(s) of the code-switch and of the segments immediately preceding and following it

- Dialect features

- Interference phenomena

- Ungrammatical switches

- Editing phenomena, i.e., presence/absence of pause, stutters, fillers, hesitations

Departing from the other approaches discussed here, Zentella makes quantitative methods an integral part in her analysis of code-switching. She presents quantitative methods as a useful tool which "support but do not supplant the qualitative methods" (1981: 10). Essentially, Zentella makes use of descriptive statistics in that she presents absolute and relative frequencies for each type of switch that falls under the three factors of code-switching mentioned above. For example, in the quantification of intra-turn code-switching she (1981: 164) notes that:

> "[a] quantitative look at the intra-turn code switching patterns of some of these children provides a fuller picture of each speaker and his/her responses to other participants and to the various settings on the block".

Markedness model

The latest comprehensive model for describing speakers' motivations for code-switching is Myers-Scotton's (1995) Markedness Model. In her model, Myers-Scotton (1995) identifies four types of code-switching: (1) Code-switching as a sequence of unmarked choices; (2) Code-switching itself as the unmarked choice; (3) Code-switching as a marked choice and (4) Code-switching as an exploratory choice. The four types of code-switching rest on a general principle and a set of maxims following from it which should apply to any type of code choice (1995: 113). They include:

- The negotiation principle
    - Code-switching as an unmarked choice
        * Code-switching as a deferential strategy
        * The virtuosity maxim and code-switching
    - Code-switching as a marked choice
    - Code-switching as an exploratory choice

The negotiation principle is modeled after Grice's (1989) 'co-operative principle' as the one principle that underlies all code choices (1995: 113). Myers-Scotton (1995: 113) defines the negotiation principle as follows:

> "Choose the *form* of your conversation contribution such that it indexes the set of rights and obligations which you wish to be in force between speaker and addressee for the current exchange."

The markedness model, similar to the communication accommodation theory (see Section 1.1.2 on p. 7) , considers "motivations and their realization in CS practices as a form of accommodation/divergence" (Myers-Scotton 1995: 101). Therefore, the markedness model takes at its core a socio-psychological point of view on code-switching (1995: 6). What distinguishes the two approaches, however, is that according to communication accommodation theory the speaker is primarily concerned with converging (accommodating) and diverging from the listener, whereas speakers make choices because of their own goals according to the markedness model (Myers-Scotton 2006: 158).

Code-switching which is directed by the unmarked-choice maxim results in either 'code-switching as a sequence of unmarked choices' or 'code-switching itself as the unmarked choice'. The former is triggered by the change of situational factors and "the speaker wishes to index the new unmarked RO [rights and obligations] set in alignment with them", whereas the latter is triggered by the speaker's wish "to index two identities or 'attitudes' toward the interaction (and therefore two RO sets) simultaneously" (Myers-Scotton 1995: 149). Code-switching which is directed by the marked-choice maxim occurs when the speaker "wishes to negotiate an RO set other than the unmarked one" (1995: 149). Lastly, code-switching which is directed by the exploratory-choice maxim occurs "when the unmarked RO set is uncertain" (1995: 149).

1.1.2 Approaches in social psychology

The most prominent approach to code-switching in social psychology is the speech accommodation theory (e.g., Genesee and Bourhis 1982, 1988). The theory was developed by Howard Giles and his associates in the 1970s, and refined in the following decades (see Giles et al. 1987 for an

overview). According to speech accommodation theory, the speaker may either have a desire to get the listener's social approval or to disassociate from the listener (Myers-Scotton 1995: 66). The former may result in a speaker accommodating to the listener's speaking style (*speech convergence*), whereas in the latter situation, the speaker might do the exact opposite (*speech divergence*) (1995: 66). When transferring this approach to multilingual environments, it can result in a speaker's switching to or away from the listener's preferred code (1995: 66). In the accommodation literature, this has been referred to as "bilingual convergence" and "bilingual divergence" (e.g. Sachdev and Giles 2004).

Another theory developed by Giles and his colleagues concerns the ethnolinguistic identity theory which prompts language as a distinct marker of ethnic identity (see Giles and Johnson 1981, Hildebrandt and Giles 1983, Beebe and Giles 1984, Giles and Johnson 1987). This theory assumes that ethnic identity is something that is achieved when making oneself distinct on dimensions such as language (Liebkind 1999: 143). In this context, Giles and his associates coined the term *psycholinguistic distinctiveness* (cf. Giles and Johnson 1987: 71). From a social psychology perspective, Liebkind (1999: 143) argues that "[l]anguage interweaves the individual's personal identity with his or her collective ethnic identity". For example, Myers-Scotton (1995: 87) describes a scene in Nairobi where two interlocutors become aware of their shared ethnicity, and thus switch from the ethnically neutral lingua franca Swahili to Luyia in order to acknowledge their shared ethnic-group membership.

1.1.3 Approaches in contact linguistics

Research in contact linguistics has contributed to the type of code-switching that in the literature is often referred to as *insertional code-switching* or *intra-sentential code-switching*. The latter refers to the phenomenon where one-to-two word items of a language A are embedded in language B. According to Backus (2015: 24-28) two branches emerged in contact linguistics dealing with the question of how this type of code-switching should be understood: the first group of researchers looks at insertional code-switching from a mainly synchronic perspective. It is this synchronic perspective that has led them to the distinction between code-switching and borrowing (e.g., Poplack and Sankoff 1984; Poplack et al. 1989). As a result, they conceive them as two distinct phenomena to the effect that "code-switched elements will never turn into borrowings" (Thomason 2001: 132). The second group studies the cross-linguistic grammatical influence which tends to take a diachronic approach (Backus 2015: 24f.). Representatives of this group (e.g., Heath 1989; Myers-Scotton 1992) take the reverse view that "code-switching is the only mechanism through which foreign morphemes are incorporated into a language" (Thomason 2001: 132).

1.1.4 The approach used in this study

This study investigates the two types of code-switching that are often referred to in the literature as alternational (or inter-sentential) code-switching and insertional (or intra-sentential) code-switching. However, unlike the studies that coined these terms, the unit of analysis in this study is the intonation unit – a concept that will be introduced in the methodology chapter (see Section 2.4 from p. 40). What is important now is that in this study the alternational type of code-switching refers to switches from a monolingual language A to a monolingual language B, whereas the insertional type refers to one-to-two word items of a language A being embedded in a different language B. The major part of this study is devoted to the alternational type in the sense that it seeks to identify some of the speakers' motivations for this type of code-switching. The minor part is concerned with the insertional type, and mainly deals with the question of

the status of this type of code-switching based on the contact linguistics approaches mentioned above. However, to a certain extent, it also deals with speakers' motivations for this type of code-switching (see Section 6.3 from p. 203).

With respect to the alternational type, this study is largely based on the concept of situational and conversational code-switching originally formulated by Gumperz (1982). The two types of code-switching have proven to be very robust in the description of code-switching across language pairs of different cultures, as well as by means of different more recent approaches. According to Gardner-Chloros (2009a: 58f.):

> "Situational CS occurs when distinct varieties are associated with changes in interlocutor, context or topic, and is therefore a direct consequence of a diglossic distribution of the varieties. Conversational CS occurs when there are changes in variety without any such 'external' prompting."

For the factor setting, it is important to provide a description of observable settings, sub-settings and speech situations. For the factors participant (and topic[1]), the approach for the analysis is to make a distinction between 'what participants say they do' and 'what participants are really doing'. The former is analyzed with the help of quantified sociolinguistic surveys and subsequent interview sessions. The analysis of 'what participants say they do' is presented in a way that is based on what Tedlock (1979) calls *dialogical anthropology*, and which stands in contrast to what he calls *analogical anthropology*. The latter is "replacing native discourse with the observer's monologic narrative" (Duranti 1997: 87). Dialogical anthropology, in contrast, "promotes native talk to the position of prominence so as to give readers more direct access to how members represent their own actions" (1997: 87). As a result, the analysis of participants' attitudes in this study takes place on the basis of their statements and not just on the basis of an interpretation of the same by the author. The analysis of 'what participants are really doing' is analyzed with the help of staged recordings.

For the participant factor of situational code-switching, this study also benefits from the socio-psychology research which led to the development of the communication accommodation theory as well as the ethnolinguistic identity theory by Howard Giles and his associates. As mentioned above, the former has also influenced Myers-Scotton's markedness model. In the Qaqet community of Kamanakam, linguistic accommodation and the expression of a shared identity appear to be one of the underlying rationales that determine the participant factor of situational code-switching.

For the interpretation of conversational functions of code-switching, this study benefits greatly from Gumperz's (1982) recognition of conversational code-switching as a *contextualization cue* – a concept that also plays an integral part in what Auer calls discourse-related code-switching in his conversation analytic approach. Code-switching understood in this sense "signals contextual information equivalent to what in monolingual settings is conveyed through prosody or other syntactic or lexical processes" (Gumperz 1982: 98). According to Gardner-Chloros et al. (2000: 1307f.) code-switching as a contextualization cue can function in three different ways:

> "The first is that CS may be used instead of other discourse markers in bilingual conversation, as suggested by Auer. The second is that it may be used in itself as a further type of discourse marker on top of those markers available to the speaker through their cumulative knowledge of two monolingual varieties. In the latter case, CS could be employed either simultaneously with other markers in order to

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[1] For topic, it will only be analyzed 'what participants say they do'.

> reinforce their effect, as in the example above, or – this being the third possibility –
> in alternation with the other resources available, within the same conversation."

Moreover, this study also benefits from methods and insights of the more recent sociolinguistic/ethnographic and conversation analytic/pragmatic approaches developed by Auer, Zentella and Myers-Scotton. They include audiovisual documentation of speakers' near-natural verbal practices as the basic data resource in the investigation of Qaqet/Tok Pisin code-switching. The audiovisual data are complemented by a sociolinguistic survey and interview data as well as whole-day recordings. In particular, this study benefits from Zentella's ethnographic and quantitative approach. Regarding the former, the present study makes use of traditional ethnographic methods of linguistic anthropology, such as participant observation and working with native speakers to obtain local interpretive glosses of communicative material (Duranti 1997: 84). In addition to the whole-day recording method, participant observation played a crucial role in identifying the participants' social networks and code-switching patterns. Working with native speakers, for example, in the transcription process, was invaluable in order to get an understanding of the speech context and many other aspects of the languages used. Without their knowledge, it would have been almost impossible to create a transcript suitable for linguistic analysis.

Zentella's quantitative approach, that is adding frequency counts for each type of code-switch, demonstrates how it can contribute to the interpretation process of speakers' motivation for code-switching. Similarly, this study integrates Zentella's quantitative approach to the study of situational and conversational code-switching. For example, for the latter type this study gives frequency counts for each conversational strategy. In this context, the present study also benefits from Gardner-Chloros et al. (2000) who for the first time compared the way in which conversational strategies are realized monolingually and through code-switching. Gardner-Chloros et al.'s approach is applied in this study in the sense that it quantitatively and qualitatively contrasts the identified conversational strategies in Qaqet/Tok Pisin code-switching with occurrences of the same strategy in monolingual Qaqet and Tok Pisin speech. In the course of carrying out this study, Gardner-Chloros et al.'s approach has the following advantages: First, it helps in the interpretation process to better differentiate what role code-switching plays in the respective conversational strategy. Second, the quantification provides measurable data regarding the frequency of a particular strategy in contrast to the same strategy in monolingual language use. Moreover, measurable data is provided in regard to the occurrence of conversational code-switching as a whole.

It may, however, be noted that the sample size of tokens of conversational strategies in this study is limited, and subjecting the data to an inferential statistical analysis could be problematic. The numbers are therefore approached with descriptive statistical methods showing the distribution of different conversational strategies with and without the use of code-switching. The figures are interpreted with caution and accompanied by a careful qualitative analysis.

The methods which have been presented as part of the approaches used in this study are again discussed in more detail in the methodology chapter (see Chapter 2 from p. 15).

1.2   Qaqet and Tok Pisin

This section provides an overview of the research carried out in ethnography and linguistics on the Qaqet people and language, as well as on Tok Pisin.

1.2.1 Previous research on the Qaqet people and language

Ethnographic descriptions

Since the early 20th century, a considerable amount of research has been devoted to ethnographic descriptions of the Qaqet people, beginning with reports written by the Missionaries of the Sacred Heart (M.S.C.), e.g., Rascher (1909), Kleintitschen (1906: 245-70) and Bley (1909). Early non-missionary ethnographic descriptions of the Qaqet include Parkinson (1907: 155-71, 613-17, 630f.) and Burger (1913: 44-80). The former belonged to a family of traders and collectors of artifacts in the Bismarck Archipelago, PNG (Specht 2000). The latter undertook his research on behalf of the ethnographic Linden-Museum in Stuttgart, Germany (Groß et al. 2003: 385).

Considerable missionary-led ethnographic research of later years include the works of Laufer (e.g., 1949, 1959, 1971) and Hesse and Aerts (1982) as well as Hesse (2007). Father Karl Hesse worked as a priest in Raunsepna between 1966 and 1975.

More recent non-missionary ethnographic descriptions include the work of Pool (1984) in Wilambemki and Puktas (St. Paul), Fajans (1997) in Lan and Yalam, and Rohatynskyj (2000, 2001) and Dickhardt in Raunsepna (2009, 2012).

While preparing for, and during fieldwork, the literature cited above served as a basis to get an understanding of the ethnographic setting the Qaqet people live in. For example, to this day, German-led missionary work and colonization is present in the minds of many (older) adults. Moreover, older Kamanakam Qaqet people remember stories about German missionaries or German plantation owners. For my fieldwork, it was important for me to be aware of this history.

Linguistic descriptions

The first linguistic description of the Qaqet language was written by priest Father Matthäus Rascher (1900, 1904). It is based on the dialect spoken in the hinterlands of Massawa Bay (1904: 3). Two early word lists were compiled by Stehlin (1905) and Volmer (1926). The latter also prepared a sketch grammar of Qaqet (Volmer 1928). An early collection of traditional Qaqet narratives collected in Takes, Lan and Puktas (St. Paul) was provided by priest Father Bernhard Bley (1914). A sketch of the Qaqet phonology and grammar was written by Parker and Parker (1974: 5-43, 1977) from the Summer Institute of Linguistics (SIL). For their phonological sketch, they worked with speakers from Walmetki on the west coast, and re-checked the data with speakers from Yalam (1974: 5-43).

The first sociolinguistic study about the Qaqet was prepared by Marley (2013) among Qaqet speakers living in Raunsepna. This study has largely benefited from Marley's study when it comes to the methodology relating to the sociolinguistic surveys (e.g., composition of questionnaires), but also to the identification of language use patterns. The latter includes the participant as a factor for code-switching, and 'swearing' as a conversational strategy in which code-switching can be observed.

Recently, Hellwig (2018) published the most extensive description of the Qaqet grammar yet written. The grammar is largely based on the variety spoken in Raunsepna-Lamarain (Hellwig 2018: 8). This study has immensely benefited from Hellwig's linguistic descriptions of Qaqet including its intonation patterns, phoneme inventory, morphology, morphosyntax and word order. In addition, Hellwig et al. (in prep.) are working on an extensive trilingual Qaqet-Tok Pisin-English dictionary. For me, being able to use a preliminary version of this dictionary in Toolbox[2] was invaluable in the transcription process of the naturalistic audiovisual corpus

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[2] Toolbox is a data management and analysis tool for field linguists developed by SIL International.

and in the morpheme-to-morpheme glossing of examples of these corpus data presented in this study.

Finally, Frye (2019) has presented a detailed study of child-directed speech among the Qaqet of Raunsepna. This study has benefited from her observations on hesitation pauses. They became particularly relevant for this study in the analysis of self-initiated self-repair as correction, a conversational strategy identified in the corpus in which code-switching can be observed.

1.2.2   Previous research on Tok Pisin language

Pidgin and creole studies

A good deal of research has been undertaken to answer questions concerning the origins of Tok Pisin including, for example, Mühlhäusler (1975, 1976b, 1982, 1990), Mosel (1980), Mosel and Mühlhäusler (1982) and Ross (1992). There also has been a number of handbooks covering historical linguistic, linguistic and sociolinguistic aspects of Tok Pisin (e.g., Wurm 1979; Wurm and Mühlhäusler 1985; Verhaar 1990). In addition, in more recent years a number of handbooks with a broader focus on pidgin and creoles has been published, in which Tok Pisin is frequently referred to (e.g., Arends et al. 1994; Holm 2000; Kouwenberg and Singler 2009; Muysken and Smith 2010).

Linguistic descriptions

There has been a considerable amount of research on the structure of Tok Pisin since the second half of the 20th century. This includes studies in the classical fields of grammar: phonology (e.g., Wurm 1985; Laycock 1985; Faraclas 1989), morphology (e.g., Snoek 2011) and syntax (e.g., Mühlhäusler 1985b; Sankoff 1976, 1991, 1993, 1994). In addition, a number of sketch grammars (e.g, Mihalic 1971: 9-49; Woolford 1979a; Mühlhäusler et al. 2003: 1-33), primers (Dutton 1973; Dutton and Thomas 1985), collections of narrative texts (Mühlhäusler et al. 2003: 35-280) and dictionaries (e.g., Steinbauer 1969; Mihalic 1971: 55-375; Volker 2014) have been published. In the more recent past, full grammatical descriptions of Tok Pisin have been prepared (Verhaar 1995; Smith 2002). I have drawn on the studies of Smith (2004a) and Tung (2014) in particular for the morpheme-to-morpheme glossing of Tok Pisin examples.

These and other Tok Pisin-related linguistic descriptions cited in this study helped me understand the grammatical structure and lexicon of Tok Pisin, which was a prerequisite for the analysis of the same. At the same time, this literature served as a basis for comparison with the understanding of Tok Pisin, which I had gained from the analysis of the naturalistic audiovisual corpus data as well as during my fieldwork.

Sociolinguistic descriptions

There also have been several studies on Tok Pisin in the area of sociolinguistics. For example, Sankoff (1977) gives a detailed overview of multilingualism in PNG at the time. Mühlhäusler gives a detailed account of the different sociolects and registers of Tok Pisin as well as of language attitudes towards Tok Pisin (1976a, 1979b). In the latter field, there also have been a number of contributions from other researchers (e.g., Wurm and Mühlhäusler 1979; Wurm et al. 1984; Lynch 1990). A considerable amount of research has also been carried out in the field of language planning of Tok Pisin (e.g., Wurm et al. 1977; Mühlhäusler and Dutton 1979; Litteral 1990).

1.2.3 Previous studies on code-switching in Papua New Guinea

Within the area of sociolinguistics, probably one of the earliest studies of code-switching between local languages of PNG and Tok Pisin was carried out by Sankoff (1968, 1972). In her studies on the social aspects of multilingualism among the Buang, who were speakers of Buang, Yabem and Tok Pisin (which Sankoff calls Neo-Melanesian), Sankoff identified three types of code-switching between the three languages. Firstly, she (1968: 201) observed the following situational factors:

> "[G]roups of people (Buang big men prefer Buang; church elders prefer Yabem; young educated people prefer Yabem in certain situations; conference officials prefer Neo-Melanesian), or by classification of topics (Yabem for theological points; Neo-Melanesian for general discussion and official matters; Buang for discussion during preparatory work, cooking, etc.) or to allow for setting (Neo-Melanesian in the trade store on the conference site; local languages during meals and in sleeping quarters; Yabem during church services)."

Secondly, she (1972: 47f.) identified a number of conversational strategies which in the more recent code-switching literature have come to be termed repetition, emphasis and language play. And thirdly, she (1972: 47) observed a "very great admixture of Neo-Melanesian words and phrases into sections of it which are basically Buang (the reverse never occurs)", that is, the insertion Tok Pisin material in a Buang frame. This phenomenon has also been described by other researchers for a number of languages in PNG (e.g., Bradshaw 1978; Chowning 1983; Ross 1985; Kulick and Stroud 1990: 212f.).

Mühlhäusler (1979a) gave a summary of the state of research on code-switching in PNG at the time. Kulick and Stroud (1990) have contributed a study of Taiap/Tok Pisin code-switching from a sociolinguistic perspective. In their study, they present the participant as a key situational factor, and show that Taiap speakers frequently accommodate to non-Taiap speakers as well as to their children (1990: 210ff.). In addition, Kulick and Stroud (1990: 214-18) identified a list of conversational strategies in which code-switching can be observed, namely emphasize commands, mark completion, emphasize agreement, mark contradiction, mark/emphasize a quotation, mark a topic change and gaining the floor.

The studies of Sankoff (1968, 1972) and Kulick and Stroud (1990) served as a valuable frame of reference in the identification of switch patterns in Kamanakam Qaqet/Tok Pisin code-switching. The researchers' studies describe a code-switching behavior that is partly similar to that observed in the Kamanakam scenario.

Chapter 2

Methodology

This chapter provides a detailed description of the methodology used for this study. Table 2.1 gives an overview of the structure of this chapter. It is structured in the order of the tasks that were performed to prepare the data for analysis.

Table 2.1: Outline of the methodology chapter

No.	Task	Section/page
1.	Designing the study	Section 2.1 from p. 15
2.	Collecting the data	Section 2.2 from p. 19
3.	Transcribing the data	Section 2.3 from p. 38
4.	Segmenting the data	Section 2.4 from p. 40
5.	Annotating the data	Section 2.5 from p. 52

2.1 Designing the study

The design of the study, in terms of how I came to collect and process the data in a preliminary analysis of a pilot corpus, is presented below.

Based on the approach outlined in Section 1.1.4 from p. 8, I arrived at a first set of assumptions which would guide me through this study.

Table 2.2: Pilot corpus

No.	Session part	Setting	Speech situation	Length
1	CodeFSS_KJS20160901_1 CodeFSS_KJS20160901_2	Cooking house	Cooking	00:56:14
2	CodeFSS_KJS20161119A_2	Cooking house	Conversation	00:28:07
3	CodeFSS_KJS20160910A_1	Copra drying house	Working	00:28:07
4	CodeFSS_KJS20161023_1 CodeFSS_KJS20161023_2	Home	Conversation	00:51:16
5	CodeFSS_KJS20170102_1	Cooking house	Conversation	00:28:07
6	CodeFST_ICK20160930A_1	Cooking house	Conversation	00:28:09

7	CodeFST_ICK20170110_2	Cooking house	Conversation	00:28:09
8	CodeFST_ICK20160919_1	Church cooking house	Church meeting	00:28:09
9	CodeFST_ICK20161024_1	School	School meeting	00:36:49
	CodeFST_ICK20161024_2			
10	CodeFST_ICK20161009_1	Church	Religious feast	00:30:19
	CodeFST_ICK20171009_2			
11	CodeFST_ICK20170212A_1	Church	Church service	01:02:30
	CodeFST_ICK20170212A_2			
	CodeFST_ICK20170212A_3			
12	EntDayFSS20160901_1	various non-public	various	06:55:57
	EntDayFSS20160901_2			
	EntDayFSS20160901_3			
13	EntDayKJS20160903_1	various (non-)public	various	04:34:33
	EntDayKJS20160903_2			
#			Total	22:24:37

2.1.1 Structure of Kamanakam Qaqet/Tok Pisin code-switching

In a preliminary analysis of session part CodeFSS_KJS20160901_1 of the pilot corpus (see Table 2.2 above), I observed inter-intonation unit code-switching and mixed intonation units (see Section 2.4.3 on p. 51). For the former, I observed that meaningful inter-intonation unit code-switching is possible in both directions, that is, from Qaqet to Tok Pisin and vice versa. For mixed intonation units on the other hand, I saw that they are almost exclusively made up of a Qaqet language frame with Tok Pisin insertions and not vice versa. Regarding the frequency of inter-intonation unit code-switches in contrast to mixed intonation units, I assumed that the occurrence of mixed units outweighs that of inter-intonation unit code-switching. From this preliminary analysis, I also gained the impression that switches from Qaqet to Tok Pisin can be more frequently ascribed a communicative effect than switches in the reverse direction. Therefore, I decided to analyze inter-intonation unit code-switches within the framework of situational and conversational code-switching.

Concerning the mixed intonation units, I saw in session part CodeFSS_KJS20160901_1 that Tok Pisin insertions in Qaqet frames predominate. In order to analyze the insertions, the major issue was deciding whether the insertions in these units should be treated as instances of intra-intonation unit code-switching or instances of borrowing. In case these mixed intonation units could be treated as intra-intonation unit code-switching, I assumed that this would allow an analysis in the realm of situational and/or conversational code-switching. In case the insertions were mostly borrowings, mixed intonation units could have been excluded from the analysis as code-switching. Chapter 4 from p. 89 is entirely dedicated to the question of how other-language insertions and thus mixed intonation units can be understood.

2.1.2 Situational code-switching

Previous studies have shown that particular codes (a language, dialect, style, register or a variety) can be associated with particular settings (e.g., home, school or church), participants (e.g., younger vs. older) and topics (e.g., solving a maths problem). As a consequence, a change within the constellation of these variables should bring about a change in the choice of code. Blom and Gumperz (1972) have coined the term situational code-switching for the type of

switches motivated by the three factors mentioned above. In the following, I will present my first observations on situational code-switching in the multilingual community of Kamanakam through a preliminary qualitative analysis of the pilot corpus (see Table 2.2 on p. 15).

Setting

Based on participant observation and a preliminary analysis of the Sessions 1–11 from the pilot corpus (see Table 2.2 on p. 15), which contained transcribed and partially annotated naturalistic audiovisual data in non-public and public settings, my first observation was that some settings in Kamanakam are associated with a particular language, whereas others are not.

A second observation was that settings in Kamanakam which are associated with a particular language are the school and the church, whereas in the home, code-switching frequently occurs. In the literature, school and church are commonly considered as formal and the home as informal settings. Bearing this in mind, I assumed that code-switching in Kamanakam would be rather found in informal settings than in formal ones. In addition, I observed that the language used in formal settings is predominantly Tok Pisin, whereas in informal settings it is Qaqet alternating with Tok Pisin, and manifesting as mixed intonation units.

Participant

In informal settings, which I assumed would permit for the use of Qaqet and Tok Pisin, the occurrence of code-switching among Qaqet/Tok Pisin bilinguals may also be determined by the sociolinguistic status of a particular addressee and/or bystander. That is, speakers may associate certain addressees or bystanders with a particular language. A question of interest in this regard is whether in Kamanakam the setting alone determines the occurrence of situational code-switching.

For the participant factor, I carried out a preliminary analysis of Sessions 1–4, 6–8, 12–13 from the pilot corpus (see Table 2.2 on p. 15), which contained transcribed and partially annotated naturalistic audiovisual data in non-public settings, as well as data from the wiring method corpus (see Table 2.12 on p. 29). From what I observed in the data, I assumed that a change in the constellation of participants can bring about a stable switch from one language to another, but usually in the form of a switch of a couple of intonation units. By changes in constellation, I mean the arrival or departure of a new interlocutor or bystander at the setting who is or is not part of the social network of the already present conversation partners. Here, I assumed that the mutual awareness of one's interlocutors' language competence had been negotiated and established in previous interactions.

From a survey of Raunsepna Qaqet adult speakers' language use towards different types of interlocutors, Marley (2013: 117) surmised that they demonstrate convergence to the speech of their interlocutors. Based on my preliminary analysis, I came to the same conclusion for the Kamanakam community. In addition, informants' metalinguistic comments on certain switches suggested that language accommodation could also serve as means to include bystanders, so as not to make them feel like the speaker had something to hide. Therefore, I decided to extend Marley's observation to bystanders who themselves are not directly addressed. In connection with an initial evaluation of sociolinguistic and sociodemographic survey data, my observations in the pilot corpus further led me to the assumption that language competence and age could be two major factors driving this type of language accommodation.

Marley's survey also shows that age seems to play a role in language accommodation among the Raunsepna participants. The latter reported a strong use of Qaqet towards elderly community members "suggesting that there are older community members who do not speak Tok

Pisin" (2013: 95). In Kamanakam, age may also be a factor, but in agreement with Marley, I also believe that it seems to be bound to language competence. For example, one Kamanakam person (FAD) told me about an approximately 75 year old Qaqet woman (GBS) who was mainly addressed in Qaqet by younger Qaqet adults. The woman was born in the remote Kamanakam hamlet Kusibum and had never attended school. She must have had considerably less contact with Tok Pisin than other Kamanakam inhabitants. Another community member (FAM) explained to me that after church announcements Qaqet/Tok Pisin code-switching usually takes place to include elderly people who cannot understand Tok Pisin well. Therefore, I assumed that elderly Qaqet people who are part of a Qaqet/Tok Pisin speaker's social network will probably be addressed according to the former's age and language competence.

With regard to the language competence variable, I assumed that a change in the constellation of participants can bring about a switch in code choice. For example, when a new individual joins a conversation, and her/his competence in the language currently being used is considered insufficient by the other interlocutors, this can prompt them to switch to a language they know/believe the particular individual has sufficient competence in. Conversely, the departure of that individual could trigger a switch back to the previous language. As already noted above, I assumed that most of the times there will be no strict "same addressee same language rule". Since all participants seem to have a certain minimum Qaqet competence the arrival of a new Tok Pisin-dominant speaker can be accommodated not through a complete switch to pure Tok Pisin, but through switching at certain points in the conversation.

Topic

Topics, or more accurately discourse topics, tend to change throughout the course of natural conversations. I speculated whether topic may be another governing factor relevant in the code-switching practices of the Kamanakam community. As for discourse topic, I followed Ochs and Schieffelin who define it as "a proposition (or set of propositions) expressing a concern (or set of concerns) the speaker is addressing" (2016: 72). This proposition may be sustained over a sequence of utterances or change from utterance to utterance (2016: 72).

In a preliminary analysis, I have analyzed session part CodeFSS_KJS20160901_1 from the pilot corpus (see Table 2.2 on p. 15) for the topic variable (see Section 2.5.4 on p. 55 on how I coded for discourse topics). Based on Ochs & Schieffelin's definition, I identified seven discourse topics within the recording: they concerned recording/project, eating and cooking, garden work, shopping, betel nut and persuading or directing someone to say or sing something (hereafter the sing/talk topic). There were three main speakers in the recording who are bilingual in Qaqet and Tok Pisin. The two men (FSS and FRU) were responsible for most of the switches, whereas the woman (IRM) showed almost no code-switching.

Overall, and across speakers, there was no single discourse topic reserved for a particular language. This means that in every topic there is inter-intonation code-switching between Qaqet and Tok Pisin to a certain degree. Still, Qaqet was the dominant language in all discourse topics considering that its use is never outweighed by the use of Tok Pisin. Although there was much inter-speaker variation for some of the discourse topics, the 'recording/project' topic with 14.6% and the 'betel nut' topic with 14.3% was associated with the greatest use of Tok Pisin among speakers.

I therefore assumed that topics can be a governing factor for situational code-switching among Qaqet speakers of Kamanakam – perhaps not in the strict sense, i.e. one topic–one language, but rather in the sense of the frequency of use of a particular language for a certain topic. Although there is no topic which is Tok Pisin-only (as there is no topic which is Qaqet-only either), considerably more frequent use of the former in the 'recording/project' topic (in

conjunction with more frequent use of Tok Pisin insertions in mixed intonation units) led me to the assumption that it may be more associated with topics involving novel concepts.

The status of the mixed intonation units, on the other hand, was still somewhat ambiguous at this point, as they involved units which could be intra-intonation unit switches or borrowings. Structurally, nearly all mixed units referred to Tok Pisin foreign material in a Qaqet frame. The Tok Pisin material in these mixed intonation units seemed to involve novel but also established concepts when compared with the Qaqet lexicon. A closer look at the distribution of mixed units for each discourse topic revealed that there are considerably more mixed intonation units in topics that involve novel concepts (cooking and eating 21%, recording/project 29%, garden work 35%, shopping 50%) compared to those where this seems to be less likely in the Kamanakam context (betel nut 4%). Therefore, I similarly assumed that topics which involve novel concepts tend to be associated with more mixed intonation units.

2.1.3 Conversational code-switching

Alongside the concept of situational code-switching Blom and Gumperz (1972) introduced the notion of metaphorical code-switching which later Gumperz (1982) also termed conversational code-switching. It is characterized by "the speaker's intention to convey specific communicative effects through codeswitching, and they tend to do so when there is no change of the participants, the setting, or the topic" (Li Wei 2013: 367). The assumptions were developed over the course of two field trips involving participant observation, ethnographic notes, sociolinguistic interviews, audiovisual recordings of naturalistic adult informal conversations, judgments from Qaqet transcribers regarding examples of inter-intonation unit code-switching and by a first qualitative analysis of the corpus, making use of all the information collected.

In a preliminary analysis of session part CodeFSS_KJS20160901_1 from the pilot corpus (see Table 2.2 above), my most basic assumption was that, in Kamanakam, adult Qaqet speakers make use of code-switching to convey communicative effects, and hence, that code-switching can be ascribed a conversational function. Further, I assumed that conversational code-switching is particularly related to inter-intonation unit code-switching and that intra-intonation unit code-switching, if it exists, is less frequently used for this purpose.

2.2 Collecting the data

The data collection extended over three field trips to the Qaqet community of Kamanakam ward, and focused on two focal families and their social networks. The focal families were part of a longitudinal study on the documentation of child language among the Qaqet people (see Chapter 1 from p. 1 for more details). Table 2.3 presents an overview of the methods used in the data collection process. The methods are given in the order uncontrolled to controlled.

Table 2.3: data collection methods used in this study

No.	Methods	Section/page
1.	Participant observation	Section 2.2.1 from p. 20
2.	Sociodemographic and sociolinguistic surveys	Section 2.2.2 from p. 20
3.	Sociolinguistic interviews	Section 2.2.3 from p. 22
4.	Wiring method	Section 2.2.4 from p. 28
5.	Naturalistic audiovisual recordings	Section 2.2.5 from p. 29

6. Staged audiovisual recordings	Section 2.2.6 from p. 31

2.2.1   Participant observation

Duranti (1997: 89) defines participant observation as "[t]he observation of a particular community [...] by participating in as many social events as possible". For the most part, participant observation and ethnographic notes allowed me to capture metalinguistic information that otherwise could not be captured in naturalistic audiovisual recordings (Duranti 1997: 115). This included data on the participants' social network including family relations, their daily routines, and sociodemographic and sociolinguistic variables such as age, education or the language use preferences of certain people.

Regarding the study of code-switching, the use of this method allowed me to identify situations in which code-switching is frequently employed. For example, regarding situational code-switching, the distinction between formal and non-formal settings (see Section 5.1 from p. 118) revealed itself to me through participant observation. Moreover, participant observation allowed me to identify and describe the various speech situations in formal and non-formal settings.

In contrast to conversational strategies such as quotation (see Section 6.5 from p. 227) – which could be more readily interpreted to be associated with conversational code-switching – participant observation was only to a certain extent suitable for identifying less overt conversational switching strategies. In this context, it is also very likely that as a non-Qaqet speaker, it was not possible for me to observe a more broad spectrum of conversational switching strategies, as my presence may have caused speakers to use Tok Pisin – a phenomenon, which has already been observed for Raunsepna (cf. Hellwig 2018: 6; Marley 2013: 97). Therefore, the identification of conversational code-switching strategies was then mostly achieved with a careful analysis of the naturalistic audiovisual data (see following section) and to some extent supported by the metalinguistic comments of the transcribers (see Section 2.5.9 on p. 61).

2.2.2   Sociodemographic and sociolinguistic surveys

During earlier field trips, my colleague Carmen Dawuda had already collected a large amount of sociodemographic data in different parts of Kamanakam ward. During my second and my third field trip, I complemented these data and collected most of the necessary sociolinguistic data for this study. For the collection of the data, I focused on a set of four hamlets (= focal hamlets) in Kamanakam ward, which include Saqalames, Lanivaqa, Altiaqa and Ngamarana. Data from these hamlets form the basis of this study. The sociodemographic and partially the sociolinguistic data were collected as part of a door-to-door survey that was actively supported by the local registrar (FSS). In the first stage, he and I went from family to family. Since I was still fairly new to the community, the presence of the registrar made it easier for respondents to build up trust in me and the research that I was doing. In the second stage, the local registrar and I visited households separately. In every family, each member was asked the same set of short questions consisting of the variables listed below. In the case of very young children or very old adults, a close relative was interviewed to give the information. Or, if possible, a close relative was requested to interview the target person herself/himself in a careful way. When a particular person was not present at the time of the survey and it was not likely that s/he would come back within the time frame of the field trip, close relatives were requested to provide the information in their place.

- Name

- Sex

- Residence

- Household

- Birthplace

- Age

- Education

- Primary/community school

- Ethnicity

- Language competence

- Occupation

The name, if not already known from previous encounters, was usually the first variable inquired from a participant. In this context, it may be interesting to know that the Qaqet people usually possess a Qaqet and a Christian name. At first glance, it seems that the order of the Qaqet names consists of a given name and a surname, as can be seen in most European countries and countries culturally influenced by Western Europe. However, among the Qaqet people, both names are often used interchangeably and neither of the two names refers to the name holder's family in any way. Less often, and especially for official matters (e.g., forms, contracts, etc.), some Qaqet people make use of a surname which they derive from the Qaqet given name of their father. The sex, residence and household of the participant was inferred by the researcher during the visits. Birthplace and age were usually inquired from the participant herself/himself. In case the participant did not remember/know, other older relatives were requested to provide the information. As noted elsewhere in this study, it can be observed that exact age does not play a prominent role for many Qaqet people. This may be due to different reasons. One of them seems to be that people are rarely confronted with situations in which they have to state their exact age. To compensate for this potential lack of information, there were other ways to obtain information about the age of the participant, including birth certificates and the documentation from the local registrar. Concerning the information about the participants' education, each interviewee was asked how many years they had attended school, rather than if they had obtained a school diploma. Over recent decades the school system in PNG has changed a few times, and therefore, the actual years of schooling is more informative in order to measure education than a particular school diploma. However, there were also situations where a participant might not remember the number of years s/he had attended school. In this case, s/he was asked for the year in which s/he started and/or ended school, and/or whether the participant had obtained a certain type of school diploma from which the school years could be inferred. Another variable superficially related to education is the name of the primary or community school which the participant had attended. The purpose of querying this information was to determine whether a particular participant was socialized in the region during her/his childhood. Regarding the ethnicity variable, the participant was asked to imagine the following situation:

(1) *sapos yu wokabaut long rot na wanpela man o meri kamap na askim yu: 'yu olsem*
    wanem? yu tolai, sepik, buka o...' na bai yu bekim wanem long en? "

    "Suppose you walk along the road and a man or a woman comes up asking you: who are
    you? Are you a Tolai, Sepik, Buka or.. What will you say to her/him? "

In this manner, the participant was asked to respond with the ethnic designation s/he feels
comfortable with (Qaqet, Baining, Tolai, etc.). The language competence variable assessed
competence in Qaqet, Tok Pisin and possible other languages the participant has at her/his
command. Table 2.4 shows the four-level rating scale that was applied for the task. The scale
is based on Marley (2013: 152ff.) who used it in her sociolinguistic study of language choices
among the Qaqet people of Raunsepna.

Table 2.4: Rating scale to assess the participants' language competence, following Marley (2013:
152ff.)

Scale	Tok Pisin	What it stands for in Tok Pisin	English	What it stands for in English
0	Nogat olgeta	Mi no inap long toktok long dispela tok ples.	Not at all	I cannot speak this language.
1	I orait	Mi inap long holim simpel toktok.	Basic	I can hold simple conversations.
2	Inap	Mi inap long bihainim planti toktok.	Proficient	I can follow most conversations.
3	Inap true	Mi inap tru long toktok long olgeta samting.	Fluent	I can talk on any topic.

For the rating task, participants were asked to think of the language in question (Qaqet, Tok
Pisin, etc.). In the next step, the Tok Pisin scale names (nogat olgeta, i orait, etc.) were read
to them, and it was explained what the scale names mean in Tok Pisin. In the final step, they
were asked to choose the rating that they felt best reflected their competence in the language
at the time.

2.2.3   Sociolinguistic interviews

The following sociolinguistic interviews were intended to evaluate participants' attitudes to-
wards the three factors of situational code-switching (setting, participant, topic) in contrast to
what can actually be observed in the naturalistic recordings and the staged recordings, respec-
tively.

The setting, participant and topic factor of situational code-switching were each assessed in
a similar way with a questionnaire and a subsequent discussion. In preparation for the task,
the local registrar (FSS) mostly made appointments with the preselected participants, as he was
more familiar with their daily schedule. In earlier attempts, I made use of longer questionnaires
in Kamanakam. Here, I observed that for a lot of participants, providing information in the form
of questionnaires is a rather unfamiliar and sometimes cumbersome task. Therefore, for each
appointment, there normally was only one questionnaire to be filled out and discussed in order
to keep the rating part of the task as short as possible. Every questionnaire entailed either a
list of settings, topics or participants in which the participants were asked to rate their Qaqet
and Tok Pisin use with the five-point Likert scale given in Table 2.5. The type of scale has

proven to be applicable in past fieldwork of Marley (2013: 69) among the Qaqet people of Raunsepna, as well as in prior fieldwork I carried out in Kamanakam. Participants were either handed over the questionnaires and asked to fill them out for themselves, or in case they had difficulties in reading, the local registrar who accompanied me for the appointments helped them to fill out the questionnaire by stating, for example, a particular setting and afterwards offering them the rating possibilities. In the last step, the questionnaire was handed over to me. After a thorough check of the questionnaire, I used it as a starting point for a discussion on the particular ratings of the participant. The questionnaire was also used to further elaborate on other settings, participants and topics, not listed in the respective questionnaire, and which resulted from the discussion. All interviews were recorded with a digital handy camera (Zoom Q4).

Table 2.5: Rating scale to assess language use

Scale	Tok Pisin	English
0	Nogat olgeta	Never
1	I no tumas	Rarely
2	Sampela taim	Sometimes
3	Planti taim	Mostly
4	Olgeta taim	Always

Attitudes towards the setting factor

The attitudes data on the setting factor were collected from the three bilingual Qaqet/Tok Pisin adults listed in Table 2.6. These individuals also contributed to the naturalistic data collected in public settings[1]. A short questionnaire with a five-point Likert scale served as a basis for a subsequent interview session on language use in different settings. The questionnaire consisted of two sections where the frequency of participants' Qaqet and Tok Pisin use in the settings church, home, school and market was investigated.

Table 2.6: Participant for attitude interviews on the setting factor in situational code-switching

No.	Census unit/ hamlet	House-hold	ID	Sex	(Approx.) year of birth	Qaqet competence	Tok Pisin competence
1	Kamanakam/ ?	?	FAL	m	1979	Fluent	Fluent
2	Nambilas/ ?	1	FPK	m	1977	(Fluent)	(Fluent)
3	Kamanakam/ Ngamarana	3	FAM	m	1980	Fluent	Fluent

The subsequent discussion was conducted along (but not limited to) the following questions:

1. Why did you choose X?

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[1] Language competences given in parentheses are based on my own observation and not on the participants' self-perceived competence collected during surveys

2. What if you spoke Tok Pisin in this setting?

3. What if you spoke Qaqet in this setting?

4. What other settings you would rate in this way?

The first question aimed to establish a basis for the conversation, where the participant is encouraged to share her/his opinion for the rating. The second and third question targeted the interviewee's attitudes towards the appropriateness of using a particular language exclusively in the given setting. The fourth question was intended to investigate whether these settings have something in common (is there a rule?) which confirm or disconfirm the hypotheses.

Attitudes towards the participant factor

The attitudes data towards 15 participants living in the focal hamlets were collected from the 12 bilingual Qaqet/Tok Pisin participants listed in Table 2.7. The latter also contributed to the naturalistic data collected in public and/or non-public settings.

Table 2.7: Participants in the attitude interviews on the participant factor of situational code-switching

No.	Census unit/ hamlet	House-hold	ID	Sex	(Approx.) YoB	Qaqet competence	Tok Pisin competence
1	Kamanakam/ Saqalames	3	NMS	f	1955	Fluent	Fluent
2	Kamanakam/ Saqalames	1	FSS	m	1987	Fluent	Fluent
3	Kamanakam/ Saqalames	4	FRU	m	1964	Fluent	Fluent
4	Kamanakam/ Lanivaqa	2	FWS	m	1978	Fluent	Fluent
5	Kamanakam/ Lanivaqa	4	FLT	m	1952	Fluent	Fluent
6	Kamanakam/ Lanivaqa	10	FST	m	1977	Fluent	Fluent
7	Kamanakam/ Lanivaqa	9	FBG	f	1984	Basic	Fluent
8	Kamanakam/ Saqalames	4	IRM	f	1964	Fluent	Fluent
9	Kamanakam/ Ngamarana	3	FAM	m	1980	Fluent	Fluent
10	Kamanakam/ Lanivaqa	10	ICK	f	1979	Fluent	Fluent
11	Kamanakam/ Altiaqa	6	GKN	f	1995	Basic	Fluent
12	Kamanakam/ ?	?	FAL	m	1979	Fluent	Fluent

A short questionnaire with a five-point Likert scale served as a basis for a subsequent in-

terview session on language use directed towards different persons living in the focal hamlets. The questionnaire consisted of two sections where the frequency of participants' Qaqet and Tok Pisin use towards the 15 participants listed in Table 2.8 was investigated. The task was designed to shed light on attitudes towards the role of the variables age and language competence.

Table 2.8: Target individuals for the language use rating task

No.	Census unit/ hamlet	House-hold	ID	Sex	(Approx.) year of birth	Qaqet competence	Tok Pisin competence
1	Kamanakam/ Altiaqa	8	GBS	f	1940s	Fluent	Fluent
2	Kamanakam/ Saqalames	5	GLS	m	1990s	(Basic)	(Fluent)
3	Kamanakam/ Altiaqa	6	GKN	f	1995	Basic	Fluent
4	Kamanakam/ Saqalames	1	KJS	f	1988	(Basic)	(Fluent)
5	Kamanakam/ Saqalames	6	FSP	f	1998	(Basic)	(Fluent)
6	Kamanakam/ Lanivaqa	5	FKW	m	1997	Basic	Fluent
7	Kamanakam/ Saqalames	3	HJP	m	1939	Basic	Fluent
8	Kamanakam/ Saqalames	4	FRU	m	1964	Fluent	Fluent
9	Kamanakam/ Altiaqa	7	FSR	f	1969	Not at all	Fluent
10	Kamanakam/ Altiaqa	8	JAS	f	1990s	Fluent	Basic
11	Kamanakam/ Altiaqa	7	FDS	m	1967	Basic	Fluent
12	Kamanakam/ Ngamarana	2	FPM	f	1989	Proficient	Fluent
13	Kamanakam/ Ngamarana	3	FAM	m	1980	Fluent	Fluent
14	Kamanakam/ Lanivaqa	4	FLT	m	1952	Fluent	Fluent
15	Kamanakam/ Lanivaqa	8	GMX	f	1949	(Fluent)	(Fluent)

The subsequent discussion was conducted along (but not limited to) the following questions:

1. Why did you choose X?

2. What happens if you address this person in Tok Pisin?

3. What happens if you address this person in Qaqet?

4. Who would you also rate this way?

5. Is there someone you cannot address in Qaqet at all?

6. Is there someone you cannot address in Tok Pisin at all?

The first question seeks to establish a basis for the conversation, where the participant is encouraged to share her/his opinion for the rating. The second and third questions target attitudes towards inherent characteristics of the potential interlocutor, and encourage the interviewee to elaborate on them. The fourth question aims to bring these characteristics into a broader perspective (Is there a rule?) and may confirm or disconfirm the variables assumed to be relevant to language choice. The fifth and sixth question broaden the scope of question four, and aim to identify rule governing characteristics, albeit, from the opposite direction. The logic behind this strategy is that people may sometimes be better at excluding features from an entity compared to including them.

Attitudes towards the topic factor

Attitudes towards 19 different topics that had been observed either in the naturalistic recording or during participant observation were collected from the nine bilingual Qaqet/Tok Pisin participants listed in Table 2.9. The latter also contributed to in the naturalistic data collected in public and/or non-public settings.

Table 2.9: Participants in the attitude interviews on the topic factor of situational code-switching

No.	Census unit/ hamlet	House-hold	ID	Sex	(Approx.) year of birth	Qaqet competence	Tok Pisin competence
1	Kamanakam/ Saqalames	4	FRU	m	1964	Fluent	Fluent
2	Kamanakam/ Ngamarana	3	FAM	m	1980	Fluent	Fluent
3	Kamanakam/ Saqalames	3	NMS	f	1955	Fluent	Fluent
4	Kamanakam/ Lanivaqa	4	FLT	m	1952	Fluent	Fluent
5	Kamanakam/ Lanivaqa	2	FWS	m	1978	Fluent	Fluent
6	Kamanakam/ Lanivaqa	10	FST	m	1977	Fluent	Fluent
7	Kamanakam/ Lanivaqa	10	ICK	f	1979	Fluent	Fluent
8	Kamanakam/ Saqalames	4	IRM	f	1964	Fluent	Fluent
9	Kamanakam/ ?	?	FAL	m	1979	Fluent	Fluent

A short questionnaire with a five-point Likert scale served as the basis for a subsequent interview session on language use regarding a number of topics that had been observed to occur in the participants' daily life. The questionnaire consisted of two sections, where the frequency of participants' Qaqet and Tok Pisin use in the context of the 19 topics given in Table 2.10

was investigated. The topics had been identified as typically occurring in the corpus recordings made in non-public settings (see Table 2.13 on p. 30). The objective of the task was to shed light on the assumption that Qaqet is more suited to traditional topics while modern topics tend to be associated more with Tok Pisin.

Table 2.10: Topics for the language use rating task

No.	Topic name: Tok Pisin	English translation
1	Kaikai	Eating
2	Wok long gaden	Garden work
3	Baim samting long stoa	Buying something in the store
4	Kuk	Cooking
5	Ol masin	Machines/technical gear
6	Buai	Betel nut
7	Stori bilong bipo	Stories from the past
8	Bosim sampela man o meri	Giving orders to some man or woman
9	Ol projek	Projects
10	Wok long haus	Housework
11	Wasim ol laplap	Doing the laundry
12	Maketim sampela samting	Selling something at the market
13	Stori bilong lotu	Church stories
14	Ol prut	Fruits
15	Bosim ol pikinini	Giving orders to children
16	Maketim samting bilong gaden	Selling something from the garden
17	Braitprais	Bride price
18	Famili	Family
19	Ol animal	Animals

1. Why did you choose X?

2. How easy is it for you to talk about this topic in Tok Pisin?

3. How easy is it for you to talk about this topic in Qaqet?

4. Are there any words often used in this topic that can be expressed in Tok Pisin but not Qaqet?

5. Are there any words often used in this topic that can be expressed Qaqet but not Tok Pisin?

6. What are other topics you would rate in this way?

The first question again seeks to establish a basis for the conversation, where the participant is encouraged to share her/his opinion about the rating. The second and third question target the interviewee's attitudes on talking about a certain topic with Tok Pisin or Qaqet. It was assumed that the participants' comments should reveal their difficulties with discussing modern Tok Pisin-related concepts/topics in Qaqet compared to traditional Qaqet-related concepts/topics in Tok Pisin. However, such difficulties may also be the result of a potential unbalanced language competence of the participant. The fourth and fifth questions particularly concern mixed intonation units, and similarly address the participant's potential struggle to

talk about modern Tok Pisin-related topics in monolingual Qaqet and traditional Qaqet-related topics in monolingual Tok Pisin. The sixth question aimed to bring the attitudes into a broader perspective, that is, whether there is a rule which may confirm or disconfirm the underlying hypothesis that novel concepts/topics are more easily approached with Tok Pisin.

2.2.4 Wiring method

The focal families' social network, that is, with whom they typically interact during a regular day, was investigated using the wiring method. Further, this method was used to identify (and corroborate already identified) situations where code-switching is frequently employed in adult conversation. The wiring method was carried out with focus family A (see Table 2.11), who both recorded and participated in the corpus recordings of the non-public settings (see Table 2.13 on p. 30).

Table 2.11: Participants for the wiring method

Focal family	Hamlet	Household	ID	Sex	(Approx.) year of birth
A	Saqalames	1	KJS	f	1988
A	Saqalames	1	FSS	m	1987

On two different days, one participant was equipped with a portable recorder (Zoom H2n) placed in a mini bilum[2] and a lavaliere microphone (Audio-Technica ATR3350) taped to the strap of the bilum (cf. Zentella 1990: 79; Beyer 2015: 242). The recording device contained one 32 gigabyte SD card, big enough to hold 25 hours and 11 minutes in uncompressed WAV format with a sampling rate of 44.1 kHz and a bit depth of 16 bits per sample (44.1/16). For 20 hours of uninterrupted recording, the Zoom H2n needed two AA batteries. In a second visit after the procedure the participant and I listened to the recording. While listening, the participant was asked to name locations and persons encountered in the recording. In case code-switching could be identified, I asked the participants for her/his opinion about why the switching occurred at that moment. In this way, I was already able to get insights into possible functions of code-switching and factors responsible for situational code-switching, but also into the language competence of certain persons and the participant's attitudes towards the latter. The locations visited, and persons encountered, by both participants is summarized in Table 2.12.

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[2] Bilums are very practical traditional bags made out of yarn or similar fabric. They are carried by women and men to hold items of daily use.

Table 2.12: Settings and encountered individuals during the wiring method

No.	Session ID	Rcdr.	Settings	Individuals	Length
1	EntDayFSS20160901_1 EntDayFSS20160901_2 EntDayFSS20160901_3	FSS	1. FRU's house	1. IRM, NMS, FRU, FNA, HCK, IGM, HMM, GKN, GDX, FSK, KJS	06:55:57
			2. Line Kakau	2. GPA, GSM, OJX, LRM, KJS	
			3. Line Kokonas	3. FJW	
			4. FSS's old house	4. HCK, KJS, HJP	
			5. FRU's house	5. FRU, HCK, FNA, GLS, IRM	
			6. FSS's old house	6. HCK, KJS	
			7. FRU's house	7. HCK, KJS, FRU	
			8. FWS's house	8. FWS, HCK, KJS, FUX	
2	EntDayKJS20160903_1 EntDayKJS20160903_2	KJS	1. FSS's old house	1. FSS, HCK	04:34:33
			2. FDV's house	2. HCK, HRV, GKN, FDV	
			3. HJP's house	3. HCK, FGM, FTI, FDV, IJT, HJP	
			4. FSS's old house	4. FSS, HCK	
			5. Aid post	5. FDS, HCK, GDS, IMX, HEX	
			6. FSS's new house	6. FSS, HCK	

2.2.5 Naturalistic audiovisual recordings

Regarding the question of what constitutes naturalistic recordings in this study, I refer to Himmelmann (1998) who distinguishes between "natural communicative events" and "observed communicative events". The former he (1998: 185) defines as:

> "[U]naffected by any external interference into the conventional communicative routines of the participants. Such events are, in principle, not amenable to documentation since the documentation process itself constitutes an extraordinary factor in the communicative situation."

In contrast, "observed communicate events" are (1998: 185):

> "[C]ommunicative events in which external interference is limited to the fact (known to the communicating parties) that the ongoing event is being observed and/or recorded. Such interference may be caused by the presence of an observer who occasionally takes notes or by the presence of a recording device."

As a result, the use of a camera constitutes an interference factor which ensures that events will be observed communicative events. For the sake of simplicity, the recordings in this study are referred to as naturalistic recordings, since they are likely to be as close as possible to the natural behavior of the speakers.

In order to prevent the presence of the researcher from being a further interference factor, it was decided to let the participants record themselves. The recording process was placed in the hands of the participants and not the researcher in order to circumvent the so-called observer's paradox (Labov 1972: 113). Duranti (1997: 117) criticizes the method of letting participants take over the recording due to the fact "that members might feel entitled to intrude much more than outsiders in the lives of their family and neighbors". However, the researcher as a recorder would have jeopardized the collection of code-switching data, since it has been observed that Qaqet speakers linguistically accommodate to outsiders by switching to Tok Pisin. The effect of being observed can be seen in my very first recordings, in which speakers were far more stiff compared to the later ones. This was evident from the fact that they were actively searching for topics to talk about, or directing other (mostly younger) participants involved to say or sing something. However, it cannot be said with certainty whether their biased behavior was due to the presence of the recorder, the camera or the situation as a whole. Nevertheless, it was assumed that the participants eventually would get used to the fact of being recorded. Similarly, Duranti (1997: 118) argues "that most of the time people are too busy running their own lives to change them in substantial ways because of the presence of a new gadget or a new person". This is in line with what was my impression of the participants' behavior in the ongoing recording process.

The two focal families were asked to record 4 hours of adult-to-adult talk per month over a period of 7 months within their social network (see 2.2.4). They were equipped with a Zoom Q4 handy video recorder, four batteries and four SD cards (32 GB). One SD card is enough for 4 hours of recording in the format .mov (1080/25), and one battery was enough for 1 to 2 hours of recording. Full SD cards and empty batteries were changed weekly during my regular visits.

Fifty four recordings with a total length of 32:12:36 hours were made in public and non-public settings. However, people were asked to focus on non-public settings, since it was assumed that more code-switching would occur in such settings. The corpus used for the analysis of conversational and situational code-switching in non-public settings consists of the four recordings in Table 2.13 with a total length of 01:47:30 hours.

Table 2.13: Corpus recordings of speech situations in non-public settings

No.	Session part	Setting	Speech situation	Length
1	CodeFSS_KJS20160901_1	Cooking house	Cooking	00:28:07
2	CodeFSS_KJS20161119A_2	Cooking house	Conversation	00:28:07
3	CodeFSS_KJS20160910A_1	Copra drying house	Working	00:28:07
4	CodeFSS_KJS20161023_2	Home	Conversation	00:23:09

Recordings for this corpus were solely from focal family A (recorder: FSS) due to the fact that their recordings contained more code-switching. Table 2.14 lists the participants in these recordings. They exclusively include persons from the focal family's social network. What is evident from the table is that children are also present in the recordings. A characteristic of the Qaqet household is that family members spend a lot of their time together as a group. Thus, disallowing children from participating in the recordings probably would have created a more unnatural scenario for the adult participants. However, as the focus of this study is on adult-to-adult code-switching, adult-to-child, child-to-child as well as child-to-adult talk were excluded from the later analysis.

Table 2.14: Participants in the naturalistic recordings

No.	Hamlet	Household	ID	Sex	(Approx.) year of birth
1	Saqalames	1	FSS	m	1987
2	Saqalames	1	KJS	f	1988
3	Saqalames	1	HCK	f	2014
4	Saqalames	3	NMS	f	1955
5	Saqalames	3	HJP	m	1939
6	Saqalames	3	FWB	f	2010s
7	Saqalames	4	IRM	f	1964
8	Saqalames	4	FRU	m	1964
9	Saqalames	4	FNA	f	2007
10	Saqalames	4	FSP	f	1998
11	Saqalames	5	GLS	m	1990s
12	Lanivaqa	2	FWS	m	1978
13	Lanivaqa	4	FLT	m	1952
14	Lanivaqa	5	FKW	m	1997
15	Altiaqa	6	GKN	f	1995
16	Altiaqa	6	HRV	m	2014
17	?	?	GFA	m	2000s
18	?	?	GBM	m	2010s

The corpus used for the analysis of situational code-switching in public settings consists of the three recordings in Table 2.15 with a total length of 02:09:38 hours.

Table 2.15: Corpus recordings of speech situations in public settings

No.	Session part	Setting	Speech situation	Length
1	CodeFST_ICK20161024_1 CodeFST_ICK20161024_2	School	School meeting	00:36:49
2	CodeFST_ICK20161009_1 CodeFST_ICK20171009_2	Church	Religious feast	00:30:19
3	CodeFST_ICK20170212A_1 CodeFST_ICK20170212A_2 CodeFST_ICK20170212A_3	Church	Church service	01:02:30

The recordings for this corpus were taken solely from focal family B. This is due to the recorder's (FST) work as Eucharistic minister through which he is almost always present at official events in the Kamanakam community.

2.2.6 Staged audiovisual recordings

According to Himmelmann (1998: 185), staged recordings, as opposed to naturalistic audiovisual recordings, "are not 'really' communicatively functional, that is, they do not serve any specific communicative purposes other than producing data". Within this category he (1998: 185) differentiates two types of staged events, that is, staged events for which rather general instructions are given and staged events that involve the use of specific stimuli. The use of

stimuli in descriptive and documentary linguistics as well as in language acquisition research has been accepted for some time (cf. Himmelmann 1998: 185; Eisenbeiss 2005: 130). Varying types of stimuli have been developed over the years, of which probably the best known and most frequently used are Chafe's *"Pear Film"* made in 1975 at the University of Berkeley and Mayer's (1969) picture book *"Frog, Where Are You?"* used for the comparative study of elicited narrative production (e.g., Chafe 1980; Berman and Slobin 1994; Strömqvist and Verhoeven 2004a). An advantage of staged data compared to naturalistic data is that the former allows for more control and richer data sets (Eisenbeiss 2005: 130). For this reason, I collected staged data with the aim to reproduce situations observed in the naturalistic recordings. This involved the use of different stimuli, each with the objective of provoking a certain type of code-switching from the speaker. The types of code-switching which I aimed to elicit concern what Blom and Gumperz (1972) and Gumperz (1982) have termed *Situational Code-Switching*. The concept of situational code-switching and its governing factors *setting, participant* and *topic* is that a change in these factors can bring about changes in a speaker's code choice. By making use of controlled stimuli, the data also allows for crosslinguistic comparability (Eisenbeiss 2005: 130) which will be relevant for future studies making use of the project's Qaqet corpus.

The staging scenarios involved the use of a set of stimuli which allowed me to systematically manipulate the parameters of interest. For situational code-switching and its factors, I designed scenarios with the aim of accounting for each individual factor. However, in the field, I left out the setting factor due to the fact that the naturalistic data already paint a clear picture of how the setting contributes to situational code-switching. Regarding the participant factor, the stimulus constituted single persons successively arriving and leaving a conversation between two already present conversational partners talking about a predefined topic. Concerning the topic factor, two participants engaged in a conversation were required to change the topic after a short period of time based on a pile of cards with predefined topics.

Participants for the staged recordings were those who had taken part in the naturalistic audiovisual recordings. It is their language use from the naturalistic recordings that I attempted to replicate in a controlled fashion. Further, if possible, the participants were grouped according to the types of code-switching they had exhibited in the naturalistic recordings. In the following sections, each method will be presented in more detail.

Pre-test for the participant and topic factor stimulus tasks

In order to obtain a first impression regarding the feasibility of the participant and topic factor stimulus tasks, I pretested the two within a single task. The basic setup of the task involved two groups of two participants having a staged conversation about two predetermined topics. Each group then had one new participant first arrive, and then leave, the conversation. Unlike the participant and topic factor tasks presented below, the pre-test involved a minimal design (see below) combining those topics and arriving participants that, on the one hand, had been assumed to provoke varying degrees of code-switching, ranging from maximal to minimal.

- Maximum CS-triggering person + Maximum CS-triggering topic
- Maximum CS-triggering person + Minimal CS-triggering topic
- Minimal CS-triggering person + Maximum CS-triggering topic
- Minimal CS-triggering person + Minimal CS-triggering topic

The task was designed to investigate how the present participants would react to a change in the constellation of participants and a change of topics, as well as the question, whether one

factor might have an influence on the other in the speaker's production of code-switching. The outcome of the pre-test had an influence on the final design of the participant and topic factor stimulus tasks, as it allowed fine adjustments to be made in the field.

From the naturalistic corpus, sociolinguistic survey data and participant observation, I developed assumptions regarding the participant and the topic factors. For the former, the data led me to assume that language competence and age of the arriving (new) participant could be the underlying rationales for the participant factor. For the latter, the data led me to assume that the underlying rationale could be related to topics that involve modern concepts in contrast to more traditional topics.

Looking at the participant factor, I initially analyzed a sample from the naturalistic corpus. As each intonation unit in the corpus is associated with the individual speaker, coding the intonation units for language (see Section 2.5.1 on p. 53) allowed me to systematically investigate who would switch when there is a change in the constellation of the participants. At the same time, I was checking the sociolinguistic make-up of the arriving participants based on sociolinguistic survey data I had already collected during my first and second field trip. In order to group the arriving participants age-wise, I made use of Erikson's (1997) stages of psychological development: young adulthood (20-39 y.), adulthood (40-65 y.) and old age (65 y. onward). As for language competence, the arriving participants were categorized as either Qaqet-dominant or Tok Pisin-dominant. The decision-making process for the categorization was built on three conditions, namely, the participants' self-perceived language competence in both Qaqet and Tok Pisin making use of a four-level scale (0 = no competence, 1 = basic, 2 = proficient, 3 = fluent), my personal participant observation as well as the local registrar's metalinguistic comments towards a particular person's language competence.

However, due to the limited size of the edited naturalistic corpus, it features a rather small amount of code-switching caused by changes in participant constellation. Therefore, the arriving participants are not represented in all age and language competence groups in the naturalistic corpus. In addition, during fieldwork, not all participants present in the naturalistic recordings were available to participate in the task. Hence, to run the complete setup of the staged recordings it was necessary to find further arriving participants, who could then fill the gaps in the naturalistic data. This again was achieved with the help of the categorization process built on the three conditions described above. From the coding of a 30 minute sample of the naturalistic corpus for discourse topic, it became evident that topics which involve modern concepts were more prone to show code-switching and mixed intonation units, in contrast to topics that were more traditional. As a consequence, I assumed that the topic *masin* 'machines, technical gear' would lead to more code-switches and use of mixed intonation units then *buai* 'betel nut'. The two topics were chosen as appropriate for the task. The search for appropriate participants led to the formation of two groups, each with three participants (see Table 2.16).

Table 2.16: Participants in the pre-test

Group	Hamlet	Household	ID	Sex	(Approx.) YoB	Qaqet competence	Tok Pisin competence
1	Saqalames	4	IRM	f	1964	Fluent	Fluent
1	Saqalames	4	FRU	m	1964	Fluent	Fluent
1	Ngumingsanas	3	FSN	f	1990s	Fluent	Basic
2	Saqalames	3	NMS	f	1955	Fluent	Fluent
2	Lanivaqa	2	FWS	m	1978	Fluent	Fluent
2	Altiaqa	7	FSR	f	1969	Not at all	Fluent

In each group, two participants (group 1: IRM, FRU; group 2: NMS, FWS) were equally fluent in Qaqet and Tok Pisin. The third participant (FSN) of group 1 was considered Qaqet-dominant in the sense that she may understand Tok Pisin, but is not fluent, and prefers not to speak it. The third participant (FSR) of group 2, in contrast, was chosen for being Tok Pisin-dominant. Her native language is Kuanua, she is fluent in Tok Pisin and self-reported as never speaking Qaqet.

Table 2.17 summarizes the procedure of the pre-test: the number of stages (Stg.), the properties of the topic/participant, that is, a combination of the respective minimal/maximal code-switching-triggering persons and the respective minimal/maximal code-switching-triggering topics. Further, the present participants as well as the arriving (new) participant and topic are also listed.

Table 2.17: Setup of the pre-test

Stg.	Property of topic/participant	Present participants	Arriving participant	Topic	Time
1	Max. CS-triggering topic	1. Group: NMS, FWS	–	Machines	5 min.
2	+Max. CS-triggering person	1. Group: NMS, FWS	FSR	Machines	5 min.
3	Min. CS-triggering topic	1. Group: NMS, FWS	–	Betel nut	5 min.
4	+Max. CS-triggering person	1. Group: NMS, FWS	FSR	Betel nut	5 min.
1	Max. CS-triggering topic	2. Group: IRM, FRU	–	Machines	5 min.
2	+Min. CS-triggering person	2. Group: IRM, FRU	FSN	Machines	5 min.
3	Min. CS-triggering topic	2. Group: IRM, FRU	–	Betel nut	5 min.
4	+Min. CS-triggering person	2. Group: IRM, FRU	FSN	Betel nut	5 min.

In Stage 1 of the procedure, the two balanced bilingual participants were asked to talk for 5 minutes about machines in the language of their choice. In the meantime, the third participant would hide in a location, where s/he could not be seen by the two participants. After 5 minutes, the third participant was asked to leave her hideout and arrive at the scene in order to engage in a conversation with the two about the same topic for another 5 minutes (Stage 2). After another 5 minutes, the third participant was given an audible sign to leave the scene again and to come back to her hiding place. In the next stage, the two original participants started to talk about betel nut for about 5 minutes (Stage 3). Finally, in Stage 4, the same third participant was asked to leave her hideout again, and to engage in the ongoing conversation about betel nut for another 5 minutes.

Stimulus task for the participant factor

For the most part, the design of the stimulus-based participant factor task is a replication of the pre-test for the participant and topic factors. That is, two groups of two present adult bilingual Qaqet/Tok Pisin speakers were asked to have a predefined conversation in the home setting with four new participants alternatively arriving and leaving the scene (see Table 2.18).

Table 2.18: Participants in the stimulus task for the participant factor

Group	Hamlet	Household	ID	Sex	(Approx.) YoB	Qaqet competence	Tok Pisin competence
1	Saqalames	3	NMS	f	1955	Fluent	Fluent
1	Lanivaqa	4	FLT	m	1952	Fluent	Fluent
2	Saqalames	4	IRM	f	1964	Fluent	Fluent
2	Saqalames	4	FRU	m	1964	Fluent	Fluent
1/2	Ngumingsanas	3	FSN	f	1990s	Fluent	Basic
1/2	Lanivaqa	5	FGM	m	1977	Basic	Fluent
1/2	Saqalames	?	HSX	f	1990s	(Basic)	(Fluent)
1/2	Ragaga ward	3	GMS	f	1950s	(Fluent)	(Fluent)

The participants were chosen out of a pool of bilingual Qaqet/Tok Pisin speakers who were either observed to code-switch in the corpus recordings in situations where the participant constellation changed (NMS, FRU, FLT), who were being present in the naturalistic corpus (IRM), or who otherwise were part of the social network of the participants, and lived in the area (FSN, FGM, HSX, GMS). Similar to the pre-test, the present bilingual Qaqet/Tok Pisin speakers were free to choose their language for the task. However, the topics were now limited to those (betel nut and cooking) which in the data were associated with very little to no code-switching to Tok Pisin. Otherwise, it would have been questionable whether the present speakers switched because of the arrival of the new participant or because of the topic they had chosen for themselves. In addition, the topics were switched with every new arriving participant in order to reduce the effect of priming. With respect to this phenomenon, psychological research has found that "[p]rior exposure to a stimulus can facilitate its subsequent identification and classification" (Horner and Henson 2008: 1979). Similarly in linguistics, priming has been observed to lead to repeated behavior of linguistic structures (e.g., Serratrice 2017).

The four arriving and leaving participants were chosen based on different age groups[3], that is, young adulthood (20-39 y.) and adulthood (40-65 y.) (see Erikson and Erikson 1997). Participants classified as old age (65 y. onward) had to be left out from the task as there were no appropriate participants in the community. Another factor was their language dominance, which was categorized as dominant and non-dominant, and which was assessed with the help of three conditions: participants' self-perceived language competence in both Qaqet and Tok Pisin measured by a four-level scale (0 = no competence, 1 = basic, 2 = proficient, 3 = fluent), my personal participant observation as well as the local registrar's metalinguistic comments towards a particular person's language competence. This resulted in four groups of arriving/leaving participants to test for the task – young Qaqet-dominant adult, Qaqet-dominant adult, young Tok Pisin-dominant adult and Tok Pisin-dominant adult. However, unlike the code-switching behavior of the present participants, that of the arriving and leaving participants was not captured in the naturalistic recordings. This would have been desirable in order to fully reproduce a scenario with the present and arriving/leaving participants from the naturalistic corpus. Unfortunately, this was not possible due to the fact that the edited naturalistic corpus does not incorporate young and middle aged Qaqet-dominant adults or Tok Pisin-dominant middle aged adults. In addition, none of the participants from the naturalistic corpus covering the other categories (young Tok Pisin-dominant adults) were available to participate when carrying out the task in the field. Hence, to run the complete set-up of the staged recordings it was necessary

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[3] This categorization might run counter to the Qaqet people's own perception of age groups. It is my impression that people from the age of about 55 onward are already considered 'old'.

to find arriving/leaving participants fitting the four above described variables, and also filling the gaps from the naturalistic data. This again was achieved with the help of the categorization process built on the three conditions described above.

In carrying out the task, I first briefly explained the task to all participants with the help of the local registrar (FSS). I provided limited information regarding the stages of the task in order to reduce bias regarding their language use. Accordingly, I asked them to hold an informal conversation, and explained that as soon as another participant arrived at the scene, they should involve this person in the ongoing conversation. In preparation for the task, the already present participants were asked to seat themselves in a separate area. I then started the recording and left the scene with a short note asking the participants to talk about the betel nut topic. The setting was a Saqalames-based kitchen house of one of the participants where they were isolated from other community members living on the hamlet as well as from the other participants. Their isolation, that is, my absence and the absence of others, was intended to reduce bias. After about 3 minutes of discussion about 'betel nut', the new participant arrived and joined the conversation. After another 3 minutes jointly talking about 'betel nut', the newly arrived participant left the scene again. The other participants continued to converse alone for 3 minutes. At the same time, they were asked to switch the topic to 'cooking'. Then they would jointly converse for 3 minutes about 'cooking', following which another new participant arrived at the scene. In this way, the routine was carried out with four arriving participants and a switch between topics ('betel nut' and 'cooking') with every participant joining the conversation. The whole procedure was recorded with a digital handy camera (Zoom Q4). Table 2.19 again summarizes the task in more detail.

Table 2.19: Set-up of the stimulus task for the participant factor

Stg.	Property of the topic/participant	Present participants	Arriving participant	Topic	Time
1	Min. CS-triggering topic	1. Group: NMS, FLT 2. Group: IRM, FRU	–	Betel nut	3 min.
2	+Min. CS-triggering person	1. Group: NMS, FLT 2. Group: IRM, FRU	FSN	Betel nut	3 min.
3	Min. CS-triggering topic	1. Group: NMS, FLT 2. Group: IRM, FRU	–	Cooking	3 min.
4	+Max. CS-triggering person	1. Group: NMS, FLT 2. Group: IRM, FRU	FGM	Cooking	3 min.
5	Min. CS-triggering topic	1. Group: NMS, FLT 2. Group: IRM, FRU	–	Betel nut	3 min.
6	+Max. CS-triggering person	1. Group: NMS, FLT 2. Group: IRM, FRU	HSX	Betel nut	3 min.
7	Min. CS-triggering topic	1. Group: NMS, FLT 2. Group: IRM, FRU	–	Cooking	3 min.
8	+Min. CS-triggering person	1. Group: NMS, FLT 2. Group: IRM, FRU	GMS	Cooking	3 min.

Stimulus task for the topic factor

The stimulus-based task for the topic factor was designed to test whether particular topics can be associated with the speaker's degree of code-switching. The design of the task involved two

adult bilingual Qaqet/Tok Pisin speakers holding a controlled conversation on predetermined topics. Appropriate participants were chosen from a pool of Qaqet/Tok Pisin speakers already present in the naturalistic corpus (see Table 2.20).

Table 2.20: Participants in the stimulus task for the topic factor

Group	Hamlet	Household	ID	Sex	(Approx.) YoB	Qaqet competence	Tok Pisin competence
1	Saqalames	4	IRM	f	1964	Fluent	Fluent
1	Saqalames	4	FRU	m	1964	Fluent	Fluent
2	Saqalames	3	NMS	f	1955	Fluent	Fluent
2	Lanivaqa	2	FWS	m	1978	Fluent	Fluent
3	Lanivaqa	10	ICK	f	1979	Fluent	Fluent
3	Lanivaqa	10	FST	m	1977	Fluent	Fluent

The topics were based on those identified in a sample of the naturalistic corpus recordings. The topics from the sample which were included in the task include:

- Fruits
- Church
- Machines
- Betel nut
- Cooking
- Eating
- Garden work
- Shopping

Each session incorporated two participants conversing with each other. The topics had been written on cards beforehand, and each topic was supposed to be discussed by the participants for about 3 minutes. This left the participants enough time for eight topics in a time frame of 24 minutes. The duration has proven to be a sufficiently long time span for the participants to feel at ease while participating in the task. Regarding the setting, the task was being carried out in the participants' home setting to provide an informal and comfortable atmosphere. Within the setting, the participants were seated in an isolated location in order to reduce bias from other persons being present. In preparation for the task, the participants were encouraged to talk freely using whatever language they liked. The potentially disturbing effect of clocking time while carrying out the task was minimized by my signaling vocally to the participants every 3 minutes from afar as an indication for them to change the topic. Due to the unknown reading skills of group 2, it was decided to call out the name of the respective topic every 3 minutes. Here, the call served both as a sign for the change of topic and as an indication of the content of the topic. Table 2.21 again summarizes the task in more detail.

Table 2.21: Setup of the stimulus task for the topic factor

Stage	Participants	Topic	Time
1	1. Group: IRM, FRU 2. Group: NMS, FWS 3. Group: ICK, FST	Fruit	3 minutes
2	1. Group: IRM, FRU 2. Group: NMS, FWS 3. Group: ICK, FST	Church	3 minutes
3	1. Group: IRM, FRU 2. Group: NMS, FWS 3. Group: ICK, FST	Machines	3 minutes
4	1. Group: IRM, FRU 2. Group: NMS, FWS 3. Group: ICK, FST	Betel nut	3 minutes
5	1. Group: IRM, FRU 2. Group: NMS, FWS 3. Group: ICK, FST	Cooking	3 minutes
6	1. Group: IRM, FRU 2. Group: NMS, FWS 3. Group: ICK, FST	Eating	3 minutes
7	1. Group: IRM, FRU 2. Group: NMS, FWS 3. Group: ICK, FST	Garden work	3 minutes
8	1. Group: IRM, FRU 2. Group: NMS, FWS 3. Group: ICK, FST	Shopping	3 minutes

2.3   Transcribing the data

From the overall 32:12:36 hours of naturalistic recordings in public and non-public settings, 04:36:18 hours in non-public settings were transcribed (see Table 2.22 below), of which 01:47:30 hours (see Table 2.13 on p. 30) were used for the analysis of situational and conversational code-switching, as well as for the analysis of mixed intonation units. Data that was deemed suitable for transcription were those that contained the maximum amount of code-switching. Prior to the transcription process, the selected recordings were incorporated into ELAN, where the speakers' utterances were segmented into broad chunks. The initial transcription was carried out in the field, making use of two different methods.

Table 2.22: Transcribed recordings of speech situation in non-public settings

No.	Transcriber(s)	Session part	Transcription method	Length
1	FSS, FPM, FCP, FVS, LSR	CodeFSS_KJS20160901_1	Paper	00:28:07
2	FSS, FPM	CodeFSS_KJS20160901_2	BOLD	00:28:07
3	FSS, FPM, FCP	CodeFSS_KJS20160910A_1	Paper	00:28:07
4	FSS, FPM, LSR	CodeFSS_KJS20161023_1	Paper/BOLD	00:28:07
5	FPM	CodeFSS_KJS20161023_2	BOLD	00:23:09
6	FSS	CodeFSS_KJS20161119A_2	BOLD	00:28:07
7	FSS	CodeFSS_KJS20170102_1	BOLD	00:28:07
8	FSS, FPM, FCP, FVS, FPK, LSR	CodeFST_ICK20160919_1	Paper/BOLD	00:28:09
9	FPM ; FPK ; ?	CodeFST_ICK20160930A_1	Paper	00:28:09
10	FPM	CodeFST_ICK20170110_2	BOLD	00:28:09

The first method was used at an earlier stage, and involved transcription on paper. Here, the transcriber and I listened to the segment in ELAN which s/he then transcribed on paper, while also providing a written translation into Tok Pisin and English. Tok Pisin segments were, however, solely translated into English. Problems that occurred with this method concerned the length of the previously segmented chunks which, if too long due to the high density of adult talk, were sometimes hard to digest for the transcriber. The transcripts were sometimes difficult to read, depending on various factors, such as the different orthographies used by each transcriber, my initial unfamiliarity of these orthographies or the degree of the transcriber's Qaqet competence.

For the second method, I made use of the "Basic Oral Language Documentation" (BOLD) method, which was proposed by Simons (2008) but has precursors already described in Bouquiaux and Thomas (1976: 173f.), Simons (1979: 7) and Woodbury (2003: 43). Simons' (2008) approach was first put into practice by Reiman (2010) and later tested in six field projects for its applicability in the field of language documentation (Boerger 2011). As with transcription on paper, the BOLD method involved playing segment after segment to the transcriber. The difference, however, was that the transcriber was asked to orally repeat each segment using careful speech and provide a translation into Tok Pisin. At the same time, the transcriber's repetition was recorded with a digital audio recorder (Zoom H2n). Additionally, the transcriber was encouraged to give extensive metalinguistic comments during the session (cf. Reiman 2010: 256). From the BOLD procedure, I decided to leave out everything which was intelligible to me, such as Qaqet and Tok Pisin discourse markers and interjections, most of the monolingual Tok Pisin phrases and the less complex Qaqet ones. The transcriber could therefore focus on monolingual Qaqet and mixed Qaqet/Tok Pisin segments. In this manner, the procedure significantly decreased the time in the field needed for the initial transcription. However, the BOLD procedure was only applicable at a later stage where I had gained sufficient knowledge of the lingua franca Tok Pisin in order to be able to transcribe it myself. At the same time, I also had gained sufficient knowledge of Qaqet to transcribe the monolingual and mixed Qaqet/Tok Pisin segments based on the slowly rephrased version from the original recording. A problem that occurred with the BOLD method was that: asking the transcriber to use careful speech sometimes led to a slower but not less contracted repetition of the segment. The latter is a common phenomenon in Qaqet, which can make it difficult for a non-native speaker to identify the underlying morphemes.

2.4   Segmenting the data

In this study, the basic unit in the analysis of the naturalistic corpus, according to which the data was segmented, is the intonation unit. The latter Chafe (1987: 22) has defined as "a sequence of words combined under a single, coherent intonation contour, usually preceded by a pause". According to Himmelmann (2006: 260) and Himmelmann and Ladd (2008: 252) major cues to determine the boundaries of an intonation unit include:

- A silent pause

- A boundary tone at the end of the intonation unit, i.e. a clearly perceptible change in pitch on the last syllable(s) of a unit (e.g., an utterance-final fall)

- Changes in voice quality and/or intensity (e.g., change to creaky voice at the end of a unit)

- A new onset at the beginning of the next unit, i.e. typically a jump in pitch between the offset of one unit and the beginning of the next one

- Marked changes in segment duration (especially longer segments just preceding a major boundary)

According to Himmelmann (2006: 260), the advantage of analyzing oral speech data with an intonation unit approach results from the way in which humans produce language:

> "It is widely held to be the basic unit into which native speakers themselves chunk their utterances, i.e. it is seen as a unit of speech production which in some sense has a psychological reality for the speakers (as opposed to a purely analytic construct 'invented' by linguists)."

However, Himmelmann (2006: 267) also notes that one may be faced with a number of problems even when trying to identify intonation units of a language one understands well:

- Missing out indications for prosodic boundaries within clauses or noun phrases

- Hearing prosodic boundary signals at, e.g., clause boundaries when in fact there are none

In contrast, trying to segment the oral speech data into units such as clauses or sentences presents the linguist with other difficulties which Himmelmann (2006: 259) summarizes as follows:

> "Decisions as to what to include in a single clause and sentence are usually based on semantics and, if available, morphosyntactic evidence. But more often than not, such decisions are also influenced by what a sentence in written English looks like (or whatever written language the editor is most familiar with). Given this mixture of variables, many of which are difficult to handle in a consistent manner, it is almost unavoidable that decisions regarding sentence and paragraph structure become almost arbitrary."

2.4.1 Intonation units in Qaqet

Hellwig (2018: 56-70) has identified the most salient intonation contours in the Qaqet variety of Raunsepna, see Table 2.23. Here, pauses tend to occur after final intonation units, however, they may or may not occur between non-final ones (2018: 57). From the beginning, her observations have proven to be broadly applicable for the segmentation of Kamanakam Qaqet intonation units.

Table 2.23: Qaqet intonation contours, following Hellwig (2018: 56)

Type	Prosody	Function
Final	Final fall	Declarative utterance; final member of a list
Non-final	Final rise-fall	Non-final unit of a declarative utterance (e.g., non-final clause, left-dislocated constituent, interjection *kuasik* 'no' & vocative); possibly also some phrasal units
Continuation	Final level + glottalization	Self-interruption; introducing reported speech & non-verbal demonstrations
List	Final rise	Non-final member of a list
Content question	Fall	Interrogative (content question)
Quoted content question	Initial rise + final fall	Reported interrogative (content question)
Polar question	Final rise-fall	Interrogative (polar question)
Imperative	(Initial rise) + final rise	Imperative

What can be observed for Qaqet is that pitch movements take place at the boundary of the intonation unit (Hellwig 2018: 51). For the intonation patterns in Qaqet, Hellwig (2018: 51) remarks that there are remarkable similarities in the overall pitch movements with Kuot, a non-Austronesian language of the neighboring island New Ireland, and concludes that "[i]t is thus likely that the prosodic system of Qaqet is not unusual from an areal perspective". However, different from Kuot (see Lindström and Remijsen 2005: 856-861), there is no sign that Qaqet does bear lexical stress (Hellwig 2018: 51).

2.4.2   Intonation units in Tok Pisin

For the identification of intonation contours in the Kamanakam variety of Tok Pisin, I resort to my own observations. They are of a purely qualitative nature, and are not based on any quantitative analysis. In this regard, it should also be noted that Tok Pisin varies in different regions of PNG. Therefore, the features identified for Kamanakam Tok Pisin are not necessarily applicable to varieties of Tok Pisin spoken in other regions.

According to Smith (2008: 201) there are two studies (Wurm 1985; Faraclas 1989) which have dealt with the prosodic features in Tok Pisin. Wurm's study presents data from fieldwork carried out in the 1950s and early 1960s with speakers of rural Tok Pisin from the Eastern Highlands Province. For Smith (2008: 202f.), this otherwise valuable study has certain shortcomings which he points out as follows:

"[...] although the patterns are quite definitely identified, there is no quantitative treatment, or indication of how they were recorded. It is not clear, for example,

whether the copious example sentences were contrived to illustrate these patterns, or were actual examples recorded in use. Thus their applicability to other varieties is problematic."

Faraclas' (1989) study deals with the reduction of word stress in Tok Pisin spoken by members of the Boiken and the Olo ethnolinguistic groups living in Wewak town, East Sepik Province. The reduction of word stress is a common feature in the Boiken and Olo languages (1989: 134). For declarative statements in Tok Pisin, he observes that this leads to a "consequent 'flattening' of intonation contours" (1989: 135). The authors of both studies argue for the importance of substrate languages being an influential factor in shaping the intonation of Tok Pisin in various parts of PNG (Faraclas 1989: 135; Wurm et al. 1984: 313). Similarly, in an early study, Bee (1971) describes in great detail the influence of the local language Usarufa spoken in the Eastern Highlands on the segmental phonology of the variety of Tok Pisin in the area. More recently, Lindström and Remijsen (2005: 847) note with regard to features of stress and intonation in the neighboring language Kuot that "(impressionistically) at least some of them are transferred to the Tok Pisin spoken by Kuot speakers". For this study, it may therefore be quite reasonable to assume that Qaqet may also have an influence on the intonation contours of the Kamanakam variety of Tok Pisin.

Final units in Kamanakam Tok Pisin

In Kamanakam Tok Pisin, I have identified two regularly occurring intonation patterns marking the final units of declarative utterances. The first one shows a falling intonation contour throughout the whole intonation unit. The second pattern shows a peak in the otherwise downwards falling intonation contour. This appears unexpected if one looks at Qaqet and other languages in the area (e.g., Kuot), where it is observed that the salient movements in the intonation contour predominantly occur at boundary of the intonation unit. In this context, further research is needed in order to discuss the question of whether Kamanakam Tok Pisin bears lexical stress and/or sentence stress.

(2)   FSS   *wantai*   *pupu*   *man*   *longem*
                 wantaim   pupu   man   longem
                 with   grandparent   man   PREP.3SG
                 'with her grandfather'

                                                   (CodeFSS_KJS20161119A_2; IU 1130)

Example 2 shows a rather flat intonation with a slight downwards fall (Figure 2.1).

(3)   FLT   *ating*   *tupla*   *yia*   *i*   *go*   *pinis*
                 ating   tupela   yia   i   go   pinis
                 probably   two   year   PRED   go   COMPLETIVE
                 'probably two years passed'

                                                     (CodeFSS_KJS20160910A_1; IU 1480)

Figure 2.2, which shows the intonation contour for Example 3, shows a rise on the word *yia* 'year' and then a constant fall in intonation. In such and similar examples, it is also not entirely clear yet whether the part *ating tupla yia* 'probably two years' should be treated as a non-final unit (see section below on non-final units in Tok Pisin), which would explain the curve as a boundary tone. Alternatively, it could be interpreted as a phenomenon that could possibly be related to stress.

Figure 2.1: Final unit – first pattern
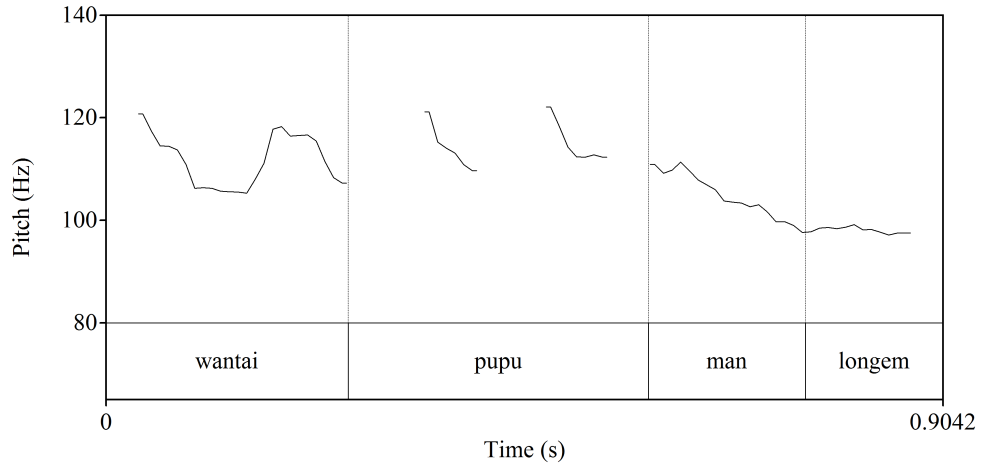
Figure 2.2: Final unit – second pattern
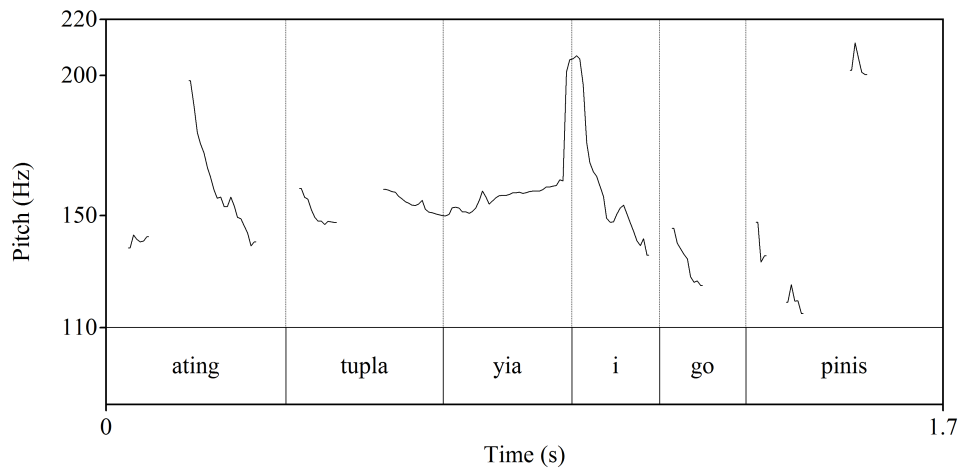
Non-final units in Kamanakam Tok Pisin

Non-final units of Tok Pisin declarative utterances seem to be marked by a rise-fall contour on the ultimate syllable of the final word. As such, they can be quite difficult to distinguish from the second pattern of final units, described above. If the latter indicates sentence stress for a word near the boundary of the intonation unit, the intonation contour may look very similar to the contour of the non-final unit. Here, a more differentiated analysis of the Kamanakam Tok Pisin intonation is needed in order to distinguish these types of units. A non-final unit – here followed by a final unit – is shown in Figure 2.3 for Example 4.

(4) 1 FLT *disla   blok   i   kam   antap   ya*
             dispela   blok   i   kam   antap   ya
             DEM   block   PRED   come   on top   PTCL
             'this block which comes up here'

     2 FLT *blong   pita*
             bilong   pita
             POSS   name
             'it's from Peter'   (CodeFSS_KJS20161119A_2; IU 122–123)

Often, the non-final units seem to correspond to syntactic units, such as conjoined matrix clauses (Ex. 5), left dislocations (Ex. 6), embedded relative (Ex. 7) or different types of adverbial clauses (Ex. 8 and 9).

(5) 1 NMS *dokta   i   lukim   em*
             dokta   i   lukim   em
             doctor   PRED   look-TR   3SG
             'the doctor saw her'

     2 NMS *na   i   mekim   em   olsem*
             na   i   mekim   em   olsem
             CONJ   PRED   make-TR   3SG   like
             'and he made her like this'
                                                      (CodeFSS_KJS20160910A_1; IU 893–894)

Example 5 shows two conjoined matrix clauses. Here, the first is marked as a non-final unit with a rise-fall intonation on the last word *em* 'her', whereas the second clause is marked as final showing a general fall in intonation.

(6) 1 FSS *meri   ya*
             meri   ya
             woman/girl   PTCL
             'the girl'

     2 FSS *em   biget   meri   ya*
             em   bikhet   meri   ya
             3SG   stubborn   woman/girl   PTCL
             'she is a stubborn girl'
                                                      (CodeFSS_KJS20160910A_1; IU 921–922)

Figure 2.3: Non-final unit
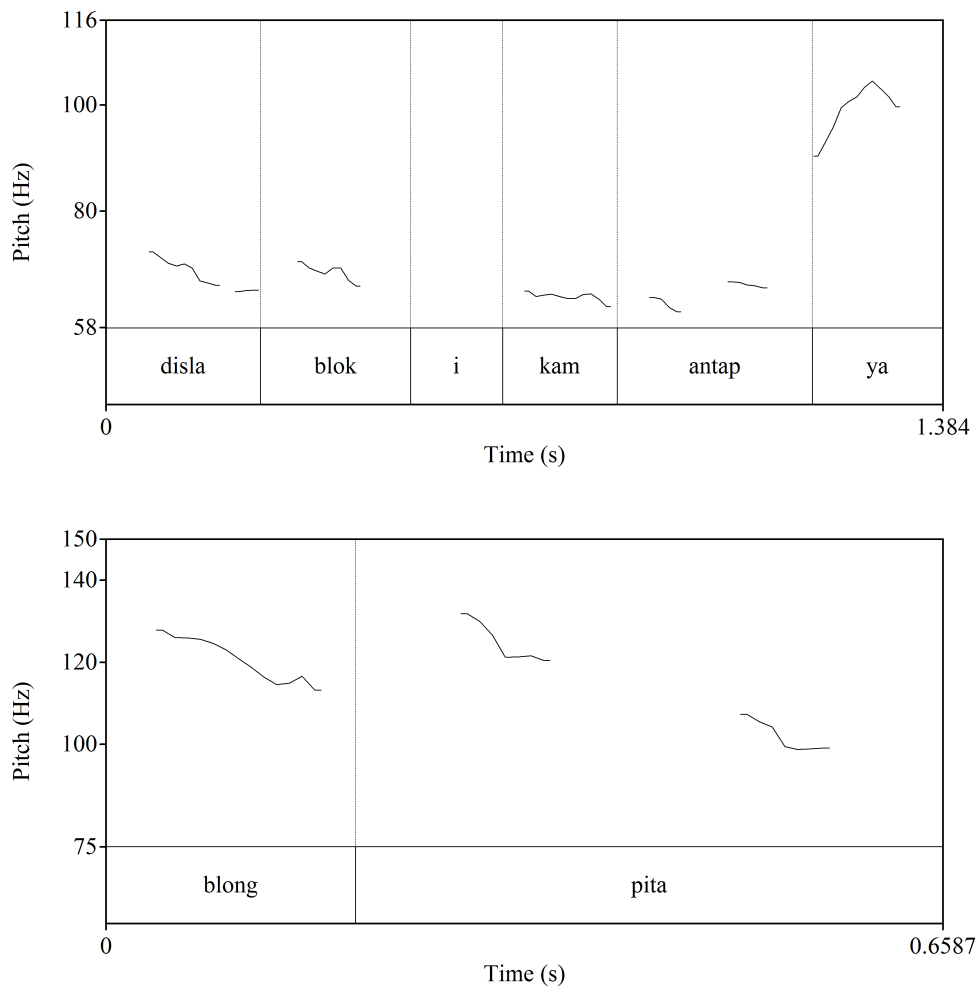
In Example 6, the subject *meri* 'girl' is fronted and marked by the *ya*-particle. The latter shows a rise-fall intonation marking off the whole constituent as a left-dislocation. The fronted nominal is then retrieved *in situ* by the pronoun *em* 'she'. Left-dislocations of this type are also described in Sankoff's (1993: 126f.) paper on focus in Tok Pisin. Her Tok Pisin data are from various sources, although her particular examples concerning left-dislocation may stem from adult Tok Pisin speakers residing in Lae (for details about their local origin, see below).

(7) 1 FSS *disla*   *i*   *tupla*   *man*
              dispela   i   tupela   man
              DEM   PRED   two   man
              'these are two men'

     2 FSS *i*   *sa*   *kros*   *nogut*   *tru*   *ya*
              i   save   kros   nogut   tru   ya
              PRED   HAB   to be angry   no good   true   PTCL
              'who get extremely angry'

                                                          (CodeFSS_KJS20160910A_1; IU 191–192)

In Example 7 the first intonation unit shows a rise-fall contour on the last word, which is the head noun *man* 'men' of the embedded relative clause in the following unit. The latter is closed with a rise-fall intonation on the *ya*-particle, marking it off as a non-final unit. Left-dislocations and relative clauses referring to a noun or a noun phrase appear to be similarly marked. In the data, there are relative clauses which are bracketed by the *ya*-particle on both sides, that is, on the final syllable of the preceding intonation unit (or head noun phrase) and on the final syllable of the intonation unit marking the relative clause. Or, *ya* is either found on one or the other side. Additionally, the speaker marks the final syllable of the head noun phrase and the final syllable of the embedded relative clause with a rise-fall intonation. The situation is similar to what Sankoff and Brown (1976) describe in their case study on the syntax of relativization in Tok Pisin. The study was carried out with speakers residing in Lae. However, the participants originally stem from various parts of the Morobe District but also other areas including Highlands, Bougainville, Madang and West New Britain (1976: 631). In their study, the two researchers state that "[m]any embedded relatives end on a rising intonation contour" (1976: 636), which stands in slight contrast to the final rise-fall intonation found in Kamanakam Tok Pisin. Another similarity to Kamanakam Tok Pisin concerns the *ya*-particle to mark beginning and/or end of the embedded relative clause. In Sankoff and Brown's data, it occurs at the same positions as described for the Kamanakam data. In addition, there are types of relative clauses where *ya* can even be totally absent (1976: 636, 652). As for the intonation, Sankoff and Brown (1976: 647) give an example of relative clause bracketed by the *ya*-particle on both sides where there is no rising intonation on the initial *ya*-particle.

(8) 1 FWS *yu*   *brukim*   *graun*
              yu   brukim   graun
              2SG   break-TR   ground
              'if you break the soil'

     2 FWS *bai*   *taro*   *kamap*
              bai   taro   kamap
              FUT   taro   grow
              'taro will grow'   (CodeFSS_KJS20160910A_1; IU 390–391)

From a pragmatic/contextual perspective, the first unit of Example 8 can be interpreted as conditional which is marked as such by a rise-fall contour on the word *graun* 'ground'. In contrast, the following unit *bai taro kamap* 'taro will grow', here being a final unit, shows a constant fall. From a lexical/morphosyntactic point of view, however, there are no anchor points that allow the first to be interpreted as a conditional adverbial clause and the second unit as a matrix clause.

(9)   1   NMS   *taim*   *i*   *woki*   *wok*
                 taim   i   wokim   wok
                 when   PRED   work-TR   work
                 'when he is doing his work'

      [...]

      3   NMS   *i*   *go*
                 i   go
                 PRED   go
                 'he will go'   (CodeFSS_KJS20160910A_1; IU 767–769)

Example 9 shows a temporal adverbial clause preceding its matrix clause. The former is marked as such by the conjunction *taim* 'when' and rise-fall intonation on the last word *wok* 'work'. The matrix clause is then marked by falling intonation.

Content questions in Kamanakam Tok Pisin

The intonation of content questions shows different patterns but typically ends on a falling intonation. What can be observed in medial position is a high pitch on syllables of different words which could be interpreted as the stressed syllable of the word which carries the sentence stress (see Examples 10 and 11). The pattern resembles what Wurm (1985: 323f.) describes for content questions in his Tok Pisin data from the Eastern Highlands Province.

(10)   NMS   *wane*   *samting*   *i*   *stap*
                wanem   samting   i   stap
                what   thing   PRED   to be
                'what is there?'
                                                                (CodeFSS_KJS20160910A_1; IU 751)

Figure 2.4 of Example 10 shows a content question with the compound interrogative *wanem samting* 'which thing' in the intonation unit's initial position. Here, the second syllable of the noun *samting* shows a high pitch indicating that the word is carrying the sentence stress. The remaining part shows a steep fall in intonation.

(11)   FSS   *paralais*   *i*   *go*   *we*
                paralais   i   go   we
                name   PRED   go   where
                'where did Paralais go?'
                                                                (CodeFSS_KJS20160910A_1; IU 607)

Figure 2.4: Content question – Example 10
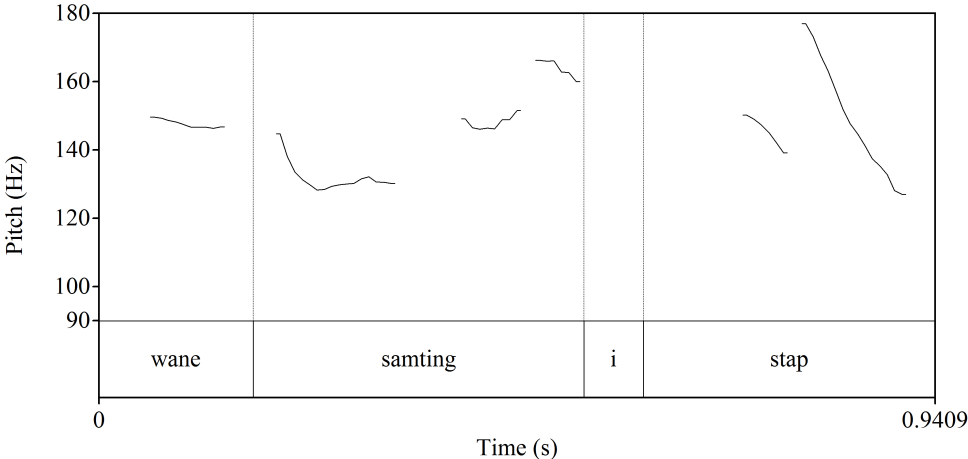
Figure 2.5: Content question – Example 11
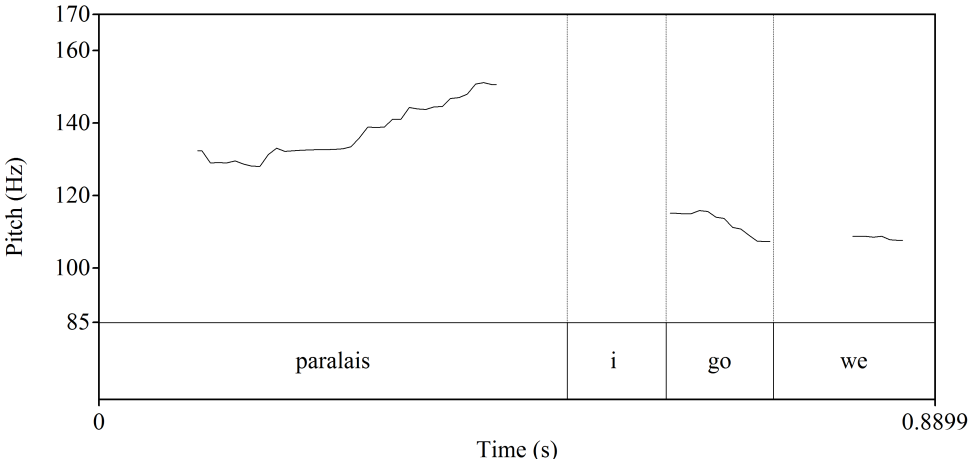
Figure 2.5 of Example 11, shows a content question with the interrogative word *we* 'where' in final position, but, here, the sentence stress lies on the name 'Paralais'. There is a high pitch realized on its third syllable while thereafter the speaker's intonation is constantly falling until the end of the clause.

Polar questions in Kamanakam Tok Pisin

Polar questions in Tok Pisin seem to show a rise-fall pattern on the last word of the unit. See Examples 12 and 13:

(12)   1   FWS   *mande*
                 mande
                 monday
                 'Monday?'

       2   NMS   *mh*
                 mh
                 yes
                 'yes'   (CodeFSS_KJS20160910A_1; IU 371–372)

Figure 2.6: Polar question – Example 12
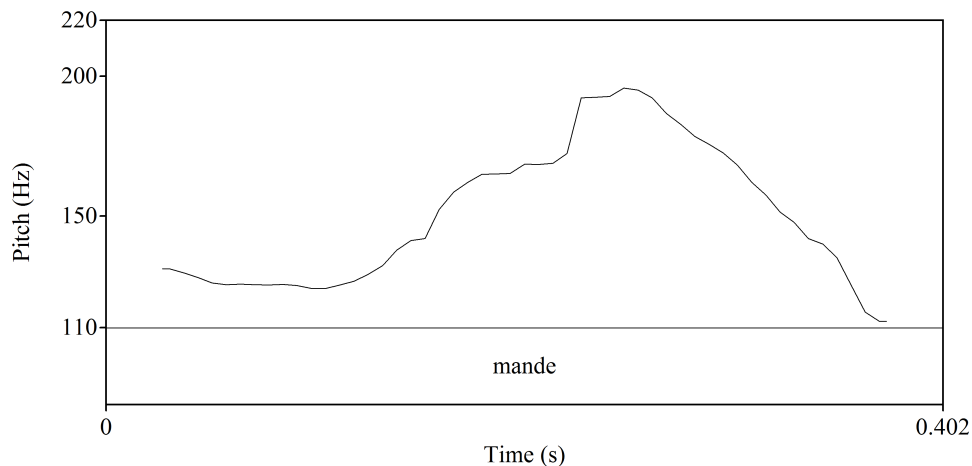
Figure 2.6 of Example 12 shows a short question-answer sequence with *mande* 'Monday?' being a minimal example of a polar question. Here *mande* shows a rise-fall intonation pattern.

(13)   1   FSS   *kati*   *palang*   *blong*   *en*
                 katim   palang   bilong   em
                 cut-TR   plank   POSS   3SG
                 'cutting his planks?'

2   IRM   *nogat*
            nogat
            no
            'no'   (CodeFSS_KJS20161023_2; IU 565–566)

Figure 2.7: Polar question – Example 13
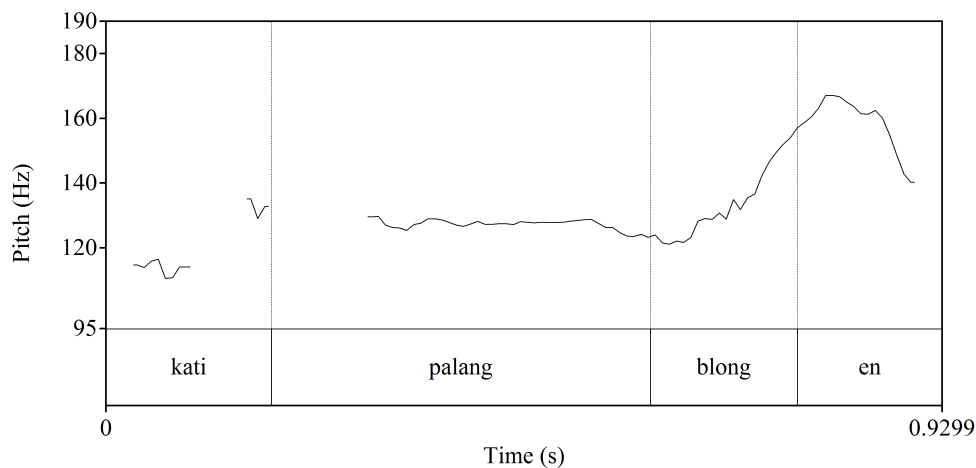
Figure 2.7 of Example 13 also shows a short question-answer sequence with a slightly longer polar question *kati palang blong en* 'cutting his planks?'. Here, the last word of the question *en* is marked by a rise-fall intonation.

In summary, it can be said that the intonation of the first pattern from the final units as well as what can be observed for the non-final units and polar questions resembles the respective patterns which Hellwig (2018: 56) describes for Qaqet. In contrast, content questions follow a different pattern that is not described for Qaqet, but which is similar to the intonation of the Tok Pisin varieties described by Wurm (1985: 323f.).

2.4.3 Types of code-switching

Code-switching between intonation units

The segmentation of intonation units according to the observations for Qaqet (see Section 2.4.1 on p. 41) and Tok Pisin (see Section 2.4.2 on p. 42) presented above showed that one type of code-switching can be safely identified among Kamanakam Qaqet/Tok Pisin speakers: code-switching from one intonation unit to the other. In the corpus, it can be observed that switches of this kind include intonation units that are directly adjacent to each other in a single turn of a speaker as well as in turns that are interrupted by another speaker. In the literature (see e.g., Gardner-Chloros 2009a: 101-104 for an overview), another issue relevant to code-switching is the question of what constitutes the base and what constitutes the embedded language of an ongoing interaction. The term 'base language' is understood here in the sense of Nortier (1990: 158) who uses the term for whole conversations, in contrast to 'matrix language', which

she reserves for individual sentences. However, I follow here Auer (2000), who abandons the notion of a base language in bilingual conversation. He (2000: 136) argues:

> "that rather than dealing with language choice on the macroscopic level of the base language of a whole episode or a major part of it, and rather than separating code-choice (of the base language) and code-switching (below it), we should look at language choice on a tum-by-turn level in order to do justice to bilingual participants' conversational practices. This means describing and explaining patterns of conversational code choice on a local basis, i.e. by analysing speakers' language choices for one particular turn or turn constructional unit with reference to the language choices directly or indirectly preceding it, as well as in their consequences for language choice in the turns to follow."

Leaving aside that his basic unit of analysis is the turn construction unit, Auer's framework has the following advantages:

1. It frees the analyst from having to decide which is the base language and which is the other language.

2. It allows for every switch (e.g., speaker A: Qaqet → Tok Pisin → Qaqet) to bear meaning (instead of only those switches that deviate from the designated base language).

Mixed intonation units

In my data, there is also a series of intonation units where one-to-two word items of a language A can be observed in language B. In this study, they are referred to as 'mixed intonation units' and mostly concern one-to-two Tok Pisin lexical items in a Qaqet frame. For the analysis, the word class of each Tok Pisin lexeme in the mixed intonation units was identified (see Section 2.5.7 on p. 60 for annotation and Section 4.2 on p. 91 for analysis and discussion). Further, their status in terms of being core or cultural (or non-core) vocabulary was identified (see Section 2.5.8 on p. 60 for annotation and Section 4.3 on p. 93 for analysis and discussion). Lastly, I analyzed how Tok Pisin phonemes and morphemes, involved in one-to-two word Tok Pisin lexical material in an otherwise Qaqet intonation unit, are realized (see Section 4.4 on p. 96 and Section 4.5 on p. 106, respectively). In the case Kamanakam Qaqet phonology or morphology was involved, I compared how Tok Pisin phonemes or equivalent morphemes normally would come to be realized in Kamanakam monolingual Tok Pisin intonation units.

2.5   Annotating the data

The data being annotated in ELAN solely concerns the corpus recordings made in non-public settings (see Table 2.13 on p. 30). In order to analyze questions related to conversational and situational code-switching, the data were specifically annotated for the tiers given in Table 2.24.

Table 2.24: Tiers used for annotation of the data in ELAN

Tier	Annotation function
%lang	Language
%cs	Type of code-switching
%addr	Addressee

%top	Discourse topic
%spa	Speech act
%disfunc	Discourse/conversational strategy
%wcl	Word class
%brw	Borrowing status

In the following sections, the annotation functions of each tier, as well as their technical realization, will be discussed.

2.5.1 Language

On the %lang dependent tier, every intonation unit in the corpus is coded for the specific language used by the speaker (see a list of the languages coded in Table 2.25 below). Excluded from the coding process, however, are primary interjections, onomatopoeias or other items that can hardly be associated with a particular language. For the language codes, the international ISO 639-3 standard is used which, for example, is also applied in the CHAT transcription format (see MacWhinney 2000: 97). Apart from this standard, I decided to code the mix of two (or more) of the aforementioned languages within one intonation unit in the following manner: in the corpus data, the most common case of language mixing involved one language setting the lexical and morphosyntactic frame for the uttered intonation unit, and the other language solely contributing to this frame with an insertion of one or two lexical items. For this type of mixed unit, the frame language is bounded by square brackets, while the insertion language is enclosed in round brackets, inside the square brackets and next to frame language: '[frame language (insertion language)]'. Accordingly, a mixed intonation unit that has a Qaqet frame with Tok Pisin insertion would thus be coded '[byx(tpi)]'. For intonation units where the frame and the insertion language could not be determined, the following compromise was made '[language A, language B]'. Accordingly, a mixed unit of this kind with Qaqet and Tok Pisin would appear as '[byx, tpi]'.

Table 2.25: Language tags for the %lang tier

No.	Language	Coded as
1.	Qaqet	byx
2.	Tok Pisin	tpi
3.	Kuanua	ksd
4.	Siwai	siw
5.	English	eng
6.	Mix	[frame(insertion)] or [language A, language B]
7.	Unknown	unknown

2.5.2 Code-switching

The %cs tier allowed coding for code-switching, with regard to the chronological sequence of intonation units uttered by a particular speaker. The method used for the annotation partially builds on what was already formulated for the %lang dependent tier (see 2.5.1 above) and has the goal of taking into account three features: 1. The languages involved, 2. The direction of the

switch, and 3. The type of code-switching. For the first feature, I decided to make use of the ISO 639-3 language codes. For the second feature, an arrowhead was used in order to account for the switch direction (e.g. 'byx>tpi'). From this coding procedure, everything that is related to the type of the switch can be derived now: the left language tag denotes the language a particular speaker has used in her/his previous intonation unit. The right language tag, on the other hand, denotes the language of the speaker's current intonation unit, and thus is the language which is being switched to. For example, the annotation 'byx>tpi' would denote a speaker's switch from monolingual Qaqet to monolingual Tok Pisin over two intonation units. Further, the coding system is also able to account for switching to and from mixed intonation units (see Section 2.5.1 for a description how mixed intonations units are coded). For example, a switch from monolingual Qaqet intonation unit to a mixed intonation unit that has a Tok Pisin frame with Qaqet insertion would be coded 'byx>[tpi(byx)]'. Another phenomenon the coding system is able to account for concerns a speaker uttering a stretch of several mixed intonation units in a row (e.g., '[byx(tpi)] > [byx(tpi)]'). Accordingly, the coding system also accounts for a speaker's monolingual use of the same language over several intonation units (e.g., 'byx>byx'). The latter then allows a comparison of the instances of code-switching against the number of intonation units where there is no switch. In cases where the content of a particular intonation unit was unidentifiable, the term 'unknown' was used instead of a language code. As a consequence, a particular intonation unit may be coded, for example, as 'unknown>byx' or 'tpi>unknown'. This makes it easier to account for the status of these intonation units in the analysis process. A speaker's first uttered intonation unit within a recording is simply coded for the particular language used, that is, only with a language tag (e.g, byx). For a summary of the elements relevant for the annotation of the %cs tier see Table 2.26 below.

Table 2.26: Coding elements for the %cs tier

No.	Element	Coded as	Comment
1	Language tag of an intonation unit	byx, tpi, ksd, siw or eng	Language codes (ISO 639-3) used to denote transfer from previous to current intonation unit
2	Mixed intonation unit	[frame(insertion)]	One language sets its frame, another language contributes as an insertion (e.g. '[byx(tpi)]')
3	Unknown	unknown	Content of the intonation unit is non-identifiable
4	Switching sign	>	Denotes transfer from the previous to the current intonation unit

2.5.3   Addressee

On the %addr dependent tier, the speakers' intonation units are coded for their particular addressee(s). The latter is represented by an ID consisting of three letters (e.g. FSS). In the case of more than one addressee, the IDs are separated by a semicolon with additional spacing before and after it (e.g. FSS ; IRM).

The corpus exclusively comprises multiparty interactions, which are unlike two-person conversations, where the hearer is necessarily also the addressee (Goffman 1979: 9). What can be observed are at least two different scenarios which Goffman (1979: 9) describes as follows:

> "[...] it will often be feasible for the current speaker to address his remarks to the circle as a whole, encompassing all his hearers in his glance, according them something like equal status. But, more likely, the speaker will, at least during periods of his talk, address his remarks to one listener, so that among official hearers one must distinguish the addressed recipient from *unaddressed* ones."

In other words, the corpus data shows stretches of talk where the speaker addresses the whole group, making everyone in this group an addressed recipient. This alternates with episodes where only a particular person seems to be addressed; this person then becomes the addressed recipient, while leaving the other person(s) as unaddressed recipient(s). Therefore, what is sought to identify and annotate for is solely the addressed recipient (who otherwise may also only be called 'addressee'). Distinguishing between the addressed and the unaddressed recipients is according to Goffman (1979: 9) "often accomplished exclusively through visual cues, although vocatives are available for managing it through audible ones". As for gestural cues, eye contact may be observed in the data as a common way to spot a recipient directly being addressed. However, there may often be no direct eye contact or other types of observable gestural cues, which makes it rather difficult to identify the actual addressed person(s). Other difficulties in this context concern the position and resolution of the camera, which sometimes does not allow for every gestural cue to be identified. What may also cause ambiguity in identifying the addressee is concerned with the participants' structural organization of turn-taking. For example, in the data it could be observed that sometimes there is a divergence in the sense that the person who appears to be addressed by the speaker is not necessarily the one who ultimately replies.

As a consequence of the above remarks, the identification of the addressee for a particular intonation unit follows the basic rules presented below:

1. The speaker makes eye contact and/or uses other gestural cues which can be interpreted as directly addressing one (or more) particular person(s)

2. The speaker directly addresses one (or more) particular recipient(s) with a question or request

3. The speaker makes use of (a/the) name(s) to get the attention of one (or more) participants

4. Otherwise all present participants are treated as addressees

2.5.4 Discourse topic

On the %top tier, the speaker's intonation units are coded for the expressed discourse topic (see Table 2.13 on p. 30 for typically occurring topics in the corpus recordings made in non-public settings). However, the coding is restricted to those intonation units which can also be annotated for language on the %lang dependent tier (see Section 2.5.1 on p. 53). For the identification of a particular discourse topic, I follow Ochs and Schieffelin (2016: 72) who define it as:

> "a proposition (or set of propositions) expressing a concern (or set of concerns) the speaker is addressing. It should be stressed that each declarative or interrogative utterance in a discourse has a specific discourse topic. It may be the case that the same discourse topic is sustained over a sequence of two or more utterances. [...]. On the other hand, the discourse topic may change from utterance to utterance, sometimes drawing on the previous utterance (incorporating topic) and sometimes not (introducing topic, re-introducing topic)."

Ochs and Schieffelin's concept of the utterance unit on the whole seems to be comparable to what is proposed for the intonation unit. According to Ochs (1979: 63) "[u]tterances should have a single intonation contour and single breath group", whereas Chafe (1987: 22) defines the intonation unit as "a sequence of words combined under a single, coherent intonation contour, usually preceded by a pause". It thus seems as if Ochs' definition is very similar to what is now considered an intonation unit. I therefore believe that Ochs and Schieffelin's (2016: 72) definition of the discourse topic can also be applied if one takes the intonation unit as the base unit for the analysis.

2.5.5   Speech act

On the %spa tier, the speakers' intonation units are coded for the expressed speech act. According to Huang (2014: 128) the latter term in its narrow sense often refers specifically to illocutionary acts which in turn he describes as to refer to:

> "the type of function the speaker intends to fulfil or the type of action the speaker intends to accomplish in the course of producing an utterance. It is an act defined within a system of social conventions. In short, it is an act accomplished in speaking. Examples of illocutionary acts include accusing, apologizing, blaming, congratulating, giving permission, joking, nagging, naming, promising, ordering, refusing, swearing, and thanking."

In this study, it was first hypothesized that certain speech acts may be subject to code-switching. I thus began to code what I thought were some of the most rudimentary speech acts: declarative statement, command and question. During the analysis, it could not be confirmed that speakers code-switch along the lines of different speech acts. It could, however, not be ruled out that coding for speech act with a more fine grained classification might give more promising results. The coding of the speech act of a particular speaker's intonation unit nevertheless turned out to be useful, in the sense that it helped to support and strengthen the analysis of certain discourse/conversational functions of code-switching. For example, in the identification of other-initiated repair, the prior coding of the speaker's intonation unit as 'question' aided the analysis. Or, in the case of direct quotations, analyzing a particular stretch of reported speech as a direct quote was often supported by the fact that it contained a command or a question rather than a statement. For the coding system, I made use of the classification developed by Ninio et al. (1994) which eventually was restricted to the use of the speech acts given in Table 2.27.

Table 2.27: Speech act codes for the %spa tier

Speech act code	Function
ST	Declarative statement
RP	Command
QN	Content question
YQ	Polar question

Coding for speech act was limited to those intonation units which were annotated for language on the %lang dependent tier (see Section 2.5.1 on p. 53).

2.5.6 Discourse/conversational strategy

On the %disfunc tier, I coded for 12[4] different discourse/conversational strategies of those intonation units, which on the %lang tier were coded for a specific language or mixed unit. In addition, the coding distinguishes the identification of discourse/conversational strategies for code-switched[5] (CS) as well as for non-switched intonation units (non-CS). The coding methodology is summarized in Table 2.28 below.

Table 2.28: Coding of the %disfunc tier

No.	Discourse function	CS: coded as	Non-CS: coded as
1	Addressee shift	AS	AS (no CS)
2	Completion	Co	Co (no CS)
3	Contrasting information: type a, b and c	CIa, CIb, CIc	CIa (no CS), CIb (no CS), CIc (no CS)
4	Elaboration	El	El (no CS)
5	Emphatic agreement	EA	EA (no CS)
6	Language play	LP	LP (no CS)
7	Mode shift: going into and going out of the narrative mode	MS (in narrative), MS (out narrative)	MS (no CS, in narrative), MS (no CS, out narrative)
8	Other-initiated repair	OIR	OIR (no CS)
9	Other repair	OR	OR (no CS)
10	Quotation	Q (direct), Q (indirect)	Q (no CS, direct), Q (no CS, indirect)
11	Self-initiated repair	SIR	SIR (no CS)

---

[4] The trouble source (TS) is not counted here as a conversational function as is explained in more detail below. However, since it is relevant to the encoding of repair, it is included here.

[5] This includes on the %cs tier a switch from a monolingual intonation unit of a language A to that of a language B (e.g., '[byx > tpi]'), a switch from a mixed to a monolingual intonation unit (or vice versa) (e.g., '[byx(tpi) > tpi]'), and a switch between two mixed intonation units (e.g., '[byx(tpi)] > [tpi(byx)]').

| 12 | Self repair:
aborting, deleting,
inserting, recycling,
replacing, searching | SR (aborting),
SR (deleting),
SR (inserting),
SR (recycling),
SR (replacing),
SR (searching) | SR (no CS, aborting),
SR (no CS, deleting),
SR (no CS, inserting),
SR (no CS, recycling),
SR (no CS, replacing),
SR (no CS, searching) |
| (13 | Trouble source | TS | TS) |

The strategies contrasting information, mode shift, quotation and self repair are further divided in order to account for their different properties. The latter are still considered so closely related to their *parent* function as to not form a strategy of their own. The characteristics of all strategies are further discussed in the respective sections of Chapter 6.

When discussing the strategies in Chapter 6, it will become apparent that sometimes a particular intonation unit could be coded for more than one discourse/conversational strategy. This may be due to the fact that in the speaker's discourse they simply overlap. Such an overlap can, for example, be observed for the strategy mode shift and quotation, namely when a speaker's going into/out of the narrative mode also entails the beginning/ending of a direct quote. However, sometimes strategies are semantically so close that it can not be decided whether one or the other is more suitable to describe the strategy of the particular intonation unit. This can, for example, be observed for the strategies completion and mode shift (out narrative). In case an intonation unit was coded for multiple strategies, the codes were noted in alphabetical order separated by a semicolon and additional space (e.g., 'MS (no CS, in narrative) ; Q (no CS, direct)').

For the coding of repair, the following observations may be noted: in the corpus, self-initiated self-repair does mostly occur within the same intonation unit. Thus, the trouble source (the problem being repaired), the speaker's self-initiation of repair and her/his self-repair are within the same intonation unit. For all other types of repair it can be observed that the trouble source is never in the same intonation unit as its repair. Thus, the coding system of the repair paradigm had to acknowledge the trouble source, the initiation of repair and the actual repair, as evident from Table 2.29. The abbreviations for the types of repair are based on conventions found in the literature on repair (e.g., Kendrick 2015).

Table 2.29: Paradigm for coding different types of repair (further outlined)

	Type of repair	In a single IU	Over multiple IUs
1	Self-initiated self-repair	Speaker A ([TS] ; SIR ; SR)	IU 1: Speaker A ([TS] ; SIR) IU 2: Speaker A (SR)
2	Other-initiated self-repair	n.a.	IU 1: Speaker A (TS) IU 2: Speaker B (OIR) IU 3: Speaker A (SR)
3	Self-initiated other-repair	n.a.	IU 1: Speaker A ([TS] ; SIR) IU 2: Speaker B (OR)

4	Other-initiated other-repair	n.a.	IU 1: Speaker A (TS) IU 2: Speaker B (OIR) IU 3: Speaker C (OR)

However, in the coding process, the trouble source was not additionally coded in the case of self-initiated self-repair. This is why it is shown in square brackets ([TS]) in Table 2.29. In such cases, the speaker herself/himself is aware that as the initiator of repair s/he is also the trouble source. In cases that involved other-initiated repair, the speaker of the trouble source is not aware that s/he is a trouble source, which is why here its explicit coding was required. A trouble source was identified when either the speaker herself/himself (self-initiated) demonstrated problems in getting the message across (e.g., searching, recycling, etc.) or the interlocutor (other-initiated) appeared to have difficulties hearing/understanding the speaker.

Another point that is relevant for the coding of self-initiated repair (SIR) and self-repair (SR) concerned the question of where the boundary for delimiting the intonation unit should be drawn for this type of repair. As this type of repair often involves speaker hesitation, it had to be decided whether the repair sequence proceeds in one or over the stretch of two or more intonation units. As a guideline, I made use of what Himmelmann (2014: 935f.) (see also Frye 2019: 78) observes for the properties of hesitation pauses, namely that they are relatively short (< 500ms) and do not involve pitch resets in the overall intonation contour. For the coding of self-initiated (SIR) self-repair (SR) this had the following consequence: if self-initiated self-repair occurred in one intonation unit, the first portion (1) until the beginning of the hesitation was coded as SIR, whereas the remaining portion (2) was coded as SR. The two were separated via a semi-colon (;) with additional space leading to an annotation as shown in Example 14 below.

(14) IU   1
                    u.. ureninbanas
                    ure = nin = barek-nas
                    1PL.SBJ.NPST = cook.CONT = BEN-self
                    'w.. we are cooking for us'
      Annotation   SIR ; SR

                                            (CodeFSS_KJS20160910A_1; IU 448)

Self-initiated self-repair that stretched over two or more intonation units was coded as shown in Example 15 below.

(15) IU   1   2   3
                    usa..   *ama..*   *ang.. angamamurlasirang*
                    husat   ama   a = ngama = murlas-irang
                    who   ART   NM = some.NSPEC = old-PL.DIM
                    'who..   the..   so.. some little old ones'
      Annotation   SIR   SR ; SIR   SR ; SIR ; SR
                                            (CodeFSS_KJS20160901_1; IU 176–178)

In Example 15, repair is initiated in the first intonation unit by Tok Pisin *usa..* 'who', and is thus coded as SIR. The speaker was searching for a way to refer to (a) particular referent(s). In the second intonation unit, the speaker starts his self-repair with Qaqet *ama..* 'the', which is why it is coded as SR. However, the unit is finished with another hesitation pause with which

the speaker signals that he is still in search for the referent(s). Hence, the unit is coded again for SIR to account for the speaker's second attempt to initiate repair. In total, this leaves the second unit coded as SR ; SIR. In the third intonation unit, the self-repair initiated in the second unit is achieved, which is why it is coded as SR. There is, however, another self-initiated self-repair, which is accounted for as SIR ; SR. Here, the speaker does not trail off the unit, but rather recycles the first portion by rapidly repeating and joining it with the rest of intended utterance. The whole unit is thus coded here as SR ; SIR ; SR.

2.5.7   Word class

On the %wcl tier, I coded for the word class of lexical material from a language A present in the frame of language B. Therefore, this concerns mixed intonation units which, on the %lang tier, were coded in the form [frame(insertion)]. In the corpus, various constellations could be observed. However, Tok Pisin insertions in a Qaqet frame (i.e., [byx(tpi)]) are by far the most common (see Table 4.2 on p. 92). Table 2.30 lists the coded word classes and the used codes.

Table 2.30: Coding of the %wcl tier

No.	Word class	Coded as	Comment
1.	Adjective	adj	In the case of more than
2.	Adverb	adv	one word, the word class
3.	Article	art	will be noted in the
4.	Conjunction	conj	order of appearance
5.	Noun	n	
6.	Numeral	num	
7	Preposition	prep	
8.	Pronoun	pro	
9.	Proper noun	pr	
10.	Verb	v	

2.5.8   Borrowing status

On the %brw tier, I coded for the status of Tok Pisin lexical material in a Qaqet frame. Therefore, this solely concerns those intonation units which on the %lang tier were coded as [byx(tpi)], as they were by far the most common mixed units in the corpus (see Table 4.2 on p. 92). The coding of the Tok Pisin material is based on what Myers-Scotton has termed core and cultural (or non-core) borrowings. Core forms "are words that more or less duplicate already existing words in the L1" (Myers-Scotton 2002: 239). Non-core forms "are words for objects new to the culture" (2002: 239). Table 2.31 lists the used codes.

Table 2.31: Coding of the %brw tier

No.	Vocabulary status	Coded as	Comment
1.	Core vocabulary	core	Familiar concepts
2.	Non-core vocabulary	non-core	New concepts

In the coding process, I distinguished core from non-core forms based on two central ques-

tions:

- Is there an equivalent lexeme in the Qaqet dictionary for the Tok Pisin insertion in question? If yes, the particular Tok Pisin insertion is treated as a core form. A number of neologisms may be excluded from this rule. These concern introduced Tok Pisin terms for which Qaqet purists have recently invented a Qaqet word or calque. This includes terms such as the days of the week[6], *buklet* 'booklet'[7] and a few others.

- Could the Tok Pisin lexeme in question be related to concepts that are more likely to have been introduced to the Qaqet people during or after the missionary and/or colonization period? If yes, the particular Tok Pisin insertion is treated as a non-core form.

The reference Qaqet dictionary has been compiled by Birgit Hellwig with the help of a number of Qaqet speakers from the Raunsepna community. I am aware that this dictionary with currently about 1,030 entries is not yet complete. As a consequence, there may be Tok Pisin forms which have equivalent Qaqet lexemes that are not yet incorporated into the dictionary. In cases where a Tok Pisin form has no equivalent Qaqet lexeme (e.g., *haus kuk* 'cooking house' or *kuru* 'germinating seedling') but otherwise describes a concept that is likely to have been already known to the Qaqet people in pre-colonial times, I treat it as a core form.

2.5.9 Metalinguistic comments

Metalinguistic comments were mostly collected during the transcription and translation process of the corpus of speech situations in non-public settings. Transcribers' commentaries that were related to understanding the context of a particular intonation unit or stretch of intonation units were noted on the %ori-nt tier. This could, for example, include commentaries where the transcriber notes that the speaker in the recording is referring to a particular person or place. It could also include clarifications on certain lexemes in Qaqet or Tok Pisin, including cultural aspects. Commentaries in which the transcriber was asked about her/his opinion on what s/he thinks why a particular speaker switched languages in a particular situation were noted on the %ori-mot tier.

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[6] E.g., Qaqet *qubeqi amagilki* 'lit. the small one' functions here as a translation for Tok Pisin *mande* 'Monday'.

[7] Qaqet *langinyini* 'lit. small tree' is reinterpreted here to describe Tok Pisin *buklet* 'booklet'.

Chapter 3

Sociolinguistic profile

The goal of this chapter is to identify relevant cultural and infrastructural as well as sociodemographic and sociolinguistic aspects of the Kamanakam Qaqet people. In presenting this information, I aim to draw a picture of the sociolinguistic situation of a part of Kamanakam ward. An additional goal is to contextualize the in-depth analysis of situational (see Chapter 5 from p. 117) and conversational code-switching practices (see and Chapter 6 from p. 175).

Section 3.1 presents what can be termed as more general information. This includes a description of the location, infrastructural matters (accessibility and transport, market, school, church) as well as daily and cultural practices. Section 3.2 presents sociodemographic and sociolinguistic information about the four focal hamlets of Kamanakam ward. Section 3.3 presents two focal families as representative inhabitants of these focal hamlets. They were involved in the recordings on which the major part of this study is based. Methods and data used for this chapter include participant observation (see Section 2.2.1 from p. 20) as well as sociodemographic and sociolinguistic survey data (see Section 2.2.2 from p. 20).

3.1 General information

3.1.1 Location

PNG is divided into a number of administrative units. The hierarchical structure from top to bottom begins with province and is followed by district, local-level government (LLG), ward and census unit (village) (Koloma and Kele 2014a: 3). Kamanakam ward, thus, lies within East New Britain Province, Gazelle District, Inland Baining Rural LLG. The latter is divided into 27 different wards with Ragaga ward bordering to the west and Radigi ward to the east of Kamanakam. Kamanakam ward is then further subdivided into six census units which the local registrar (FSS) has identified as Arlemgi, Tolai Komuniti, Kamanakam, Nambilas, Ngemireme and Lamesam. On the local non-administrative level, the residents commonly assign a name to their household, but more usually to a cluster of households, which have come to be recognized as distinct areas within the community. These clusters of households are referred to in this study as *hamlet* or *block* depending on their structure. The hamlet and block distinction strongly characterizes the make-up of the area. In the former, several households stand in a cluster, and crop areas are attached to it or a bit farther away. The block area, on the other hand, is mostly a plantation area. The latter is divided into what in Tok Pisin is called *blok* 'block', that is, rectangular sections within a plantation area intended for cultivation. Each section or block belongs to a particular household, and clusters of blocks with their associated households are assigned

names. The local registrar of Kamanakam here identified 24 such clusters of households either in the form of hamlets or blocks within the six census units. My fieldwork was centered on the census unit 'Kamanakam', within the hamlets Saqalames, Lanivaqa, Altiaqa and Ngamarana. Figure 3.1 presents a map of the focal hamlets within Kamanakam ward.

Figure 3.1: Focal hamlets within Kamanakam ward
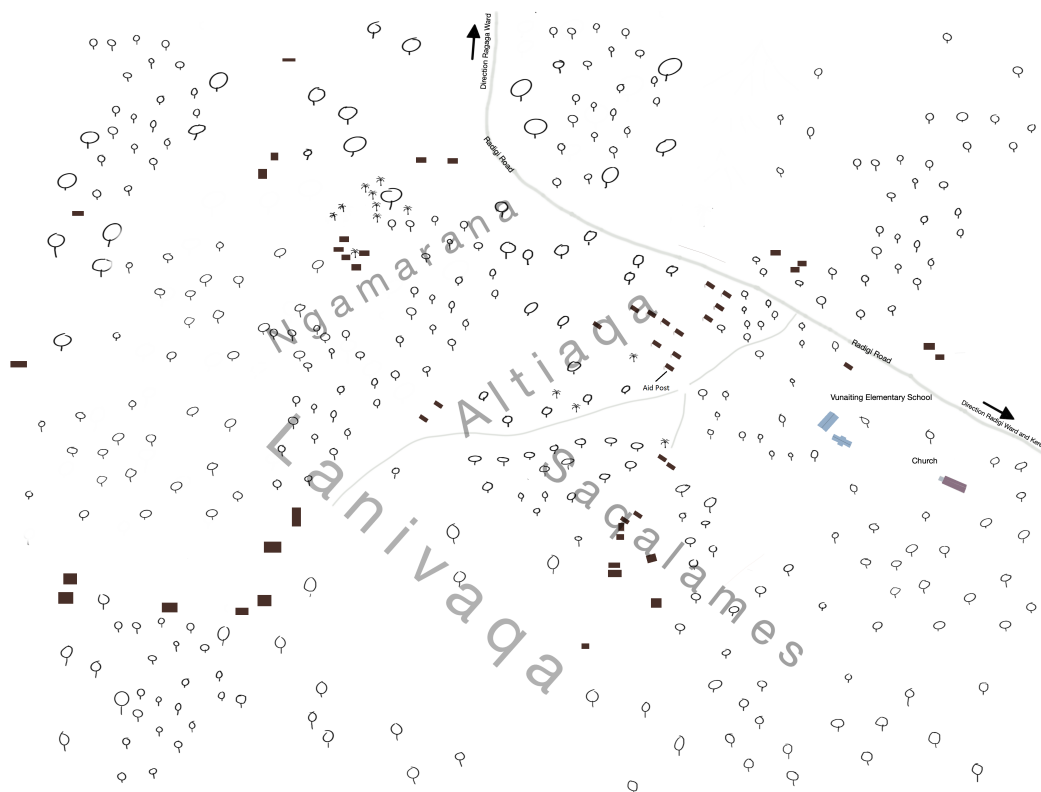
To the north of Kamanakam lies the coast. Here, the land is rather flat and bushy swampland alternates with strips of sandy beach. It is in this area that a road crosses Kamanakam in an east-west direction. However, the flat coastal strip is rather short, and the much bigger southbound inland part of Kamanakam is fairly mountainous. The latter area is only accessible by foot via the countless trails that run through it.

3.1.2 Infrastructural aspects

Accessibility and transport

Kamanakam ward can be accessed by a gravel road which, throughout Kamanakam ward, is called Radigi road as it leads to the adjoining Radigi ward in the east, and eventually to the town Keravat (see Figure 3.1). About 5 kilometers before this town, the road is paved. The construction of this road in the 1980s made Kamanakam more accessible in two ways: within Kamanakam, it made it easier for the local population to get from one point to the other. But more importantly, it made Kamanakam more readily accessible from outside. Before the road

was built, the only way to get to Kamanakam quickly was via the use of boats through various landings along its coastline.

Today, between three to five public motor vehicles (*PMV*) regularly run via Keravat from Kamanakam to Kokopo town as early as 6 or 7 a.m. They mostly bring farmers who want to sell their crops to the markets, and normally leave Kokopo with the same passengers as late as 1 or 2 p.m. It is a 3 to 5 hours drive for the 70 kilometers from Kokopo to Kamanakam, with several streams and rivers to be crossed. The road condition heavily depends on the weather conditions, as rain easily softens the surface of the road. Heavy rainfall commonly causes rivers to swell, which can make it impossible to cross smaller rivers where bridges often do not exist.

Market

In the case of the markets, it is important to make a distinction between the Kamanakam community-based markets and markets in towns such as Keravat, Kokopo or Rabaul. The former are mostly visited by the Kamanakam Qaqet and non-Qaqet speaking locals, and to a certain degree, also by Qaqet speaking people coming from the more remote bordering wards, such as Raunsepna. The latter are visited by the rural as well as the town population. However, fruit and vegetables sellers in the town markets come from the surrounding rural wards (including Kamanakam) to sell surplus crops from their gardens. The sellers are by no means all Qaqet speakers, but rather Tolai people and others who mostly reside in the above mentioned towns and their surroundings.

Another type of market in Kamanakam is the so-called *tudak maket* or *dak maket* 'dark market'. It is carried out every Thursday in the morning hours and starts as early as 4 or 5 a.m. before the sun rises (which is usually at about 6 o'clock). The market then lasts until about 8 or 9 a.m. until the heat of the sun sets in. The sellers usually sit in a big round circle, so that the buyer can go round from seller to seller. The goods being sold include not only surplus crops such as taro, sweet potato, peanut, tomato, cucumber and green onion, but also to a certain extent processed food items from the town such as canned fish or meat, instant noodles and seasoning cubes. Often, there are also small non-food items such as batteries, lighters or prepaid phone credit to be found. The latter items, as well as small fruits and vegetables, are usually presented on a blanket or on an empty cocoa bean bag.

School

In its current version, PNG's education system has 3 years of elementary school (elementary preparatory grade, grade 1 and 2), 6 years of primary school (grade 3 to 8) and 4 years of secondary school (grade 9 to 12) (Papua New Guinea Department of Education 2004: 27-31 and 2016: 25). Kamanakam has at least two elementary schools and one primary school.

Next to Radigi road in the immediate vicinity of the focal hamlets Altiaqa and Saqalames, there is the so-called Vunaiting Elementary School (see Figure 3.1 on p. 64). The school is situated in the corner of a grass-covered area opposite the Catholic church building. The area occurs at an elevation, and resembles a plateau when approaching it from the street. Another elementary school is situated in the hamlet of Bolwara. Kamanakam's primary school is in about 30 to 45 minutes' walking distance from the focal hamlets if one follows Radigi road towards the east. In Kamanakam, parents usually enroll their children between the ages of 6 and 9 in elementary school. The nearest secondary school is the so-called Utmei Secondary School (from Qaqet *utmii* 'we all'). It is a boarding school, and is located in the neighboring Lamarainam ward.

Church

In the course of the German missionary work in the late 19th century (see e.g. Rascher 1909), many Qaqet Baining adopted the Roman-Catholic faith. In 1898, St. Pauls was the first mission station among the Qaqet Baining founded and supervised by Pater Matthäus Rascher (Rascher 1909: 255f.; Hiery 2007: X). In 1913, Kamanakam became the second mission station supervised by Pater Leo Brenninkmeyer until 1926 (Hiery 2007: X). He was followed by Stephan Dargas (1926–1937) and Bruno Stapelmann (1937–1940) (Hiery 2007: X). Since then, other Christian churches have established themselves in the area such as for example in recent years the Revival Fellowship.

Today, the main church building in Kamanakam, completed in 1979, belongs to the Roman-Catholic church (see Figure 3.1 on p. 64). Moreover, there are also a few other church buildings made of bush material in the more remote areas of Kamanakam. The Sunday church service is an integral part of many Kamanakam Qaqet people. It is possibly *the* main event of the week, when people regularly come together. In the main church building of Kamanakam, the service usually starts between 8 or 9 a.m. and ends between 9:30 or 10:30 a.m. before the sun heats up the building too much. On Sunday morning, a clergyman rings the bell three times: around 6:30, 7:30 and 8/9. After the second bell ringing, people usually slowly gather in front of the church. Women and men form small groups in which they sit together and talk about daily matters and what is new in the community. Children usually play in groups until the service starts. When the bell rings the third time, the people go inside the church. After the service, people gather again under a big mango tree directly in front of the church. Here, people have the chance to discuss matters that they want to share with the whole community. This includes community work, school matters, church matters and other events that affect the community in some way.

Aid post

Kamanakam has one aid post which is located within the focal hamlet Altiaqa (see Figure 3.1 on p. 64). It consists of one building with two to three rooms intended for examination. At the time of my fieldwork, there was one male trained community health worker treating patients. He was supported in his daily work by his wife. The health worker is equipped to treat illnesses such as bacterial or protozoan infections and various types of malaria. The patient usually has to pay for medication, while treatment is free. For more serious illnesses, Kamanakam residents have to visit Kerevat Rural Hospital in Kerevat, St. Mary's Hospital Vunapope in Kokopo or Nonga General Hospital in Rabaul, 35, 70 and 75 kilometers away, respectively. In these facilities, it is obligatory for patients to pay for medication as well as treatment.

Store

There are three stores within the focal hamlets of Kamanakam, namely one in Ngamarana, Altiaqa and Saqalames, respectively. Generally, Kamanakam is not connected to the power supply system. Thus, the local stores exclusively carry long-lasting food items (e.g., rice, instant noodles, canned fish and meat, cabin biscuits) that do not need cooling. In addition, the stores may also carry some useful non-food items (e.g., pencils, exercise books, lighters).

Cemetery

There is at least one local cemetery which borders the elementary school, and is located almost half way to the Altiaqa-based aid post. It is reserved for deceased former Kamanakam residents.

3.1.3 Cultural aspects

Garden work and food

The people in Kamanakam and probably in most other rural areas throughout the Gazelle Peninsula are predominantly subsistence farmers. They maintain a cultivated area – in Tok Pisin commonly called *gaden* 'garden' – in order to feed themselves. In Kamanakam, these gardens can either be in the immediate vicinity of the home or a little further away. It is also not unusual for people to have more than one garden at varying distances from their home. As mentioned above, the garden stands in contrast to what in Tok Pisin is called *blok* 'block'. The latter is a parcel of land within a plantation area such as the Vunalama plantation located in Kamanakam.

In their daily routine, adults may leave for work in the garden as early as 7 in the morning and usually come back between 3 and 5 in the afternoon. If a family decides to work in a more distant garden, the family as a whole, or a few family members will move to that garden for a period of time. Depending on how long they plan to stay, they build temporary shelters or more permanent houses for their accommodation. Regularly occurring rest days include Sundays (for church service), official holidays and other religious and non-religious feasts. In addition, there may be other non-regular religious and non-religious feasts that people can choose to participate in, instead of working. For many people, it is also common practice to take a day's rest after a longer stretch of exhausting working days. As far as the organization of work is concerned, it is not atypical for people to go out for work as a group. This often includes members of a family from up to three generations but also other relatives and persons from the family's social network. In the garden, one may work alone at a certain part of the garden or as a group if the type of work demands it. Much of the daily work consists of weeding the garden in order to prepare the ground for planting and/or keeping clear of weeds, to allow the crops to grow properly. Before planning new crops, people often burn the dried vegetation in the garden to facilitate the weeding process. Taro may take about six to seven months, cooking banana six months and sweet potato three months in order to be ready for harvest. The people are usually equipped with a machete which is a suitable tool for most of their daily work. However, people may use a special tool when harvesting cacao beans, namely a knife in the form of a hook attached to a stick about 1.7 to 2 meters in length.

The makeup of the garden is dependent on the crops planted. There may be garden areas where someone chooses to plant different types of crops for self-consumption. Here, basic foods include taro, cooking banana and sweet potato. Out of these, the Qaqet people usually consider taro to be their traditional staple food. In other parts of the same garden or in a garden that is located elsewhere, people may choose to plant cash crops, which in the Kamanakam area, is mostly cacao. In addition, throughout all garden areas, one might regularly see coconut and betel nut trees. For many people, the latter two may be just as important for self-consumption as they are for selling. In a typical Kamanakam household, the oil-water mixture extracted from the meat of the coconut kernel (coconut milk) usually builds the foundation of nearly every cooked meal during the day. In contrast, the dried meat of the coconut – called *kopra* 'copra' in Tok Pisin – is an important source of income in addition to the cultivation and sale of cacao. The betel nut, on the other hand, gains its importance from the fact that it is commonly chewed all over PNG for its effect as a mild stimulant. Especially in the towns, one commonly sees a great demand for betel nut since the trees do not grow there to such an extent.

Depending on individual preferences, people usually cook between two to three times during the day. Usual times for cooking are in the morning between 6 and 7 a.m., optionally at noon between 11 a.m. and 1 p.m. and finally between 4 and 6 p.m. in the evening. The activity is commonly carried out by female adults and/or female adolescents. Typical ingredients of any of the daily meals may include taro, cooking banana or sweet potato in combination with

a wide variety of green/leafy vegetables such as the edible fern *aibika*. There may be different ways to prepare a meal, but the most common way seems to be the preparation of something similar to a stew. People may also bake several taros or cooking bananas near the fire, and fry the green/leafy vegetables in a pan. Another more elaborate way is to prepare the food under a pile of hot stones. In Tok Pisin, this is referred to as *mumu* 'food cooked by steaming with heated stones in a pit, earth oven' while the act is called *mumuim* 'to cook in an earth oven'. In Kamanakam, the latter procedure is often used for cooking meat, which most of the times is only eaten on special occasions. The actual cooking process may then take up to 2 hours. When preparing a typical stew, the process may start with one person scraping off the meat of one to three coconuts. The flakes are put into water and in a second step they are wrung out into the pot. What comes out is coconut milk which forms the basis of every stew. At the same time, another person usually peels the vegetables, while yet another person may light a fire. Eventually, when everything is ready, the vegetables are added to the coconut milk in the pot, which is then put on fire. Once the food is cooked one person may count the people present, and place the appropriate amount of plates on a central place where the food is being served. It can be observed that male adults are usually served more food on their plates compared to female adults.

Celebrations and feasts

On a grassy area about the size of a football field between the church and the school buildings, Kamanakam inhabitants usually celebrate their religious and non-religious feasts. Religious feasts may include various church-related celebrations that involve special preparations by the Roman-Catholic part of the community. These include events such as the children's communion or a Christian rally. Although, a great deal of the celebration usually takes place outside on this grassy area, religious feasts may also include church services which then entails the movement of people inside the church.

Non-religious feasts may involve school feasts such as the celebrations for the children's graduation from elementary school after the fourth term in the beginning of December. Other non-religious feasts may include the annual celebrations for PNG's independence on 16 September. The event usually starts at about 9 a.m., and last until about 5 p.m. There usually is a music system placed on a wooden stage constantly playing Papua New Guinean popular music. During these kinds of feasts, children often play catch, and some of the adults may dance to the music, while others stand or sit in small groups, talking to each other. There usually is an official part where certain school officials give speeches congratulating the children upon their graduation. In addition, the program possibly involves traditional dances presented by a group of adults or a local band playing some of their music. In certain areas, adults would be sitting and selling snacks such as fresh or dried peanuts, fried taro chips or fried flour patties to the community. The celebrations for PNG's independence usually takes place outside the Kamanakam primary school. Superficially, the proceedings seem to be quite similar to the celebrations for the children's elementary school graduation. What differs mainly lies within the official part of the celebration. Thus, PNG's independence celebrations may include speeches concerning other topics. Additionally, the primary school children usually perform a march, and at a certain point, the national anthem is sung by everyone.

During religious and non-religious feasts, Kamanakam Qaqet adults can be observed to perform their traditional dances including fire dance, spear dance and a practice that in Tok Pisin is referred to as *bel i go insait* 'the bell goes inwards' (see Hesse and Aerts 1982: 41-116 and Dickhardt 2009: 279-302 for descriptions of these practices as observed among Qaqet people living in Raunsepna and Fajans 1997: 165-263 among Qaqet people living in Lan and Yalam).

3.2   Sociolinguistic profile

This section presents a sociolinguistic profile of the hamlets Saqalames, Lanivaqa, Altiaqa and Ngamarana, in which the focal families live, along with many people that belong to their social network. Variables of interest include population figures, the relative distribution of different ethnic groups within Kamanakam and the distribution of blocks and hamlets throughout Kamanakam ward. More detailed information is provided on the household and marriage structure (incl. age, sex, occupation, ethnicity, language competence, education) for Saqalames and Lanivaqa and for the directly neighboring hamlets Altiaqa and Ngamarana (these four will henceforth be called the focal hamlets).

According to the 2011 National Population & Housing Census, Kamanakam ward consists of 161 households with a total population of 1,006, of whom 472 are female and 534 are male (Koloma and Kele 2014a: 12). Thus, there are slightly more men (53%) living in Kamanakam ward. Unfortunately, the census does not report on other demographic specifics. More detailed demographic data were firstly collected by my colleague Carmen Dawuda as part of the Qaqet child language documentation project during her fieldwork in Kamanakam. In the course of our ongoing fieldwork, these data were supplemented and extended with other demographic/sociolinguistic data. Eventually, we came to have samples of reasonable size for each of the collected variables; I will discuss each of these below.

3.2.1   Location, area structure and ethnicity

In order to get a fair impression of the ethnic distribution throughout Kamanakam, I decided to consult the local registrar for data on people's ethnicity down to the hamlet/block level (see section 3.1.1 on p. 63). Table 3.1[1] shows a summary of his estimates, as well as the location of the hamlets/blocks within Kamanakam ward. The focal hamlets are given in bold script. What is shown on the left-hand side of the table is the respective census unit, the hamlets/blocks in each census unit and their location in relation to their proximity to the street (front vs. back). *Front* in this context means near the street and therefore more accessible, while *back* stands for further away from the street, that is, somewhat more remote in the hinterland. On the right-hand side of the table is the local registrar's estimate for the ethnic distribution within each hamlet or block. Qaqet refers to the Qaqet speaking people this study is about. The name *Tolai* refers to an ethnic group that speaks the Kuanua language. They are direct neighbors of the Qaqet in the northern part of the Gazelle peninsula. The term *Sepik* is used here for people from the area that is crossed by the Sepik river. The latter runs through the East Sepik and West Sepik Province in the Momase Region, which is located in the northern part of mainland PNG (cf. Koloma and Kele 2014b). The term *Highlands* refers to people from the Highlands Region which is located in the mountainous center of mainland PNG. The two terms were brought up by the local registrar, but they are also widely used throughout the community. It should be obvious that the use of these terms does not refer to actual ethnic groups. Rather, what has become established is the stereotypical use of names for areas, provinces or regions in order to group people from the same area together. This phenomenon has also been reported elsewhere in PNG (e.g., Colebatch et al. 1971: 219; Beer 2008: 104).

The local registrar's information on 19 out of 24 hamlets/blocks summarized in Table 3.1 paints the following picture: 14 seem to be dominated by Qaqet people, 2 by Tolai people, 1 seems to be just about equally populated by Qaqet and Tolai people, 1 by Qaqet and people from the Sepik and Highlands region and 1 is no longer inhabited. Moreover, the distribution

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[1] Unfortunately, no information is given for Sumuspumgi in the Kamanakam census unit; Dingmanu, Laqarl and Parwan in the Nambilas census unit; Kavanini in the Ngemireme census unit.

of hamlets and blocks shows that 15 out of 19 units are hamlets, while the others are blocks. From the 15 hamlets, 12 are located towards the back and 3 are in the front. The blocks are situated to the east of Kamanakam in direction of Radigi ward. Here, 1 block is located towards the back, while the the remaining 3 are in front. The 3 front blocks are either inhabited by people other than Qaqet or by Qaqet living alongside people of other ethnicities. The front blocks provide their inhabitants with a compartmentalized parcel that is primarily intended for cultivation. Because of the blocks' front location, the road which leads to trade centers such as Kerevat, Kokopo and Rabaul can be easily accessed here. It can therefore be assumed that the non-Qaqet population living within these three front blocks predominantly pursues commercial interests. In contrast, the majority of the Qaqet population resides in hamlets which are farther away (back) from the road.

Table 3.1: Location of hamlets/blocks and the estimated ethnic distribution within Kamanakam ward

Census unit	Hamlet		Block		Qaqet	Tolai	Sepik	Highlands	Uninhabited
	Back	Front	Back	Front					
Arlemgi			Kalangsaqi		x				
				Ningaman	x		x	x	
Kamanakam		**Altiaqa**			x				
	Kabalnguru								x
		Lanivaqa			x				
	Malangem				x				
	Mangem				x				
		Ngamarana			x				
		Saqalames			x				
	Singirles				x				
Lamesam	Kusimbum				x				
	Surluqa				x				
Nambilas	Bungmaranirl				x				
	Rariqaska				x				
Ngemireme	Bolwara				x	x			
	Lalambet				x				
	Puruqem				x				
Tolai komuniti				Sangaqa		x			
				Tobubu		x			

In addition to the local registrar's estimates, he and I collected data from a sample of 67 from 182[2] residents in the focal hamlets in a door-to-door survey on the adults' self-perceived ethnicity. I regarded everyone as an adult from the age of 20. This age is used as an approximation (cf. ReVille 1989: 46) for the starting age of the development stage which Erikson and Erikson (1997) defines as *young adulthood*. For the survey, the participants' responses can be summarized as Qaqet, Baining (Qaqet), Baining (Mali), Tolai, Mix Qaqet-Tolai, Mix Baining (Qaqet)-Tolai, Mix Baining-Arowe[3] or Other. The latter stands for everyone who perceives herself/himself as non-Qaqet.

Linguistically, Qaqet and Mali alongside Simbali, Ura, Qairaq and possibly Makolkol belong to the Baining language family (Stebbins 2011: 1). Stebbins (2011: 1) notes that "Baining people share a common non-Austronesian ancestral language and similar cultural practices". In various conversations with Qaqet speakers, it became clear to me that they are aware of the other Baining languages and their speakers. When asked, they perceived the other Baining languages as difficult to understand to the effect that they may understand only single words or phrases. Nevertheless, I observed that they feel culturally connected to the other Baining people or even see themselves as a cultural unit. What I also became aware of during various conversations is that some interpret the term Baining as pan-Baining, that is, the person emphasizes that s/he is a member of the Baining people including all speakers of languages belonging to the Baining language family. In contrast, others interpret Baining in a more narrow sense, that is, as being synonymous with Qaqet. In this context, it may be noted that due to their geographical separation the other Baining people (Mali, Simbali, Ura, Qairaq, Makolkol) often do not play a role in the daily life of the Kamanakam Qaqet people. This could explain why the other Baining people may not be automatically included when Kamanakam Qaqet speakers make use of the term *Baining* in order to refer to themselves. In summary, it can not be decided how the individual participant interpreted the term Baining when giving it as her/his perceived ethnicity. Therefore, the term Baining is understood here as oscillating somewhat between the broad and narrow interpretation of the term.

During loose conversations, sociolinguistic surveys and interviews, as well as participant observation, the following could be observed for the question how ethnicity is understood by the participants: when the participants are asked for their self-perceived ethnicity, they may not account for interethnic marriages in their family tree that are more than one generation away. Similarly, if someone is the child of Qaqet and non-Qaqet speaking parents or if someone has lived in Kamanakam for a very long time, they may also perceive themselves as Qaqet. In summary, participants' commentaries on being Qaqet often included speaking the Qaqet language, being brought up in the area where Qaqet people traditionally live and/or being familiar with the cultural practices of the Qaqet people (for more information see also section 5.2 on p. 144). However, individual participants did not necessarily relate to all these factors. Therefore, the statements made by the Qaqet people underline the fact that ethnicity is a sociocultural construct. Table 3.2 shows the ethnic distribution based on self-perceived ethnicity within each of focal hamlets and combined for all focal hamlets in %.

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[2] See Table 3.3 on p. 73 for an overview of the number of people in the focal hamlets.

[3] I was told by a Mix Baining-Arowe person that the Arowe people were from West New Britain Province. There is a group of islands of the same name near the south coast close to the western tip of West New Britain, see map in Lentfer et al. (2013: 122).

Table 3.2: Ethnic distribution based on self-perceived ethnicity in the focal hamlets in %

	Saqalames	Lanivaqa	Altiaqa	Ngamarana	All hamlets
Qaqet	77.78	82.35	22.22	50	50.75
Baining (Qaqet)		11.77	70.38	14.29	34.33
Baining (Mali)			3.7		1.49
Tolai	11.11		3.7	14.29	5.97
Mix Baining-Tolai		5.88			1.49
Mix Baining-Arowe	11.11				1.49
Other				21.42	4.48
N	9	17	27	14	67

What is evident from Table 3.2 is that for the focal hamlets Saqalames, Lanivaqa, Altiaqa and Ngamarana, the local registrar's estimate of adults' ethnicity in Table 3.1 largely corresponds to the numbers from the sample in Table 3.2. In the four hamlets, Qaqet or Baining (Qaqet) makes up for 77.78%, 94.12%, 92.6% and 64.29%, respectively. Thus, Lanivaqa shows the highest percentage in terms of perceived Qaqetness. In contrast, Ngamarana is most ethnically diverse compared to the other hamlets.

3.2.2 Household

Tables 3.3 lists the number of households, number of people and household composition for the four focal hamlets Saqalames, Lanivaqa, Altiaqa and Ngamarana, respectively.

Table 3.3: Households in the focal hamlets

Hamlet	No. of household	No. of people	Household composition
Saqalames	1	3	2 adults, 1 child
	2	4	2 adults, 2 children
	3	3	2 adults, 1 child
	4	4	2 adults, 2 children
	5	5	4 adults, 1 child
Ø	N	19	12 adults, 7 children
Lanivaqa	1	1	1 adult
	2	7	2 adults, 5 children
	3	6	2 adults, 4 children
	4	1	1 adult
	5	7	2 adults, 5 children
	6	2	2 adults
	7	9	5 adults, 4 children
	8	2	2 adults
	9	6	2 adults, 4 children
	10	9	2 adults, 7 children
	11	8	2 adults, 6 children
	?	1	1 adult

Ø	N	59	24 adults, 35 children
Altiaqa	1	2	2 adults
	2	8	2 adults, 6 children
	3	4	2 adults, 2 children
	4	5	2 adults, 3 children
	5	4	4 adults
	6	8	6 adults, 2 children
	7	6	3 adults, 3 children
	8	6	5 adults, 1 child
	9	6	2 adults, 4 children
	10	5	2 adults, 3 children
	11	9	5 adults, 4 children
Ø	N	63	35 adults, 28 children
Ngamarana	1	12	7 adults, 5 children
	2	9	5 adults, 4 children
	3	7	2 adults, 5 children
	4	9	2 adults, 6 children, 1 unknown
	5	4	2 adults, 2 children
Ø	N	41	18 adults, 22 children, 1 unknown

According to the census data collected by my colleague Carmen Dawuda and myself, the hamlets are of varying size, ranging from 63 inhabitants in 11 households (Altiaqa) to 19 inhabitants in 5 households (Saqalames). Table 3.4 shows the mean and median numbers of individuals per household for each focal hamlet, as well as of all focal hamlets taken together.

Table 3.4: Mean and median individuals per household

	Saqalames	Lanivaqa	Altiaqa	Ngamarana	All hamlets
Mean	3.8	4.92	5.73	8.2	5.52
Median	4	6	6	9	6
N	19	59	63	41	182

Table 3.4 shows that the mean / median household size is 5.52 / 6 individuals per household. In the focal hamlets, the mean / median ranges between 3.8 / 4 (Saqalames) to 8.92 / 9 (Ngamarana) individuals per household. About half of the households have 2 adults, and therefore may represent a nuclear family with several children (i.e., <20y.). To a lesser degree, these households may also be composed of widowed/divorced spouses living with their last-born adult child. Households with more than 2 adults often include more than two generations of family members. It may, however, also be the case that adult children (i.e., >20y.) are still living in their parents' household. In this scenario, it is also not unusual that these children have already started a family of their own, so that the spouse and child/children add to the size of the household. As a result, in the overall picture, at least two structures can be identified for the composition of households: 1. The nuclear family: 2 adults and ≥2 children and 2. The multigenerational household, including grandparents and/or adult children having

young families of their own still living with their parents.

In general, it should be noted that the numbers of households and individuals can only be considered approximate values for the years 2016/2017. This may be due to the constant mobility of Qaqet people between inland and coastal areas and/or different gardens or due to adoption or temporary admission of relatives (Dickhardt 2009: 137). In summary, we may not have been able to record all inhabitants either because of their absence or because we simply overlooked them.

3.2.3 Age

Age was another variable recorded in the demographic survey. The ages of 168 people were collected in the focal hamlets. Table 3.5 shows the relative age distribution of the focal hamlets in the year 2016. The age is grouped based on Erikson's (1997) eight stages of development. However, since Erikson does not specify an age range for each stage, I provide age approximations as established in the life-span developmental psychology literature (e.g., Lugo and Hershey 1979: 377; ReVille 1989: 46ff.). In the table, I have excluded people for whom I only have an age estimate (e.g., 2010s or pre-school child). In consequence, the sample size is a bit lower than the number of people listed in Table 3.3 on p. 73.

Table 3.5: Age distribution of focal hamlets in 2016 by age groups in %

Stage	Age	Saqalames	Lanivaqa	Altiaqa	Ngamarana	All hamlets
1	Infancy 0–2 years	5.88	5.36	12.07	10.81	8.93
2	Early childhood 3–4 years	0	7.14	5.17	5.41	5.36
3	Play age 5–8 years	5.88	19.64	3.45	8.11	10.12
4	School age 9–12 years	11.76	12.50	10.34	13.51	11.90
5	Adolescence 13–19 years	11.76	17.86	17.24	18.92	16.67
6	Young adulthood 20–39	35.29	28.57	36.21	27.03	32.14
7	Adulthood 40–65	17.65	7.14	15.52	10.81	11.90
8	Old age >65	11.76	1.79	0	5.41	2.98
Ø	N	17	56	58	37	168

Table 3.5 shows that the population in all focal hamlets is quite young. Generally, there is a noticeable drop in numbers from the adulthood stage onward, and Kamanakam's register of death indicates that there is an increasing mortality rate after the age of 45. While this is also true for Saqalames, it shows a higher number of inhabitants in the adulthood and old age stages compared to the other focal hamlets. However, Saqalames also has the lowest number of inhabitants, which is likely to have an effect on this distribution.

Table 3.6 shows the mean and median age of each focal hamlet, as well as of all focal hamlets taken together.

Table 3.6: Mean and median age in the focal hamlets

	Saqalames	Lanivaqa	Altiaqa	Ngamarana	All hamlets
Mean	32.12	19.73	21.52	22.03	22.11
Median	29	13.5	21	19	18
N	17	56	58	37	168

At 22.11 and 18 years, the mean and median age of all focal hamlets together supports the view that this part of Kamanakam ward has quite young population, on average. Moreover, at 32.12 and 29 years, the mean and median for Saqalames support the impression that the members of this hamlet are on average slightly older than the other three hamlets. Table 3.7 presents the mean and median age of adults (above 20 years) in the focal hamlet as well as for all focal hamlets taken together.

Table 3.7: Mean and median age of adults (above 20 years) in the focal hamlets

	Saqalames	Lanivaqa	Altiaqa	Ngamarana	All hamlets
Mean	43.91	37.67	33.30	38.88	37.12
Median	33	35	31.5	35	34.5
N	11	21	30	16	78

Table 3.7 supports the view that in the focal hamlets of Kamanakam, adults are also quite young on average (37.12 mean and 34.5 median years of age).

3.2.4   Marriage structure

Kamanakam has become increasingly populated by non-Qaqet speakers. This has also impacted the marriage structure within the community, and continues to do so. Some Kamanakam elders, now between 55 and 65 years old, could be identified as already being children of interethnic marriages. With that said, it is safe to say that marriages between Qaqet and non-Qaqet speakers can be traced back at least 60–70 years. The trend may have accelerated since the construction of the road around the 1980s, which connects the northern coastal area of the Gazelle peninsula (see Section 3.1.2 on p. 64). Table 3.8 shows the ethnic distribution in relation to married couples within the focal hamlets. The table lists the marriage structure in the focal hamlets based on people's self-perceived ethnicity. As explained in Section 3.2.1, people's perceived ethnicity does not necessarily correspond to the fact that they have Qaqet as their native language, and are raised and socialized where the Qaqet people traditionally live. The term *Morobe* people is commonly used in the area to refer to people from the Morobe Province. The latter is located on the northern coast of the mainland of PNG. For *Unknown* individuals, it cannot be said whether they consider themselves as Qaqet or as belonging to another ethnicity. The table does not distinguish if couples were divorced or widowed at the time of the survey. What is also not distinguished is the individuals' sex in relation to perceived ethnicity. In interethnic relationships Qaqet may therefore either refer to the wife or the husband. Further, I have excluded married couples whom I was not able to ask about their self-perceived ethnicity.

Table 3.8: Marriage structure in the focal hamlets

	Saqalames	Lanivaqa	Altiaqa	Ngamarana	All hamlets
Qaqet–Qaqet	3	8	7	2	20
Qaqet–Qaqet/Tolai	0	1	0	0	1
Qaqet–Tolai	1	0	0	1	2
Qaqet–Sepik	0	0	0	2	2
Qaqet–Morobe	0	0	0	1	1
Qaqet–Unknown	0	0	2	0	2
Mali–Tolai	0	0	1	0	1
N	4	9	10	6	29

Table 3.8 shows that Qaqet–Qaqet couples (n = 20) represent the majority compared to couples where at least one marriage partner considers herself/himself as (partially) non-Qaqet (n = 7). However, the table shows that there is some ongoing diversity in the sense that Qaqet people continue to marry people that do not perceive themselves as Qaqet. With 8 Qaqet–Qaqet couples and 1 Qaqet–Qaqet/Tolai couple, the hamlet Lanivaqa shows the least ethnic diversity. Ngamarana, in contrast, shows the least Qaqet–Qaqet couples and more interethnic marriages with people considering themselves Morobe, Sepik or Tolai. Couples with no Qaqet background, such as the Mali–Tolai couple in Altiaqa, seem to be rare but surely do exist in the focal hamlets, and probably even more in the blocks Sangaqa and Tobubu (see Table 3.1 on p. 71), which the official census considers to be mostly populated by the Tolai people.

One observation I made while exploring some areas inland from Kamanakam was that the further inland (back) the hamlet is from the road, the more likely it is that one will meet Qaqet–Qaqet couples in a household. I identified couples as Qaqet–Qaqet when they spoke almost exclusively Qaqet, and seemed less comfortable to speaking Tok Pisin. In contrast, it has been pointed out by the local registrar that the blocks located in the front position (i.e., near the road) are predominantly inhabited by non-Qaqet people probably pursuing commercial interests. It therefore remains to be seen whether the number of marriages for the focal hamlets as well as mine and the local registrar's observations can support the following interpretation: non-Qaqet people are more likely to settle near the road. This leads to more interethnic marriages in these areas and fewer interethnic marriages in the more remote areas of Kamanakam, which are further away from the road.

3.2.5 Children

Table 3.9 shows the number of households in relation to the number of children in the focal hamlets for the year 2016. The bottom of the table shows the total number of children within the hamlet. A child is defined as anyone who is below 20 years of age. This means that offspring who are over 20 years old, and still live in their parents' house are not counted. Further, there may be small deviations from the tables regarding the age distribution in the focal hamlets (see Section 3.2.3 on p. 75). This is due to the fact that in Table 3.9, the number of children per household can include children that could not be taken into account in Table 3.5 for the age distribution, because we did not know their exact age. Finally, adoption among the Qaqet in Kamanakam is very common. This has been reported for other areas where Qaqet people traditionally live (see e.g., Raunsepna: Dickhardt 2009: 167; Lan and Yalam: Fajans 1997: 22). Adopted children are included in the count, but are not differentiated in this table.

Table 3.9: Number of children in relation to number of households in the focal hamlets in 2016

No. of children	Saqalames	Lanivaqa	Altiaqa	Ngamarana	All hamlets
1	2		1		3
2	2		1	1	4
3			4		4
4		3	2		5
5		2	1	3	6
6		1			1
7		1		1	2
N	6	35	28	24	65

Generally, Table 3.9 indicates that in the focal hamlets, families have between 1 and 7 children. The most diversity in that sense is to be found in the hamlets Altiaqa and Lanivaqa. However, this is very likely due to the higher number of families living in the latter hamlets compared to the other two hamlets. The families in Saqalames seem to have comparably fewer children than, for example, in Lanivaqa. This may be due to the fact that people are slightly older in Saqalames compared to the other focal hamlets (see Table 3.6 on p. 76), and the fact that children over 20 years of age are not accounted for in Table 3.9. Similarly in Altiaqa, most families have between 1 and 4 children, and only one family has 5 children. Ngamarana ranks somewhat in the middle.

Table 3.10 shows the mean and median number of children per family in each focal hamlet and all focal hamlets taken together.

Table 3.10: Mean and median number of children per family in the focal hamlets

	Saqalames	Lanivaqa	Altiaqa	Ngamarana	All hamlets
Mean	1.5	5	3.11	4.8	3.72
Median	1.5	5	3	5	4
N	6	35	28	24	65

The numbers in Table 3.10 indicate that an average family in the focal hamlets has 3.72 (mean) or 4 (median) children. As can already be inferred from the absolute figures in Table 3.9, when looking at each hamlet individually, there is some diversity between the hamlets. Compared to Saqalames, the average number of children in the other focal hamlets is considerably higher.

3.2.6 Language competence

A total of 71 adults were asked about their self-perceived Qaqet and Tok Pisin competence during a survey within the focal hamlets, in order to assess their productive and perceptive communicative competence. The participants where asked to assess their competence using the following four-way gradation: Not at all (= I cannot speak this language), Basic (= I can hold simple conversations), Proficient (= I can follow most conversations) and Fluent (= I can talk on any topic). The relative figures are summarized in Table 3.11 below.

Table 3.11: Overall language competence in the focal hamlets in %

	Qaqet	Tok Pisin
Not at all	4.2	0
Basic	26.8	1.4
Proficient	11.3	5.6
Fluent	57.7	93
N		71

The overall tendency, as given in Table 3.11, shows that 57.7% of the respondents consider themselves to be 'fluent' in Qaqet, whereas 26.8% state that they have a 'basic' Qaqet competence. For Tok Pisin, the overwhelming majority (93%) consider themselves to be 'fluent', whereas other less-fluent self-perceptions are only marginal. Table 3.12 shows the numbers for each focal hamlet individually.

Table 3.12: Language competence in Qaqet and Tok Pisin in each focal hamlet in %

	Saqalames		Lanivaqa		Altiaqa		Ngamarana	
	Qaqet	Tok Pisin	Qaqet	Tok Pisin	Qaqet	Tok Pisin	Qaqet	Tok Pisin
Not at all	0	0	0	0	7.1	0	6.2	0
Basic	37.5	0	26.3	0	14.3	3.6	43.8	0
Proficient	0	0	0	0	17.9	7.1	18.8	12.5
Fluent	62.5	100	73.7	100	60.7	89.3	31.2	87.5
N		8		19		28		16

Table 3.12 shows that the situation is a bit more diverse than the overall figures in Table 3.11 might suggest. In the case of Qaqet, 60.7%, 62.5% and 73.7% of adults in Altiaqa, Saqalames and Lanivaqa consider themselves to be fluent. In Ngamarana, on the other hand, far fewer adults regard themselves as being fluent in Qaqet, namely, only 31.2% of the adults surveyed. As for Tok Pisin, virtually all adults in the focal hamlets Saqalames and Lanivaqa regard themselves as fluent. In Altiaqa and Ngamarana, the situation is not as strong, but with 89.3% and 87.5%, respectively, the overwhelming majority nevertheless considers themselves to be fluent in Tok Pisin.

Table 3.13 shows the language competence according to the participants' sex.

Table 3.13: Language competence in Qaqet and Tok Pisin in relation to sex in %

	Female		Male	
	Qaqet	Tok Pisin	Qaqet	Tok Pisin
Not at all	5.9	0	2.7	0
Basic	20.6	2.9	32.4	0
Proficient	11.8	11.8	10.8	0
Fluent	61.7	85.3	54.1	100
N		34		37

Table 3.13 shows that slightly more females consider themselves to be fluent in Qaqet compared to males. In addition, the former also report a considerably lower basic competence than the males. As for Tok Pisin, the males unanimously consider themselves to be fluent, whereas the females, despite also being overwhelmingly fluent, were noticeably more restrained in their self-evaluations. From what I observed, some female participants may have been shy about judging themselves as fluent. For example, 2 female participants did not finish or attend school, 1 considered a language other than Qaqet and Tok Pisin as the one she is fluent in, and for 2 other females, I cannot point to any obvious reason. Therefore, it can only be speculated that the speaker's modesty, her association with another speaker group or being overly critical of herself may play a role here.

I have observed Tok Pisin to be widely used for communication between Qaqet and non-Qaqet speakers in Kamanakam. It could therefore be speculated that among other factors, the previous and ongoing settlement of non-Qaqet speakers and their marriage to Qaqet speakers play a role in the participants' decreasing Qaqet competence. In this context, it has been stated for numerous other local languages of PNG that they now find themselves in a competitive relationship with Tok Pisin for different reasons (e.g., Kuot: Lindström 2002: 80ff.; Nalik: Jenkins 2000: 64-70; Taiap: Kulick 1992: 265f.).

3.2.7   Education

A total of 58 adults were surveyed with regard to their level of education, and were asked, in particular, about the number of years they went to school and the school they attended. Table 3.14 shows a summary of the school years attended, for females, males and both sexes combined.

Table 3.14: School years in the focal hamlets in relation to sex in %

School years	Female	Male	Both sexes
0	6.9	3.45	5.17
1	0	0	0
2	3.45	0	1.72
3	3.45	0	1.72
4	0	0	0
5	3.45	10.34	6.9
6	31.03	34.48	32.76
7	0	0	0
8	34.48	27.59	31.03
9	0	3.45	1.72
10	17.24	17.24	17.24
11	0	0	0
12	0	3.45	1.72
N	29	29	58

What is evident from Table 3.14 is that 63.79% hold a primary education with 32.76% having finished grade 6, and another 31.03% having finished grade 8. The peaks at these two grade levels is the result of a reform of the school system implemented between 1993 and 1995, which increased primary education to a duration of 8 years (Papua New Guinea Department of Education 2004: 28). Another 17.24% went on with lower secondary education, and graduated after

grade 10. This is a rather recent development, and solely concerns younger adults for whom 8 years of primary education was compulsory. People holding an upper secondary education until grade 12 seem to be rare in the focal hamlets. As for sex, the sample shows a rather even distribution of females and males holding a primary (grade 6 or 8), lower secondary (grade 9 and 10) and higher secondary (grade 11 and 12) education. There were slightly more males finishing primary education when 6 years were compulsory. The trend has reversed in favor of females after the introduction of 8 years of primary education. In this context, there are two male participants who need to be considered separately. They happen to be community elders, who went to school between the 1940s and 1960s. They reported that during this time, a 5 year primary education was compulsory.

Table 3.15 shows the attended school years within each of the focal hamlets in %.

Table 3.15: School years within each of the focal hamlets in %

School years	Saqalames	Lanivaqa	Altiaqa	Ngamarana	All hamlets
0	0	0	12	0	5.17
1	0	0	0	0	0
2	0	0	0	7.14	1.72
3	0	0	4	0	1.72
4	0	0	0	0	0
5	28.57	8.33	4	0	6.9
6	14.29	50	28	35.71	32.76
7	0	0	0	0	0
8	0	16.67	44	35.71	31.03
9	14.29	0	0	0	1.72
10	42.86	25	8	14.29	17.24
11	0	0	0	0	0
12	0	0	0	7.14	1.72
N	7	12	25	14	58

What is evident from Table 3.15 is that in Altiaqa, the majority of people hold a primary education (72%), followed by Ngamarana (71.4%) and Lanivaqa (66.67%). In Saqalames, 42.86% of the inhabitants hold a primary education up to grades 5 and 6 and 57.15% hold a lower secondary education up to grades 9 and 10. This contrast is again likely to be biased by the low number of Saqalames inhabitants. In addition, there are only a few early school leavers or individuals who never attended school. Among them, there is, for example, an older woman (75 y.) who originally came from the inland area of Kamanakam, where, when she was young, there was probably no compulsory schooling. There are also people with learning difficulties, sometimes caused by disabilities. Other reasons reported include having to help with household duties or regular farming work as children.

Table 3.16 shows the mean and median years of education within the focal hamlets and for all hamlets taken together.

Table 3.16: Mean and median years of education in the focal hamlets

	Saqalames	Lanivaqa	Altiaqa	Ngamarana	All hamlets
Mean	7.86	7.25	6.32	7.43	6.97
Median	9	6	8	8	8
N	7	12	25	14	58

Table 3.16 shows that, on average, the inhabitants of the focal hamlets have an education that lasts around 7 (mean) or 8 (median) years. Within the focal hamlets, Saqalames lies a bit above the overall average, with people having had an education of almost 8 (mean) or 9 (median) years.

3.2.8   Occupation

In the focal hamlet, the majority of the adult inhabitants are subsistence farmers, i.e. they cultivate their own *gaden* 'garden' or *blok* 'block' which are the places where they grow crops to feed themselves and their family. Female farmers, additionally, often refer to themselves as *hauswaif* 'housewife' or as *lukautim haus* or *wasim haus* 'taking care of household duties' when they are younger and not yet married. A certain part of the farmers' harvest may serve as cash crops, which are sold at local markets throughout Kamanakam ward, and also as far as the nearby towns of Keravat, Kokopo and Rabaul, 35, 70 and 70 kilometers away, respectively. For a higher income, many farmers also grow cocoa (selling for approx. 300–400 PGK per bag in 2016/17) or produce copra (dried meat of the coconut, selling for approx. 100–200 PGK per bag in 2016/17), which is intended exclusively for sale to locally based exporters in Keravat, Kokopo or Rabaul.

People who had the possibility to learn a profession in a vocational school (e.g., in Keravat or Kokopo) seem to be rare. Such people may have left Kamanakam afterwards in search for work. When addressing this topic, middle-aged and older male locals often expressed the wish that people who go away to learn a profession should afterwards come back to support the community with their knowledge. All remaining jobs in the community are situated in the public sector, and include positions such as teacher, community health worker, ward member, local registrar and several church-related positions. Most of the people holding these jobs normally still work as subsistence farmers, as payment is irregular and/or not sufficient to buy their groceries exclusively at local markets. Community health workers may be an exception, as their work usually requires them to be constantly on-call. Among those holding a job in the public sector, three persons additionally operate local food stores providing the community with non-perishable commodities, such as instant noodles, cabin biscuits, canned fish or meat, rice, salt, sugar and oil. However, these goods are only intended as supplements to the crops people are growing.

3.2.9   Summary

Section 3.2 has looked at sociodemographic/sociolinguistic determinants in the focal hamlets Saqalames, Lanivaqa, Altiaqa and Ngamarana of Kamanakam ward. Variables of interest included location, area structure, ethnicity, household, age, marriage structure, children, language competence, education and occupation. Table 3.17 summarizes the information given for each of these variables in the focal hamlets, along with total values. For the variables location and area structure, this concerns information on all identified hamlets within Kamanakam

ward. For the other variables, a total is given only for the focal hamlets in either mean/median or %.

Table 3.17: Summary of sociodemographic/sociolinguistic variables

	Focal hamlets	Total
Location	Near (front) or farther away (back) from the road:	
	1. Saqalames: front	In Kamanakam:
	2. Lanivaqa: back	
	3. Altiaqa: front	6 front
	4. Ngamarana: front	13 back
Area structure	Distribution of hamlets / blocks:	
	1. Saqalames: hamlet	In Kamanakam:
	2. Lanivaqa: hamlet	
	3. Altiaqa: hamlet	14 hamlets
	4. Ngamarana: hamlet	5 blocks
Ethnicity	Qaqet or Baining (Qaqet) (in %):	
	1. Saqalames: 77.78	In focal hamlets:
	2. Lanivaqa: 94.12	
	3. Altiaqa: 92.6	85.08%
	4. Ngamarana: 64.29	
Household	Mean / median number of individuals per household:	
	1. Saqalames: 3.8 / 4	In focal hamlets:
	2. Lanivaqa: 4.92 / 6	
	3. Altiaqa: 5.73 / 6	5.52 / 6
	4. Ngamarana: 8.2 / 9	
Age	Mean / median age:	
	1. Saqalames: 32.12 / 29	In focal hamlets:
	2. Lanivaqa: 19.73 / 13.5	
	3. Altiaqa: 21.52 / 21	22.01 / 18
	4. Ngamarana: 22.03 / 19	
Marriage structure	Qaqet–Qaqet couples:	
	1. Saqalames: 3	In focal hamlets:
	2. Lanivaqa: 8	
	3. Altiaqa: 7	Qaqet–Qaqet: 20
	4. Ngamarana: 2	

	Other couples:	
	1. Saqalames: 1	In focal hamlets:
	2. Lanivaqa: 1	
	3. Altiaqa: 1	Other: 7
	4. Ngamarana: 4	
Children	Mean / median no. of children:	
	1. Saqalames: 1.5 / 1.5	In focal hamlets:
	2. Lanivaqa: 5 / 5	
	3. Altiaqa: 3.11 / 3	3.72 / 4
	4. Ngamarana: 4.8 / 5	
Language competence	Fluent in Qaqet / Tok Pisin (in %):	
	1. Saqalames: 62.5 / 100	In focal hamlets:
	2. Lanivaqa: 73.7 /100	
	3. Altiaqa: 60.7 / 89.3	57.7 / 93
	4. Ngamarana: 31.2 / 87.5	
Education	Mean / median years of education:	
	1. Saqalames: 7.86 / 9	In focal hamlets:
	2. Lanivaqa: 7.25 / 6	
	3. Altiaqa: 6.32 / 8	6.97 / 8
	4. Ngamarana: 7.43 / 8	
Occupation		In focal hamlets:
		Majority: Subsistence farmers
		Among them some hold positions in the:
		Public sector as teacher, community health worker, ward member, local registrar, church- related positions
		Private sector as local food store owners

Kamanakam can be divided into hamlets and blocks. The majority of the two types of units constitute hamlets, which includes the focal units. As for the location and ethnic distribution of these hamlets, the majority of the Qaqet-dominated hamlets, including the focal hamlet Lanivaqa, are located farther away from the road (back). The other three focal hamlets (Altiaqa,

Saqalames, Ngamarana) are the only Qaqet-dominated hamlets located near the road (front). The ethnic composition of the focal hamlets Saqalames, Lanivaqa and Altiaqa is dominated by people who consider themselves Qaqet or Baining (Qaqet). Ngamarana has the largest percentage of residents who perceive themselves as different from Qaqet or Baining (Qaqet).

The mean / mean number of individuals in a household within the focal hamlets is 5.52 / 6 individuals per household. The numbers of individuals per household vary considerably within each hamlet, ranging from between 3.8 / 4 (Saqalames) to 8.92 / 9 (Ngamarana) individuals per household.

The inhabitants of the focal hamlets are quite young. At least half of them are under 20 years of age and the mean / median age for all four hamlets is 22.01 / 18 years. The numbers for the focal hamlets Lanivaqa, Altiaqa and Ngamarana more less oscillate around these numbers. Saqalames – with the smallest population of all focal hamlets – is an outlier here, in that only about a third of the population is younger than 20 years. This hamlet shows a mean / median age that is on average about 10 to 15 years higher than the other three focal hamlets.

The marriage structure for the focal hamlets shows that the majority of marriages are between individuals who consider themselves as Qaqet. Ngamarana shows the most diversity, whereas Lanivaqa, being the only focal hamlet located more inland (back), has the lowest proportion of interethnic marriages.

Families in the focal hamlets have on average 3.72 / 4 children. This figure is lower in Saqalames, with 1.5 children, and higher in Lanivaqa, with 5 children. Altiaqa and Ngamarana are in the middle of this spectrum.

On average, more than half of the respondents in the focal hamlets consider themselves to be fluent in Qaqet. The rate of Qaqet fluency is higher for the focal hamlets Altiaqa, Saqalames and Lanivaqa, and lower for Ngamarana. The trend for the Qaqet competence somewhat matches with the participants' responses on perceived ethnicity and the data collected for marriage structure. Conversely, the vast majority of the inhabitants from the focal hamlets consider themselves to be fluent in Tok Pisin – the national lingua franca of PNG.

More than half of the inhabitants (63.8%) of the focal hamlets have a primary education up to grade 6 or 8. When looking at each hamlet individually, about two-third of the inhabitants in the focal hamlets Lanivaqa, Altiaqa and Ngamarana have a primary education, and around one-third a (lower/upper) secondary education. In Saqalames, in contrast, half of inhabitants have a primary education, and half have a lower secondary education.

The extent to which the situation in the focal hamlets may also be applicable to other hamlets and blocks of Kamanakam ward can only be speculated. The local registrar's summary of the ethnic make-up of the hamlets and blocks in Kamanakam ward has shown that the focal hamlets are predominantly inhabited by Qaqet people. As such, if there are similarities to other hamlets and blocks, it will most likely be Qaqet-dominated hamlets that manifest these similarities (see Table 3.1 on p. 71).

3.3 Focal families

The following section presents a brief characterization of the focal families based on the sociolinguistic and sociodemographic data collected.

3.3.1 Focal family A

Focal family A resides in the hamlet Saqalames in Kamanakam ward (Inland Baining Rural LLG). The nuclear family consists of four family members: father (FSS), mother (KJS), son (FRS) and

daughter (HCK). However, the son used to live with his maternal grandparents in Lae, Morobe Province, until his grandmother died in December 2017. Since January 2018, he has returned to live with his parents.

Table 3.18: Sociodemographic/sociolinguistic data of focal family A

Variables	FSS	KJS
Residence	Saqalames	Saqalames
Ethnicity	Qaqet	Tolai
Age 2016	29 years	28 years
Children	2 (FRS, HCK)	2 (FRS, HCK)
Qaqet	Fluent	Basic
Tok Pisin	Fluent	Fluent
Kuanua	Basic	Fluent
Siwai	Proficient	Not at all
Education	9 years	10 years
Occupation	Subsistence farmer, Local registrar, Member of the Development Commitee	Subsistence farmer, Housewife

The father (FSS) was born 1987 in the Keravat Health Center located approximately 35 kilometers away from Kamanakam. FSS describes himself as a Qaqet person, who is fluent in Qaqet and Tok Pisin, and also has a proficient command of his foster-father's native language Siwai. He grew up in Kamanakam, and finished lower secondary school up to the 9th grade in 2005. Since then, he has worked as a subsistence farmer. In 2012, he became Kamanakam's local registrar. Thus, he is responsible for keeping a record of people's births and deaths, and of people moving to or away from Kamanakam. He is also responsible for updating the electoral roll of Kamanakam during elections.

FSS is the son of a mixed Qaqet-Arawe mother (NMS). NMS was born 1955 in Kamanakam. She describes herself as Qaqet, and fluent in Qaqet and Tok Pisin. She is a subsistence farmer and housewife. FSS's biological non-Qaqet speaking father stems from New Ireland. FSS's foster-father, i.e. the mother's second husband (HJP), is from Buka Island. HJP was born in 1939, and finished school up to grade 5, which was the standard at that time. He describes himself as Qaqet, fluent in his mother tongue Siwai and Tok Pisin, and with basic competence in Qaqet language. HJP is a subsistence farmer. In colonial times, he also worked, for example, as a driver for a Kamanakam-based plantation owner, and later operated a local store in Kamanakam. Both FSS's parents (NMS, HJP) live in Saqalames.

The mother (KJS) was born in 1988 in Vunapope Hospital in Kokopo. Her parents are Tolai who stem from Nangananga ward, Raluana LLG, a region in Kokopo District. Accordingly, KJS describes herself as Tolai. I would describe her as fluent in Tok Pisin, and probably also in Kuanua and with a basic competence in Qaqet. During her childhood, the family moved to the city of Lae in Morobe Province, where KJS finished lower secondary school up to grade 10. Her mother (died 2017) was a nurse. Her father who still lives in Lae is a police-man.

3.3.2 Focal family B

Focal family B resides in the hamlet Lanivaqa in Kamanakam ward. The nuclear family consists of nine family members: father (FST), mother (ICK), son (GSJ), daughter (HAM), daughter (HDA), son (GBR), son (JPK), daughter (IMK) and son (FVL).

Table 3.19: Sociodemographic/sociolinguistic data of focal family B

Variables	FST	ICK
Residence	Lanivaqa	Lanivaqa
Ethnicity	Baining (Qaqet); Tolai	Baining (Qaqet)
Age 2016	39 years	37 years
Children	7 (GSJ, HAM, HDA, GBR, JPK, IMK, FVL)	7 (GSJ, HAM, HDA, GBR, JPK, IMK, FVL)
Qaqet	Fluent	Fluent
Tok Pisin	Fluent	Fluent
Kuanua	Basic	Not at all
Education	6 years	6 years
Occupation	Subsistence farmer, Eucharistic minister	Subsistence farmer, Housewife

The father (FST) was born in Poniar ward, Lassul Baining Rural LLG. The ward is located roughly to the west of Kamanakam in an area that is considered as traditional Qaqet territory. FST describes himself as a mix of Baining and Tolai, albeit more attached to his Baining (Qaqet) heritage. He considers himself fluent in Qaqet and Tok Pisin, and with basic competence in Kuanua. After 6 years of education, he graduated from Kolopom community school in Kolopom ward, Lassul Baining Rural LLG. He must have settled in Kamanakam sometime after finishing school. He works as a subsistence farmer, and also holds the position of a Eucharistic minister in the local Kamanakam Catholic church.

FST describes his mother as a Qaqet born 1948 in Komgi ward (also Lassul LLG), who lived in Kamanakam. She graduated from Raunsepna primary school, and afterwards attended the teacher's college. As such, she worked as a teacher, but probably also as a subsistence farmer in her adult life. She died in 1999. His father, FST describes as a Tolai born 1948 in Kabaira, Livuan/Reimber Rural LLG, which is located north of the town Keravat on the east coast of the Ataliklikun Bay. He graduated from Kabaira primary school, and then probably went on to a vocational school specializing in carpentry, since he worked as a carpenter in his adult life. As such, he was, for example, involved in building the local Kamanakam Catholic church in the late 1970s. FST's mother was probably fluent in Qaqet and Tok Pisin, whereas his father is probably fluent in Kuanua and Tok Pisin. There is no information about the competence each may have (had) in each other's native language.

The mother of focal family B (ICK) was born in the Nonga General Hospital in Rabaul, which is located approximately 75 kilometers away from Kamanakam. She describes herself as Baining, and is fluent in Qaqet and Tok Pisin, but with no competence in Kuanua. She grew up in Kamanakam, and graduated from Kamanakam community school after 6 years of education. She is a subsistence farmer and housewife.

ICK is the daughter of a Qaqet mother (GMX). GMX was born 1949 in Raunsepna, and describes herself as Qaqet. From my encounters with her, I perceived her as fluent in Qaqet and Tok Pisin. She describes herself as a housewife, but was also a subsistence farmer her entire adult life. She went to school in Raunsepna, and probably finished school after 6 years.

Her father is described as Qaqet, born 1947 in Komgi, Lassul Baining Rural LLG. He was fluent in Qaqet and probably also in Tok Pisin. After finishing school in Komgi, he worked as a subsistence farmer in his adult life. He died in 2012.

3.3.3   Summary

Among other characteristics that were important for the longitudinal study, the two families were being selected according to what was perceived to be the dominant characteristics of the Kamanakam Qaqet inhabitants: predominantly speakers of Qaqet, but also fluent in Tok Pisin, living within a Qaqet-speaking social network, and working as subsistence farmers.

In the focal hamlets, more than half of the queried people perceive themselves as fluent in Qaqet. However, there is also a considerable group who perceives their Qaqet competence as only basic. From that standpoint, focal family A fits in the profile with FSS being fluent, and KJS having only basic competence in Qaqet. In focal family B, FST and ICK are both fluent in Qaqet, and therefore represent what is still the majority in the focal hamlets. The majority of the inhabitants of the focal hamlets consider themselves as Qaqet or Baining (Qaqet). However, there is also some variation within each focal hamlet. Focal family A is divided here in terms of their perceived Qaqetness, with FSS being Qaqet and KJS being Tolai. In the focal family B, ICK sees herself as Baining (Qaqet). FST acknowledges his Tolai heritage, but he feels more connected to his Baining (Qaqet) heritage. The adults of both focal families work as subsistence farmers, just as the majority of inhabitants of the focal hamlets. In addition, the males in both families hold positions in the public sector. It can be speculated that this may place them at a higher status than their fellow inhabitants. However, their professions are not connected to a regular income that would allow them a higher socioeconomic status. Indeed, they live a life that is very similar to that of the other inhabitants of the focal hamlets. The average school years for all focal hamlets is 6.97 (mean) or 8 (median) years, and therefore points to a primary education as the predominant level of education within the focal hamlets. The adult members of focal family A attended school until the lower secondary level (9–10 years), which is not yet that common in in the focal hamlets. Focal family B, in contrast, finished their education at the primary level, which is in accordance with the majority of Kamanakam's inhabitants. Thus, focal family A is somewhat more educated in terms of attended school years than the average Kamanakam inhabitant. The inhabitants of the focal hamlets are considerably young, and with an adult's mean / median age of 37.12 / 34.5 years. The majority can therefore be considered as being in what Erikson and Erikson (1997) called young adulthood. Similarly, agewise the two focal families both lie within the young adulthood stage. However, they have an age difference of about ten years. With two and seven children, respectively, focal family A has fewer and focal family B has more children than the average number of four children in the focal hamlets.

Chapter 4

Code-switching and borrowing

It is notoriously difficult to distinguish between code-switching and lexical borrowing, and there is still an ongoing debate on the issue. In the Kamanakam corpus, switching between monolingual intonation units and mixed intonation units can be observed. The former can be safely described as inter-intonation unit code-switching. The latter, on the other hand, cannot be always described as intra-intonation unit code-switching, when one takes into account the phenomenon of lexical borrowing. In this study, the term *mixed intonation unit* or *mixed unit* is used when one, two or three lexical item(s) of language A are/is embedded in a language B frame. The language frame of a particular utterance is delimited suprasegmentally by the boundaries of the intonation unit. Between these boundaries, the language frame is assigned to the language that makes up the majority of the morphemes. It therefore follows the practice of assigning a matrix language to a given utterance, as proposed by Myers-Scotton (1992: 22). The insertion of Tok Pisin lexical and structural material has also been discussed for other languages in PNG (e.g., Sankoff 1972: 47f.; Bradshaw 1978; Chowning 1983; Ross 1985; Kulick and Stroud 1990: 212f.). This chapter addresses the question how such other-language insertions should be treated, that is, to best be able to distinguish borrowings from intra-intonation unit code-switching in mixed intonation units of the Kamanakam corpus. In the case that such inserted material could largely be considered as intra-intonation unit code-switching, they could then be further analyzed as either situational or conversational code-switching.

Concerning the question of how to distinguish intra-sentential code-switching from lexical borrowing, two major positions have come to the fore. On the one hand, there is the position of Poplack and her associates, who understand code-switching and borrowing as two distinct phenomena that are not related to each other. Poplack and Meechan (1995: 200) define other-language insertions as code-switching when the grammar of the embedded element is retained, while the placement of the insertion is defined by the recipient language. Borrowings, however, are characterized by their morphological and syntactic (and usually phonological) integration in the recipient language. On the other hand, Myers-Scotton (1992: 30) conceives of code-switching and borrowing along the lines of a diachronic continuum, that is, what starts as code-switching eventually ends in borrowing. She distinguishes between cultural (or non-core) and core types of foreign lexical vocabulary within a given language. Appel and Muysken (2005: 165) define the two terms as follows:

> "Core vocabulary refers to items basic to a human society such as 'fire', 'hands', 'two', 'daughter'. Non-core items are elements of the very specific material and non-material culture and organization of a group: 'lawnmower', 'dictionary', 'psychiatry'.

Based on this notion, other-language core forms coming in to use would more or less duplicate already existing lexemes in a particular language, whereas cultural (or non-core) forms would be used for objects new to a particular culture (Myers-Scotton 2002: 239). According to Myers-Scotton (1992: 29f.), core forms start out as code-switching, and are repeated until they become core borrowings. Cultural (or non-core) forms, however, are unrelated to code-switching as a phenomenon, since they enter the matrix language abruptly as borrowings. For Myers-Scotton (1992: 31), phonological integration is a questionable criterion: "while *most* established B [borrowing] forms may well be phonologically integrated into the ML [matrix language], by no means do *all* B forms show such integration" (1992: 31). In consequence, "far from *all* B forms can be distinguished from *single* CS forms on the basis of their phonological integration into the ML". Based on her observations, morpho-syntactic integration is a similarly questionable distinguishing feature since "single CS forms are always integrated into the syntax and often into the morphology of the ML" (1992: 31).

In the following sections, a set of features – and among them the ones Poplack and Myers-Scotton have stated as decisive – is going to be qualitatively and as far as possible quantitatively analyzed. Section 4.1 asks how frequently mixed units can be observed in contrast to monolingual intonation units. Section 4.2 identifies the word classes of the inserted lexemes. In Section 4.3, I analyze how many of the other-language material can be considered to be core vocabulary, compared to cultural (or non-core) vocabulary. Section 4.4 investigates the degree to which the inserted material can be said to be phonologically integrated. Section 4.5 discusses how morphosyntactically integrated the other-language material is. Section 4.6 concludes with a summary and discussion.

Methods and data used for this chapter include naturalistic audiovisual data (see Section 2.2.5 from p. 29). In the preparation process, these data were transcribed (see Section 2.3 from p. 38), segmented (see Section 2.4 from p. 40) and annotated. For the latter, the annotation for language (see Section 2.5.1 on p. 53), word class (see Section 2.5.7 on p. 60) and borrowing status (see Section 2.5.8 on p. 60) were particularly relevant for the identification and analysis of the inserted material.

4.1   Monolingual and mixed intonation units

Table 4.1 shows the number of monolingual and mixed intonation units in adult-to-adult talk[1]. Each column refers to one of the four recordings that make up the Kamanakam corpus. In rows, the upper part of the table shows the numbers for monolingual language use. The languages are given in ISO 639-3 code and include: Qaqet (byx), Tok Pisin (tpi) Kuanua (ksd) and English (eng). In the lower part, the use of mixed intonation units is presented. The language in square brackets constitutes the language frame of the intonation unit, with the language of the inserted element in parentheses. For example, '[byx(tpi)]' stands for a mixed unit consisting of a Qaqet language frame with (a) Tok Pisin-inserted element(s). For mixed units such as '[byx , tpi]', the situation is somewhat balanced. In this case, the number of morphemes of either language is more or less equal. This especially includes very short intonation units consisting of one morpheme from either language. In the corpus, there are only 4 such cases, in which the language frame is non-identifiable. It may be that they occurred due to errors in the annotation. These 4 cases have been excluded from the analysis.

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[1] Non-identifiable intonation units as well as adult-to-child, child-to-adult, and child-to-child talk are excluded from this table.

Table 4.1: Number of monolingual and mixed intonation units in the Kamanakam corpus

	Monolingual intonation units
byx	1214
tpi	832
ksd	7
eng	6
Total mono	2059
	Mixed intonation units
[byx(tpi)]	188
[byx(ksd)]	1
[byx(eng)]	1
[tpi(byx)]	7
[tpi(ksd)]	1
[tpi(eng)]	1
[byx , tpi]	3
[eng , tpi]	1
Total mixed	203
Total all	2262

[*] *byx* 'Qaqet'; *tpi* 'Tok Pisin'; *ksd* 'Kuanua'; *eng* 'English'

Table 4.1 shows that Qaqet and Tok Pisin are the main languages used. They make up for 53.67% and 36.78% of uttered intonation units, respectively. The table further shows that of all intonation units, the mixed units make up 8.97%. Of all mixed intonation units, the ones showing a Qaqet frame and a Tok Pisin insertion make up 92.61%. In the upcoming sections of this chapter, therefore, the analysis predominantly focuses on Tok Pisin insertions in a Qaqet frame.

4.2 Word class

It has been stated in the language contact literature (e.g., Matras 2009: 168; Manfredi et al. 2015: 290) that nouns are borrowed more easily than other word classes. More generally, it has also been stated that content words (adjectives, nouns, verbs) are more easily borrowed than function words (articles, pronouns, conjunctions) (Appel and Muysken 2005: 171). Table 4.2 shows the word classes in mixed intonation units. Word classes found within the corpus include (in alphabetical order): *adj* 'adjective', *adv* 'adverb', *art* 'article', *conj* 'conjunction', *n* 'noun', *num* 'numeral', *pr* 'proper noun'[2], *prep* 'preposition', *pro* 'pronoun' and *v* 'verb'. The counts include all tokens irrespective of whether a lexeme occurs more than once[3]. What is already evident here is that other-language insertions range from one (e.g., n) to three (e.g., n ; num ; n) insertions per intonation unit. Cases in which more than one other-language lexeme

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[2] Similar to Field (2002), this study includes proper nouns in the word counts. Field (2002: 205) argues that "[i]rrespective of status as proper versus common noun, proper nouns [...] certainly have concrete referents". Including proper nouns may help to "illustrate the cultural impact" (2002: 205) they have on the Qaqet culture.
[3] See van Hout and Muysken (1994: 44f.) for a discussion on counting 'types' vs. 'tokens' of borrowed elements.

occurs in an intonation unit are given in the order of appearance. They are separated via a semicolon (;). This excludes *num-n* which is considered a single word (consisting of a numeral and a noun).

Table 4.2: Word classes of the other-language insertions within the mixed intonation units

	[byx(tpi)]	[byx(ksd)]	[byx(eng)]	[tpi(byx)]	[tpi(ksd)]	[tpi(eng)]	Ttl.
n	123	1					124
v	29			1			30
num-n	9						9
n ; n	5						5
pr	4						4
pro	4						4
adj	2			1	1		4
art				3			3
conj			1	2			3
v ; n	4						4
adv	1					1	2
num	1						1
n ; num	1						1
n ; num ; n	1						1
num ; n ; n	1						1
pr ; v	1						1
prep	1						1
prep ; pro	1						1
Total	188	1	1	7	1	1	199

As already suggested in Table 4.1, the most inserted elements in Table 4.2 concern Tok Pisin elements within a Qaqet frame. Table 4.3 shows the relative distribution of Tok Pisin nouns and verbs in a Qaqet frame compared to other word classes in [byx(tpi)] and other types of mixed intonation units (e.g., [tpi(ksd)], etc.).

Table 4.3: Nouns and verbs in [byx(tpi)] vs. other word classes in [byx(tpi)] + [other(other)] (in %)

	[byx(tpi)]	[byx(tpi)] + [other(other)]
n	61.81	
v	14.57	
other		23.62

What is evident from Table 4.3 is that Tok Pisin nouns in a Qaqet frame make up 61.81% of the inserted material, followed by Tok Pisin verbs, with 14.57%. When solely considering the [byx(tpi)] mixed intonation units, nouns make up 65.43% and verbs 15.43% of the inserted material. The numbers for nouns and verbs as the most common word classes are in line with studies on other language pairs (e.g., Poplack et al. 1988: 63; Bernstein 1990: 76). In conclusion, it can be said that nouns, and more generally content words, constitute the majority of the inserted Tok Pisin elements in Qaqet.

4.3 Core and non-core vocabulary

Myers-Scotton (1993: 171) has suggested that cultural (or non-core) forms are usually borrowed. According to Manfredi et al. (2015: 289), this may be due to the fact that cultural forms "fill a gap in the mental lexicon of the speaker". Core forms, on the other hand, can be one-time code-switchings or already borrowed forms. According to Myers-Scotton (1993: 173ff.), the latter have come into the language through repeated use as originally code-switched items. Based on Myers-Scotton's distinction, this study follows two central questions in order to distinguish between core and non-core forms (see Section 2.31 on p. 60).

Table 4.1 in Section 4.1 has shown that Tok Pisin insertions in a Qaqet frame form the majority of mixed intonation units within the corpus. Moreover, Table 4.2 in Section 4.2 has shown that Tok Pisin nouns and verbs in a Qaqet frame form the majority of inserted word classes. Table 4.4 presents the number of core and non-core vocabulary of such Tok Pisin insertions within a Qaqet frame.

Table 4.4: Core and non-core vocabulary in [byx(tpi)] mixed intonation units

No.		all core	all non-core	mixed core/non-core	Total
1	n	26	97		123
2	v	11	18		29
3	num-n			9	9
4	n ; n	1		4	5
5	pr	3	1		4
6	pro	4			4
7	v ; n	2		2	4
8	adv	2			2
9	adj	1			1
10	num	1			1
11	n ; num	1			1
12	n ; num ; n	1			1
13	num ; n ; n	1			1
14	pr ; v			1	1
15	prep	1			1
16	prep ; pro	1			1
Ø	Total	56	116	16	188

Table 4.5 shows the relative distribution of Tok Pisin nouns, verbs and other word classes in regard to being core, non-core or mixed core/non-core forms.

Table 4.5: Core/non-core/mixed distribution of nouns, verbs and other word classes in %

	all core	all non-core	mixed core/non-core
n	13.83	51.60	0
v	5.85	9.57	0
other	10.11	0.53	8.51

What is evident from Table 4.5 is that single non-core Tok Pisin nouns are the most often

used. They are followed by single core Tok Pisin nouns, single non-core Tok Pisin verbs and single core Tok Pisin verbs. Table 4.6 shows the relative distributions for single nouns and verbs with a core and non-core status.

Table 4.6: Distribution of core and non-core Tok Pisin-inserted nouns and verbs in %

	n	v
core	21.14	37.93
non-core	78.86	62.07
N	123	29

What is evident from Table 4.6 is that inserted nouns and verbs predominantly have a non-core status. According to Myers-Scotton, the non-core forms would have to be considered as borrowings. Table 4.7 lists the core and non-core Tok Pisin nouns in [byx(tpi)] mixed intonation units. It may be noted here that the meaning of the Tok Pisin and Qaqet forms is not always identical. For example, Qaqet *luan* for Tok Pisin *klos* 'clothes' may in its literal sense to be more understood as what in Tok Pisin is referred to as *laplap* 'any fabric'. The symbol *?* is used for Qaqet words where either the form is unknown or it is not known if a Qaqet equivalent exists.

Table 4.7: Non-core and core nouns in [byx(tpi)] mixed intonation units

	Core vocabulary			Non-core vocabulary	
	Tok Pisin	Qaqet	Translation	Tok Pisin	Translation
1	daka	agan	'pepper'	aua	'hour'
2	garamsel	?	'?'	ba	'bar'
3	hap	luqupki	'place'	bek	'bag'
4	haus kuk	?	'cooking house'	bisket	'biscuit'
5	kago	quvanngi	'cargo'	bisop	'bishop'
6	klos	luanngi	'clothes'	blok	'block'
7	kuru	?	'germinating seedling'	brus	'tobacco'
8	maket	mirlki	'market'	buklet	'booklet'
9	mama	nan	'mother'	domatri	'dormitory'
10	paia	ltinyngi	'fire'	gumi	'rubber'
11	papa	mam	'father'	hapkas	'individual of mixed heritage'
12	pasin	gamansena	'custom'	haus lotu	'church house'
13	rot	iska	'road'	haus kiap	'guest house for district administrative officers on patrol'
14	stori	lengiim	'story'	haus sik	'hospital'
15	tambu	reviska	'in-laws'	kap	'cup'
16				kakao	'cocoa'
17				kapsikan	'capsicum'
18				kaukau	'sweet potato'
19				klaspati	'class party'
20				kon	'corn'

Table 4.7: Non-core and core nouns in [byx(tpi)] mixed intonation units

	Core vocabulary			Non-core vocabulary	
	Tok Pisin	Qaqet	Translation	Tok Pisin	Translation
21				kopi	'coffee'
22				kopra naip or naip kopra	'copra knife'
23				krismas	'Christmas'
24				lotu	'church'
25				mande	'Monday'
26				masis	'matches'
27				masta	'master'
28				paiaman	'copra drying house'
29				plang	'plank'
30				plestik	'plastic'
31				pinat	'peanut'
32				projek	'project'
33				raba	'rubber band'
34				rais	'rice'
35				sande	'Sunday'
36				sarere	'Saturday'
37				sip	'ship'
38				sospen	'sauce pan'
39				spray	'sprayer'
40				stoa	'store'
41				taim	'time'
42				tic (ti-ai-si)	'teacher'
43				tomato	'tomato'
44				tunde	'Tuesday'
45				wik	'week'

Table 4.7 shows that the non-core Tok Pisin nouns cover a range of semantic fields of more concrete terms including designations for industrially manufactured household goods, including small items (e.g., *masis*, *raba*), cooking devices and dishware (e.g., *sospen*, *kap*), but also industrially manufactured food items (e.g., *bisket*). Non-manufactured items include vegetables (e.g., *kapsikan*) as well as semiluxury food items (e.g., *brus*). Further, there are a few terms related to the Christian belief system (e.g., *haus lotu*, *bisop*), terms for state institutions (e.g., *haus sik*, *haus kiap*), time-related terms (e.g., *aua*, *wik*, weekdays) as well as some more abstract terms (e.g., *projek*, *klaspati*). Table 4.8 lists the core and non-core Tok Pisin verbs in [byx(tpi)] mixed intonation units. It may be noted, that there are Qaqet equivalent forms which cover the semantic field of the respective Tok Pisin form. However, as there is no definite Qaqet form that covers the exact meaning of a respective Tok Pisin form, the Qaqet translations are omitted.

Table 4.8: Non-core and core verbs in [byx(tpi)] mixed intonation units

	Core vocabulary		Non-core vocabulary	
	Tok Pisin	Translation	Tok Pisin	Translation
1	les	'to be tired'	bilasim	'to decorate'
2	lus	'to lose'	klem(im)	'to claim'
3	pas	'to pass'	praim	'to fry'
4	rausim	'to remove'	rekodim	'to record'
5	senis	'to change'	ring	'to ring sb.'
6	serim	'to share'	spray	'to spray'
7	stopim	'to stop'		
8	stori	'to tell sth.'		
9	tok	'to talk'		
10	wetim	'to wait'		

The non-core verbs in Table 4.8 cover semantic fields that are related to newly introduced technical devices, such as cameras and mobiles phones (*rekodim*, *ring*) or insecticide spray guns (*spray*), cooking devices, such as frying pans (*praim*), or concepts of land ownership (*klemim*).

4.4   Phonological integration

This section analyzes to which degree Tok Pisin insertions are phonologically integrated into Qaqet frames.

4.4.1   Methodology

I carried out a pilot study for Kamanakam Qaqet, in which I identified minimal pairs based on a Qaqet word list collected from spoken monolingual Qaqet intonation units in 30 minutes of the Kamanakam corpus. The reference point for Qaqet constitutes Hellwig's (2018) grammar of Qaqet, which is based on the Raunsepna Qaqet dialect. For Kamanakam Qaqet, I was able to identify the same consonant and vowel phonemes as Hellwig (2018) describes for Raunsepna Qaqet. In another pilot study, I investigated the realization of the plosives /p/, /t/ and /k/ in Kamanakam Qaqet in over 200 word forms. Their realization is in accordance with what Hellwig (2018) describes for Raunsepna Qaqet.

With a list of Tok Pisin minimal pairs to the monolingual Tok Pisin intonation units of the Kamanakam corpus, I have identified most of the 18 consonant and eight vowel phonemes in Kamanakam Tok Pisin that Mihalic (1971: 5f.) proposed. The latter is often cited as the standard for comparison. I checked for the occurrence of the potential consonant phonemes in syllable onset and coda position. I could not extract all consonant phonemes on the basis of minimal pairs from the Kamanakam corpus due to the restricted vocabulary available.

4.4.2   Kamanakam Qaqet phoneme inventory

Table 4.9 shows the Kamanakam Qaqet consonant phoneme inventory. If a phoneme's orthographic representation differs from the phoneme symbol, it is shown in angle brackets.

Table 4.9: Kamanakam Qaqet consonant phoneme inventory, following Hellwig (2018: 21)

	Labial	Alveolar	Retroflex	Palatal	Velar
Plosive (voiceless)	p	t			k
Plosive (voiced)	^{n}b <b>	^{n}d <d>			^{n}g <g>
Fricative	β <v>	s			ɣ <q>
Nasal	m	n <n, nn>		ɲ <ny>	ŋ <ng>
Trill/flap		r	ʈ <rl>		
Lateral		l			

Kamanakam Qaqet shares the same consonant phoneme inventory and phonotactic rules which Hellwig (2018: 21) has observed and formulated for Raunsepna Qaqet. Similar to Raunsepna Qaqet, all consonant phonemes in Kamanakam Qaqet occur in syllable onset position, while in syllable coda position, solely /p/, /t/, /k/, /s/, /m/, /n/, /ɲ/, /ŋ/, /ʈ/, /l/ are attested. Thus, the voiced plosives (/b/, /d/, /g/), the voiced fricatives (β/, /ɣ/) as well the trill /r/ are not attested (cf. Hellwig 2018: ch.2).

Similarly, it turned out that Hellwig's (2018: 22-31) description on the realization of the plosives /p/, /t/ and /k/ is largely transferable to what I have observed for Kamanakam Qaqet. For other consonants within the phoneme inventory, I investigated whether their realization was different to what Hellwig describes for Raunsepna Qaqet. Largely, this was not the case (see Section 4.4.6 on p. 101 for details regarding the realization of /p/, /t/, /k/ and /h/).

Table 4.10 shows the Kamanakam Qaqet vowel phoneme inventory. If a phoneme's orthographic representation differs from the phoneme symbol it is shown in angle brackets.

Table 4.10: Kamanakam Qaqet vowel phoneme inventory, following Hellwig (2018: 40)

	Front	Central	Back
Close	i		u
Mid		ə <e>	
Open		a	

As formulated above, the Kamanakam Qaqet vowel inventory and its allophony are comparable to what Hellwig (2018: 39-49) describes for Raunsepna Qaqet. Differences in the realization of vowels, for example for *taqen* 'talk' v *taqan* or *-irang* 'PL.DIM' v *-iring* or *raing* 'sing' v *ring*, seem not to be dialectal, since the same variation can be observed in Raunsepna Qaqet[4]. Therefore, they are subject to inter-individual variation. In addition, the vowels can combine to form diphthongs of which Hellwig (2018: 47) identifies the following: /ia, iu, ai, au, ui, ua/.

4.4.3 Kamanakam Tok Pisin phoneme inventory

According to Smith (2002: 43), the phoneme inventory of Tok Pisin is usually said to comprise around 25 phonemes. He also notes (2002: 43) that there is necessarily some variation due to the fact that Tok Pisin is a second language to many individuals. For these speakers, the phonology of their first language may influence, to varying degrees, their realization of Tok

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[4] Personal conversation with Prof. Dr. Birgit Hellwig on 16 March 2020.

Pisin (2002: 43). This first language influence on the phonology of Tok Pisin has been already described in a series of studies (e.g., Bee 1971; Faraclas 1989; Laycock 1985). Mihalic's (1971: 4ff.) phoneme inventory, which comprises 18 consonant and eight vowel phonemes, is often cited as the standard for comparison. The respective consonant phonemes are summarized in Table 4.11. If a phoneme's orthographic representation differs from the phoneme symbol, it is shown in angle brackets.

Table 4.11: Tok Pisin consonant phoneme inventory, following Mihalic (1971: 5f.)

	Labial	Alveolar	Palatal	Velar	Glottal
Plosive (voiceless)	p	t		k	
Plosive (voiced)	b	d		g	
Fricative (voiceless)	f	s			h
Fricative (voiced)	v				
Nasal	m	n		ŋ <ng>	
Trill/flap		r			
Lateral		l			
Affricate		dʒ <j>			
Approximant	w		j <y>		

I found all consonant phonemes except for /ŋ/, /dʒ/ and /v/ to contrast with other phonemes in syllable onset position. For the phoneme /ŋ/, Tok Pisin dictionaries indicate that this phoneme can not occur in syllable onset position, and I also did not find it to be used in Kamanakam Tok Pisin. For the phoneme /dʒ/, I only found proper nouns, such as Jemani, Janice or Jay which, however, do not have a contrasting minimal pair in the Kamanakam corpus. For the phoneme /v/, there is no example in syllable onset position, but Tok Pisin dictionaries indicate that this phoneme can occur in syllable onset position (e.g. I have heard the word *vokeisenel skul* 'vocational skul' used by Qaqet/Tok Pisin speaking participants). In the corpus, /v/ can only be observed to occur in intervocalic position, such as in *save* 'to know' or *seven* 'seven'. Some variation can also be observed. For example, in monolingual Kamanakam Tok Pisin /h/ is regularly omitted and/or realized as a glottal stop [ʔ].

In syllable coda position, I identified the consonant phonemes /p/, /t/, /k/, /s/, /m/, /n/, /ŋ/, /r/ and /l/ to be minimally contrasting with each other. The voiced plosives /b/, /d/, /g/ were not used in this position. This is in accordance with Laycock (1985: 299), who describes that in Tok Pisin the opposition of voiceless and voiced plosives is neutralized in syllable coda position in that the voiced plosives /b/, /d/, /g/ do not occur in this position at all. This is basically also represented in the Tok Pisin orthography as virtually no Tok Pisin lexeme ends with the graphemes <b>, <d> or <g>.

As for the Tok Pisin vowel phoneme inventory, Mihalic (1971: 4) and Laycock (1985: 302) identify a five-vowel system /a, e, i, o, u/ and Smith (2004a: 719) notes that "these appear to be fairly close to cardinal IPA values". In addition, Mihalic (1971: 4f.) identifies three diphthongs /ai, au, oi/. In contrast, Laycock (1985: 303) identifies six falling diphthongs /ái, áu, éa ía, ói, úa/ and three rising diphthongs /iá, ió, iú/. Smith (2004a: 719) identifies the four diphthongs /aɪ, ɪə, aʊ, ɔɪ/ to be commonly in use, and also lists the two triphthongs /aɪə/ and /aʊə/. Based on minimal pairs extracted from monolingual Tok Pisin intonation units in the Kamanakam corpus data, the five basic vowels /a, e, i, o, u/ as well as the diphthongs /ai, ia, au, oi, oa/ can be minimally contrasted. I would describe the diphthongs to be similar in quality as detailed by Smith (2004a: 719). In addition, there are two diphthongs and three triphthongs which

could not be minimally contrasted. These include /iu/ as in *niuyia* 'New Year', /ua/ as in *guava* 'guava', /aua/ as in *aua* 'hour', /aia/ as in *paia* 'fire' and /uai/ as in *buai* 'betel nut'.

4.4.4 Comparison of both phoneme inventories

Table 4.12 shows the Kamanakam Qaqet (Q) and the Kamanakam Tok Pisin (TP) consonant phoneme inventory.

Table 4.12: Kamanakam Qaqet and Kamanakam Tok Pisin consonant phoneme inventory

	Labial		Alveolar		Retroflex		Palatal		Velar		Glottal	
	Q	TP	Q	TP	Q	TP	Q	TP	Q	TP	Q	TP
Plosive (voiceless)	p	p	t	t					k	k		
Plosive (voiced)	^{n}b	b	^{n}d	d					^{n}g	g		
Fricative (voiceless)		f	s	s								h
Fricative (voiced)	β	v							ɣ			
Nasal	m	m	n	n			ɲ		ŋ	ŋ		
Trill/flap			r	r	ɽ							
Lateral			l	l								
Affricate				dʒ								
Approximant		w						j				

What is evident from Table 4.12 is that Kamanakam Qaqet has 16 and Kamanakam Tok Pisin 18 consonant phonemes. Both languages have the voiceless plosives /p/, /t/ and /k/ as well as their voiced counterparts /b/, /d/ and /g/ in their consonant phoneme inventory. In both varieties, voiceless plosives are attested in syllable onset and coda position, whereas voiced plosives can only be observed in syllable onset position. For Raunsepna Qaqet, Hellwig (2018: 35) notes that the voiced plosives "are almost always realized prenasalized, and counter-examples are very rare". This feature is absent in idealized descriptions of the Tok Pisin phoneme inventory. However, it can be observed to occur in Kamanakam Tok Pisin. At this point in time, however, no further statements can be made in terms of frequency and pattern. Similarly, Laycock (1985: 298) observes prenasalisation of /b/, /d/ and /g/ in local languages of the Sepik and Madang areas, which he then also observes in the local varieties of Tok Pisin. A feature that separates Kamanakam Qaqet from Kamanakam Tok Pisin is that in the former, plosives can be lenited (see Section 4.4.6 on p. 101 for a description of the sound change for /p/, /t/ and /k/).

Kamanakam Tok Pisin has a voiceless labial fricative /f/, which does not exist in Kamanakam Qaqet. Both languages show a voiceless alveolar fricative /s/ which, according to Hellwig (2018: 33) in Qaqet "has a free variant [h] in all positions". In Kamanakam Tok Pisin, the glottal fricative /h/ constitutes a phoneme of its own. Both languages have a labial fricative. However, they slightly differ in their place of articulation. In addition, Kamanakam Qaqet has a voiced velar fricative /ɣ/, which does not exist in Kamanakam Tok Pisin. As for the nasals, both languages have a labial /m/, an alveolar /n/ and a velar /ŋ/ in their phoneme inventory. In Kamanakam Qaqet, the velar nasal /ŋ/ can be observed in syllable onset position which is not the case for Kamanakam Tok Pisin. In addition, Kamanakam Qaqet has a palatal nasal /ɲ/ which does not exist in Tok Pisin. Both languages have an alveolar trill/flap /r/ and an alveolar lateral /l/, whereas Qaqet in addition also has a retroflex trill/flap /ɽ/. In contrast to Kamanakam Qaqet, Kamanakam Tok Pisin has an alveolar affricate /dʒ/, a labial approximant

/w/ and a palatal approximant /j/ in its phoneme inventory. It may be noted that the latter two sounds can be found in the realization of Qaqet word-initial diphthongs starting with /u/ /i/, for example, [win] '2DU' (from /uin/) or [jam] '3DU.M' (from /iam/) (Hellwig 2018: 48).

Kamanakam Qaqet has a four vowel system /a, ə, i, u/, whereas Kamanakam Tok Pisin has a five vowel system /a, e, i, o, u/. Both languages show sequences of vowels of which there are six in Kamanakam Qaqet: /ia, iu, ai, au, ui, ua/. In Kamanakam Tok Pisin, the five dipthongs /ai, ia, au, oi, oa/ can be observed to minimally contrast. In addition, two diphthongs /iu, ia/ and three triphthongs /aua, aia, uai/ can be observed in Kamanakam Tok Pisin, but could not be minimally contrasted.

4.4.5   Results for phonological integration

Table 4.13 shows the numbers for Kamanakam Tok Pisin forms in the categories integrated, non-integrated, neutral or unknown. 'Integrated' are forms that are adjusted to the Kamanakam Qaqet phonology – may it either be due to specific Tok Pisin phonemes that are non-existent in Qaqet, and for which a speaker uses the closest equivalent in Qaqet, or due to specific sound changes that typically occur in the realization of certain Qaqet phonemes. 'Non-integrated' are Tok Pisin forms that retain Tok Pisin phonology. What is listed under 'Neutral' are Tok Pisin forms showing Tok Pisin phonology. However, they can not be treated as non-integrated since the phonemes of these forms occur in both languages, and their realization does not violate any of the Qaqet rules.

Table 4.13: Phonological integration of Tok Pisin forms in otherwise Qaqet frames

	Integrated	Non-Integrated	Neutral	Unknown	Total
%	26.60	61.70	11.17	0.53	100
N	50	116	21	1	188

Table 4.13 shows that at 61.7%, the majority of the forms can not be considered as integrated. See Examples 16 and 17 for non-integrated Tok Pisin-inserted forms.

(16)   NMS   *dengentaqanqusaqamapinat*
                 de=ngen=taqen=kuasik=ama=pinat
                 CONJ=2PL.SBJ=say.CONT=NEG=ART=peanut
                 'you are not talking about the peanut'
                                                    (CodeFSS_KJS20160910A_1; IU 64)

In Example 16, if *pinat* 'peanut' were phonologically integrated, one could expect Tok Pisin /p/ to be realized as [β] (<v>) in Qaqet.

(17)   FRU   *daamastoriluhera*
                 de=ama=stori=lu-ka-iara
                 CONJ=ART=1SG.POSS=story=DEM-SG.M-PROX
                 'and the story is this'
                                                    (CodeFSS_KJS20160901_1; IU 893)

In Example 17, if *stori* 'story' were phonologically integrated, one could expect Tok Pisin /o/ to be realized as [u] in Qaqet. Phonologically integrated Tok Pisin forms showing signs of Qaqet-induced consonant and vowel sound changes will be presented in Section 4.4.6 from p. 101 and Section 4.4.7 from p. 103, respectively.

4.4.6 Consonants

The consonant sound changes observed include intervocalic lenition of the voiceless plosives /p/, /t/ and /k/ at the morpheme boundary in morpheme-final position and the circumscription of Tok Pisin word initial /h/ with the Qaqet glottal stop [ʔ]. In the following, I give a short comparison of the usual realization of these sounds (if applicable) in Kamanakam Qaqet, Kamanakam Tok Pisin and in [byx(tpi)] mixed intonation units.

The voiceless plosives: /p/, /t/, /k/

Kamanakam Qaqet has three voiceless plosives which contrast with each other in onset and coda position. Phonetically, they are characterized by a rather light release burst in onset position to an almost non-existent one in coda position. At morpheme boundaries within phonological words, an alternative realization of plosives can be observed, which point to certain types of sound changes. These include lenition and total loss of voiceless plosives. In intervocalic position, voiceless plosives are realized as voiced and spirantized, whereas after certain nasals they become voiced. Loss of the voiceless plosives can occur in intervocalic position or when preceding other plosives, fricatives or nasals. Less frequently, lenition and loss of voiceless plosives are also observed in initial and final position of phonological words.

In the following, the Qaqet sound changes relevant for the integration of Tok Pisin forms in a Qaqet frame will be presented in more detail. As indicated above, this includes the lenition of morpheme-final voiceless plosives in intervocalic position at morpheme boundaries. In these environments, /p/ is realized as [β] and /t/ as [r]. As for /k/, the phonological rule is somewhat more restricted depending on which vowel /k/ precedes. It appears that when /k/ precedes the /i/ vowel, it becomes to be realized as [ʝ], whereas when preceding all other vowels it is realized as [ɣ]. See Example 18 for the realization of /p/ as [β] (<v>), Example 19 for /t/ as [r] and Example 20 for /k/ as [ʝ] (<q>):

(18) IRM   *kuasik   buveme*
            kuasik   bu**p**-em=a
            NEG   fill-SG.RCD=DIST
            'it is not full'

                                                    (CodeFSS_KJS20160901_1; IU 205)

(19) FWS   *kurlingra*
            kurli-nge**t**=a
            leave-3N=DIST
            '[you] leave them there!'

                                                    (CodeFSS_KJS20160910A_1; IU 465)

(20) FSS   *guavaqiara*
            gua=va-**k**i=iara
            1SG.POSS=thingy-SG.F=PROX
            'my thing [camera] is here'

                                                    (CodeFSS_KJS20160901_1; IU 360)

Kamanakam Tok Pisin shares with Kamanakam Qaqet the same three voiceless plosives /p/, /t/ and /k/. In Kamanakam Tok Pisin, they contrast with other consonants in onset and coda

position. Unlike Kamanakam Qaqet, in Kamanakam Tok Pisin the realization of /p/, /t/, /k/ in syllable coda position at morpheme boundaries is not subject to lenition. See Example 21 for the realization of /p/ as [p], Example 22 for /t/ as [t] and Example 23 for /k/ as [k]. In all examples, the transitivizing marker *-im* is attached to the verb.

(21)   IRM   *pulma**p**im*   *insait*
                 pulima**p**-im   insait
                 fill-TR   inside
                 'fill it up inside'

(CodeFSS_KJS20161023_2; IU 456)

(22)   FWS   *pu**t**im*   *gut*
                 pu**t**-im   gut
                 put-TR   well
                 'put it well'

(CodeFSS_KJS20160910A_1; IU 745)

(23)   FWS   *lu**k**im*   *lu**k**im*
                 lu**k**-im   lu**k**-im
                 look-TR   look-TR
                 'look after it'

(CodeFSS_KJS20160910A_1; IU 744)

In a few [byx(tpi)] mixed intonation units, Tok Pisin lexemes are subject to lenition, as described for Kamanakam Qaqet. In Example 24, the /p/ phoneme in Tok Pisin *kopra naip* 'copra knife' is lenited to [β] (<v>). In Example 25, the /t/ phoneme in Tok Pisin *pinat* is lenited to [r]. Finally, in Example 26, the /k/ phoneme in Tok Pisin *daka* 'pepper' is lenited to as [ɣ] (<q>).

(24)   IRM   *agiakopranai**v**ina*
                 a=gia=kopra nai**p**-ini=a
                 a=2SG.POSS=copra knife-SG.DIM=DIST
                 'a it is your little copra knife'

(CodeFSS_KJS20161023_2; IU 346)

(25)   NMS   *kuastiaralaqama*
                 kuasik=kia=ral=a=qama
                 NEG=3SG.F.SBJ=carry.NCONT=NM=some
                 'she did not bring some'

                 *pina**r**inavakdi*
                 pina**t**-ini=a=va-ka=dip
                 peanut-SG.DIM=DIST=thingy-SG.M=FUT
                 'little peanuts, it will be..'

(CodeFSS_KJS20160910A_1; IU 67)

(26)   NMS   *dequauinaqamadaqem*
              de = kua = uin = a = qama = da**k**a-em
              CONJ = INTRG = 2DU = NM = some = pepper-SG.RCD
              'and you two have some short pepper?'

<div align="right">(CodeFSS_KJS20161023_2; IU 311)</div>

The voiceless glottal fricative: /h/

Kamanakam Qaqet has no voiceless glottal fricative /h/ in its phoneme inventory, in contrast to Kamanakam Tok Pisin. In monolingual Kamanakam Tok Pisin, /h/ seems to be predominantly realized. There might be some variation, but the quality of the data does not allow for a more thorough analysis in this direction. In [byx(tpi)] mixed intonation units, /h/ may be sometimes realized, but in the majority of the cases /h/ is definitely not audible. In the latter case, it may or may not find it self to be substituted with [ʔ]. Example 27 shows how /h/ of the Tok Pisin lexeme *hap* 'area' is realized in monolingual Tok Pisin. In contrast, Example 28 shows how /h/ of the Tok Pisin lexeme *haus* 'house' is not realized in a [byx(tpi)] mixed intonation unit.

(27)   FRU   *salim*   *olgeta*   ***h**ap*   *tamblo*
              sal-im   olgeta   **h**ap   tambelo
              sell-TR   ALL   place   below
              'selling all the places down below'

<div align="right">(CodeFSS_KJS20161023_2; IU 59)</div>

(28)   FLT   *damurlama**a**uslotuinamuk*
              de = murl = ama = **h**aus lotu = i-na-muk
              CONJ = distantly = ART = church = AWAY-BACK-across
              'before the church was over there'

<div align="right">(CodeFSS_KJS20161119A_2; IU 707)</div>

4.4.7 Vowels

The Qaqet vowel sound changes include the realization of Tok Pisin /e/ as [i], and Tok Pisin /o/ as [u], in Qaqet. This is due to the fact that Qaqet does not have any short vowel phonemes /e/ and /o/ (cf. Hellwig 2018: 39). Further, the realization of the diphthongs /ai/ and /au/ as long vowels [ee] and [oo] is a common pattern in Qaqet (2018: 39). In the following, I give a short comparison of the usual realization of these sounds (if applicable) in Kamanakam Tok Pisin, Kamanakam Qaqet and [byx(tpi)] mixed intonation units. For /e/ and /o/, it is obviously not possible to give a monolingual Qaqet example, since both phonemes are non-native to Qaqet.

The short vowels: /e/ and /o/

In contrast to Kamanakam Tok Pisin, Kamanakam Qaqet does not have any short vowel phonemes /e/ and /o/ in its phoneme inventory. This leads to a situation where speakers adapt Tok Pisin insertions containing /e/ or /o/ phonemes to the Qaqet phoneme inventory by using their closest counterparts: /i/ and /u/, respectively. Example 29 shows how /e/ is realized in the lexeme *bek* 'bag' in the environment of a monolingual Tok Pisin intonation unit.

(29)   FRU   *na   wanem   ol   bek   yu   wok   long   hipim   insait*
               na   wanem   ol   b**e**k   yu   wok   long   hip-im   insait
               CONJ   what   PL   bag   2SG   CONT   PREP   heap   inside
               'Which bags you were heaping inside?'

                                                          (CodeFSS_KJS20160901_1; IU 1286)

In contrast, Example 30 shows how the /e/ phoneme of the same lexeme *bek*, now used as
a Tok Pisin insertion in a Qaqet frame, is realized as [i].

(30)   FSS   *kuasiqamabiqimuk*   *oi*
               kuasik = ama = b**e**k = i-muk   oi
               NEG = ART = bag = AWAY-across   INTJ
               'no, the bag is over there, oi'

                                                          (CodeFSS_KJS20160901_1; IU 1292)

Example 31 shows the /o/ phoneme in the lexeme *rot* 'road' as realized in a monolingual
Kamanakam Tok Pisin frame.

(31)   NMS   *yumi   bihaini   rot   blo   krus   ya*
               yumi   bihain-im r**o**t   bilong kruse   ya
               1PL.INCL   follow-TR   road   POSS   cross   PTCL
               'we two follow the path of the cross'

                                                          (CodeFSS_KJS20160910A_1; IU 820)

Example 32 how shows the same lexeme *rot* now used by the same speaker in a Qaqet
frame. Here, the speaker adapts the Tok Pisin /o/ phoneme to the Qaqet phoneme inventory
by changing it to [u].

(32)   NMS   *samnamarut*
               sa = men = ama = r**o**t
               already = at = ART = road
               'already at the road'

                                                          (CodeFSS_KJS20160910A_1; IU 862)

The diphthongs: /ai/ and /au/

The diphthongs /au/ and /ai/ are part of the phoneme inventory of both Kamanakam Qaqet and
Kamanakam Tok Pisin. In Kamanakam Qaqet, speakers usually realize /ai/ and /au/ as [ee]
and [oo], respectively. This can not be observed in the Kamanakam corpus for monolingual
Tok Pisin intonation units. However, in [byx(tpi)] mixed intonation units, Tok Pisin lexemes
showing the diphthongs /ai/ and /au/ are realized according to the Qaqet pattern as [ee] and
[oo]. Example 33 shows how /ai/ in the native Qaqet lexeme *kaina* 'waters' is realized as [ee]
in monolingual Kamanakam Qaqet.

(33)   FRU   *kauaik*
               ka = uaik
               3SG.M.SBJ = run.NCONT
               'he ran away,'

> *kamensari*
> ka = men = sasari
> 3SG.M.SBJ = come.NCONT.PST = to.there
> 'he came back'

> *baqamrakeena*
> be = ka = mat = a = **kai**na
> CONJ = 3SG.M.SBJ = take.NCONT.PST = NM = water
> 'and took his water'
>
> (CodeFSS_KJS20160901_1; IU 169)

Example 34 shows how the same phoneme in the lexeme *rais* 'rice' is realized as [ai] in monolingual Kamanakam Tok Pisin.

(34) FWS *rais*
       r**ai**s
       rice
       'rice'

(CodeFSS_KJS20160910A_1; IU 756)

Example 35 shows how the phoneme /ai/ of the same Tok Pisin lexeme *rais* is realized in a [byx(tpi)] mixed intonation unit by the same speaker. Here, the speaker adapts the Qaqet phonology rules to the Tok Pisin lexeme and realizes the diphthong as [ee].

(35) FWS *dinyitesamarees*
       dip = nya = tes = ama = **rais**
       FUT = 2SG.SBJ = eat.CONT = ART = rice
       'you will eat rice'

(CodeFSS_KJS20160910A_1; IU 265)

Example 36 shows how /au/ in the lexeme *iaus* 'devil' is realized as [oo] in monolingual Kamanakam Qaqet.

(36) IRM *amaioos*
       ama = **iau**s
       ART = devil
       'the devil'

(CodeFSS_KJS20160901_1; IU 895)

Example 37 shows how /au/ in the lexeme *kakau* 'cocoa' is realized as [au] in monolingual Kamanakam Tok Pisin.

(37) IRM *em   putim   kakau   blong   em*
       em   putim   kak**au**   bilong   em
       3SG   put-TR   cocoa   POSS   3SG
       'he puts his cocoa'

(CodeFSS_KJS20161023_2; IU 567)

Example 38 shows how the minimally contrasting Tok Pisin lexeme *kaukau* 'sweet potato' is realized in a Qaqet frame. Here, the speaker adapts the two instances of the diphthong /au/ to the Qaqet phonological rules by realizing both as [oo].

(38)   NMS   *ngutaqan..*   *amak**oo**k**oo***
               ngu = taqen   ama = k**au**k**au**
               1SG.SBJ.NPST = say.CONT   ART = sweet potato
               'I told.. sweet potato'

                                                        (CodeFSS_KJS20160910A_1; IU 234)

4.5   Morphosyntactic integration

This section analyzes the morphosyntactic integration of Kamanakam Tok Pisin nouns and verbs into Kamanakam Qaqet. From descriptions of other languages spoken in PNG, it is known that there is frequent morphosyntactic integration of Tok Pisin forms. For example, Lichtenberk (1983: xvii) notes that "from the morphological and the syntactic points of view they are, with a few exceptions, fully assimilated to the Manam pattern". Similarly, Kulick and Stroud (1990: 212) remark that "Tok Pisin verbs are very frequently incorporated into vernacular utterances, and are inflected according to Taiap patterns". In this chapter, it is shown that Tok Pisin-inserted nouns, in contrast to Tok Pisin-inserted verbs, are, for the most part, not integrated in Qaqet.

The morphosyntax of the Kamanakam varieties of Qaqet and Tok Pisin, as given in the Kamanakam corpus data, can be sufficiently described with the help of Hellwig's (2018) grammar of Qaqet, as well as the Tok Pisin grammars of Smith (2002) and Verhaar (1995). In the following Sections 4.5.1 and 4.5.2, the morphosyntactic integration of Tok Pisin-inserted nouns and verbs, the two largest groups in [byx(tpi)] mixed intonation units, will be analyzed. In each section, I first describe which constituents, according to Hellwig (2018), can be expected to surround the Tok Pisin-inserted nouns and verbs. Secondly, I investigate the rate of co-occurrence of these constituents with Tok Pisin-inserted nouns and verbs in [byx(tpi)] mixed intonation units, in order to get an impression of their degree of integration.

4.5.1   Tok Pisin-inserted nouns

Structure of the Qaqet noun phrase

Tok Pisin nouns form the largest group of insertions within a Qaqet frame. A prerequisite to discuss their morphosyntactic integration is to establish the order of constituents in the Qaqet noun phrase. Afterwards, it will be possible to assess how Tok Pisin nouns fit into this structure. Hellwig (2018: 77) summarizes the structure of the Qaqet noun phrase as follows:

Table 4.14: Structure of the Qaqet noun phrase, following Hellwig (2018: 77)

Constituent	Type
1. Determiners, including:	Possessor index
	Article
	Indefinite pronoun
	Demonstrative pronoun

2. (Modifiers)
3. Head
4. (Demonstrative)
5. Modifiers, including   Adjective
                         Noun (e.g., numeral or quantifier)
                         Prepositional phrase, directional

Tok Pisin-inserted nouns form the head of the noun phrase. What is obligatory in all contexts – and therefore functions as a minimal predictor for morphosyntactic integration – is the possessor index or the article in pre-head position, and for singular/dual number, the noun class suffix attached to the head noun. In the following, these features will be discussed in more detail.

Qaqet possessor index, article and noun class suffix

According to Hellwig (2018: 168), the Qaqet possessor index paradigm distinguishes between *singular* 'SG', *dual* 'DU' and *plural* 'PL' number as well as between *first* '1', *second* '2' and *third* '3' person. In the third person singular, it also distinguishes between *masculine* 'M' and *feminine* 'F' gender. Moreover, a *neuter* 'N' gender is distinguished covering all three numbers in the third person. Table 4.15 summarizes the full form of the possessor index paradigm, following Hellwig (2018: 168).

Table 4.15: Qaqet possessor indexes, following Hellwig (2018: 168)

	SG	DU	PL
1	gua	una	ura
2	gia	uana	ngena
3M	aa		
3F	ara	iana	araa
3N	ngera	ngera	ngera

As for the Qaqet articles, they include (i) the noun marker *a* 'NM', (ii) the articles *ama* 'ART' and *ma* 'ART.ID' and (iii) the indefinite articles *qama* 'some' and *ngama* 'some.NSPEC' (Hellwig 2018: 134).

Finally, the Qaqet noun class is a system of nominal classification that distinguishes two sex-based classes (*masculine* 'M' and *feminine* 'F') and six shape-based classes (*diminutive* 'DIM', *reduced* 'RDC', *flat* 'FLAT', *long* 'LONG', *extended* 'EXT' and *excised* 'EXC') with distinct singular, dual and plural forms (Hellwig 2018: 187). The morphemes occur in form of a free pronoun, in form of a suffix on a noun, on noun phrase elements agreeing with the noun and as object suffixes on verbs and prepositions (2018: 187). A distinctive feature of Qaqet is that the plural of the sex based-classes can be null-marked (2018: 187f.). Hellwig (2018: 189) notes that the associative 'ASSOC' and collective 'COLL' plurals are not part of the noun class system proper. However, they can replace noun class suffixes under certain conditions (2018: 189), which is why they are included in Table 4.16.

Table 4.16: Qaqet noun class suffixes, following Hellwig (2018: 188)

	SG	DU	PL $\sim$ N
M	-ka	-iam	Ø
F	-ki	-im	-ta (PL.H)
			-nget (N)
			-kena (ASSOC.M)
			-kina (ASSOC.F)
			-pik (COLL.H)
			-dem(COLL.N)
DIM	-ini	-iram	-irang
RDC	-em	-am	-ap
FLAT	-es	-ivim	-iving
LONG	-it	-isim	-ising
EXT	-it	-itnem	-itnek
EXC	-igel	-igrlim	-igrling

Results: Tok Pisin-inserted nouns

As mentioned above, the possessor index/article as well as the singular/dual noun class suffix are obligatory. However, the Qaqet plural of the sex based-classes can be null-marked. Therefore, when assessing the integration of Tok Pisin-inserted nouns in Qaqet, it is important to distinguish between contexts in which a particular noun has plural/mass meaning as opposed to contexts where it has singular/dual meaning. In the corpus, the former are often found with food and semiluxury food items (e.g., *bisket* 'biscuits', *brus* 'tobacco', *kakao* 'cocoa', *kopi* 'coffee', *kuru* 'germinating seedling', *pinat* 'peanut', *rais* 'rice'). Qaqet speakers may or may not refer to these types of items in a pluralistic sense. Table 4.17 shows the numbers for possessor index/article minimally contrasting with the noun class suffix, that is, whether a Tok Pisin-inserted noun occurs with (+) or without (–) a possessor index/article (PI/Art) and a noun class suffix (NCl). In addition, pairings that do not have a noun class suffix (i.e., –NCl) but in which a noun class suffix would be expected (i.e., singular/dual contexts) are marked as obligatory (obl.), while nouns with a possible plural/mass meaning are marked as not clear (n.c.).

Table 4.17: Tok Pisin-inserted nouns showing an possessor index/article and/or a noun class suffix

	+PI/Art +NCl	+PI/Art –NCl		–PI/Art +NCl	–PI/Art –NCl		Total
		NCl (obl.)	NCl (n.c.)		NCl (obl.)	NCl (n.c.)	
%	29.51	30.33	26.23	5.73	7.38	0.82	100
N	36	37	32	7	9	1	122

Table 4.17 shows that about a third of the Tok Pisin nouns are morphosyntactically fully integrated in Qaqet. The rest can be tentatively labeled as partly integrated or not integrated, since one cannot make a clear statement for nouns with a possible plural/mass meaning. In the following section, examples will be given for each of the pairings. Table 4.18 lists observed possessor indexes with Tok Pisin-inserted nouns in the Kamanakam corpus.

Table 4.18: Observed Qaqet possessor indexes with Tok Pisin-inserted nouns in the Kamanakam corpus

	SG	DU	PL
1	gua		ura
2	gia		ngena
3M	aa		
3F			
3N			

From the Qaqet articles, the noun marker *a* 'NM', the articles *ama* 'ART' and *ma* 'ART.ID' and the indefinite article *qama* 'some' could be observed with Tok Pisin-inserted nouns. Finally, Table 4.19 lists the noun class suffixes which could be observed to be suffixed to Tok Pisin-inserted nouns.

Table 4.19: Observed Qaqet noun class suffixes on Tok Pisin-inserted nouns in the Kamankam corpus

	SG	PL
M	-ka	-kana
F	-ki	-kina
DIM	-ini	-irang
RDC	-em	

Examples: Tok Pisin-inserted nouns

Examples 39 and 40 show morphosyntactically fully integrated Tok Pisin nouns for the pairing (+PI +NCl) and (+Art +NCl), respectively. Examples 41 and 42 show morphosyntactically partially integrated Tok Pisin nouns for the pairing (+PI/Art –NCl). The former exemplifies a context in which the suffixing of the noun class would be considered obligatory. The latter, in contrast, exemplifies a context in which this is not clear. Finally, Example 43 shows a morphosyntactically partially integrated Tok Pisin noun for the pairing (–PI/Art +NCl) and Example 44 shows a morphosyntactically non-integrated Tok Pisin noun for the pairing (–PI/Art –NCl).

(39)   NMS   *ngena**masta**qamuk*
                 ngena = **masta**-ka = a-muk
                 2PL.POSS = master-SG.M = DIR-across
                 'your master over there'

                                                          (CodeFSS_KJS20160910A_1; IU 458)

(40) FRU *ma**gumi**ringa*
           ma = **gumi**-irang = a
           ART.ID = rubber band-PL.DIM = DIST
           'the little rubber bands'

                                                              (CodeFSS_KJS20160901_1; IU 427)

(41) FLT *damurlama**auslotu**inamuk*
           de = murl = ama = **haus lotu** = i-na-muk
           CONJ = distantly = church = AWAY-BACK-across
           'before the church was over there'

                                                              (CodeFSS_KJS20161119A_2; IU 707)

(42) NMS *ama**kuru***
           ama = **kru**
           ART = seedling
           'the seedling(s)'

                                                              (CodeFSS_KJS20160910A_1; IU 569)

(43) FSS *da**masis**kiqua*
           de = **masis**-ki = kua
           CONJ = matches/lighter-SG.F = where
           'where is the lighter?'

                                                              (CodeFSS_KJS20160910A_1; IU 50)

(44) NMS ***klaspati**ditates*
           klaspati = dip = ta = tes
           class party = FUT = 3PL.SBJ = eat.CONT
           '[at the] class party they will eat it'

                                                              (CodeFSS_KJS20161023_2; IU 226)

4.5.2 Tok Pisin-inserted verbs

Structure of the Qaqet and Tok Pisin verb phrase

Tok Pisin-inserted verbs form the second largest group of insertions in Qaqet frames. Simplified, the minimal structure of the Qaqet[5] and Tok Pisin verb phrase may be summarized as in Table 4.20.

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[5] For Qaqet, see Hellwig (2018: 234) for a detailed account of the morphological structure of the Qaqet predicate and (2018: 436) for the constituent order of Qaqet verbal clauses.

Table 4.20: Minimal structure of the Qaqet and Tok Pisin verb phrase

	-2	-1	0	1(a)		1(b)
Qaqet	Subj. NP	Subj. index	VB stem	Direct obj.		Prep. obj.
				Pronominal: - Sfx. - Ptcl.	Nominal: - Indep. word	
Tok Pisin	Subj.	Ptcl. *i*	VB stem + *-im*	Direct obj.		
	N Pron. NP			N Pron. NP		

In Qaqet, the verb can have up to three aspectual stems, each encoding different information about tense/aspect (Hellwig 2018: 234). Qaqet verbs are either intransitive or transitive, which has to be distinguished from their semantic valency (2018: 242f.). Hellwig (2018: 243) describes the situation as follows:

> "Very frequently, transitivity and valency do not match, because Qaqet makes widespread use of prepositions to introduce arguments entailed by the verb semantics. There is an on-going lexicalization process whereby prepositions that originally introduced adjuncts become integrated into the verb: they start to interact with the argument structure of individual verbs, and end up as unanalyzable verb particles or suffixes. In the intermediate stages of this development, this lexicalization process has consequences for the analysis of transitivity and grammatical relations: the question arises as to whether arguments marked by prepositions should or should not be considered (direct) objects of transitive verbs."

In Kamanakam Tok Pisin, transitivity is distinguished by adding the transitivizing marker *-im* to the verb stem (cf. Smith 2002: 52).

In Qaqet, the verb is preceded by the subject argument and it is obligatorily indexed on it (Hellwig 2018: 244). In contrast to the subject index, the subject noun phrase is non-obligatory (2018: 244). The lexical noun phrase may then often be introduced in a previous intonation unit (2018: 244). Alternatively, it may be introduced as a left-dislocated element (2018: 244). In Kamanakam Tok Pisin, the verb is usually preceded by a subject in the form of a noun, pronoun or a noun phrase (cf. Verhaar 1995: 30), and often by the particle *i*. The latter is found under certain conditions between subject and predicate. Unfortunately, the rules of its use in Kamanakam Tok Pisin cannot be further discussed here. It may only be noted that for other varieties of Tok Pisin *i* has been observed to be "in the process of dropping out of Tok Pisin altogether" (Woolford 1979b: 37). When looking through the Kamanakam corpus data, *i* appears to be subject to variation as well. In Qaqet, the realization of the direct object may be in the form of a suffix or particle if it is pronominal, and in the form of an independent word if it is a direct nominal object. Alternatively, prepositional objects can appear in this position. Here, they may "either adding an additional argument to an intransitive or transitive verb, or

replacing the unmarked direct object" (Hellwig 2018: 263). In Tok Pisin, objects may follow transitive verbs (cf. Verhaar 1995: 31) in the form of nouns, pronouns or noun phrases.

In summary, in contrast to Qaqet, Kamanakam Tok Pisin verbs do not have different stems distinguishing tense/aspect. Further, transitivity is overtly marked by *-im* being suffixed to the verb stem. The order of constituents preceding and following the predicate is fairly similar in both languages in the sense that subjects precede and objects follow the predicate. However, in Kamanakam Tok Pisin, the object is obligatory, whereas Qaqet does allow for the object to be omitted. For a Tok Pisin verb to be considered as integrated in Qaqet, it therefore should be minimally marked by a subject index.

Qaqet subject index and preposition

In Qaqet, the subject argument is indexed as a proclitic on the verb (Hellwig 2018: 315). The subject index expresses information about person and tense (2018: 234). Two sets of subject indexes can be distinguished: a neutral set and a non-past set. Table 4.21 lists both sets.

Table 4.21: Qaqet subject indexes, following Hellwig (2018: 316)

	Index: Neutral			Index: Non-past (NPST)		
	SG	DU	PL	SG	DU	PL
1	ngua	un	ut	ngu	une	ure
2	nya	uan	ngen	nyi	uane	ngene
3M	ka	ian	ta (H)	ke	iane	te (H)
3F	kia	ian	ta (H)	ki	iane	te (H)
3N	nga	nga	nga	ngere	ngere	ngere

Table 4.22 lists the 13 attested forms of Qaqet prepositions.

Table 4.22: Qaqet prepositions

Form	Gloss
ne	from/with
se	to/with
daleng	above
de	LOC.PART
gel	near
kut	along
men	at
met	in
pe	PLACE
pet	on/under
set	behind
barek	BEN
te	PURP

Results: Tok Pisin-inserted verbs

As mentioned above, for a Tok Pisin verb to be considered as integrated in Qaqet, it should be minimally marked by a subject index. In case of a transitive verb – and if not omitted – it should either show a suffixed object pronoun or an object noun phrase. Table 4.23 shows in rows whether the Tok Pisin-inserted verb has (+) or lacks (–) a subject noun phrase (Sbj NP) and/or a subject index (Sbj Idx). In columns, this is put in relation to whether the respective verb is (+) or is not (–) transitive (Trans) and therefore does (+) or does not show (–) a prepositional object (Prep Obj). It may be noted at this point that object suffixes and direct nominal objects could not be observed in connection with transitive Tok Pisin-inserted verbs, which is why they are omitted from this table.

Table 4.23: (In-)transitive Tok Pisin-inserted verbs showing a subject noun phrase and/or a subject index and/or a prepositional object

	+Trans +Prep Obj	–Trans –Prep Obj	Total
+Sbj NP +Sbj Idx	2	4	6
–Sbj NP +Sbj Idx	9	12	21
+Sbj NP –Sbj Idx	0	0	0
–Sbj NP –Sbj Idx	2	0	2
Total	13	16	29

What is evident from Table 4.23 is that the majority (n = 27) of this list of Tok Pisin-inserted verbs can be considered as integrated. That is, 27 verbs minimally show a subject index. Among them, the transitive verbs show a prepositional object. Table 4.24 lists the subject indexes found on Tok Pisin-inserted verbs.

Table 4.24: Qaqet subject indexes on Tok Pisin verbs

	Index: Neutral			Index: Non-past (NPST)		
	SG	DU	PL	SG	DU	PL
1		un		ngu	une	ure
2				nyi		
3M	ka			ke	iane	te (H)
3F				ki		
3N						

What is evident from Table 4.24 is that a more varied assortment of non-past indexes are used, compared to neutral indexes. At this point, it is not possible to say whether the context more often requires the use of non-past subject indexes compared to neutral indexes. This table therefore serves a descriptive purpose. Similarly, the variation/meaning regarding the use of Qaqet prepositions heading an object required by a transitive Tok Pisin-inserted verb cannot be further discussed here. They include *ne* 'from/with', *pet* 'on/under' and *se* 'to/with'. Finally, Table 4.25 shows the distribution of transitive markers attached to Tok Pisin-inserted verbs.

Table 4.25: Tok Pisin-inserted verbs showing a transitive marker

	+ Trans	–Trans	Total
+ *-im*	11	0	11
– *-im*	2	16	18
Total	13	16	29

What is evident from Table 4.25 is that *-im* is not present when the Tok Pisin-inserted verb is used intransitively. In verbs used transitively, *-im* is always present when they minimally show a subject index.

Examples: Tok Pisin-inserted verbs

Example 45 with Tok Pisin *klemim* 'to claim' can be considered to be an integrated transitive Tok Pisin verb, as it shows a subject noun phrase *ma=tuarl-ka* 'the male Tuarl' in left disloca-tion, a subject index *ka* '3SG.M.SBJ' which agrees in number and person with the subject noun phrase and a prepositional object *ne-em* 'from/with-SG.RCD'. The use of the prepositional object indicates that the Tok Pisin transitive marker *-im* is not analyzed as such by the speaker, other-wise he would have used a direct object instead. Example 46 with the transitive Tok Pisin verb *praim* 'to fry' can be considered as somewhat less integrated, as it does not show a subject index, but a prepositional object *ne=ma-nget=a* 'from/with=thingy-N=DIST'. There is, however, no example in the corpus that is completely non-integrated, that is, without subject index and/or prepositional object.

(45)   FLT   *maduarlka*
                   ma = tuarl-ka
                   ART.ID = NAME-SG.M
                   'Tuarl'

          FLT   *ka**klemim**num*
                   ka = **klem-im** = ne-em
                   3SG.M.SBJ = claim-TR = from/with-SG.RCD
                   'he claimed it'
                                               (CodeFSS_KJS20161119A_2; IU 559–560)

(46)   IRM   *palaim**namangera*
                   praim = ne = ma-nget = a
                   fry.TR = from/with = thingy-N = DIST
                   'fry the things'
                                               (CodeFSS_KJS20160901_1; IU 726)

4.6   Summary and conclusion

This chapter has presented an analysis of features of other-language-inserted material that are relevant to assessing its status as intra-intonation unit code-switches or as borrowings.

Firstly, it was shown that mixed intonation units make up for 8.97% of the adult-to-adult talk in the Kamanakam corpus. Further, it was shown that of these mixed intonation units, the overwhelming majority of 92.61% constitutes Tok Pisin-inserted elements in Qaqet frames. Secondly, it was established that the Tok Pisin-inserted nouns and verbs in a Qaqet frame make up 76.38% of all inserted material. And within [byx(tpi)] mixed intonation units, the two word classes make up 80.86% of the Tok Pisin-inserted material. Thirdly, two approaches – Myers-Scotton as opposed to Poplack and associates – were introduced to assess the code-switching/borrowing status of Tok Pisin-inserted nouns and verbs in a Qaqet frame (see p. 89 of this chapter). Based on the two approaches, the Kamanakam data was analyzed for core vs. non-core material (Myers-Scotton) and for phonological and morphosyntactic integration of Tok Pisin-inserted verbs and nouns (Poplack et al.).

For the Kamanakam data, it was decided to analyze the phonological and morphosyntactic integration of the most frequent elements in the most frequent type of mixed intonation unit: these are single Tok Pisin-inserted nouns and verbs in a Qaqet frame. In this context, it should be noted that the degrees of phonological and morphosyntactic integration were assessed independently of one another, and not in combination. Or, to put it differently: I did not analyze how many forms are phonologically integrated followed by how many of these are then morphosyntactically integrated.

Poplack and her associates observe that phonological integration is subject to variation. Due to different reasons (see discussion in Poplack 2018: 56ff.), she therefore concludes that "phonetic integration does not appear to play the same diagnostic role" (2018: 58) compared to morphosyntactic integration. Table 4.26 shows the numbers for non-core and morphysyntactically integrated forms.

Table 4.26: Non-core status versus morphsyntactic integration of Tok Pisin-inserted nouns and verbs in %

	Nouns	Verbs
Non-core status	78.86	62.07
N	123	29
Morpho-syntactically integrated	29.51	93.10
N	122	29

Based on Myers-Scotton's approach, the numbers for non-core nouns and verbs in Table 4.26 indicate that the majority of the nouns and verbs can be considered as borrowings.

Regarding the morphosyntactic integration of Tok Pisin-inserted nouns and verbs, Table 4.26 points to an almost complete integration of Tok Pisin-inserted verbs. According to Poplack and her associates, they should therefore not be considered as code-switches. In contrast, one third of the Tok Pisin-inserted nouns are fully integrated. The number is tentatively given with the fact that close to a third (26.23%) of the nouns could have a potential plural/mass meaning (see Table 4.17 on p. 108), which means that no clear statement can be made for these nouns.

For phonological integration, the data indicates that 26.60% are integrated and 11.17% are as neutral (see Table 4.13 on p. 100). The Tok Pisin lexemes which I have labeled as phonologically integrated show signs of integration in the sense that rules of Qaqet phonology

are applied to these lexemes. Nonetheless, the lexemes may not behave completely according to the rules of Qaqet phonology.

For the analysis of the mixed intonation units, I will follow Myers-Scotton's approach since her concept of core vs non-core shows its relevance in the analysis of topic-related situational code-switching (see Section 5.3 from p. 162). However, an alternative interpretation is offered for Tok Pisin-inserted material used in the conversational strategy 'language play' (see Section 6.3.2 from p. 213).

Chapter 5

Situational code-switching

The concept of situational code-switching goes back to Blom and Gumperz (1972) who contrast it with metaphorical code-switching – later also known as conversational code-switching (see following Chapter 6 on p. 175). According to Myers-Scotton (1995: 52) situational code-switching "is never really very well defined" by the two researchers. Over the years, it has come to be understood to involve "a direct relationship between code use and observable factors of the situation" (Bailey 2000: 170). In the literature, the situational factors are predominantly presented as setting, participant and topic (e.g., Li Wei 2013: 366; McClure 1977: 100; McConvell 1988: 112; Myers-Scotton 1995: 52). Moreover, "the change of language usually corresponds to changes in the situation" (Li Wei 2013: 366), that is, changes of one or more of the situational factors.

The goal of this chapter is to analyze the role the situational factors setting, participant and topic play in the code-switching of adult Kamanakam Qaqet/Tok Pisin speakers. It will be shown that all three factors affect the speakers' code-switching behavior to a certain extent. However, the Kamanakam data indicates that the participant factor plays a key role in situational code-switching. In the following, each factor will be dealt with in its own section.

Table 5.1: Situational factors of code-switching relevant for the Kamanakam data

Factor	Section/page
Setting	5.1 on p. 118
Participant	5.2 on p. 144
Topic	5.3 on p. 162

For the setting factor, a distinction is made between public and non-public settings. The focus of this section lies on the description of observable settings, sub-settings and speech situations. For the factors participant and topic, the approach for the analysis has been to make a distinction between 'what participants say they do' and 'what participants are really doing'. However, for topic, this studies solely presents an analysis of 'what participants say they do'.

Methods and data used for this chapter include participant observation (see Section 2.2.1 from p. 20), sociodemographic and sociolinguistic survey data (see Section 2.2.2 from p. 20), sociolinguistic interview data (see Section 2.2.3 from p. 22), wiring method data (see Section 2.2.4 from p. 28), naturalistic audiovisual data (see Section 2.2.5 from p. 29) and staged audiovisual data (see Section 2.2.6 from p. 31). In addition, the identification of discourse

topics was supported by coding for the same (see Section 2.5.4 on p. 55) in the naturalistic audiovisual data.

5.1   Setting

Research on other languages has shown how setting plays a role as a factor in situational code-switching. For example, for the Buang people in PNG, Sankoff (1968) describes how different languages are being used in different settings. She makes the following observations: "Neo-Melanesian [i.e., Tok Pisin] in the trade store on the conference site; local languages during meals and in sleeping quarters; Yabem during church services" (1968: 201). In a number of studies (e.g., Bentahila 1983: 59ff.; Rubin 1962: 56), it has also been observed how distinct varieties are used based on the degree of formality associated with a certain setting (Sachdev and Giles 2004: 364f.). At its extreme ends, this situation can be described as a diglossic (Ferguson 1959) distribution of the varieties. That is, a situation in which "the local vernacular is restricted to the role of informal communication in private settings, while the more prestigious cosmopolitan language is considered the voice of intellect and of public formal communication" (Sachdev and Giles 2004: 365). For Kamanakam Qaqet and Tok Pisin, it will be shown that dependent on whether a setting is defined as public or non-public, the following language use can patterns be observed:

Table 5.2: Language use in public and non-public settings within Kamanakam

Setting type	Language use	Condition
Public	• Predominantly Tok Pisin	Participant and topic
	• Occasionally Qaqet	Participant
Non-public	• Qaqet	Participant and topic
	• Tok Pisin	Participant and topic
	• Qaqet/Tok Pisin code-switching	Conversational code-switching

   In this study, 'public' is defined as a public space where related and non-related people/families come together. The public space itself serves the public needs of community members. In the Kamanakam context, observed public spaces which serve such public needs include church, school, aid post, market, cemetery and local food stores. In contrast, 'non-public' is defined as a closed space that is predominantly (but not exclusively) reserved for related people/families and people from their social network. Non-public settings that can be observed in this context include the house and garden/block area of a particular person/family or group of people/families[1].

   In order to approach the setting, it is also necessary to define what constitutes a setting in this study. Within his SPEAKING[2] model, Hymes (1967: 21) defines setting as "time, and place, of a speech event". A speech event "may consist of a single speech act, but will often comprise several" (1967: 19). The basic unit of analysis in this study is the intonation unit (see Section 2.4 on p. 40). Based on this notion, a speech event in this study may consist of a

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   [1] Attitude interviews of the participants towards topic-related code-switching again confirm the relevance of the distinction between public vs. non-public settings (see Section 5.3.2 from p. 165).

   [2] SPEAKING stands for setting, participants, ends, acts, key, instrumentalities, norms and genre. In his "ethnography of speaking"-approach, Hymes (1967: 20-25) uses this acronym as a mnemonic to cover essential aspects when describing a speech event.

single or several intonation unit(s). A further way to determine and distinguish settings may be to identify regularly occurring activities that are linked to them. Thus, what is going to be outlined for each setting are the typically observed speech situations. Hymes (1967: 19) describes the latter as "ceremonies, fights, hunts, meals, love-making and the like" which "may enter as contexts into the statement of rules of speaking as aspects of setting". In other words, a speech situation may refer to the activity that is taking place within a particular setting. In this context, settings may have several sub-settings. For example, speech situations in front of a church building may differ from those within the building itself. Therefore, one may conclude that particular settings (e.g., church) and their sub-settings (e.g., in vs. in front of the church) may constitute the appropriate time and place for specific speech situations (e.g., church service vs. waiting for the church service) in which speech events can (or cannot) be observed. A superimposed distinguishing criterion relevant for the analysis will be to group settings into public and non-public settings.

Table 5.3 and 5.4 present an overview of the public and non-public-settings, sub-settings and their associated speech situations which I have identified within Kamanakam[3]. Speech situations that usually occur in a sequence are grouped together, and are provided with a consecutive number. If a speech situation is the only one that could be observed in a certain sub-setting in a certain time frame, then it is marked via the # symbol. Speech situations that often occur within the same time frame are marked as *a* and *b*. What is also indicated is how frequently a (group of) speech situations occur with a particular setting. In the following sections 5.1.1 and 5.1.2, these settings and their occurring speech situations will be described based on what I have come to know about them through participant observation and naturalistic audiovisual recordings. Information may include a rough description of the makeup of the setting. Further, it may concern questions such as when and where these speech situations usually occur, who is usually present, what language(s) may be used and how a particular speech situation usually proceeds. The descriptions for a particular speech situation may be more or less detailed, based on the frequency with which I have encountered to it and the degree of my involvement. For speech situations covered by the naturalistic corpus, the language use is presented on the basis of these recordings. For speech situations in non-public settings, the data are broken down according to participant, language and number of intonation units. For speech situations that I experienced while observing the participants, I will indicate the language use for situations for which I feel comfortable making an anecdotal statement.

Table 5.3: Public settings, sub-settings and their speech situations within Kamanakam

No.	Setting type	Setting	Sub-setting	Speech situation	Frequency
1	Public	Church	Outside	Waiting for the church service	On Sundays
2a	Public	Church	Inside	Church service	
2b	Public	Church	Outside	Sunday school	
3	Public	Church	Outside	Community matters	

[3] Settings, sub-settings and speech situations not covered in the two tables have remained unknown to me during my stays. It is therefore difficult to estimate how complete these lists are. For example, a setting not covered in Table 5.4 would be the hidden places where Qaqet men prepare their masks for the fire dance.

#a	Public	Church	Inside	Community work	Regularly
#b	Public	Church	Outside	Community work	
#	Public	Church	Inside	Church meeting	Irregularly
#a	Public	Church	Inside	Learning songs	Irregularly/prior to church feasts
#b	Public	Church	Inside	Learning prayers	
#a	Public	Church	Outside	Religious feast	Christian holidays/ church-related visitors
#b	Public	Church	Outside	Traditional customs	
1	Public	School	Inside	School lessons	Monday to Friday
2	Public	School	Outside	Physical education	
#	Public	School	Inside	School meeting	Irregularly
#	Public	School	Outside	Sports/games	Irregularly
#a	Public	School	Outside	Non-religious feast	Holidays/outside visitors
#b	Public	School	Outside	Traditional customs	
1	Public	Aidpost	Outside	Waiting for examination	Monday to Sunday
2	Public	Aidpost	Inside	Examination	
#	Public	Market	Outside	Buying	Once per week
#	Public	Store	Outside	Buying	Every day
#	Public	Cemetery	Outside	Community work	Irregularly
#	Public	Cemetery	Outside	Funeral	Irregularly

Table 5.4: Non-public settings, sub-settings and their speech situations within Kamanakam

No.	Setting type	Setting	Sub-setting	Speech situation	Frequency
#	Private	Home	Inside	Conversation	Every day
#	Private	Home	Inside	Praying	Regularly
#	Private	Home	Outside	Conversation	Every day
#	Private	Home	Outside	Sports/games	Regularly
#	Private	Home	Outside	Settle dispute	Irregularly
#	Private	Home	Outside	House building	Irregularly
#	Private	Garden	Outside	Working	Monday to Saturday
1	Private	Garden	Outside	Collecting firewood	Regularly
2	Private	Garden	Inside	Cooking	
3	Private	Garden	Inside	Eating	
#	Private	Garden	Outside	House building	Irregularly
#	Private	Cooking house	Inside	Conversation	Every day
1	Private	Cooking house	Outside	Collecting firewood	Every day
2	Private	Cooking house	Inside	Cooking	
3	Private	Cooking house	Inside	Eating	
#	Private	Cooking house	Inside	Sports/games	Regularly
#	Private	Creek	Outside	Bathing	Every day

#	Private	Creek	Outside	Fetching water	Every day
#	Private	Creek	Outside	Washing dishes	Every day
#	Private	Creek	Outside	Washing clothes	Regularly

Table 5.5 lists the public and non-public speech situations that are covered by the naturalistic corpus data. In the following description, these particular speech situations will be presented in more detail, and complemented by quantitative insights into the participants' language use. The numbers are based on frequency counts computed in R from ELAN annotations of participants' language use at the intonation unit level.

Table 5.5: Corpus recordings of speech situations in public and private (non-public) settings

No.	Session part(s)	Type	Setting	Sub-setting	Speech situation	Length
1	CodeFST_ICK20170212A_1 CodeFST_ICK20170212A_2 CodeFST_ICK20170212A_3	Public	Church	Inside	Church service	01:02:30
2	CodeFST_ICK20161009_1 CodeFST_ICK20171009_2	Public	Church	Outside	Religious feast	00:30:19
3	CodeFST_ICK20161024_1 CodeFST_ICK20161024_2	Public	School	Inside	School meeting	00:36:49
4	CodeFSS_KJS20161023_2	Private	Home	In./out.	Conversation	00:23:09
5	CodeFSS_KJS20160901_1	Private	Cooking house	Inside	Cooking	00:28:07
6	CodeFSS_KJS20161119A_2	Private	Cooking house	Inside	Conversation	00:28:07
7	CodeFSS_KJS20160910A_1	Private	Copra drying house	Outside	Working	00:28:07

5.1.1 Public settings

Church

The Kamanakam Roman-Catholic church is located near the focal hamlets. It is a wooden house which has a foundation made of cement and a gabled corrugated iron roof. Alongside the building, there are five glass louver windows on each side, allowing for a proper ventilation of the building. The church has one main entrance at the front end of the gable, and two side entrances in the back, each providing access to the left and right-hand side of the altar. Leading to the altar, there is an aisle between 15 rows of wooden benches each to the left and right-hand side. The benches are about 30-centimeters high. The seating plan reserves the benches on the left side for females, and the ones on the right side for males. Children other than small infants are supposed to sit in the front rows, and to follow the seating pattern of the adults according to gender. To my knowledge, the Catholic church is currently the only permanently built church building in Kamanakam. There is at least one other smaller church made from bush material in/near the Kamanakam hamlet Kusibum. Unfortunately, I was not able to witness a mass in the Kusibum church. Therefore, I cannot assess the extent to which my observations for the Kamanakam Chatholic church can be generalized to other churches throughout Kamanakam.

For the church setting, there are two different sub-settings (inside and outside) within which a set of at least 10 regular re-occurring speech situations are observable. Of these speech situations, four revolve around another speech situation, namely the Sunday 'church service'. The speech situations[4] will be presented as part of the following description from a typical Kamanakam church service.

Outside: Waiting for the church service At about 6 to 7 in the morning, the church bell is rung with a hammer by a clergyman as a first call in order to get ready for church. At about 8, the procedure is repeated as a signal to make one's way to church. The area in front of the church then slowly fills up with people. Here, the first speech situation 'waiting for church service' in front of the church sets in. People of different ethnicities meet and greet each other. They may not have seen each other during the week if they are from different non-bordering hamlets and/or do not belong to each others' immediate social network. Gradually, they begin to form small groups within which they start to have a conversation. For males and females (incl. adults and adolescents), it is not unusual to form single-sex groups within the setting. Children other than small infants often group together to play catch or similar games with each other. Topics within the adults' conversations include everyday matters, and thus are not solely church-related topics. The language of interaction here may vary between Qaqet and Tok Pisin, though Tok Pisin may predominate. At about 9, the clergyman rings the bell a third time, which is the signal for everyone to proceed into church.

Inside: Church service At this point, the sub-setting changes towards the inside of the church, and is accompanied by the start of the 'church service' as another speech situation. What can be observed is a categorical shift towards Tok Pisin. Number 1 of the corpus recordings made in public settings (see Table 5.5 on p. 122) covers a whole church service. Based on recording number 1, Table 5.6 gives a description of a typical Sunday service within the Kamanakam Roman-Catholic church (direct quotations are in English translation).

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[4] Except for the language situation 'Sunday School', about which I cannot give a report.

Table 5.6: The course of a Sunday service in the Kamanakam Roman-Catholic church

No.	Description	Time frame
1	The people proceed into the church.	00:00:00 – 00:04:45
2	The priest invites everyone to stand up and sing the first hymn. During the hymn, the priest walks to the front of the congregation (holding bible), and positions himself behind the pulpit.	00:04:45 – 00:08:20
3	The priest welcomes the people, and sets the stage for a number of prayers, which the people are invited to recite.	00:08:20 – 00:11:05
4	Two other hymns are intoned, which the people are invited to sing.	00:11:05 – 00:14:25
5	The priest speaks a prayer, which the people finish by saying "Amen" and sitting down.	00:14:25 – 00:15:15
6	Another clergyman gives a Bible reading. After a certain psalm the reader says: "This is God's message" at which the people answer: "We thank God for his message".	00:15:45 – 00:17:35
7	The reader recites a set of rules at which the people answer with: "Everyone who follows my rule will be happy".	00:15:35 – 00:19:45
8	Another clergyman gives a Bible reading. After a certain psalm the reader says: "This is God's message" at which the people answer: "We thank God for his message".	00:19:45 – 00:23:05
	The people stand up and sing "Hallelujah". The reader recites another prayer and the people sing "Hallelujah" again.	00:23:05 – 00:24:30
9	The priest comes to the pulpit and introduces the gospel according to Matthew. The people make the sign of the cross and sit down. He then starts to read a longer passage from the gospel, and finishes it with: "This is the gospel of Jesus Christ" at which the people answer: "xxx".	00:24:30 – 00:32:30
10	The priest and two other clergymen seat themselves. The people now start to pray for themselves in silence.	00:32:30 – 00:35:05
11	The priest invites the people to stand up and confess everyone's faith by repeating a prayer he recites.	00:35:05 – 00:36:20
12	Intercession: The priest starts an intercessions prayer for which he invites the people to pray on behalf of others. After each prayer the people answer with: "Hear our prayer".	00:36:20 – 00:37:55
13	Now each one is allowed to speak a prayer on behalf of others and at which the people afterwards also answer with: "Hear our prayer" and finally are sitting down.	00:37:55 – 00:39:10
14	Offertory: The priest proceeds with the offertory. Afterwards, the congregation sings a hymn, during which some put some coins as their offering in a small basket in front of the altar. Afterwards, they go back to their seats and pray in silence.	00:39:10 – 00:44:05

Table 5.6: The course of a Sunday service in the Kamanakam Roman-Catholic church

No.	Description	Time frame
15	Eucharistic prayer: The priest proceeds with the eucharistic prayer. The congregation starts to sing a hymn and kneel down, while the clergyman takes the holy bread (wafer) from the altar and consecrates the sacramental bread.	00:44:05 – 00:48:05
16	Lord's prayer: The congregation rises, and speaks the Lord's Prayer.	00:48:10 – 00:48:55
17	The priest prays, and invites everyone to shake hands with their neighbors.	00:48:55 – 00:49:40
18	Breaking the bread: The clergyman blesses the bread while everyone is kneeling down. Afterwards everyone speaks a prayer, and proceeds to pray for himself.	00:49:40 – 00:50:50
19	Administration of communion: The people return to sitting position. The priest walks to the front of the altar. Some people line up in a queue in front of the priest, who gives communion to the congregation. At the same time, the other people who are still sitting start to sing a hymn. Those who have received communion wafer go back to their seats, and start to pray for themselves.	00:50:50 – 00:54:50
20	The clergyman invites everyone to pray.	00:54:50 – 00:56:45
21	The clergyman invites everyone to stand up and pray.	00:56:45 – 00:57:45
22	The people sing a last hymn, and the priest dismisses the people.	00:57:45 – 01:01:20
23	The people step into the aisle kneeling or bowing down in the direction of the altar, and afterwards start to leave the church building.	01:01:20 – 01:02:30

Within the first half of the church service, children are often not present in the church building. If this is the case, they are outside the church, normally following Sunday school. At a certain point, they join the adults in the church. What is optional before the people finally leave the church building is that the clergyman makes some church-related announcements. This procedure usually takes no more than 5 to 10 minutes.

During a set of sociolinguistic interviews, participants have shared different views regarding the church setting, and particularly the speech situation 'church service'. For example, there is one view that the predominant Tok Pisin use is dependent on an external factor, that is, the Bible being only available in Tok Pisin.

(47) *"lo tokples mipla i no spikim tumas, bikos a..., ba bai mi tok olsem, mipla i lukluk i go lo buk, asua, lukluk mipla lukluk tru lo buk, singsing tasol em mipla i sa singim lo tokples, ol pre mipla i save kisi lo tok pisin bikos lo buk."*

"We do not speak that much Qaqet because we read the Bible. Sorry, we really read the Bible. Only the songs we would sing in Qaqet. As for the prayer, we take them from Tok Pisin because of the Bible."

(AttSitCS_SF_20180824B_1)

In this regard, it maybe noted that a Qaqet translation of the New Testament was prepared by James Parker from the Summer Institute of Linguistics (SIL). I was able to see a copy of this book in the possession of one of the community members. In conversations with other people, however, it became clear that it must be one of only a handful of copies in the area of the focal hamlets at this point in time. To the majority, therefore, the Qaqet New Testament seems to be not available.

The same participant further relates the lack of Qaqet use to the fact that people were not taught how to pray in Qaqet.

(48)   *"na tu.., sampla lot (lotu) lo taim blo pre, mipla i no save spikim tumas tokples bikos, bai mi tok olsem, nau mipla, mipla i.., i no go tumas lo tokples, bat i gat ol pre blo tokples i stap. bat mipla i no skulim ol lain."*

       "In addition, during some services when we are praying, we usually do not speak Qaqet very much because we do not go very much into Qaqet, but all prayers do exist in Qaqet. But we didn't teach everyone."

                                                                      (AttSitCS_SF_20180824B_1)

With regard to this comment, it is known from conversations with community members that the long-time Catholic catechist (GLK, died 2017/18), who also took on the role of priest during mass, had a rather basic Qaqet competence. During mass, I never witnessed him using Qaqet. In his absence, he was represented by a non-Qaqet person (FMX), as well as the Eucharistic minister (FST) and a new priest (IPK). The latter two self-reported as being fluent in Qaqet. During mass, however, I never witnessed them speaking Qaqet.

Similarly, another view ascribes the predominant use of Tok Pisin to the language use of older people, in the sense that when today's adults were young children, they grew up witnessing their elders making use of only Tok Pisin during the mass.

(49)   *"lotu i sa dipen long ol.. bai mi tok long olpla manmeri, ya. sapos ol i.. ol i.. ol i.., mi pestaim blo pre lo lotu na ol i spikim Qaqet olgeta taim, den mipla tu bai save. ah, olsem mipla bai bihainim, bat taim ol spikim pidgin tasol, em olgeta taim blo lotu mipla mas tok pisin tok pisin tok pisin."*

       "The church depends on the older people. If I pray in church for the first time and all would speak Qaqet, then we would follow their lead. But when they only speak Pidgin we must also speak Tok Pisin when we are in church."

                                                                      (AttSitCS_SF_20180824A_1)

Accordingly, as Qaqet speakers become adults, the non-use of Qaqet in church seems to have eventually led to a lack of competence to perform a mass in Qaqet. This is is being evident from two other quotes below.

(50) *"bat lo.. lo sait blo tokples tu lo.. hau lo pre o lotu, em bai mi tok olsem wanem, bai mi tok, em mipla sa skelim o lukim olsem wanem, em longpla taim, em tekim mipla sampla aua yet lo pre lo tokples. olsem na taim mipla lukim olsem, planti man i tok: sss, surik blo mipla lo brukim skru na pre ya.. lo tokples. maski, yumi tok pisin bai hariap."*

"As for Qaqet, as for how they are praying in church, our view is like this: it takes a long time. It takes us some hours to pray in Qaqet. In this view, many people say: no, let's avoid kneeling down and praying in Qaqet. Who cares, if we pray in Tok Pisin it will be faster."

(AttSitCS_SF_20180824A_1)

Lastly, one view relates the Tok Pisin use in church to the presence of non-Qaqet speaking community residents.

(51) *"na supos yumi stap insait lo lotu, em.. mi ken tokples, andastendim blo sampla, bai ol i kisim, mi ken tokples.. insait. taim nogat.. man we.. blo arasait. na yumi tasol, em mi spikim tokples na yumi stap."*

"If I am inside the church it is okay if I speak Qaqet. Some people will understand it. When it is only us [Qaqet] and there are no people from outside, then I speak Qaqet."

(AttSitCS_SF_20180902_1)

In this view, the setting factor intersects with the participant factor, as the reported Tok Pisin use in church is clearly related to the type of people being present. What can be inferred from the participant's remarks is that Tok Pisin is used by the Qaqet speakers in order to accommodate to those who cannot understand Qaqet. In addition, what also becomes evident is that generally there seems to be no taboo or other church-related restrictions against using Qaqet during the mass.

In summary, one view is related to the lack of Qaqet transmission from the older to the younger generation in church/religious contexts. This view could be analyzed with the help of the language socialization paradigm by Ochs and Schieffelin (1984) and Schieffelin and Ochs (1986), which proposes *socialization through the use of language* and *socialization to use language*. In this context, the continued spread of the Christian religion via Tok Pisin is also likely to have a significant impact. Another view relates the predominant use of Tok Pisin to the participant factor. Language accommodation may play a role in the use of Tok Pisin as the language of wider communication. The last point will be further outlined in Section 5.2.2 from p. 149, which deals with the attitudes of participants regarding language depending on their interlocutors.

Outside: Community matters After the church service, the community members usually rest a while in the area around the church building. Most of the times, the majority remain under a particular big old mango tree right in front of the church building. The tree provides a considerable amount of cool shade, which makes it suitable for a follow-up speech situation, namely discussing 'community matters'. The latter speech situation usually follows the Sunday church service, and has the function to discuss various church and non-church related community matters. Though it may not be mandatory to take part, most of the community members stay. One can imagine that the time and place is convenient for such a semi-formal meeting, as only the church service regularly brings a good deal of the community members together to one place. While the community members are sitting on the ground or on one of the mango tree roots, one female or male person who wishes to talk stands up and begins to speak about

what s/he believes to be community-relevant information. The language for such an oration is mostly Tok Pisin, although there seem to be Qaqet repetitions of some parts. These repetitions were described by people regularly taking the floor in this speech situation as being for the elderly, who might have problems understanding the information in Tok Pisin-only. Similar to the 'church service' speech situation, another view relates the consecutive use of Qaqet and Tok Pisin to the degree of non-Qaqet speakers present.

(52) *"wai mi putim eks longap i no tumas, ah, mi no save yusim bikos yumi different man i save kam, kam lo lotu, so. wanem samting mi givim, olsem mi mensenim lo sande, bihain lo lotu, em mi no save go tumas lo tokples, supos yumi qaqet stret yumi stap, em bai mi yusim tokples. bat yumi different man nau, em bai mi save tokples wantem tok pisin gen."*

"I put the x [in the survey form] on 'rarely using Qaqet' because we are different people coming to the church. On Sundays, when I talk to the community after church I usually do not speak Qaqet very much. If we would be real Qaqet people living here then I would speak Qaqet. But we are different people now, which is why I usually speak Qaqet along with Tok Pisin."

(AttSitCS_SF_20180902_1)

Topics often include the announcement, preparation and task allocation of various community works, such as preparing feasts, cleaning the church and school area or maintaining its buildings. Moreover, the speaker may call for money to be collected for certain events inside the community. If these matters do not proceed fast enough or have been done improperly, a speaker may also overtly complain about the lack of community participation. In the latter case, the speaker's voice may become quite loud and irate. In addition, the speaker may also talk rather fast. For foreigners, this may be at first sight an unexpected case of a person having a tantrum. However, it seems as if this behavior might not exclusively be related to the mood of the speaker, as I noticed this happening on a frequent basis with different speakers. One might speculate that this behavior constitutes a separate register. In the course of the discussion, everyone is invited to comment and share their view with the community once the initiator has set out her/his view of things. If a topic has been sufficiently discussed, other community members may stand up and address further community-relevant matters. Finally, the speech situation comes to an end when everyone has had their chance to bring up their desired topic, which takes about 30 to 60 minutes.

Inside: Church meeting The speech situation 'church meeting' may be conducted inside a church-related building situated in the immediate vicinity of the church. Such meetings seem to be primarily held by church workers (e.g. catechist, chairmen of the church, etc.) though generally, the presence of others may not be prohibited. These meetings do not necessarily occur on a specific day, and may simply be called as needed. Topics for the meeting may concern church-related matters, such as the organization of Christian rallies or other church-related feasts. The meetings may be not too formal, and from an outsider's perspective, seem to resemble the type of discussions which can be observed within the context of a family's home. Language use includes Qaqet and Tok Pisin. Tok Pisin predominates if non-Qaqet speakers are present.

Inside: Learning songs and prayers The speech situation 'learning songs' and 'learning prayers' usually take place within the church building. These sessions may take place during

after-work hours, as early as 3 or 4 p.m. on weekdays, including Saturday. The two types of speech situations often serve as preparation for a certain church-related event or feast, especially when guests from outside the community are present. The 'learning songs' speech situation involves the learning of new songs, as well as consolidating old ones. In addition, church songs in the Kamanakam church are always polyphonic. Thus, part of the sessions may also involve the practice of polyphonic singing. The 'learning prayer' speech situation involves practicing and consolidating the appropriate liturgy for the upcoming event. I have not directly witnessed these two speech situations. As these songs and prayers are prepared for church-related feasts, I witnessed during the feasts themselves that they are predominantly in Tok Pisin.

Outside: Religious feast The speech situation 'religious feast' may include various church-related celebrations that involve special preparations by the Roman-Catholic part of the community. These include events such as the children's communion or a Christian rally. Special preparations for the event usually include the above described speech situations 'learning songs' and 'learning prayers', but also the assignment of certain community members to the task of food preparation in their homes (see Section 3.1.3, p. 67). Although, a great deal of the celebration usually takes place outside on the grassy area between church and elementary school, religious feasts may also include the speech situation 'church service', which then entails a shift to the inside of the church. Number 2 of the corpus recordings made in public settings (see Table 5.5, p. 122) shows a welcoming scene of a Christian rally. Here, the Kamanakam Catholic community has gathered in the evening in front of the church building to welcome their guests arriving from different parishes of the Kimbe area, West New Britain Province. The scene shows several Qaqet and non-Qaqet Kamanakam church officials and one Kimbe church official holding a speech. Table 5.7 gives a short summary of the goings-on in the scene, along with the language used by each speaker. In the scene, the language for the official parts was always Tok Pisin, except during some short intervening sections, when one church official (FAL), acting as the master of ceremonies, made use of Qaqet.

Table 5.7: The course of the welcoming scene of the church rally in Kamanakam

No.	Description	Language	Time frame
1	The Qaqet church chairman (FAL) directs the Kamanakam community members to greet the guests from Kimbe by shaking hands. In addition, the female Qaqet community members should give out betel nuts to the guests from Kimbe.	Qaqet	00:00:00 – 00:00:40
2	The women and female adolescents line up in front of the guests, handout betel nuts, and shake their hands in order to welcome them.	Tok Pisin	00:00:40 – 00:09:15
3	The Qaqet church chairman (FAL) directs the Kamanakam community members to listen to the Kimbe church official.	Qaqet	00:09:15 – 00:09:20
4	A Kimbe church official introduces the Kimbe parishes which have traveled to Kamanakam.	Tok Pisin	00:09:20 – 00:12:50

Table 5.7: The course of the welcoming scene of the church rally in Kamanakam

No.	Description	Language	Time frame
5	A Kamanakam non-Qaqet church official (FMX) takes over, and introduces the program and other organizational topics.	Tok Pisin	00:12:50 – 00:20:50
6	A Qaqet elementary teacher (FPK) informs the guests about their accommodation, which is supposed to be in the elementary school buildings.	Tok Pisin	00:20:50 – 00:22:30
7	The non-Qaqet church official (FMX) again takes over, and informs the guests about the provisions.	Tok Pisin	00:22:30 – 00:23:25
8	Another church chairman (FAM) explains to the community that due to the accommodation situation, there will be no school for the duration of the rally. In addition, he informs the guests again about the upcoming meal, and welcomes everyone in the name of the Kamanakam parish.	Tok Pisin	00:23:25 – 00:25:35
9	The two church chairmen (FAL, FAM) direct the women to put the prepared food on mats laid out before the congregation.	Qaqet	00:25:35 – 00:25:45
10	The women put the food on the mats; this is further supervised by one of the chairmen (FAL).	Qaqet	00:25:45 – 00:28:00
11	One of the chairmen (FAM) invites everyone to pray for the food.	Tok Pisin	00:28:00 – 00:28:10
12	The people stand up and start to pray for the meal they are about to eat.	Tok Pisin	00:28:10 – 00:30:00
13	The church chairman (FAM) makes some last announcements concerning the partaking of the meal.	Tok Pisin	00:30:00 – 00:30:10

Inside/Outside: Community work (church)   The speech situation 'community work' within the church setting concerns various maintenance activities in front of the church building, such as cutting the grass, clearing the area of leaves and other rubbish and building, repairing or decorating church-related buildings. This kind of work may be assigned to the community members within the speech situation 'community matters'; alternatively, community members may simply volunteering for certain tasks. The community work is a regularly occurring activity within the community. However, it becomes even more prominent before upcoming events, which in terms of speech situation, is subsumed under 'religious feast' or 'traditional customs'. Language use is not restricted to either Qaqet or Tok Pisin. Tok Pisin predominates if non-Qaqet speakers are present among the workers, or if non-Qaqet speakers arrive at the scene and engage the workers in a conversation.

Outside: Traditional customs The speech situation 'traditional customs' may not be exclusively restricted to the (outside) church setting, but may also be an activity which is performed in an outdoors area of the Kamanakam primary school. The time and date for this speech situation does often co-occur with, or is embedded in, other speech situations such as 'religious feast' and 'non-religious feast'. However, it can also be a cultural event by itself. These events take the form of mask dances, which provide the most exciting insights into the Qaqet Baining spiritual world and culture. Hesse and Aerts (1982) and Hesse (2007) have given extensive descriptions from preparation to the performance and meaning of the Qaqet Baining's traditional dances. I have witnessed parts of the so-called *firedance* at the outside church area. In addition, I saw parts of other dances as part of the Independence Day celebrations at the outside area the Kamanakam primary school. The dances include the *speardance* and a dance that was described to me in Tok Pisin as *bel i go insait* 'to pull the stomach in'. Generally, the firedance is what Hesse and Aerts (1982: 66-75) also describe as a nightdance. They stand in contrast to the daydances, of which the speardance and *bel i go insait* constitute a particular part (cf. Hesse and Aerts 1982: 50-66). The aforementioned dances are solely performed by Qaqet males. The preparation of the traditional masks, which I believe can account as another speech situation, is secretly carried out by the male dancers. Unfortunately, I have no eye-witness knowledge of the particular happenings during the preparation of the masks. Hesse and Aerts (1982: 43) states in this context that the males build huts in order to secretly craft the masks. Most women, however, are forbidden to visit the huts (1982: 43).

For the performance of the firedance, viewers gather in front of the church building at around 5 to 6 p.m., just before sunset. At a certain distance from the church building, others will have, by this time, already prepared a pile of tree trunks stacked on top of each other. Another two long tree trunks are placed in two rows near the church building, each with a plank of similar length placed in front of it. The tree trunks serve as seating reserved for the singing and rhythm group. This consists of about 10 people, each equipped with a bamboo tube. Slowly, the singing and rhythm group sits down on the tree trunk. In preparation for the later dance, the pile of tree trunks is set on fire. The mask dancers, however, will stay away from the area for another 1 or 2 hours until the darkness sets in. At a certain point when the dancers have arrived, they may signal their readiness, even though they may still be hidden in the bush. Then the singing and rhythm group starts to sing while accompanying each other rhythmically by knocking on the plank with their tubes. This is when the dancers come out wearing their masks. Their dance movements follow the four-four time rhythm provided by the singing and rhythm group, and is often accompanied by screaming sounds. The viewers make a half-round circle within which the dance is carried out. By this time, the actual fire, a bit further away, has mostly turned into a pile of smoldering, but still red-hot, tree trunks. At some point, each dancer goes through the fire, or kicks it with his feet. Normally, the dancing proceeds in this manner until the early morning hours. The language used by the singing and rhythm group is not Tok Pisin, but I am also not clearly able to identify it as Qaqet, due to the sounds of the dance (although it is very likely that it is Qaqet). The viewers, however, predominantly use Tok Pisin.

School

The school, namely the Vunaiting elementary school, is situated opposite the church, with a large free grassy area in between. The elementary school has two separate buildings. The buildings are wooden houses with wooden floors and a gabled corrugated iron roof. Alongside each house, the walls have a panoramic window sporting a large-scale rectangular grid that ensures air flow through the building. For the pupils, there are two rows each of four wooden school desks suitable for two to three children. At the back end of the building, a blackboard

covers the entire wall. Similar to the church setting, there are two different sub-settings, namely inside and outside the school.

Inside: School meeting   The speech situation 'school meeting' inside the school building may occur when adults such as teachers, school board members and parents come together in order to discuss various matters regarding their children's education. Number 3 of the corpus recordings made in a public setting (see Table 5.5, p. 122) covers such a school meeting. It shows a Qaqet elementary teacher (FPK) in the class room speaking in front of Qaqet and non-Qaqet parents (e.g., FST, FJP, FAM, FLP, FJG, FBS and FDS among others). The children's parents themselves are sitting on the wooden school desk or on the floor while the teacher addresses certain school-relevant topics in the form of a speech (e.g., organization of children's graduation: cooking, collecting money, etc.). However, the teacher is not the only one speaking, as other parents occasionally give comments and thereby interact with the teacher and the group of parents as a whole. Later, as the teacher finishes his (official) part, the parents start a discussion wherein one after another (including others teachers) takes the floor and gives her/his opinion on the current matter and/or addressing other relevant topics (e.g., student school grades, how to supervise the children to do their homework, etc.). The language of interaction is predominantly Tok Pisin, but there are two occasions showing a switch from Tok Pisin to Qaqet language. In the first, the teacher (FPK) switches to Qaqet to address a Qaqet speaker towards the back, and in the second, the recorder (FST), who is also a speaker, is sitting next to the teacher, and makes a side comment to the teacher in a low voice. In one of the attitudes interview sessions, one participant explained the predominant use of Tok Pisin in school with the presence of speakers from different languages. It could be inferred that Tok Pisin serves here an accommodating function to facilitate mutual understanding between the people. Furthermore, the interviewee continues to judge Qaqet spoken in the presence of non-Qaqet speakers as a non-appropriate behavior, in the sense that it could give them the feeling of having something to hide.

(53)   *"yu sa, skul nau em, olgeta tokples nau i stap lo skul. so.. yumi mas tokpl.. a tok pisin nau. olsem yumi tok pisin. olsem mi moa tokples, bat yumi, bai mi tok wanem, kain kain man a, nogut mi tokples na yu no inap filim gut, na bai yu tok: oh, man ya tokples nogut, em i tok nogutim mi o, planti i bin sa kamap olsem, olsem na nau yumi mi mas tok pisin tasol. tok pisin pastem. taim mi bungim wantok stret na mitupla i.. sanap awe longwe liklik long ol lain na mitupla hariap long.. bamim tokples blo mitupla bihain, oke, go bek long.. senta na yumi tromoi long tok pisin gen."*

   "As for the school, all languages are in the school now. That's why we have to speak Tok Pisin now. I would be more for Qaqet, but there are different people in the school, and it would be bad if I spoke Qaqet and you did not feel good about it. And you would say: This man insults me in his mother tongue. There were many situations like this which is why we have to speak Tok Pisin only, Tok Pisin comes first. When I meet another Qaqet speaker, and we two stand far away from all [non-Qaqet speakers] we quickly speak Qaqet with one another, and when we go back to them we speak Tok Pisin again."

                                                                  (AttSitCS_SF_20180824A_1)

Inside: Non-religious feast   The speech situation 'non-religious feast' may involve school feasts, such as the celebrations for the children's elementary school graduation or the annual

celebrations for PNG's independence on 16 September (see Section 3.1.3 on p. 68). The activities (e.g., giving speeches, performing dances, engaging in games, selling snacks) within the 'non-religious feast' speech situation could be considered as speech situations in their own right. Some of them are more thoroughly addressed in the description of the other public settings.

Inside/Outside: Community work (school)   The speech situation 'community work' outside of the school buildings may in principle very similar to what was already described for the same speech situation occurring within the church setting.

Outside: Sports/games (school)   The speech situation 'sports/games' is a rather infrequently occurring activity among the adults as the daily garden work, cooking and childcare often leaves little room for it. However, from what I have seen, adults do enjoy to occasionally taking part in a range of activities such as volley ball, rugby, football and playing cards. Team sports that require a larger open space may usually be played at the outdoor area of the school. The home setting, however, is rather unsuitable due to its often mountainous ground and limited space. Time-wise, leisure activities often occur when most people in the community take a break from work, such as during official holidays. Here, this activity may also frequently be part of the speech situation 'non-religious feast'.

Inside/Outside: School lessons   The speech situation 'school lessons' may not be exclusively restricted to the inside of the church building, but also take place in front of the school buildings. School lessons may shift to the outside when children, for example, have to build articles of handicraft. Other speech situations that are associated with the 'school lessons' speech situation such as 'physical education' and 'school break' may also take place in the outside school setting. A typical school day may start at 8 or 9 a.m., and last until 12 or 1 p.m. midday. Language use is overwhelmingly Tok Pisin, due to the fact that Qaqet and non-Qaqet speaking teachers and students come together. In addition, the use of Tok Pisin may be also conditioned by macro sociolinguistic factors such as a language policy that favors/prescribes the use of Tok Pisin in schools.

Aid post

The aid post is located within the focal hamlet Altiaqa and consists of one building with two to three rooms intended for examination. The building has a permanent foundation made of cement. The walls on the outside are covered with corrugated iron, which is also what the flat roof is made of. Inside the house, there is a table bearing frequently needed medications and tools, and chairs to conduct examinations. Usually, there is one male trained community health worker treating the patients, who is supported in his daily work by his wife. Similar to the church and school setting, the aid post setting has two sub-settings, namely one located inside and one located outside the aid post building.

Outside: Waiting for examination   The speech situation 'waiting for examination' outside the aid post takes place prior to the speech situation 'examination'. Patients usually come to the aid post as early as 6 a.m., and are usually served until 1 or 2 p.m. in the afternoon. However, people can always come to the aid post outside the consultation hours in case of an emergency. Within the speech situation, the patients sit outside waiting for the examination while talking with family members who accompany them or other patients. Topics may include their illness or other daily community matters. Language use may not be restricted to either

Qaqet or Tok Pisin. Tok Pisin may predominate if non-Qaqet speakers are among the patients waiting for treatment.

Inside: Examination   The speech situation 'examination' takes place inside the aid post building. During the examination, the health worker asks about the patient's symptoms, based on which he makes his diagnosis, and prescribes the appropriate medication. If necessary, the health worker will schedule another appointment to re-examine the patient. Before leaving, the patient is usually asked to pay a fee for the medication. Afterwards, the next patient goes inside. Depending on how many patients are waiting outside, the health worker may have more or less time in order to discuss the details of his diagnosis. The latter may be also dependent on the patient and the desire to learn more about the illness. Language use is restricted to Tok Pisin due to the fact that the health worker is a non-Qaqet speaker.

Market

Types of local markets include, for example, the weekly dark market (see Section 3.1.2, p. 65), the weekly market at Klinwara and irregular markets, which may be part of other speech situations such as 'non-religious feast' in the outside school setting. The dark market and the market at Klinwara are a bit further away from the focal hamlets. The former can be reached within an hour's walk and the latter in about half the time. What all markets may have in common is that they take place outside. They are held by and for members of the local community.

Outside: Buying (market)   As for the market setting, what can be inferred from participants' statements is that language use is dependent on the people present at the market, which in turn depends on the location of the market. Local markets seem to be associated with local residents from Kamanakam and its surroundings, and thus, more Qaqet speakers and fewer non-Qaqet speakers. Town markets in contrast, seem to be associated with more unknown non-Qaqet speakers and fewer Qaqet and non-Qaqet speaking Kamanakam locals (cf. Section 3.1.2, p. 65). This could mean that the use of Tok Pisin at the town markets seems to have an accommodating function, as exhibited by (54). In this sense, the setting factor again intersects with the participant factor, as with a different market setting comes a different set of people that calls for a different language to be used.

(54)   *"yeah, sampla taim mi tok pisin lo maket. bat planti taim ol lain ol maket we mipla ol ples lain i stap, mi tokples."*

"Yeah, sometimes I speak Tok Pisin at the market. But in those markets where there is only us from the area I mostly speak Qaqet."

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A possible explanation for the accommodating behavior is presented by another participant, who explains his predominant Tok Pisin use at the town market as a means to attract customers. Similarly, at the local markets, he uses Tok Pisin and Qaqet simultaneously, in order to achieve the same result. Thus, it could be argued that the use of Tok Pisin at the town market and the particular use of Qaqet or Tok Pisin has an engaging function to appeal to the power differential of seller and customer, where the latter is in a preferential position (see Myers-Scotton and Ury 1977).

(55) *"yeh, planti taim mi sa tok pisin lo maket blong pulim.. kastama. [...] olsem, supos.. maket long mipla yet, ah em.. yumi pulim kastama tu long tokples tok pisin wantem."*

"Yeah, most of the times I speak Tok Pisin at the market to pull customers. [...] If it is one of our markets we pull the customers by using Qaqet and Tok Pisin at the same time."

(AttSitCS_SF_20180824A_1)

Store

There are three stores within the focal hamlets of Kamanakam, namely one in Ngamarana, Altiaqa and Saqalames, respectively (see Section 3.1.2 on p. 66). The stores are part of more permanently built houses that in two cases have corrugated iron reinforced outer walls and a foundation made of cement. The third store, in contrast, is made out of wooden planks, and is built on stilts which are about 1.60 to 1.70 meters high. All three stores have a corrugated iron roof and and a linoleum covering on the floor. In contrast to the stores found in bigger towns such as Keravat, Kokopo or Rabaul, this type of local store is not a walk-in shop. The local stores instead have a window covered with an iron grill, through which the customer can see the goods. When the latter has decided on an article the seller will hand it over the counter in exchange for money. Inside the stores, one basically sees wooden wall shelves on which the goods for sale are placed with big price tags on the shelf.

Inside: Buying (store) As the local stores may only be approached from the outside, further sub-settings were not distinguishable. The regularly occurring speech situation 'buying' may be the only identifiable one. However, unlike the stores in the town, the seller often have time to chat with the customer about daily goings-on in the community, which may enrich the mere 'buying' situation with other speech events. Language use is dependent on the language competence of seller and buyer. Two of the three stores in the focal hamlets are operated by Qaqet/Tok Pisin speakers. The other one is operated by a Tok Pisin-only speaker. For the former stores, Tok Pisin is predominant if non-Qaqet speakers approach, or other non-Qaqet speakers are present. For the latter store, it is Tok Pisin-only. In addition, product names in Tok Pisin may lead the buyer to use that language (see Section 5.3 from p. 162).

Cemetery

The local cemetery borders the elementary school, and is located almost half way to the Altiaqa-based aid post. On an area of approximately 25 x 25 meters surrounded by palm-like plants, the cemetery is reserved for deceased former Kamanakam residents.

Outside: Funeral The speech situation 'funeral' may take place on a Sunday after the 'church service' speech situation (see above). The latter is then dedicated to the memory of the deceased. After the service, the churchgoers would meet with other community members and family and friends of the deceased. The casket containing the deceased would have been brought by members and friends of the family. The clergyman recites prayers, which those present are invited to speak in unison. During the official ceremony, there may also be hymns sung by the people. At a certain point, the casket is lowered into the earth. This is when family and friends would start to cry in a fashion that may be unfamiliar to foreigners. There would be demonstrative crying, and others would have to restrain family members from rushing at the

casket being lowered into the earth. This would continue while the gravediggers started to fill the grave with soil. Once the grave is filled, the funeral is considered finished, and people slowly leave the cemetery. Language use is here predominately Tok Pisin when it comes to the funeral oration held by the church worker for the deceased.

Outside: Community work (cemetery)   As already described for the church setting, the speech situation 'community work' may be assigned to the community members during the speech situation 'community matters' or based' spontaneous volunteering. Mostly, the work includes grass cutting and/or to trim back or to replant the plants that mark the border of the cemetery. The fast and ever growing vegetation of the area make this a regularly occurring activity.

5.1.2   Non-public settings

Home

The typical Kamanakam home setting is a cleared area with one to five houses each normally occupied by one nuclear family. A typical house within the focal hamlets may be built on stilts and predominantly made of bush material, including a wooden scaffolding and floor, bamboo for the walls and *kunai* grass for the roof. Instead of the latter, some may instead put a corrugated iron roof on top of the house. The material being used for the roof may then also determine its form. When using grass material, it is usually gabled, whereas it is commonly flat-roofed when corrugated iron is used. If available, extant and still usable wooden planks from old dismantled houses is reused for building the new house. What may be frequently used by all house builders in the area are nails to fix the individual components. Traditionally, this seems to have been done with small grass ropes, as can be still observed in the more remote areas. In addition to the main house, usually a so-called *haus kuk* 'cooking house' is built in its close vicinity. The house is predominantly reserved for preparing food and eating. However, it will be treated as a setting in its own right, and thus further described after the next section.

The cleared area may be otherwise surrounded by planted gardens in addition to wild and planted tropical plants and trees. The garden will be described in more detail within the next section which deals with the garden as a setting in its own right. The surrounding vegetation in the focal hamlets has been visibly influenced by the inhabitants' planting. Coconut trees, betel nut trees, banana trees, mango trees and citrus trees merge with the otherwise wild growing bush. The latter areas again alternate with areas of planted gardens for the inhabitants' own food supply. A great number of narrow trails run through the two areas or constitute borders between them. The trails are commonly used by local people to travel on foot through Kamanakam off the road.

From sociolinguistic interviews, it is apparent that Tok Pisin is mostly used in the home, because children have an insufficient knowledge of Qaqet due to the fact that when they are among their peers, they only speak Tok Pisin.

(56) *"planti taim mi tok pisin bikos ol pikinini grow up lo tok pisin. mi traim tokples,*
       olsem a, sampla taim mi tok ples, planti taim mi tok pisin bikos mi tokples ol i no
       andastendim, mi traim tokples, na ol i sa goaut, so ol tok pisin tok pisin, na ol i
       influensim ol, so sampla taim nau mi tokples."

"Often I speak Tok Pisin because the children are growing up with Tok Pisin. I try to speak
Qaqet, in this way, I sometimes speak Qaqet and most of the time Tok Pisin because they
do not understand. I try to speak Qaqet. But they go out where they speak a lot of Tok
Pisin, and they influence each other. So, sometimes I speak Qaqet."

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Within the home setting I have identified two different sub-settings, that is the inside and
the outside home setting. Each sub-setting may show similar speech situations, but more im-
portantly, it may show speech situations that are not commonly found within the other.

Inside/Outside: Conversation (home) The speech situation 'conversation' may occur in
both sub-settings. Typically, however, people's everyday lives take place outside. Here, adult
household members may have conversations with members of their family, members of neigh-
boring families or other persons belonging to their social network. Occasionally, strangers may
pass by a family's household on the way to another destination and start a conversation. The
inside of the house is normally used by adults only for sleeping, either at night, or when one
is sick. Another time for everyone to stay inside is during heavy rainfall, which may develop
quickly at any given point of the day. During such times, household members may have pro-
longed conversations inside the house. Topics for conversations occurring inside and outside
may concern people's daily life, such as planning daily tasks, recapitulating the day or the
newest community gossip. Within such conversations, they may also tell stories from the past.

Number 4 of the corpus recordings made in non-public settings (see Table 5.5, p. 122) covers
the speech situation 'conversation' in the outside sub-setting of a home located in Saqalames.
The recording basically involves four adult persons who sit and talk together, while there are
two additional adults and three children, who at different times, enter the scene and leave it
again. Table 5.8 shows the total and the individual uttered adult-to-adult intonation units of
the above-mentioned recording number 4.

Table 5.8: Participants' language use in home setting 'conversation' speech situation in IUs

No.	ID	Qaqet	Tok Pisin	English	Mix	Total
1	FSS	12	28	0	8	48
2	FRU	40	69	1	14	124
3	IRM	101	24	0	19	144
4	NMS	43	4	0	10	57
#	N	196	125	1	51	373
#	%	52.55	33.51	0.27	13.67	100

The numbers in Table 5.8 show that Qaqet and Tok Pisin are the predominating languages
used in the sample of this speech situation. The numbers, therefore, confirm that Qaqet along-
side Tok Pisin is used in non-public settings.

Inside: Praying   The speech situation 'praying' may occur in certain households right before going to bed. For some, this speech situation may also be an activity to begin the day with. Members of a family may carry out this activity for themselves, or as a group. Language use was observed to be Tok Pisin-only.

Outside: Settle dispute   The speech situation 'settle dispute' may be an irregularly occurring meeting, arranged in order to settle an ongoing dispute between two or more persons or parties. Originally, the dispute may have started off with a previous verbal or physical fight, which may constitute a speech situation in its own right, and occur at any given setting except in the church during service. The speech situation may commonly take place in front of the house of one of the two parties. Other than those persons having the dispute, the meeting may also involve the disputing individuals' family members or other people who may, in some way, feel themselves associated with the parties or the situation. This particular speech situation constitutes an explicit dialog-oriented attempt to settle inner-community problems, and to restore what in Tok Pisin is called *wanbel* 'peace' within the community. Language use was observed to be code-switching between Qaqet and Tok Pisin if only Qaqet speakers were present. If non-Qaqet speakers were among the disputing parties, Tok Pisin would predominate.

Outside: House building (home)   The speech situation 'house building' may be an irregularly occurring activity that encompasses the tearing down of an old house, and the construction of a new one. For this activity, usually family members and other persons from their social network come to help by providing tools and their experience in house building. Language use may involve Qaqet and Tok Pisin. If helpers from the social network are non-Qaqet speakers, Tok Pisin can predominantly be observed.

Outside: Sport/games (home)   The speech situation 'sports/games', as mentioned in the school setting above, is a rather irregularly occurring activity among the adults. In addition, space for team sports may be limited, and thus limited to public settings. However, games that do not require a large open space, such as playing cards, may occasionally be played at the inside and outside home setting. The former tends to occur in times of rainy weather. Adults coming together for these games often include members of the family, members of neighboring families or other persons belonging to the social network of the host family. Language use may involve Qaqet and Tok Pisin.

Outside: Collecting firewood   The speech situation 'collecting firewood' usually involves going out alone or as a group, equipped with a machete, to cut down dried branches from trees or to pick them up from the ground. Time-wise, this is usually done prior to the 'cooking' speech situation. The task is often assigned to younger family members from the age of seven onward. Language use among children is often Tok Pisin. Among adults, Qaqet and Tok Pisin is used.

Garden

The people in Kamanakam are predominantly subsistence farmers (see Section 3.1.3 on p. 67 for more details on the makeup of the garden). The garden setting may be predominantly an outside setting. The inside-outside distinction is pertinent only in those cases when people build a temporary shelter within the setting. Often, a temporary shelter is built when the garden (or block) is located a bit farther away from the house and/or one is planning to work for a longer time in the garden. It may then serve as a resting place and a cooking house, and provides

protection during rain showers. Due to the temporary character of the newly emerging inside sub-setting, totally unexpected speech situations do not occur here. Rather, it leads to speech situations that otherwise would have been simply conducted outside.

Outside: Working   The speech situation 'working' in the garden concerns the daily activity among the majority of the adults (see Section 3.1.3 on p. 67 for more details on the daily working routine). Language use may involve Qaqet and Tok Pisin.

Outside: House building (garden)   The speech situation 'house building' may be an irregularly occurring activity that occurs when people decide to build a temporary shelter within the garden. Temporary shelters, in contrast to more permanent houses, differ in terms of effort and material spent for its construction. Different types of temporary shelters can be observed, which may again depend on the time and material available. For example, a common type of temporary shelter has wooden stakes 1 to 1.5 meters high on each corner, and a roof made out of banana leaves or similar material. Language use may include Qaqet and Tok Pisin.

Inside/Outside: Cooking, eating and collecting firewood   Once a temporary shelter is built, the speech situations 'cooking' and 'eating' partially shift to the inside of the shelter. In the first step, the 'cooking' speech situation commonly involves 'collecting firewood' as another speech situation (for the latter see description above). This process usually starts around lunch time. As opposed to the cooking house setting, less effort tends to go into what and how something is cooked in the temporary shelter, since usually no cooking utensils are available. Thus, when the fire has been successfully started one may, for example, put a number of unpeeled cooking bananas near the fire in order to let them bake slowly. The speech situation 'eating' involves those adults that are currently working as a group within the garden.

Cooking house

Formally, the cooking house setting can be viewed as a part of the home setting due to the fact that it is commonly situated in its close vicinity. However, it may be useful to distinguish the cooking house from the home setting, as specific speech situations occur in each setting that are usually not found within the other. This includes the speech situations 'cooking' and 'eating' in the cooking house setting and 'praying' in the home setting.

The cooking house is mostly built from similar material as the main house. However, construction-wise, the former differs in that it is commonly built flush with the ground. Moreover, it is often freely accessible from at least one side, and/or has a generous window area which allows smoke easily to escape, and fresh air as well as sunlight to enter. Inside, a fireplace is situated in the middle of the room, around which usually a set of about 1 meter high wooden benches is built.

Inside: Cooking   The 'cooking' speech situation is a regularly occurring activity, and depending on individual preferences, may take place between two to three times during the day (see Section 3.1.3 on p. 67 for more details on the daily cooking routine).

Number 5 of the corpus recordings made in non-public settings (see Table 5.5, p. 122) covers a part of the 'cooking' activity in a cooking house located in Saqalames. In the recording, three adults are present inside the cooking house, one of whom (IRM) is preparing taro for the fire, one (FRU) is sitting on a bench next to her, and one (FSS) is filming the scenario. In addition, two children (FNA, HCK) are present for the majority of the time. In the course of the recording,

two additional adults appear at the scene at different times. One of them (GKN) comes with her child (HRV), and stays for a longer time, whereas another person (GLS) only stops by for a brief moment. Table 5.9 shows the total and the individual uttered adult-to-adult intonation units of the above mentioned recording number 5.

Table 5.9: Participants' language use cooking house setting 'cooking' speech situation in IUs

No.	ID	Qaqet	Tok Pisin	Kuanua	English	Mix	Total
1.	FSS	86	18	1	0	37	142
2.	FRU	138	19	0	1	11	169
3.	IRM	147	3	0	1	24	175
4.	GKN	1	6	1	0	0	8
#	N	372	46	2	2	72	494
#	%	75.30	9.31	0.41	0.41	14.57	100

When looking at the language use for each speaker individually, it is evident that all speakers switch between Qaqet and Tok Pisin to a certain extent, while Qaqet clearly predominates. In addition, the first four speakers in the table switch to Kuanua and/or English.

Inside: Eating The 'eating' speech situation is the immediate follow-up activity to the 'cooking' speech situation. Individuals present for eating usually include the members of the household. Often, there are also visitors or passers-by who cross a family's plot of land to get to their home or another destination. In case they are still present at the start of the meal, they are usually offered a plate of food. Before everyone starts to eat, it is not uncommon in certain households to say a prayer. This may, however, strongly depend on how much a household associates with their faith. When eating a stew-like dish, spoons are widely used. However, people often mentioned that eating with one's hands would be their traditional way of eating. This is still widely practiced even for the stew-like dishes and can be still considered the predominant way of eating other types of food. What seems to be a common behavior while eating is to sit opposite to each other. If someone has had enough to eat, and cannot finish her/his meal s/he normally shares it with the others present. Once the meal is finished, everyone usually thanks the cook individually for her work and the food she has provided. Language use may include Qaqet and Tok Pisin.

Inside: Conversation (cooking house) The 'conversation' speech situation within or around the cooking house setting may, in principle, be similar to the equivalent situation within the home setting. It differs in that the speech situation more commonly occurs in the cooking house. This is due to the fact that the cooking house is the more usual place to stay during the day time, when one is not out in the garden for work, or is forced by other circumstances to stay inside. It is, moreover, usually the place to host any guests or other persons from the social network. With that said, the speech situation primarily involves members of the household, but often also members from neighboring households or other persons from the family's social network. Sometimes there may also be strangers addressing the family with a certain matter, or simply passing by on their way to another destination. The speech situation is a regularly occurring situation during the day when no other activity is taking place. A predictable time

for it to occur is usually after dinner and before going to bed. Often, it also co-occurs or merges with the 'cooking' or 'eating' speech situation.

Number 6 of the corpus recordings in non-public settings (see Table 5.5, p. 122) covers a conversation mainly between FSS and FLT. Table 5.10 shows the total and the individual adult-to-adult language use, measured in intonation units (IUs), for this recording.

Table 5.10: Participants' language use, cooking house setting, 'conversation' speech situation (in IUs)

No.	ID	Qaqet	Tok Pisin	Kuanua	English	Mix	Total
1	FSS	89	62	3	1	13	168
2	FLT	287	258	0	0	23	568
3	GFA	1	3	0	0	0	4
4	FKW	0	3	0	0	0	3
#	N	377	326	3	1	36	743
#	%	50.74	43.88	0.40	0.13	4.85	100

What is evident from Table 5.10 is that FLT talks much more than other participants. This is due to the fact that his speech involves quite a few narrative passages from events that have taken place in Kamanakam in the past. Moreover, the main participants FLT and FSS both show a use of Qaqet and Tok Pisin that is almost equal.

Inside: Sports/games (cooking house) The 'sports/games' speech situation in the cooking house setting may be comparable to the one observed for the home setting. Similar to the 'conversation' speech situation, the cooking house seems to be the more usual place for the 'sports/games' speech situation, as people tend to spend more time in the cooking house than in the home setting during the day time. Games are, however, mostly restricted to those that do not require a large open space, such as playing cards. Language use may include Qaqet and Tok Pisin.

Creek

Kamanakam is crossed by many small rivers, which are often the namesake of the hamlets through which they flow. Every household may have a favorite creek for certain activities, depending on which it suits best. The creeks a family chooses to use regularly are usually located in the immediate vicinity of their home. However, the creeks do not belong to a certain family, and may be shared with other neighboring families. Naturally, the creek setting is an exclusive outside setting, and involve the speech situations 'bathing', 'washing dishes', 'washing clothes' and 'fetching water'.

Outside: Bathing The 'bathing' speech situation occurs at least once a day, usually in the evening after work. However, the time and frequency may eventually differ according to a person's personal preferences. Women and men usually wash themselves at either separate creeks or at separate times. Younger children up to the age of seven or eight are usually accompanied by their parents or older siblings. As creeks are often shared with other households, it could happen that someone approaches a creek and is not sure whether it is already occupied

by people of the other gender. Or, this person may have already heard from afar that this is the case. In these situations, this person usually gives a signal by uttering a call in order to let the other party know that s/he also wants to have a wash, and is going to wait until they have finished. Often, the 'bathing' speech situation co-occurs with the other speech situations described below.

Outside: Washing dishes   The 'washing dishes' speech situation may occur regularly once a day, and involves the thorough cleaning of the pots and pans as they become covered in soot while cooking over a fire. This activity often takes place in preparation for the 'cooking' speech situation or immediately after. It is not unusual for parents to delegate this type of work to younger adults or children.

Outside: Washing clothes   The 'washing clothes' speech situation may be a regularly occurring activity that is usually carried out in the morning by one or two person(s) before starting the daily garden work. In this manner, the heat of the sun may dry the clothes during the day. Trying to let the clothes dry in the evening or at night would not have the desired effect due to the very humid climate.

Outside: Fetching water   The 'fetching water' speech situation may be a regularly occurring activity to provide the household with clean water for drinking, cooking and to a certain extent also washing the dishes. The activity may not be bound to a particular time of the day, but simply carried out when the water storage at home is exhausted. The water is usually fetched with plastic or iron buckets by one or two person(s), and is carried home on the head. However, as described above, the activity often co-occurs with other speech situations at the creek, and may thus involve more individuals.

Copra drying house

Copra is the dried meat of the coconut, and the copra drying house is basically a shed with a flat grating as a roof, and bounded by a wooden frame. The area is used to lay out coconut halves and to dry the meat inside by exposing the halves to the sun. Copra drying houses are usually situated near the home setting of a particular household but may be shared by different neighboring households.

Outside: Working   The 'working' speech situation may be a regularly occurring activity at or in the vicinity of the copra drying house. In preparation for the drying process, people assemble to collect the coconuts from their garden or block. Then, they bring them to an area near the copra dryer, where they cut the coconuts in half. After drying, the copra is removed from the shell, packed and sold to local buyers as far away as Kerevat, Kokopo or Rabaul. The work is predominantly carried out by adults. However, at least once a year, children and adolescents may help their parents with this work. For the parents, the sale of copra from the coconut, which is usually available all year round, helps to earn money for their children's annual tuition.

Number 7 of the corpus recordings made in non-public settings (see Table 5.5, p. 122) covers the preparation of coconut halves near a copra dryer located in Saqalames. What can be seen in the recording is that at first three adults are sitting in a circle next to a few piles of coconuts and each person is holding a machete in their hand. In the course of the recording, they cut the coconuts in half, and after a while, they move to an area 10 to 15 meters away, where another pile of coconuts is to be found. Here, they again form a circle, and are now joined by a

fourth participant and a girl. Throughout the scene, the adults have a conversation that roughly focuses on current events in their personal lives. Meanwhile, the girl plays by herself, comes and goes, and is only marginally involved in the adults' working process. Table 5.11 shows the total and the individual adult-to-adult language use, measured in intonation units (IUs), for the above mentioned recording number 7.

Table 5.11: Participants' language use copra drying house setting 'working' speech situation in IUs

No.	ID	Qaqet	Tok Pisin	Kuanua	English	Mix	Total
1.	FSS	46	115	0	2	5	168
2.	NMS	173	97	0	0	34	304
3.	FWS	50	123	3	0	5	181
#	N	269	335	3	2	44	653
#	%	41.19	51.30	0.46	0.31	6.74	100

What is evident from Table 5.11 is that monolingual language use of Qaqet and Tok Pisin is predominant, and each of the participants makes extensive use of both Qaqet and Tok Pisin.

5.1.3 Summary and conclusion

It was assumed (see Section 2.1.2 on p. 17) that only Tok Pisin is used in public settings, whereas Qaqet/Tok Pisin code-switching is only present in non-public/private settings. For public settings (see Section 5.1.1 from p. 123), the Kamanakam corpus recordings support this view. They show that Tok Pisin is predominantly used in the speech situations:

- 'Inside: church service' (see p. 123)

- 'Outside: religious feast' (see p. 129)

- 'Inside: school meeting' (see p. 132)

For the speech situation 'outside: buying (market)' (see p. 134), however, the use of Tok Pisin is supported, only by the interview data. The three recordings and observations for other non-recorded public settings show that Qaqet can occur in public settings. However, Tok Pisin often predominates, as participants with various language competencies interact with each other.

For non-public (home) settings (see Section 5.1.2 from p. 136), naturalistic recordings of the following speech situations support the use of code-switching between Qaqet and Tok Pisin:

- 'Inside/outside: conversation (home)' (see p. 137)

- 'Inside: cooking' (see p. 139)

- 'Inside: conversation (cooking house)' (see p. 140)

- 'Outside: working' (see p. 142)

When comparing the four non-public recordings, it can be seen that the use of Qaqet predominates by far in the 'cooking' speech situation (see Table 5.9 on p. 140) compared to the other three recordings (see Tables 5.8 on p. 137, 5.10 on p. 141 and 5.11 on p. 143). Generally, the diverging distribution of Qaqet and Tok Pisin in all four recordings is not conditioned by the fact that they were recorded in different settings, but by other factors: For the 'cooking' speech situation, the predominant Qaqet use is probably due to the fact that it was the first recording being made. The participants may have felt the need to demonstrate the use of Qaqet which, in turn, led to its predominance in this recording. The latter becomes clear from requests by IRM and FRU to other participants in the recording (FNA, GKN, GLS) to speak Qaqet. In addition, IRM has mentioned her preference for the use of Qaqet in socolinguistic interviews. IRM also has the largest proportion of speech in both the 'conversation' and 'cooking' speech situation. The observations can already help to somewhat explain the predominant use of Qaqet in these two recordings. Other than that, the majority of switches to Tok Pisin in the four recordings can be attributed to instances of conversational code-switching.

In summary, Kamanakam is a multi-ethnic and multilingual community and in the public settings described above, Qaqet and non-Qaqet speaking people come together, and communicate with each other. Eventually, language use, is to some extent, restricted to Tok Pisin because it serves here as a lingua franca. Therefore, it is assumed that to a large extent, the language use in public settings is governed by the participant factor described in the following section. However, this study does not look at macro factors such as language policy planning. The latter has played a significant role in introducing and promoting the use of Tok Pisin in churches and schools throughout PNG (see Litteral 1990: 378-382). The Qaqet/Tok Pisin use in non-public settings, on the other hand, can be said to be largely influenced by the participant factor of situational code-switching (see Section 5.2 below), conversational code-switching (see Chapter 6 from p. 175), and to some extent, the topic factor of situational code-switching (see Section 5.3 from p. 162).

5.2 Participant

Studies in various cultural settings have shown how the participant as a factor determines the language being used (e.g., McClure and McClure 1988: 45; McConvell 1988: 112; Zentella 1990: 81). In PNG, Sankoff (1968) and Kulick and Stroud (1990) have observed how bilingual accommodation plays a role in participant-related situational code-switching among Buang and Taiap speakers, respectively. Sankoff (1968: 201) states that "there is a tendency to speak in the same language as one's predecessor in the discussion". Similarly, Kulick and Stroud (1990: 210) remark that "[v]illagers in Gapun are keen to accomodate [sic] others linguistically, and those who know other vernacular languages frequently use them, in stretches at least, when talking to men or women from neighbouring villages". In this context, Kulick and Stroud (1990: 210) also note that "[t]he single most important factor influencing the villagers' language choice is their conversational partner".

In this section, it will be shown that for Kamanakam Qaqet/Tok Pisin speakers, the participant is a dominant factor in situational code-switching. Further, a number of underlying variables is identified that are argued to be involved in what can be described as bilingual accommodation to the interlocutor. For the analysis, three types of data have been collected: 1. Survey data, 2. Interview data and 3. Staged audiovisual data. In this order, the types of data have been chosen to enable an analysis which seeks to 1. Reveal the participants' reported behavior, 2. Explain their reported behavior and 3. Compare reported with actual behavior in a staged scenario. The naturalistic corpus was not systematically analyzed in regard to

participant-related situational code-switching. However, the results of a preliminary analysis of the naturalistic data are consistent with the results based on the other types of data (see Section 5.2.4 on p. 161).

5.2.1 Participants' self-rated language use

I conducted a survey with 12 adult participants, who were the major contributors to the naturalistic recordings (see Section 2.2.3 from p. 24 for a more detailed account of the methodology). In the survey, they were asked to rate their self-perceived Qaqet and Tok Pisin use towards a sample of 15 adult Kamanakam inhabitants. All 12 participants then took part in a subsequent attitudes interview, giving more detailed insights for their motivation to rate the inhabitants in this particular way. The 15 people being subject to the survey are part of the social network of each of the 12 participants. Moreover, they were chosen according to the age and competence variable which were assumed to be governing rationales for the participant factor. In addition, the 15 participants were also subject to what was assumed to be participant-related situational code-switching in the naturalistic corpus. The survey for the Qaqet and Tok Pisin use was based on a five-point Likert scale which, in statistical terms, represents ordinal data. However, to make the data quantifiable when using R and more readily accessible when it comes to its representation, I have assigned each of the possible five ordinal values to a numeric value of which 1 = never, 2 = rarely, 3 = sometimes, 4 = mostly and 5 = always. For each participant, I then calculated the mean of all rated values in R. In a second step, I visualized the means in the form of a scatter plot, by ordering them from the highest to the lowest score.

Qaqet use

Figure 5.1 shows the mean values of Qaqet use of the 12 respondents for a group of 15 Kamanakam residents, sorted from the highest to the lowest score. That is, each point represents the mean of the rated Qaqet use of 12 respondents for one of the 15 target people. The latter are represented by their participant ID (e.g. GMX, FLT, etc.).

Figure 5.1: Mean value for the participants' self-perceived Qaqet use towards a group of 15 Kamanakam inhabitants
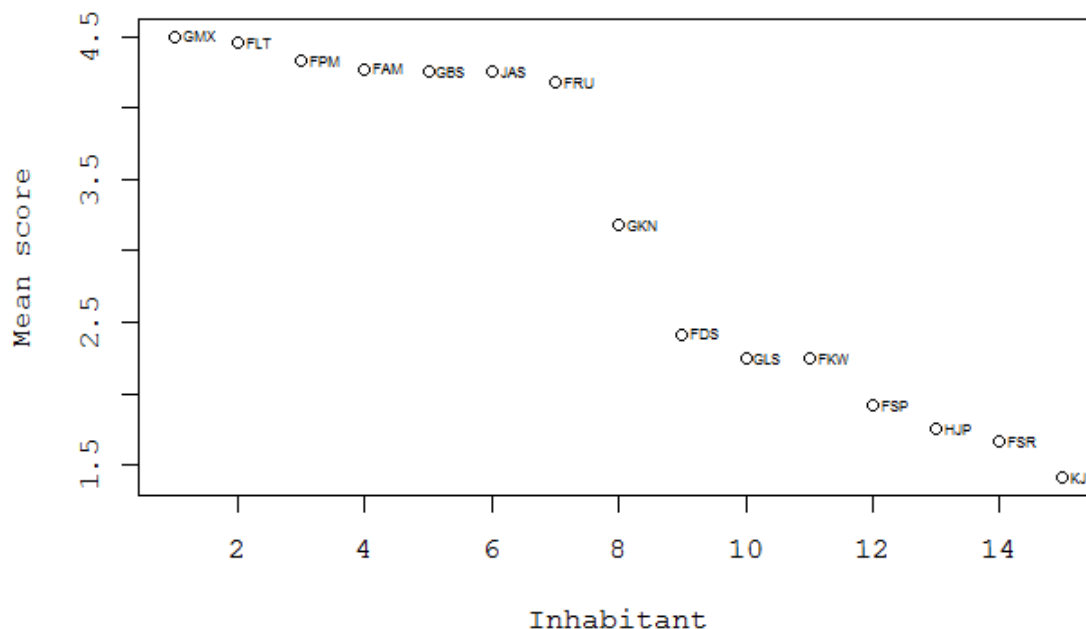
What is evident from the scatter plot above is that there seems to be a sharp distinction between two groups. The Qaqet use directed towards the 'higher' group was rated between 4.0 and 4.5, which translates to a point between 'mostly' and 'always'. The Qaqet use towards the 'lower' group ranges between 1.5 and 2.5, which lies between 'never' and 'rarely' and 'rarely' and 'sometimes'. Based on the results, it seems as if the respondents have a very clear idea of whom they would address in Qaqet and whom not. In my initial assumption on the underlying rationales that may drive participant-related code-switching (see Section 2.1.2 on p. 17), it was assumed that language competence and age could be those major factors. In the meantime, the demographic and sociolinguistic survey data has pointed to a set of variables which seem to be promising markers to differentiate the two groups mentioned above. These variables include the participants' 1. Self-perceived language competence, 2. Self-perceived ethnicity, 3. Place of birth and 4. Time span spent in Kamanakam. Thus, language competence is one of the assumed factors. However, age seems to only play a minor role, as participants of varying ages are among the 'higher' and the 'lower' group. Table 5.12 lists these variables (including age for comparison) for the two groups[5].

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[5] GKN is in the intermediate position between 'higher' and 'lower' group. She therefore seems to be an outlier, which is why I will not include her in the following analysis.

Table 5.12: Variables that divide along the lines of the surveyed participants' Qaqet use

No.	Variable	'Higher' group	'Lower' group
1	Self-perceived language competence	6 fluent in Qaqet 1 proficient in Qaqet 6 fluent in Tok Pisin 1 basic Tok Pisin competence	6 basic Qaqet competence 1 no Qaqet competence 7 fluent in Tok Pisin
2	Self-perceived ethnicity	7 as Qaqet	3 as Qaqet 2 as Tolai 1 as Mali 1 Unknown
3	Place of birth	4 born in Kamanakam 3 born in neighbouring Qaqet areas	2 born in Kamanakam 4 born in non-Qaqet areas 1 Unknown
4	Duration of residence in Kamanakam ward	7 longterm residents	5 longterm residents 1 short term resident 1 Unknown
#	Age	3 young adulthood 1 adulthood 3 old age	4 young adulthood 2 adulthood 1 old age

The first variable is self-perceived language competence. This is understood here as "the knowledge of linguistic and related communicative conventions that speakers must have to initiate and sustain conversational involvement" (Gumperz 1981: 325). A speaker's switching to the language for which s/he assumes the interlocutor to have sufficient competence would be what is referred to as 'bilingual convergence' in the language accommodation literature (e.g., Sachdev and Giles 2004). In bilingual contexts, "bilingual convergence would be expected to facilitate interpersonal and intergroup interaction where linguistic dissimilarities may otherwise be a barrier to communication" (Sachdev and Giles 2004: 367). From seven people within the 'higher' group, five participants rated their self-perceived productive Qaqet competence as 'fluent', one participant as 'proficient', whereas for one participant there is no survey data. However, from my observations, I would definitely consider her as being 'fluent'. Within the 'lower' group, in contrast, Qaqet competence is apparently lower compared to the 'higher' group: one participant has rated herself as having no productive Qaqet competence, two participants rated their productive Qaqet competence as being 'basic', another participant was rated as having 'basic' productive Qaqet competence, and for three participants there is unfortunately no such survey data available. From my observations, and from other variables which will be outlined below, I would consider the latter three's productive Qaqet competence as being 'basic'. Tok Pisin competence is somewhat comparable in both the 'higher' and the 'lower' groups. Based on this fact, it will be shown in the following section that Tok Pisin competence does play a distinguishing role in this context.

The second variable is self-perceived ethnicity. In social psychology, the ethnolinguistic

identity theory introduced by Giles and his colleagues (see Giles and Johnson 1981, Hilde-
brandt and Giles 1983, Beebe and Giles 1984, Giles and Johnson 1987) promotes language as
a distinctive marker of ethnic identity (see Section 1.1.2 on p. 7). Within the 'higher' group,
all seven people gave 'Qaqet' as their self-perceived ethnicity. Within the 'lower' group, in
contrast, the situation is much more diverse.

The third and fourth variable concern the place of birth and the time span someone has
lived in Kamanakam. Within the 'higher' group, four participants were born in Kamanakam
ward, whereas the other three were born in the neighboring Raunsepna ward, Puktas ward and
Ngangas ward, respectively. The three wards can be considered as places where Qaqet people
traditionally live. From Kamanakam, each of the three wards lies within a range of half a day
to a day's march. The three participants had already migrated to Kamanakam 25 to 35 years
ago, which makes them longtime Kamanakam residents. For people of the 'lower' group, the
birth place is more often located in non-Qaqet areas. The duration of residence, however, is
somewhat more comparable to that of the 'higher' group. From four participants born in a
non-Qaqet area, one immigrated to Kamanakam some 50 years ago, and another two came to
Kamanakam about 20 years ago, which makes them all longtime Kamanakam residents. The
last participant has lived no longer than 3 years in Kamanakam, and is thus a comparatively
recent immigrant to the community.

The last variable age is for comparison. Within the 'higher' group, four people belong to the
categories from adulthood to old age (54, 66, 69, c. 75) and three people are in their young
adulthood (24, 29, 38). Within the 'lower' group, three people belong to the categories from
adulthood to old age (49, 51, 79) and four people are in their young adulthood (20, 21, c. 22,
30)[6].

The most striking difference between the two groups seems to lie within the Qaqet compe-
tence of both groups. This is the only variable where a marked contrast to the 'higher' group
can be seen (fluent vs. basic). What is also noticeable for the 'higher' group is that the values
for the above-mentioned variables seem to cluster (1. mainly fluent in Qaqet, 2. Qaqet ethnic-
ity, 3./4. Long time Kamanakam resident who may originate from an adjacent Qaqet-speaking
area) compared to the 'lower' group. This suggests that if a person is fluent in Qaqet, s/he is
perceives herself/himself as Qaqet, and may then also be a long time resident in places where
Qaqet traditionally live.

Other than the third and fourth variable, the first and second variable are very much attitu-
dinal in nature. They address a person's self-perceived ability (language competence) and group
affiliation (ethnicity). Moreover, since the assessment on these two variables was given by the
rated participants themselves, it could be argued that it says very little about the interviewed
respondents' attitudes towards the quality of these variables. However, the respondents' rat-
ings have let to this two group distinction without their having any knowledge about the rated
persons' self-perceived language competence and ethnicity. Interestingly, the two variables par-
tially resonate with this distinction. In the following, the respondents' attitudes will be further
illuminated by making use of a set of attitudes interviews carried out with them.

Tok Pisin use

Figure 5.2 shows the mean value of the participants' self-perceived Tok Pisin use towards a
sample of 15 Kamanakam inhabitants.

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[6] Cf. Table 3.5 on p. 75 for Erikson's (1997) stages of psychological development.

Figure 5.2: Participants' Tok Pisin use towards a group of 15 Kamanakam inhabitants
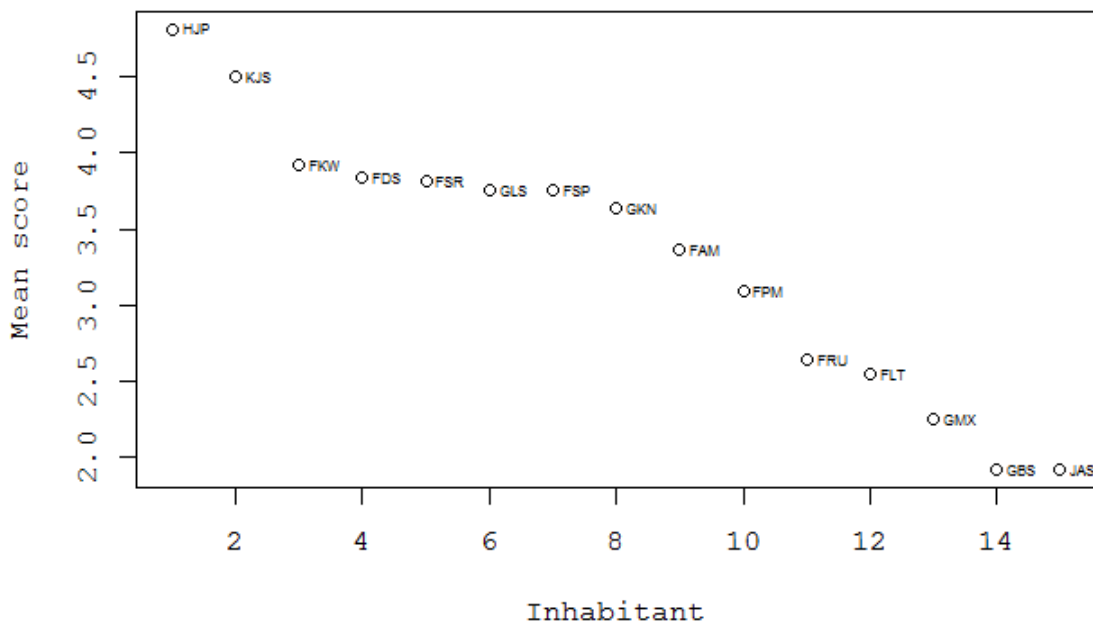
What is evident from Figure 5.2 is that the above identified 'higher' and 'lower' group are now in reverse order. For the former, the respondents' Tok Pisin use ranges between 1.5 and 3.5, which lies between 'never' and 'rarely' and 'rarely' and 'sometimes'. For the latter, the Tok Pisin use ranges between 3.5 and 5, which translates to being between 'sometimes' and 'mostly' and 'mostly' and 'always'. However, for the respondents' Tok Pisin use, the transition between the groups is somewhat more gradual. That is, the sharp distinction between the two groups, seen in Figure 5.1, is not evident here. From Table 5.12 in the previous section, it is known that while one inhabitant said that s/he has basic Tok Pisin competence, 10 participants consider themselves as 'fluent' in Tok Pisin. For four participants, there is no such data available. From my observations, I would consider the latter four's productive Tok Pisin competence as also 'fluent'. Therefore, Tok Pisin competence may not explain the gradual decrease in the respondents' Tok Pisin use. What seems more likely to be the case is that the more someone is associated with or perceived as being competent in Qaqet, the less they are addressed in Tok Pisin.

5.2.2 Participants' attitudes

The survey in the previous section on participants' Qaqet use towards a group of 15 Kamanakam inhabitants has already led to a distinction of the rated people in two groups: 1. The 'higher' group who are frequently addressed in Qaqet and 2. The 'lower' group who are in-frequently addressed in Qaqet. The analysis of the survey data has led to the identification of four variables (language competence, ethnicity, place of birth and the time a person has lived in Kamanakam). Subsequently, the participants of the survey were also interviewed about their attitudes towards each of the 15 people. The following analysis presents the results of these interviews. The participants' attitudes support some of the identified variables above. In addition, the participants

present new variables (language use, social role) that were not systematically recorded in the surveys[7]. For the analysis of the interviews, the existence of the 'higher' and 'lower' groups identified in the survey will be a superordinate point of reference. However, in the analysis, I focus on the attitudes towards members of the 'higher' group. Table 5.13 presents a list of 10 attitudes the participants expressed during the sociolinguistic interviews in regard to their use of Qaqet with members of the 'higher' group. Further, this table shows the variable each attitude can be linked to.

Table 5.13: Summary of participants' attitudes towards their use of Qaqet with members of the 'higher' group

No.	Attitude	Variable
1	Respondent's frequent use of Qaqet with the interlocutor	Use
2	Interlocutor's infrequent use of Tok Pisin	Use
3	Interlocutor's frequent use of Qaqet	Use
4	Interlocutor's Qaqet competence	Competence
5	Interlocutor's lack of Tok Pisin competence	Competence
6	Mutual intelligibility	Competence
7	Baining/Qaqet membership	Ethnicity
8	Place of origin	Place of birth
9	Interlocutor's old age	Age
10	*bikman* status	Social role

Table 5.13 shows that some of the participants' attitudes correspond to variables which have already been identified in the analysis of the survey on Qaqet use (see Table 5.12 on p. 147). They include language competence, ethnicity, place of birth and age.

However, one variable which was not considered in the analysis of the survey is related to language use, i.e., a person's customary use/non-use of Qaqet or Tok Pisin. This may include a participant either frequently using/not using Qaqet or Tok Pisin with an interlocutor, or observing a target person frequently using/not using either language. Therefore, it could be argued that the interlocutors' choice to use Qaqet or Tok Pisin is based on what Gumperz (1981: 329f.) describes as "tacit assumptions that were acquired through previous interactive experiences".

The other variable takes into account the *bikman* 'big man' status of a person, which mainly relates to a certain social role in the community. This social role is in turn reserved for older people (see variable age), which is why the two variables seem to form a cluster for these particular values (*bikman*, old). In the following, the attitudes presented in Table 5.13 are further discussed based on quotations from individual participants.

1-3. The first to third attitudes of the respondents refer to the fact that the former usually speak Qaqet with members of the 'higher' group, they assume that the members of the 'higher' group rarely use Tok Pisin or frequently use Qaqet. These arguments correspond to the 'use' variable.

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[7] The variables 'language competence', 'language use', 'ethnicity' can also be identified from the attitude interviews of the participants in the analysis of the topic-related switching (see Section 5.3.2 from p. 165). This again confirms their relevance for participant-related code-switching.

(57) *"tupla i save lo tokples, na mipla i save tokples tasol. tasol, tupla i save lo pidgin,*
      tasol, mipla i save tokples, tokples mipla i stori. taim mipla i sidaun stori, em bai
      mipla i stori lo tokples stret."

"These two know Qaqet and we usually speak Qaqet. These two know Tok Pisin, but we
usually speak Qaqet. When we sit and talk then we speak pure Qaqet."

(AttSitCS_PF_20180818A_1)

The statement above was made towards two older speakers (FLT, GMX) from the 'higher'
group, and shows that Qaqet use is perceived as a habitual behavior. It is likely that this habitual
behavior is due to various participant-internal factors, such as language competence.

(58) *"olsem em, em quiet meri na em i no tok pisin tumas. bai mi mas tok.. tokples yet."*

"She is a quiet woman and does not speak very much Tok Pisin. I have to speak Qaqet
with her."

(AttSitCS_PF_20180813B_1)

The statement above was made by FRU towards a younger speaker (JAS) from the 'higher'
group. In the language-use survey (see Section 5.2.1 on p. 145), FRU states that he 'always'
speaks Qaqet with JAS. Regarding Tok Pisin, the above statement suggests that during previous
interactions and/or observations, FRU has witnessed that this person is a quiet woman who
does not speak very much Tok Pisin. It can also be assumed that through previous interactions
and/or observations, he has become aware that the woman has a certain command of Qaqet.
These two points can be interpreted to satisfy the 'use' variable as a determining factor. In a
sociolinguistic survey, the speaker (JAS) has described her Tok Pisin competence as 'basic' and
her Qaqet competence as 'fluent'. Based on her self-perceived language competence and FRU's
statement, it can be assumed that her preferred language is Qaqet. FRU's statement that he
has to speak Qaqet with her is in accordance with JAS's assessment. FRU's statement can be
interpreted in the sense that this is what he believes to be more likely her preferred language.
Therefore, 'language preference' would be another determining factor following from observed
use.

(59) *"[...] mainly em ol sa tokples ya [...]."*

"They mainly speak Qaqet."

(AttSitCS_PF_20180813A_2)

The statement above was made by FSS towards two elder speakers (FLT, GMX) from the
'higher' group. In the language-use survey (see Section 5.2.1 on p. 145), FSS has stated that he
'always' speaks Qaqet with the two people he refers to in the above statement. Similarly, it can
be concluded that FSS has observed, during previous interactions and/or observations, that the
two predominantly speak Qaqet as opposed to Tok Pisin. This would satisfy the 'use' variable as
one of FSS's determining factors. However, this statement can also be interpreted in the sense
that he believes the two have a preference for Qaqet. This would make 'language preference'
another determining factor, following from observed interaction and/or observations. Similar
to the second attitude, FSS's switching to Qaqet in an encounter with one of the two individuals
could be described as bilingual convergence towards what he has observed to be their preferred
language: Qaqet. In a sociolinguistic survey, FLT and GMX have assessed themselves as 'fluent'
in Qaqet and Tok Pisin. Therefore, their preference for Qaqet cannot necessarily be attributed
to a lack of Tok Pisin competence, but would rather be driven by other factors.

4-6. The fourth through sixth attitudes that respondents have towards members of the 'higher' group is that the latter: know the Qaqet language very well, have a lack of Tok Pisin competence, and/or are Qaqet competent in a way that ensures mutual intelligibility. These arguments correspond to the first variable 'language competence' outlined in Table 5.12 on p. 147, where participants mainly provided 'fluent' ratings. It can be assumed that during previous interactions and/or observations, participants have witnessed the language competence of the members of the 'higher' group.

(60)   *"ol sa gut tru lo tokples, oke, bai mi mas tokples wantaim ol."*

"They know Qaqet very well. Okay, I have to speak Qaqet with them."

(AttSitCS_PF_20180813B_1)

The statement above was made by FRU towards two elder Qaqet speakers (FLT, GMX) from the 'higher' group. In the language-use survey (see Section 5.2.1 on p. 145), FRU has stated that he 'always' speaks Qaqet with FLT and GMX.

(61)   *"[...] bikos em i no save lo tok pisin."*

"Because she doesn't know Tok Pisin."

(AttSitCS_PF_20180813B_1)

The statement above was made by FSS towards a younger speaker (JAS) from the 'higher' group. In the language-use survey (see Section 5.2.1 on p. 145), FSS has stated that he 'always' speaks Qaqet with JAS.

(62)   *"[...] mi andastendim em, em andastendim mi [...]."*

"I understand her and she understands me."

(AttSitCS_PF_20180817B_1)

The statement above was made by FAM towards an elderly speaker (GBS) from the 'higher' group. In the language-use survey (see Section 5.2.1 on p. 145), FAM has stated that he 'always' speaks Qaqet with GBS.

7. The seventh attitude presented by some respondents relates their Qaqet use to the 'higher' group's Qaqet membership. The statement below was made by IRM towards an elder speaker (GBS) from the 'higher' group.

(63)   *"long wanem, mitupla em, mitupla baining."*

"Because we two are Baining."

(AttSitCS_PF_20180815_1)

In the language-use survey (see Section 5.2.1 on p. 145), IRM has stated that she 'always' speaks Qaqet with GBS. IRM's statement directly corresponds to the second variable 'ethnicity', identified in the language-use survey. As mentioned above, the people of the 'higher' group unanimously identify themselves as 'Qaqet'. Note that in the above quote, IRM refers to GBS and herself as 'Baining' which, in the direct context of a self-designation is often the case (see Section 3.2.1 on p. 69 for a discussion of the term Baining in relation to Qaqet).

8. The eighth attitude relates the Qaqet use to the 'higher' group's place of origin. The statement below was made by FAM towards two elderly speakers (FLT, GMX) from the 'higher' group.

(64) *"tupla, bikos em.., tupla blo hia [...]."*

"The two are from here."

In the language-use survey (see Section 5.2.1 on p. 145), FAM has stated that he 'always' speaks Qaqet with FLT and GMX. FAM's above statement directly corresponds to the third and fourth variable 'place of origin' and 'duration of residence', identified in the language-use survey. From the two elderly Qaqet speakers, one was born in Kamanakam, whereas the other is a longtime Kamanakam resident who originally is from Raunsepna, which is further inland. Still, FAM refers to both as being 'from here'. This raises the question of how to interpret 'from here' in this context? The inclusion of the particular resident could stem from her longtime residency in Kamanakam. However, 'here' could also be interpreted to include all places where Qaqet people traditionally live. This then would contrast to people stemming from other non-Qaqet speaking places.

9. The ninth attitude presented by some respondents relates their Qaqet use to a person's advanced age (corresponding to the variable 'age'). In the survey data, there is a rather uniform distribution of younger and older people in the 'upper' as well as in the 'lower' group. Thus, with the survey data alone, it is rather difficult to imagine how a target person's age may contribute to the respondents' Qaqet use. From the interviews, it becomes clear that the 'age' variable is most frequently mentioned when talking about the oldest member of the 'higher' group (GBS, c. 75 years old).

(65) *"mi.., mi save ting olsem em, bikos em i.., i lapun meri na.., bai mi yusi tokples. tokples, so em i.., tok pisin, em i no.., i no inap bai mi.. tok pisin tumas long en, em.., em i save i go lo tokples, olse na mi tokples lo em olgeta taim."*

"I think because she is an old woman, I use Qaqet. It would not be possible to speak Tok Pisin to her. She usually speaks Qaqet, which is why I always speak Qaqet to her."

In the language-use survey, FRU states that he 'always' speaks Qaqet with GBS. In the quote above, FRU relates his Qaqet use to GBS's preference for Qaqet and her lack of Tok Pisin competence.

(66) *"bikos em.., olsem, em lapun meri, na em sa lo tokples. em sa gut lo tokples na, taim mi bungim em, mi tokples long em."*

"She is an old woman and she knows Qaqet. She knows Qaqet well and when I meet her I speak Qaqet to her."

In the language-use survey, FST also states that he 'always' speaks Qaqet with GBS. In the quote above, FST relates his Qaqet use towards GBS to her very good Qaqet competence.

(67) *"[...] em i lapun tasol [...] olsem, mayb.., ating.., maybe em i sa lo tok pisin bat, em i no inap.., tok pisin blo bipo i narapla liklik lo tok pisin blo nau."*

"She is an elder and maybe she knows Tok Pisin, but she is incapable of it. The Tok Pisin from the past is different from today's Tok Pisin."

In the language-use survey, FAL states that he 'sometimes' speaks Qaqet with GBS. In the quote above, FAL relates his Qaqet use towards GBS to her lack of Tok Pisin competence. He further elaborates that she would not be able to properly understand today's Tok Pisin, as it has been heavily influenced by the Tok Pisin spoken in the towns.

The attitudes presented in the three quotes correspond to attitudes that have already been described above under the variables 'use' and 'competence' (see Tables 5.12 on p. 147 and 5.13 on p. 150). Bilingual convergence could particularly be at work as a way to be considerate towards the elderly. Similarly, Marley (2013: 117f.) has shown that Qaqet speakers in Raunsepna accommodate to older speakers of the community.

10. The 10th attitude relates the respondents' Qaqet use to the specific social roles of FLT and GMX from the 'higher' group, namely having the status of a *bikman* 'big-man, leader' in the community. Based on the respondents' statements below, it appears that *bikman* status, to a certain degree, overlaps with some of the variables identified above.

(68) *"olsem, olsem, tupla bikos em.., olsem ol bikman a, ol bikman blo ples olsem aqaqet [...]"*

      "the two are like the big-men, the big-men from the area like the Qaqet people."

      (AttSitCS_PF_20180814A_1)

In the language-use survey, FWS states that he 'always' speaks Qaqet with FLT and GMX. Based on FWS's quote above, to be a *bikman* means to be a Qaqet from the area.

(69) *"na em olsem ol i.., em ol.., olsem bai mi tok, qaqet stret. so, taim mitupla bung, em mitupla i tokples."*

      "They are proper Qaqet. So, when we meet, then we speak Qaqet."

      (AttSitCS_PF_20180814D_1)

In the language-use survey, FST states that he 'mostly' speaks Qaqet with FLT. Based on FST's quote above, to be a *bikman* means to be a Qaqet person.

(70) *"mipla olsem ol bikman, na mipla save lo tokples, em bai mipla i nonap tok pisin, em tokples tasol."*

      "we are like the big-men. We know Qaqet, we won't use Tok Pisin, [for us] it's only Qaqet."

      (AttSitCS_PF_20180815_1)

In the language-use survey, IRM states that she 'always' speaks Qaqet with FLT and GMX. Based on IRM's quote above, to be a *bikman* means to know the Qaqet language, to not use Tok Pisin and to only use Qaqet.

The attitudes presented in the three quotes correspond to attitudes that have been already described above under the variables language competence, language use, ethnicity and place of origin (see Tables 5.12 on p. 147 and 5.13 on p. 150).

5.2.3   Participants' staged language use

In the foregoing sections, the Qaqet/Tok Pisin speakers' attitudes regarding language use towards other members of the community were assessed with the help of a sociolinguistic surveys

and interviews. In Section 5.2.1 from p. 145 onward, it was shown that people were assessed partly along the lines of 'language competence', 'ethnicity' and to a certain degree, 'place of birth and duration of residence'. However, 'age' could not be detected as a differentiating variable. In Section 5.2.2 from p. 149 onward, it was confirmed by the respondents that the variables 'language competence', 'ethnicity', 'place of birth' and 'age' are among the variables crucial for their use of Qaqet. In addition, the interviews revealed that the respondents consider habitual language use and a person's *bikman* status to be governing variables of the participant.

This section shows that the Qaqet/Tok Pisin speakers' attitudes revealed in the foregoing sections are in line with the behavior Qaqet/Tok Pisin speakers show in a staged scenario. The latter was designed to provoke a situation where two conversing Qaqet/Tok Pisin speaking participants are confronted with different types of new participants. The types of incoming participants included those who provoked the most Qaqet / least Tok Pisin, and vice versa, in the two interlocutors who were already present. In this context, *topic* as being another potential governing factor for language use (see the following section) came into play.

Participant/topic factor – pre-test

In a pre-test, it was sought to separate topic from participant as a potential interfering factor, and vice versa. To achieve this, the pre-test was designed in such a way that the participants (without their actual knowledge) were asked to speak to minimal/maximal Qaqet/Tok Pisin-triggering arriving participants about minimal/maximal Qaqet/Tok Pisin-triggering topics (see Section 2.2.6 on p. 32 for a more detailed account of the method design).

Table 5.14 gives a summary and the results for this pre-test. The first column of Table 5.14 marks the number of the scenario, each of which lasted about 5 minutes. The second column presents the particular topic talked about, and specifies the arriving participant (AP); Ø stands here for no arriving participant. The third column summarizes the language use of the present participants. In this context, a switch to Tok Pisin is defined here as a categorical switch to Tok Pisin for one or more intonation unit(s). Tok Pisin insertions concern one-to-two Tok Pisin word insertions within a Qaqet frame (see Chapter 4 on p. 89 for further details). The fourth column summarizes the language use of the arriving participant if present.

The present participants NMS, FWS, IRM and FRU are Qaqet/Tok Pisin bilinguals. They are among the respondents of the sociolinguistic survey and interviews. The arriving participants include FSR (Tok Pisin-dominant) and FSN (Qaqet-dominant). The former is among the participants who were being rated in the sociolinguistic survey. FSR is a longterm Kamanakam resident (born and raised in a non-Qaqet speaking area), who is in the adulthood phase of her life. She reports herself to be fluent in Tok Pisin and to have no competence in Qaqet. Ethnically, she perceives herself as belonging to the Tolai people. In Figures 5.1 and 5.2, the mean of the respondents stated that they never/rarely address her in Qaqet and mostly in Tok Pisin. FSN is also a longterm Kamanakam resident, who is in the young adult phase of her life. The local registrar FSS reports her to be fluent in Qaqet and with basic Tok Pisin competence. Topics to talk about included 'machines' (Tok Pisin-dominant topic) which is used by Kamanakam Qaqet/Tok Pisin speakers as a cover term for all kinds of technical devices known/available to them and 'betel nut' (Qaqet-dominant topic) which is traditionally chewed in PNG.

For the chosen arriving participant, it was hypothesized that the present participants ideally would switch to Tok Pisin when FSR arrives, and keep talking in Qaqet when FSN joins the conversation. This is based on the assumption that the present participants would adjust their language use along the lines of the participant-related variables language competence, ethnicity and place of birth. For the chosen topics, it was hypothesized that betel nut would minimally, and machines maximally, provoke a switch to Tok Pisin or the use of Tok Pisin insertions. This

is based on the assumption that speakers would associate 'betel nut' with less and 'machines' with more novel concepts.

Table 5.14: Language use in the pre-test of the staged recordings for participant/topic factor

No.	Topic / AP	Language use: NMS, FWS	Language use: AP
1	Topic: Machines AP: Ø	Qaqet with 6 switches to Tok Pisin and 1 Tok Pisin insertion (1 *masin* 'machine')	n.a.
2	Topic: Machines AP: FSR	Tok Pisin	Tok Pisin
3	Topic: Betel nut AP: Ø	Qaqet with 7 switches to Tok Pisin and 3 Tok Pisin insertions (1 *maket* 'market', 1 *skul* 'school', 1 *taim* 'time')	n.a.
4	Topic: Betel nut AP: FSR	Tok Pisin	Tok Pisin
No.	Topic / Participant	Language use: IRM, FRU	Language use: AP
1	Topic: Machines AP: Ø	Qaqet with 12 Tok Pisin insertions (1 *gras kata* 'gras cutter', 4 *masin* 'machine', 1 *masta* 'master', 2 *petrol* 'petrol', 1 *stoa* 'store', 1 *sais* 'size', 1 *stori* 'story, to talk', 1 *taim* 'time')	n.a.
2	Topic: Machines AP: FSN	Qaqet with 11 Tok Pisin insertions (1 *gras kata* 'gras cutter', 5 *masin* 'machine', 1 *mobail* 'mobile', 1 *pat* 'part', 2 *redio* 'radio', 1 *taun* 'town')	Qaqet with 1 Tok Pisin insertion (1 *masin* 'machine')
3	Topic: Betel nut AP: Ø	Qaqet with 8 Tok Pisin insertions (5 *kakao* 'cocoa', 1 *maket* 'maket', 2 *taim* 'time')	n.a.
4	Topic: Betel nut AP: FSN	Qaqet with 1 Tok Pisin insertion (1 *kakao* 'cocoa')	Qaqet

Table 5.14 shows that regular switches to Tok Pisin are present for the first and third scenarios, in which NMS and FWS are talking about machines and betel nut among themselves. At this point, it cannot be further determined whether these switches are topic-related (for an analysis of topic-related switching see the following Section 5.3 from p. 162). However, my impression is that a good deal of these switches could be ascribed to acts of conversational code-switching (see the following Chapter 6 on p. 175). For scenarios two and four, in which the Tok Pisin-dominant participant FSR arrives, it can be observed that NMS and FWS make a categorical switch to Tok Pisin.

In the first and third scenario of IRM and FRU talking among themselves, the participants make use of Qaqet for both topics, with a number of Tok Pisin insertions. It can be assumed that the insertions used here constitute non-core vocabulary introduced to Qaqet to refer to novel concepts (see Section 4.3 on p. 93 for more details). What can be observed is that IRM and FRU make less use of this type of vocabulary when talking about betel nut. However, the numbers are too small to be able to draw any more substantial conclusions as to whether this is a trend that can support what is assumed to drive the topic factor. When FSN arrives at the scene, IRM and FRU do not switch to Tok Pisin, and instead keep talking in Qaqet.

The present participants' switching and non-switching to Tok Pisin after the arrival of FSR and FSN, respectively, support the above formulated hypothesis for the participant factor. NMS and FWS behave in accordance with the statements of the respondents in the sociolinguistic survey, that is, to never/rarely address FSR in Qaqet, and instead, mostly address her in Tok Pisin. The pre-test also supports the greater importance of the participant factor compared to the topic factor, as participants' language use does not substantially change from one topic to the other.

Participant factor – main test

In the main test, the participant factor was investigated in more detail, while the topic factor was controlled. In order to keep the topic factor constant, the test was carried out with two topics 'betel nut' and 'cooking' – the former already used in the pre-test – which were associated with very little to no code-switching to Tok Pisin. For the participant factor, two groups, each consisting of two present participants, were asked to talk successively to four arriving participants (see Section 2.2.6 on p. 34 for a more detailed description of the task).

Table 5.15 and 5.16 give a summary of the task as well its results. Other than the topic and set-up of the participants, the structure of this table is identical to that of Table 5.14. In contrast to the pre-test, each scenario of the proper test lasted 3 minutes instead of 5.

The present participants NMS, FLT, IRM and FRU are all Qaqet/Tok Pisin bilinguals, that is, fluent in both languages. NMS, IRM and FRU had already participated in this role in the pre-test. The arriving participants have different levels of Qaqet/Tok Pisin competence. FSN, who already participated in this role in the pre-test is a longterm Kamanakam resident, who is in the young adult phase of her life and who is reportedly fluent in Qaqet, and with basic competence in Tok Pisin. FGM was born and raised in Kamanakam, and is in the adulthood phase of his life. He has a self-perceived basic Qaqet competence, and considers himself to be fluent in Tok Pisin. He perceives himself as Qaqet ethnically. HSX was born and raised in Kamanakam, and is in the young adult phase of her life. She has a reportedly basic Qaqet competence, and is fluent in Tok Pisin. Finally, GMS was born and raised in the area, and is fluent in Qaqet and Tok Pisin.

For the arriving participants, it was hypothesized that the present participants ideally would switch to Tok Pisin when HSX and FGM arrive, and keep talking in Qaqet when FSN and GMS join the conversation. For the chosen topics 'betel nut' and 'cooking', it was hypothesized that they would minimally provoke a switch to Tok Pisin or the use of Tok Pisin insertions. As with the pre-test, the main test was based on the assumption that the present participants would adjust their language use along the lines of the participant-related variables language competence, ethnicity and place of birth. For the topic factor, it was assumed that the present speakers would associate the topics 'betel nut' and 'cooking' with non-novel concepts.

However, as will become evident from the proper test, FGM and HSX have a sufficient passive Qaqet competence to follow Qaqet conversations. Therefore, a continuum can be observed when it comes to Qaqet competences. FSR from the pre-test (see Section above) does not have

sufficient active/passive Qaqet competence, FGM/HSX have a sufficient passive Qaqet competence and FSN/GMS have sufficient active/passive Qaqet to follow/take part in Qaqet conversations. Accordingly, it can be observed that the participants:

- Switch from Qaqet to Tok Pisin in the presence of FSR, with FSR herself speaking Tok Pisin

- Show a different use of language, ranging from continuing with Qaqet to categorically switching to Tok Pisin in the presence of HSX, with HSX herself speaking Tok Pisin

- Continuing with Qaqet in the presence of FGM, with FGM himself speaking Tok Pisin

- Continuing with Qaqet in the presence of FSN/GMS, with FSN/GMS themselves speaking Qaqet

Table 5.15: Language use in the staged recordings for the participant factor (NMS, FLT)

No.	Topic / AP	Language use: NMS, FLT	Language use: AP
1	Topic: Betel nut AP: Ø	NMS: Qaqet with 1 Tok Pisin insertion (1 *maket* 'market')	n.a.
		FLT: Qaqet	
2	Topic: Betel nut AP: FSN	NMS: Qaqet	Qaqet
		FLT: Qaqet with 1 switch to Tok Pisin (*o man, tesin ya* 'man, it's the plantation'), 1 Tok Pisin insertion (1 *bek* 'bag')	
3	Topic: Cooking AP: Ø	NMS: Qaqet with 4 Tok Pisin insertions (1 *kuk* 'cooking', 2 *lotu* 'church, sunday', 1 *praim* 'to fry')	n.a.
		FLT: Qaqet with 5 Tok Pisin insertions (1 *kaukau* 'sweet potato', 3 *lotu* 'church, sunday', 1 *maket* 'market')	
4	Topic: Cooking AP: FGM	NMS: Qaqet with 2 switches to Tok Pisin (2 *oke* 'okay'), 3 Tok Pisin insertions (1 *kaukau* 'sweet potato', 1 *rais* 'rice', 1 *twenti toea* 'twenty toea')	Tok Pisin
		FLT: Qaqet with 1 Tok Pisin insertion (1 *sande* 'Sunday')	
5	Topic: Betel nut AP: Ø	NMS: Qaqet with 3 Tok Pisin insertions (1 *haus lotu* 'church', 1 *kakao* 'cocoa', 1 *maket* 'market')	n.a.
		FLT: Qaqet	

6	Topic: Betel nut AP: HSX	NMS: Tok Pisin	Tok Pisin
		FLT: CS between Qaqet and Tok Pisin	
7	Topic: Cooking AP: Ø	NMS: Qaqet with 1 Tok Pisin insertion (1 *rais* 'rice')	n.a.
		FLT: Qaqet with 1 Tok Pisin insertion (1 *tapiok* 'tapioca')	
8	Topic: Cooking AP: GMS	NMS: Qaqet with 2 Tok Pisin insertions (2 *stori* 'story, to talk')	Qaqet
		FLT: Qaqet	

What is evident from Table 5.15 is that in NMS and FLT's first, third, fifth and seventh scenarios, in which they talk among themselves, there is no inter-intonation unit code-switching. However, there are a number of mixed units with Tok Pisin insertions. The core-vocabulary term *maket* 'market' would have to be treated as a switch (which may or may not be on its way to becoming a borrowing). The other insertions can be considered as borrowings (see Chapter 4 from p. 89).

For scenarios four and six, in which the Tok Pisin-dominant participants FGM and HSX arrive, the following can be observed: for FGM, NMS mostly stays in Qaqet, but she makes two one-word switches (*oke* 'okay') to Tok Pisin, and uses a few Tok Pisin insertions, while FLT stays in Qaqet, and makes use of one Tok Pisin insertion. The Tok Pisin insertions constitute non-core vocabulary, and would therefore be treated as borrowings here. The two one-word switches of NMS can be interpreted as instances of conversational code-switching. They are used here, for example, to signal agreement (see Section 6.2.2 on p. 195) or to structure the talk in other ways such as to mark the beginning of a new turn. From the recording, it is evident that FGM's self-rated 'basic' Qaqet competence does not correspond to his passive competence. He can easily follow NMS and FLT conversing and addressing him in Qaqet, while he himself only speaks Tok Pisin in the entire scene. The fact that he is able to follow the Qaqet-speaking present participants, and can engage in the conversation proves that: 1. He has a sufficient passive Qaqet competence and 2. The present participants perceived him as having a sufficient passive Qaqet competence, and conclude that they can address him in Qaqet.

For HSX, NMS categorically switches to Tok Pisin, while FLT switches multiple times between Qaqet and Tok Pisin. NMS's categorical switch to Tok Pisin after the arrival of HSX supports the above formulated hypothesis for the participant factor. FLT's ongoing switching between Qaqet and Tok Pisin cannot be interpreted as clearly situational or conversational code-switching. The fact that FLT categorically switches back to Qaqet after HSX has left the scene, however, would partially support an interpretation of his switching behavior as being participant-related.

For scenarios two and eight, in which the Qaqet-dominant participants FSN and GMS arrive, the following can be observed: for FSN, NMS stays in Qaqet, while FLT mostly stays in Qaqet with one short switch to Tok Pisin (*o man, tesin ya* 'man, it's the plantation') and one Tok Pisin insertion (*bek* 'bag'). FLT's switch to Tok Pisin can be interpreted here as being conversational, possibly with a language play (see Section 6.3 on p. 203) or completion function. For the latter,

one could think of it being used in the sense of Sebba (1993: 109ff.) (see Section 6.7.2 on p. 264). FLT's Tok Pisin insertion *bek* 'bag' is considered here to be non-core vocabulary, and therefore to be a borrowing.

   For HSX, FLT continues speaking in Qaqet. NMS also continues with Qaqet, but twice uses the Tok Pisin insertion *stori* 'story, to talk'. The latter is considered a core-vocabulary term. According to Myers-Scotton, it should therefore have started as a code-switched term. However, at this point, it is unclear to which degree the term may or may not already have displaced its Qaqet counterparts in Kamanakam.

Table 5.16: Language use in the staged recordings for the participant factor (IRM, FRU)

No.	Topic / AP	Language use: IRM, FRU	Language use: AP
1	Topic: Betel nut AP: Ø	IRM: Qaqet FRU: Qaqet with 2 Tok Pisin insertions (2 *taim* 'time')	n.a.
2	Topic: Betel nut AP: FSN	IRM: Qaqet FRU: Qaqet with 3 Tok Pisin insertions (3 *kakao* 'cocoa')	Qaqet with 1 Tok Pisin insertion (1 *haus sik* 'aid post')
3	Topic: Cooking AP: Ø	IRM: Qaqet FRU: Qaqet, 2 switches to Tok Pisin, 1 Tok Pisin insertion (1 *haus kuk* 'cooking house')	n.a.
4	Topic: Cooking AP: FGM	IRM: Qaqet FRU: Qaqet with 1 switch to Tok Pisin	Tok Pisin
5	Topic: Betel nut AP: Ø	IRM: Qaqet FRU: Qaqet with 2 switches to Tok Pisin (2 *oke* 'okay')	n.a.
6	Topic: Betel nut AP: HSX	IRM: Qaqet with 1 Tok Pisin insertion (1 *daka* 'pepper') FRU: Qaqet with 1 switch to Tok Pisin (1 *oke* 'okay')	Tok Pisin
7	Topic: Cooking AP: Ø	IRM: Qaqet FRU: Qaqet with 1 switch to Tok Pisin	n.a.

8	Topic: Cooking	IRM: Qaqet		Qaqet
	AP: GMS			
		FRU: Qaqet		

What is evident from Table 5.16 is that in the first, third, fifth and seventh scenarios of IRM and FRU talking, they make use of Qaqet for the topic 'betel nut' with two Tok Pisin insertions and three one-word switches (*oke* 'okay') to Tok Pisin. The insertions concern a non-core term *taim* 'time', which according to Myers-Scotton, could be considered to be borrowings. For the Tok Pisin discourse marker *oke*, the same interpretations applies as already made for NMS in scenario 4 (see Table 5.15 above). For the topic 'cooking', IRM keeps speaking in Qaqet, while FRU occasionally (n = 3) switches to Tok Pisin, and makes use of one Tok Pisin insertion *haus kuk* 'cooking house'. The former seem to be conversational switches – here probably made for emphasis. However, they cannot be analyzed in further detail here. The Tok Pisin insertion *haus kuk* is considered to be part of the core vocabulary. To my knowledge, there is no widely used Qaqet equivalent for this term in Kamanakam. This could point to the displacement of the Qaqet word in favor of the Tok Pisin term, and thus borrowing. However, further analysis is needed to make a more definite statement about its status.

For scenarios four and six, in which the Tok Pisin-dominant participants FGM and HSX arrive, the following can be observed: for FGM, IRM keeps speaking in Qaqet, while FRU mostly does the same apart from one short switch of two-to-three intonation units to Tok Pisin. The latter cannot be further analyzed here. For HSX, IRM continues with Qaqet, and makes use of one Tok Pisin insertion *daka* 'pepper', while FRU, other than a switch for the Tok Pisin discourse marker *oke* 'okay', also keeps speaking in Qaqet. IRM's insertion can be considered a core term, which would be on the continuum between code-switching and borrowing.

For scenarios two and eight, in which the Qaqet-dominant participants FSN and GMS arrive, the following can be observed: for FSN, IRM and FRU keep speaking in Qaqet. FRU makes use of the Tok Pisin insertion *kakao* 'cocoa', which has been identified as non-core vocabulary (see Section 4.3 on p. 93). According to Myers-Scotton, the term is therefore located somewhere on the continuum between code-switching and borrowing. For GSM, both IRM and FRU continue with Qaqet.

IRM and FRU's preference for Qaqet for the Tok Pisin and well as the Qaqet-dominant participants does not support the participant hypothesis as clearly as with the other group (see Table 5.15 above). One way of explaining IRM and FRU's behavior may be as follows: the recordings show that all arriving participants have a passive Qaqet knowledge to a degree that they can partake in a conversation where IRM and FRU mostly speak Qaqet. Therefore, for IRM and FRU there seems to be no need for a categorical switch to Tok Pisin deriving from an actual or a perceived lack of Qaqet competence in their interlocutors. In addition, sociolinguistic interviews with IRM indicate that she seems to prefer the use of Qaqet. It can thus be speculated that through repeated interactions with the Tok Pisin-dominant participants HSX and FGM, IRM and FRU probably know that they will be understood by HSX and FGM when they speak Qaqet.

5.2.4 Summary and conclusion

It was assumed (see Section 2.1.2 on p. 17) that 'language competence' and 'age' are the main variables that lead to bilingual accommodation as the basis for the participant factor of situational code-switching. The analysis of participants' self-perceived language use has supported 'language competence' as the predominant variable. The other variables 'ethnicity', 'place of birth' and 'duration of residence' seem to cluster with 'language competence'. Sociolinguistic

survey data associated with these variables point to a preferential (between 'mostly' and 'always') Qaqet use if the interlocutor is perceived to have the following characteristics: 1. Mainly fluent in Qaqet, 2. Qaqet ethnicity, 3. Long time Kamanakam resident who may originate from an adjacent Qaqet-speaking area. The age of the rated people varied from adolescents/young adulthood to old age across the three identified variables. Therefore, the 'age' variable does not seem to play a role.

The attitudes of the participants collected in sociolinguistic interviews support the three identified variables 'language competence', 'ethnicity' and 'place of birth'. In contrast to the analysis of the survey, based on what can be inferred from the participants' comments, 'age' also plays a role. This means that a Qaqet/Tok Pisin speaker may accommodate to the preferred language of persons as 'old' perceived in order to be considerate towards the elderly. In addition, the interviews point to 'use' and an interlocutor's 'social role' as potential variables leading to accommodation to Qaqet. For the 'use' variable, this is analyzed as being caused by a habitual use of Qaqet with members of the Qaqet-dominant group ('higher' group). For 'social role', accommodation to Qaqet is present with certain community members, who are associated with a *bikman* 'big-man, leader' status. The latter, however, overlaps with other variables that can be associated with *Qaqetness*, namely Qaqet 'competence', Qaqet 'use', Qaqet 'ethnicity' and Kamanakam or another place where Qaqet people traditionally live as their 'place of birth'.

For the staged scenario, the pre-test as well as the main test partially support the analysis based on participants' self-perceived language use and the sociolinguistic interviews. For certain constellations of already present and arriving participants, a categorical switch of the present participants to Tok Pisin can be observed. In these cases, the one quality the arriving participants all lack is a sufficient Qaqet competence. Therefore, one could argue that the arriving participant's Qaqet 'competence' established through habitual 'use' plays a more important role compared to other identified variables. However, the present participants do not necessarily make a categorical switch to Tok Pisin for every arriving participant, who rated herself/himself as having a 'basic' Qaqet competence. This indicates that the present participants' and arriving participants' perceptions of the latter's Qaqet competence do not necessarily match. In this regard, a distinction has to be made between active and passive competence. What could be observed is a continuum ranging from 1. Not having sufficient active/passive Qaqet competence, 2. Having a sufficient passive Qaqet competence to 3. Having sufficient active/passive Qaqet to follow/take part in Qaqet conversations. As a result, categorical switching to Tok Pisin could only be observed for the first type of arriving participants. For the second type, responses ranged from staying in Qaqet to switching to Tok Pisin. For the third type, present participants invariably kept speaking Qaqet.

5.3 Topic

Studies in different cultural settings have shown how topic can be a factor in the language being used (e.g., Ervin-Tripp 1964: 97f.; Kulick and Stroud 1990: 210; Rubin 1962: 56; Sankoff 1968: 201). Appel and Muysken (2005: 118) refer to topic-related code-switching as "the one that bilingual speakers are most conscious of". According to the two researchers, there are two types of topic-related code-switching. As for the first type, "[c]ertain subjects may be more appropriately discussed in one language, and the introduction of such a subject can lead to a switch" (2005: 118). For the second type, "a specific word from one of the languages involved may be semantically more appropriate for a given concept" (2005: 118). From a structural perspective, the two types of topic-related code-switching can be mapped to the structural types of code-switching identified in this study, that is, code-switching between intonation units and

mixed intonation units (see Section 2.4.3 on p. 51). For mixed intonation units, this study shows that a good deal of other-language insertions can be interpreted as borrowings (see Section 4.6 on p. 114), rather than as instances of intra-intonation unit code-switching.

In PNG, Sankoff (1968: 201) has observed how certain topics can be reserved for different languages among the Buang people, namely "Yabem for theological points; Neo-Melanesian [i.e., Tok Pisin] for general discussion and official matters; Buang for discussion during preparatory work, cooking, etc.". For the Gapun people, Kulick and Stroud (1990: 210) have observed how topic is usually not a determining factor "with the single significant exception of religion". For the latter, they state that "every aspect of religion – mass, private prayer, talking about religion – is verbalized exclusively in Tok Pisin" (1990: 230).

Based on sociolinguistic surveys, this section shows how participants associate more modern topics with less Qaqet use as compared to more traditional topics. With the help of sociolinguistic interviews, I show how the reduced use of Qaqet can be explained with topic-related variables, along with other factors such as participant and setting. Staged audiovisual data were collected for the analysis of topic-related situational code-switching (see Section 2.2.6 on p. 36). However, these data have not yet been analyzed, and are therefore not used in this study.

5.3.1 Participants' self-rated language use

Survey data: Qaqet use

Table 5.17 lists the 19 assessed topics with information on whether they are more traditional or more modern. Traditional topics are defined here as those that were already relevant before the missionary and/or colonial period, while modern topics only became relevant after that time[8]. This non-exhaustive list of topics has been identified in audiovisual recordings and participant observation of Qaqet/Tok Pisin speakers interacting with each other in public and non-public settings.

Table 5.17: Topics for the language use survey

No.	Topic	Traditional/Modern	Comments
1	Cooking	Traditional	Novel concepts: names for fruits, vegetables and cooking utensils
2	Betel nut	Traditional	
3	House work	Traditional	Novel concepts: names for cleaning/ maintaining gear
4	Eating	Traditional	
5	Garden work	Traditional	Novel concepts: names for crops and working gear

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[8] An exception is the topic *bride price*, which is related to the ongoing settlement of Tolai people in traditional Qaqet areas as well as the increasing number of mixed marriages between them. Here, *modern* is understood in the sense that bride price has become more and more relevant in the last 40 or so years.

6	Giving orders to children	Traditional	
7	Family	Traditional	
8	Washing clothes	Traditional	Novel concepts: names for washing utensils
9	Selling garden products (community markets)	Traditional	Novel concepts: names for crops
10	Stories from the past	Traditional	
11	Fruits	Traditional	Novel concepts: names for fruits
12	(Audiovisual) recordings	Modern	
13	Machines	Modern	
14	Shopping (store)	Modern	
15	Church stories	Modern	
16	Selling sth. on the market (town markets)	Modern	
17	Animals	Traditional	Novel concepts: names for non-native animals
18	Giving orders to adults	Traditional	
19	Bride price	Modern	Modern in the sense that the bride price is a customary behavior introduced to the Qaqet people via the Tolai people

What is evident from Table 5.17 is that novel concepts (fruits, vegetables, gear, etc.) have been introduced to a number of what appear to be more traditional topics (e.g., cooking, house work, garden work, etc.). Figure 5.3 shows the mean values of Qaqet use of nine participants for the above listed 19 discourse topics, sorted from the highest to the lowest score. That is, each point represents the mean of the rated Qaqet use of nine respondents for one of the 19 topics. The latter are represented by a number (1-19) as given in Table 5.17 above.

Figure 5.3 shows that traditional topics (e.g., cooking, betel nut, house work, garden work, etc.) are more often associated with Qaqet use that lies between 'sometimes' and 'mostly'. More

Figure 5.3: Mean value for the participants' self-perceived Qaqet use towards a set of 19 topics
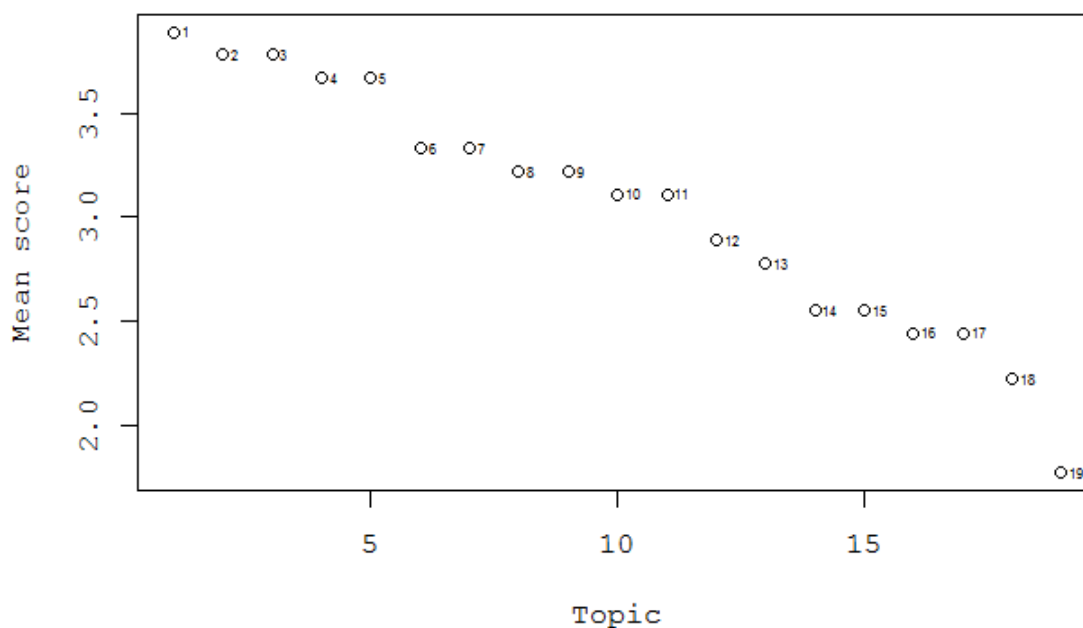
modern topics (e.g., recordings, machines, shopping (store), etc.), in contrast, are associated with a Qaqet use that lies between 'rarely' and 'sometimes'. The traditional topics 'animals' and 'giving orders to adults' constitute an exception here, and therefore cannot be explained along the lines of the traditional/modern distinction.

5.3.2 Participants' attitudes

The participants of the topic survey were subsequently interviewed to share their attitudes about their rating of particular topics (see Section 2.2.3 on p. 26 for a more detailed account of the methodology). The following analysis presents the results of these interviews. The analysis of the interviews confirms that Tok Pisin is used for more modern and Qaqet for more traditional topics, while other factors such as participant and setting are also relevant. A more frequent Tok Pisin use for more modern topics can be associated with a lack of sufficient 'vocabulary' (see Section 4.3 on p. 93) to address such topic in monolingual Qaqet and/or with the fact that the topic covers an otherwise unknown 'speech genre' in Qaqet language. Hymes (1967: 25) defines genre as "categories or types of speech act and speech event: conversation, curse, blessing, prayer, lecture, imprecation, sales pitch, etc.". According to Biber and Conrad (2009: 34), speech genres are "governed by specific conventions, generally recognized by members of a culture, and so the genre itself is named within the culture". From the participants' statements, it cannot be conclusively concluded to what extent the switch to Qaqet is stable throughout the whole act of talking about a topic or whether more frequent switches between Tok Pisin and Qaqet can possibly occur.

In the interviews, it was not possible to control for the distinction between talk-about-action (e.g., the language one uses when talking about how to wash clothes) and talk-in-action (e.g.,

the language one uses when actually washing clothes). The latter may have been particularly triggered in cases where the topic constitutes an action in itself (e.g., giving a command to sb., washing clothes, etc.). Similarly, for certain topics referring to objects (e.g., machines, fruits, etc.) the distinction between talking-about-object and talking-while-using-object was not controlled for during the interviews. This will be taken into account in the presentation of the analysis by making clear how the speakers have approached a particular topic based on the distinctions just made.

Table 5.18 presents a list of nine attitudes the participants expressed during the sociolinguistic interviews when talking about their use of Qaqet/Tok Pisin in regard to 14 of the 19 topics. The 14 topics were singled out as participants rated them as being strongly associated with, or not associated with, the use of Qaqet[9]. In the columns 'traditional topic(s)' and 'modern topic(s)', the attitudes are separated along the lines of whether they were associated with more modern or more traditional topics. Next to each topic, a lowercase letter indicates how participants approached a topic, that is, whether they talked about it as if they were acting out this topic (a1: 'talk-in-action' or a2: 'talk-while-using-object') or as if they were in a situation where they talk about this topic (b1: 'talk-about-action' or b2: 'talk-about-object'). In cases where participants approached a certain topic differently (i.e., acting out vs. talking about a topic) these topics are separated by a comma (e.g., a1, b1). In case it could not be clearly determined whether a participant was approaching a topic in the, acting out, or talking about, manner, this is noted via a forward slash (e.g., a2/b2). In the last column, the table shows the variable and the type of code-switching each attitude can be linked to.

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[9] The five topics not included here concern the traditional topics: eating, house work, family, washing clothes and animals.

Table 5.18: Summary of participants' attitudes towards the use of Qaqet/Tok Pisin regarding a set of 14 topics

No.	Attitude	Traditional topic(s)	Modern topic(s)	Variable / CS type
1	Lack of specific vocabulary to address this topic	• Fruits (a2/b2)	• (Audiovisual) recordings (b1) • Machines (b2) • Church stories (a1) • Bride price (b1)	Vocabulary / Topic-related CS to Tok Pisin
2	Topic not part of culture / not spoken about		• Bride price (a1/b1, b1)	Speech genre / Topic-related CS to Tok Pisin
3	Interlocutor's lack of Qaqet competence	• Cooking (a1) • Garden work (a1) • Selling garden products (a1) • Stories from the past (a1) • Giving orders to adults (a1)	• (Audiovisual) recordings (a1) • Machines (a1) • Shopping (store) (a1) • Church stories (a1) • Selling sth. on the market (a1) • Bride price (a1, a1/b1)	Competence / Participant-related CS to Tok Pisin
4	Accommodate to Tok Pisin use		• Church stories (a1)	Use / Participant-related CS to Tok Pisin
5	Qaqet membership	• Betel nut (b2)		Ethnicity / Participant-related CS to Qaqet
6	Teach children / interlocutor Qaqet	• Betel nut (a2/b2) • Giving orders to children (a1) • Stories from the past (a1)		Language learning / Language socialization-related CS to Qaqet
7	Qaqet use in the home	• Giving orders to children (a1)		Home / Setting-related CS to Qaqet
8	Tok Pisin use in public		• Selling sth. on the market (a1)	Public / Setting-related CS to Tok Pisin
9	Customary use of Tok Pisin		• Shopping (store) (a1)	Socialization / Setting-related CS to Tok Pisin

Table 5.18 shows that participants' attitudes can be associated with variables which can ultimately be linked to topic-, participant- and setting-related code-switching. This includes variables already identified as being associated with participant-related code-switching 'competence' , 'use' and 'ethnicity' (cf. Table 5.13 on p. 150). The first and second attitude point to variables 'vocabulary' and 'speech genre' that are associated with topic-related code-switching. Here, the hypothesized distinction between 'traditional' and 'modern' topics can be directly associated with these variables, and thus topic-related code-switching. In the following, the attitudes presented in Table 5.18 will be further discussed based on quotations from individual participants.

1. The first attitude was presented by some respondents towards five of the 14 topics (see Table 5.18 on p. 167). According to Appel and Muysken, topic-related switching either occurs "because they do not know the word for it in the other language, or because the language chosen is more fit for talking about a given subject" (2005: 118). As stated above, this could in principle include inter- and intra-intonation unit code-switching. From the survey and interview data, it cannot be directly inferred to what degree topic-related switching accompanies inter-intonation unit switches to Tok Pisin. For 'church stories', FST's comment indicates that inter-intonation unit switching is an option. He is referring to the topic in a 'talk-in-action' manner (a1):

(71)   *"stori lo baibel ya, mi lukim olsem lo tok pisin yet, i.. i.. eksplenim gut o disla kain.*
        so, lo tokples, yu ken eksplenim, tasol, olsem, bai ol i no inap kisim gut, bai yu
        eksplen gen lo pidgin."

        "As for Bible stories, I think Tok Pisin explains it well. You can explain it in Qaqet, but
        they won't understand it well. Which is why you will explain it again in Tok Pisin."
                                                                        (AttSitCS_TF_20180818B_1)

The analysis of the status of the mixed intonation units shows that they are predominantly non-core vocabulary and thus borrowings (see Section 4.6 on p. 114). Topics for which the same attitude was presented by other respondents include the 'traditional' topic 'fruits' as well as the 'modern' topics '(audiovisual) recordings', 'machines', 'church stories' and 'bride price'. As for 'fruits', the respondents explain that the reason for the use of Tok Pisin fruit names is the fact that there are no apparent equivalents in Qaqet. Following Myers-Scotton's approach, the distinction of 'traditional' and 'modern' topics can be assumed to mainly include the use of core and non-core lexical Tok Pisin material, respectively. Therefore, non-core Tok Pisin-inserted nouns and verbs would have to be treated predominantly as borrowings in Qaqet. Accordingly, topic-related intra-intonation unit code-switching would not be the right approach to describe these mixed units.

The statement made by FRU below towards the 'modern' topic '(audiovisual) recordings' indicates the use of mixed units. His statement can be analyzed as 'talking-about-action' (b1):

(72)   *"lo mipla i.., tokples i no.., kamap ples klia tumas, lo mipla. i nogat wanpla tokples i*
        kamap strong, bai mipla i rait lo tok.. tokples. olsem na..., bai mipla i..., sampla
        taim, bai mipla puti lo pidgin, sampla taim, em bai tokples, i no tumas lo disla. "

        "Qaqet did not reveal itself very much to us. There is no Qaqet [expression] that has
        emerged strongly which we could write in Qaqet. That's why we sometimes will put it
        in Pidgin, and sometimes it will be Qaqet, the latter not that much though."
                                                                        (AttSitCS_TF_20180815_2)

In the above statement, FRU explains the use of Tok Pisin for the topic '(audiovisual) recordings' as a matter of lexical need (and/or other phenomena) for which he feels that the Qaqet language has no equivalent he is aware of. In principle, this attitude would be in accordance with what Appel and Muysken (2005: 118) refer to as topic-related switching proper. However, FRU probably is referring here to non-core vocabulary.

2. The second attitude was presented by three respondents towards one ('bride price') of 14 topics. They explain their rare use of Qaqet by saying that it is a non-existing speech genre among Qaqet people. According to interviews with Kamanakam Qaqet speakers, the 'bride price' is a culturally specific feature of the neighboring Tolai people. As the name 'bride price' implies, (the family of) the groom has to pay a certain amount of money in order to seal the marriage. In contrast, in the Qaqet tradition, marriage is sealed by exchanging food (taro) with one another. When asking FST if it would be easy or difficult to talk about 'bride price' in Qaqet he made the following statement:

(73) *"em bai, mi tok olsem, i ting em bai.. i.. i hat. bikos mipla i lainim lo mipla yet. bai hat lo toktok.. long en. bikos mipla long hia, nogat braitprais."*

"I think it will be difficult, because we learned [the wedding customs] from our people. It will be difficult to talk about it, because we from here don't have a bride price."

(AttSitCS_TF_20180818B_1)

Similarly, when asking IRM a similar question, that is, if it would be easy or difficult for her to discuss 'bride price' in Qaqet with another fellow Qaqet (FSS), she stated that she would use Tok Pisin and Qaqet:

(74) *"supos em i marit lo narapla hap, em olsem bai mipla.. sidaun, den bai mipla i toktok lo.. braitprais, olsem long sait lo meri blong en. tok pisin, tokples."*

"If he would marry someone from the outside, we would sit together and talk about bride price regarding his [future] wife. [Using] Tok Pisin, Qaqet."

(AttSitCS_TF_20180819B_1)

From FST's attitude towards 'bride price' and other interview data, it can be inferred that traditionally the 'bride price' custom did not exist among Qaqet people. It therefore is likely to have been a non-existing speech genre, which is also evident from the fact that FST considers it as difficult to talk about 'bride price' in Qaqet. IRM states that if it were to be discussed between Qaqet speakers (due to an upcoming mixed marriage), she would use Tok Pisin and Qaqet. The two presented attitudes suggest that for Qaqet/Tok Pisin, speakers Tok Pisin is at times the more suitable language to talk about 'bride price', which then leads to a switch from Qaqet to Tok Pisin. In this sense, their attitudes would be in accordance with Appel and Muysken's definition of topic-related code-switching triggered when "the language chosen is more fit for talking about a given subject" (2005: 118).

3. The third attitude was presented by some respondents with regard to nine of 14 topics (see Table 5.18 on p. 167). The attitude explains that the use of Qaqet, which the respondents rated as 'rare' or 'never', is due to the lack of Qaqet competence of their interlocutors. Thus, the attitude corresponds to the 'competence' variable of the participant factor of situational code-switching, already identified in the previous Section (see Table 5.13 on p. 150). The 'competence' variable can be associated with what is described as "bilingual convergence" in the language accommodation literature (e.g., Sachdev and Giles 2004). The respondents consider children, non-Qaqet speakers and people from mixed marriages (i.e., one Qaqet parent and one

non-Qaqet parent) be those generally lacking Qaqet competence. In the following statement, FWS refers to his 'rare' use of Qaqet when talking to children about 'garden work'. His statement can be analyzed as 'talk-in-action' (a1):

(75)   *"olsem, lo.., taim mi wok wantem…, mi wok lo mangi, em i tok pisin."*

       "When I work with children, it is Tok Pisin."

                                                                      (AttSitCS_TF_20180818A_1)

In contrast, when asked what language FWS would use in this context when speaking to FSS (fluent in Qaqet) and others like him, FWS states that he would use Qaqet. In the next statement, FWS refers to his 'rare' use of Qaqet when talking to non-Qaqet speakers about 'stories from the past'. His statement can be analyzed as 'talk-in-action' (a1):

(76)   *"mi sidaun wantem…, man we.., olsem, man blo tok pisin, bai i no tumas. mitupla qaqet, bai mitupla stori i… stori gohet… tokples."*

       "When I sit with a Tok Pisin man, it will be not much [Qaqet]. If we two are Qaqet, then the story will be in Qaqet."

                                                                      (AttSitCS_TF_20180818A_1)

In the last statement, IRM says that she 'never' uses Qaqet when talking to speakers of mixed heritage about 'selling garden products'. Her statement can be analyzed as 'talk-in-action' (a1):

(77)   *"mipla planti.. mipla mix wantem ol, sampla na mi…, mi no save tokples tumas. a tok pisin tumas, mi sa tok pisin tasol, tokples nogat."*

       "A lot of us mix with them [non-Qaqet]. Some I usually don't address in Qaqet very much, I speak only Tok Pisin, no Qaqet."

                                                                      (AttSitCS_TF_20180819B_1)

4. The fourth attitude was presented by two respondents with regard to one ('church stories') of the 14 topics. The attitude explains the respondents' 'rare' use of Qaqet as being use-related. In the below statement, NMS refers to her 'rare' use of Qaqet when talking about 'church stories'. Her statement can be analyzed as 'talk-in-action' (a1):

(78)   *"olsem, sampla taim bai…, kisim wanem mipla wokim lotu lo tok pisin, na bai mi kam bihain."*

       "Sometimes [they] will turn what we are doing in the church to Tok Pisin, and I will follow."

                                                                      (AttSitCS_TF_20180817B_1)

In the above statement, NMS states that she switch to Tok Pisin when others use Tok Pisin in the church. NMS's presented attitude corresponds to the 'use' variable of the participant factor of situational code-switching, already identified in the previous section (see Table 5.13 on p. 150). Similar, to the 'competence' variable, it can be described as an act of 'bilingual convergence'.

5. The fifth attitude was presented by one respondent towards one ('betel nut') of the 14 topics. The attitude explains the respondent's use of Qaqet as being related to his Qaqet membership. In the following statement, FWS says that he 'always' uses Qaqet when talking about 'betel nut'. His statement can be analyzed as 'talk-about-object' (b2):

(79)   *"bikos mi blong aqaqet"*

“because I’m from the Qaqet people.”

(AttSitCS_TF_20180818A_1)

In the above statement, FWS cites his Qaqet membership as the reason for his use of Qaqet when talking about betel nuts. FWS’s stated attitude thereby corresponds to the ‘ethnicity’ variable of the participant factor of situational code-switching, already identified in the previous section (see Table 5.13 on p. 150).

6. The sixth attitude was presented by two respondents towards three (‘betel nut’, ‘giving orders to children’, ‘stories from the past’) of the 14 topics. All three respondents had said that they spoke Qaqet most of the time. The attitude is related to the variable ‘language learning’. In the below statement, FAL says that he ‘mostly’ uses Qaqet when talking to others about ‘stories from the past’. His statement can be analyzed as ‘talk-in-action’ (a1):

(80)   *"taim mi stori long ol, na mi.. mi tokples planti taim, long stori tubuna, bikos, mi laikim ol i save lo wanem samting mi kolim. em, so yet ol save, i mas save olsem, o disla samting ya, lo tokples ol i kolim olsem ya. kain olsem, wara o [...]"*

“When I’m telling stories from the past to them, I speak Qaqet most of the time. Because I want them to know how I call things. So that they know: o this thing, they call like this in Qaqet. For example, like water or [...].”

(AttSitCS_TF_20180824_1)

In the next statement, FAL says that he ‘mostly’ uses Qaqet when talking to his children about ‘betel nut’. His statement can be analyzed as ‘talk-while-using-object’ and/or ‘talk-about-object’ (a2/b2):

(81)   *"meri pikinini blo mi em, bikos, lo mi laikim ol i save lo tokples, mi mas tokples long ol blo buai. olgeta taim bai olsem, mi traim lo wokim ol bai ol i save lo tokples. bikos, mama tu i no save lo tokples na, mi wan tasol save lo tokples, na taim mi kaikai buai em, givim ol, tokples i go i go i go."*

“My daughter, because.., I want all [my children] to know Qaqet, I have to speak Qaqet to them about betel nuts. It’s always like this: I try to teach them so that they will know Qaqet. Because their mother also doesn’t know Qaqet. I’m the only one who knows Qaqet. And when I chew betel nut it’s like: give it to them, Qaqet goes and goes and goes.”

(AttSitCS_TF_20180824_1)

In the last statement, ICK says that she ‘mostly’ uses Qaqet when talking about ‘giving orders to children’. Her statement can be analyzed as ‘talk-in-action’ (a1):

(82)   *"mi sa bosim ol pikinini lo tokples, bai ol i mas save gut long tokples."*

“I usually give orders to children in Qaqet because they must know Qaqet well.”

(AttSitCS_TF_20180818C_1)

The above statements center around code-switching being used for teaching their interlocutors/children the Qaqet language. In case of more frequent switches between Qaqet and Tok Pisin, this would point to a form of code-switching which García (1980) has referred to as ‘translation’, that is, “[t]he same information [...] given in both languages” (1980: 243). According

to García, this form of code-switching serves a "function related to conversational clarification and possibly language learning (teaching)" (1980: 243). In this sense, it may either serve a conversational function such as other-initiated self-repair (see Section 6.6 on p. 234), or in the context of language socialization, as a form of language learning (teaching) (Schieffelin 1994: 29).

7. The seventh attitude was presented by one respondent towards one ('giving orders to children') of the 14 topics. The attitude explains the respondent's use of Qaqet as being related to a general Qaqet use in the home when giving orders to children. In the following statement, FAM says that he 'always' uses Qaqet when talking 'giving orders to children'. His statement can be analyzed as 'talk-in-action' (a1):

(83) *"em lo haus yet. so narapla haus, kain olsem, nau lo hia, em pidgin bat..., taim lo haus, em mi sa yusim [tokples]. lo toktok lo ol xxx ol, no ken wok disla samting."*

"In other houses such as this one, it will be Tok Pisin, but when I'm in my house, I usually use Qaqet to tell them that they shouldn't do this thing."

(AttSitCS_TF_20180817A_1)

8. The eighth attitude was presented by one respondent towards one ('selling sth. on the market') of the 14 topics. The attitude explains the respondent's use of Qaqet as being related to a general tendency to use Tok Pisin in public. In the below statement, FAL says that he 'rarely' uses Qaqet when 'selling sth. on the market'. His statement can be analyzed as 'talk-in-action' (a1):

(84) *"maket ples o, hap we yu go bungim wanpla maket, salim samting, em planti tokples lain yumi stap, diferen language yumi stap, bai yumi tok pisin."*

"The market place, or the area where you go to meet/gather a market in order to sell something, there we are a lot of vernacular groups, there we have different languages, [so] we will speak Tok Pisin."

(AttSitCS_TF_20180824_1)

The statements made for the seventh and eighth attitude center around the distinction of Qaqet used in the home as opposed to Tok Pisin used in public. For non-public (home) settings (see Section 5.1.2 from p. 136 onward), recordings of the speech situations 'inside/outside: conversation (home)', 'inside: cooking', 'inside: conversation (cooking house)' and 'outside: working' point to code-switching between Qaqet and Tok Pisin. However, as the recordings exclude child-directed speech, they cannot be used to support or contradict the seventh attitude when it comes to FAM's statement made about the topic 'giving orders to children'. For public settings (See Section 5.1.1 from p. 123 onward), the Kamanakam corpus recordings support the eighth attitude. That is, they show that Tok Pisin is predominantly used in the speech situations 'inside: church service', 'outside: religious feast' and 'inside: school meeting'. For the speech situation 'outside: buying (market)', the use of Tok Pisin is supported, but only by the interview data.

9. The ninth attitude was presented by one respondent towards one ('shopping (store)') of the 14 topics. The attitude explains the respondent's use of Qaqet as being related to a customary use of Tok Pisin for this topic. In the following statement, FWS says that he 'never' uses Qaqet when performing the activity 'shopping (store)'. His statement can be analyzed as 'talk-in-action' (a1):

(85) *"kastam em, mas go tok tok pisin long en na kisim samting, koli samting."*

"the custom is that one has to speak Tok Pisin to [the shopkeeper] when taking or naming something."

(AttSitCS_TF_20180818A_1)

5.3.3   Summary and conclusion

It was assumed (see Section 2.1.2 on p. 18) that topics which can be considered as 'modern' would be more associated with the use of Tok Pisin as well as mixed intonation units showing Tok Pisin insertions in a Qaqet frame.

Participants' self-perceived language use has shown that there is a tendency for modern topics – in contrast to more traditional topics – to be associated with less Qaqet use. Sociolinguistic interviews pointed to the variables 'vocabulary' and 'speech genre', which can be associated with the topic factor. The variables point to Tok Pisin as the more appropriate language to address what is considered to be more modern topics. In addition, it can be inferred from the interviews that the factors participant ('competence', 'use', 'ethnicity'), setting ('public', 'not public') and language socialization ('language learning') play a role in determining the language use of the participants.

5.4   Summary and conclusion

This chapter has presented an analysis of the factors setting, participant and topic commonly associated with situational code-switching.

For the setting factor, a number of speech situations that can be identified in the sub-settings of public and non-public settings have been presented. It has been shown how Tok Pisin can be observed to be dominantly used in public settings, while in non-public settings the use of Qaqet/Tok Pisin code-switching can predominantly be observed. In addition, it has also been shown that the use of Tok Pisin in public settings is not necessarily independent of the participant.

For the participant factor, it has been shown that bilingual accommodation, itself dependent on the variables 'language competence' and 'use' (clustering with the variables 'ethnicity', 'place of birth', 'age', 'social role'), is a driving factor when it comes to the question whether to use Qaqet or Tok Pisin with an interlocutor.

For the topic factor, a distinction has been proposed between more 'traditional' and more 'modern' topics. The analysis has shown that Qaqet is less associated with more 'modern' topics, and that the variables 'vocabulary' and 'speech genre' can explain a large number of Tok Pisin insertions and potentially also switches to Tok Pisin. However, other variables pointing to the factors participant ('language competence', 'use', 'ethnicity'), setting ('public', 'not public') and language socialization ('language learning') also play a role, and possibly a more important one.

As a result, the participant seems to be the more important factor that can explain situational code-switching among Kamanakam Qaqet/Tok Pisin speakers. However, the analysis also suggests that the three factors interact with one another.

Chapter 6

Conversational code-switching

In following Gumperz's tradition, a number of studies have identified conversational functions of code-switching (see Chapter 1.1 on p. 3 as well as the following sections). The studies demonstrate that code-switching is not an arbitrary change of languages, but bears meaning. This is also what I argue for the code-switching that can be observed among the Qaqet/Tok Pisin bilinguals of Kamanakam. In the analysis of the naturalistic corpus of recordings made in non-public settings, I have identified a number of conversational strategies that have been already observed for other language pairs in different cultural settings. The observed strategies are summarized in Table 6.1 below.

Table 6.1: Conversational strategies in the naturalistic corpus for which code-switching can be observed

Function	Section/page
Addressee shift	Section 6.7.1 on p. 261
Code-switching between non-final and final intonation units	Section 6.1 on p. 177
Completion	Section 6.7.2 on p. 264
Emphatic agreement	Section 6.2 on p. 189
Language play	Section 6.3 on p. 203
Mode shift	Section 6.4 on p. 217
Quotation	Section 6.5 on p. 227
Repair	Section 6.6 on p. 234
Repetition	Section 6.7.3 on p. 267
Swearing	Section 6.7.4 on p. 269

However, not all switches that occurred in the corpus can be ascribed to strategies listed in Table 6.1. Therefore, the used approach may not be able to account for every switch in the data set, and the function/meaning of some switches in the body remain unclear for the time being. In addition, due to the small sample size, it can not be ruled out that it would be possible to ascribe them to other potential conversational strategies not listed in the above table (e.g., marking emphasis to give orders, to deliberately signal topic shifts or to include/exclude somebody from the conversation).

This study is concerned with adult-to-adult Qaqet/Tok Pisin code-switching of Qaqet/Tok

Pisin speakers. In this chapter, there is one speaker in the corpus data who has only passive command of Qaqet. He (HJP) is an elderly person, who was born outside of the Qaqet community, and whose first language was not Qaqet. He arrived in Kamanakam in his 20s. His speech was left out of the analysis, as he never speaks Qaqet, and thus can not be considered as a Qaqet/Tok Pisin bilingual. However, any speech from other people directed towards HJP was included in the analysis. What is also left out from the analysis is child talk, that is, child-to-child and child-to-adult talk. Similarly, child-directed speech is also being excluded from the analysis.

The type of code-switching considered here (mostly) concerns a speaker's switch from monolingual Qaqet intonation units to monolingual Tok Pisin intonation units and vice versa (but see Section 6.3.2 on p. 213 for the use of other-language insertions in the context of language play). However, there are also switches from Qaqet and Tok Pisin to other languages including Kuanua, Siwai and English.

In this study, conversational code-switching is measured on the basis of the act of the switch itself. For example, in case of direct speech, I measure whether the speaker makes a switch into the other language when starting to utter a direct quote. I do not, however, measure for how many intonation units this switch lasts. This is because once the quote is started in one particular language it is also finished in that language. To code for every intonation unit involving that quote could skew the results in favor of the language with longer quotes. Thus, it is the switch that is of importance and not the amount of language used.

Extensive research has been carried out on the analysis of the structure of monolingual discourse. In the study of code-switching, much effort is devoted to identifying how this phenomenon can be used to structure the multilingual discourse. Gardner-Chloros et al.'s (2000) study with Sikh Punjabi/English speakers was the first attempt to compare monolingual with bilingual speech and code-switching. The researchers (2000: 1312) formulated the goal of their study as follows:

> "bilinguals are also, by definition, monolinguals at the same time, and in the same conversation may at times resort to codeswitching and at other times speak monolingually. By comparing codeswitched and monolingual *passages within the same conversations*, it should be possible to compare the way in which particular conversational effects are realized monolingually and through CS."

Similar to Gardner-Chloros et al.'s (2000) study, one of the goals of this chapter is thus not only to identify and discuss some of the conversational strategies in which Kamanakam Qaqet/Tok Pisin code-switching can be observed, but also to qualitatively and quantitatively contrast these strategies with their counterparts in monolingual discourse. If the numbers are large enough, this approach has the advantage that one is able to base the number of switches of a particular strategy against the number of that same strategy in monolingual discourse. It produces measurable data on the frequency with which code-switching is used in a particular strategy, as well as data on the frequency of code-switching as a whole. Further, it can help to support the interpretation process in order to better differentiate the role code-switching plays in the respective conversational strategy. In this study, the number of tokens is limited due to the small sample size. For this reason, no strong statements can be made on a quantitative basis. Nevertheless, the quantitative data provide information about the distribution of a particular strategy in the corpus. Further, the numbers provide clues, generate hypotheses, help to identify types of code-switching and thereby support the qualitative analysis.

In the following Sections 6.1 – 6.6, I outline how each of the strategy in this study is defined, and how it fits with other studies that have identified the same or similar functions of code-switching. Quantifiable data are provided for each strategy, i.e., the frequency at which a

certain strategy occurs in the context of monolingual compared to switched intonation units. Every strategy is (if possible) discussed on the basis of monolingual and code-switched examples from the naturalistic corpus of recordings made in non-public settings. In addition, Section 6.7 on p. 261 discusses a number of strategies that have been identified in the corpus, but only briefly, due to a lack of tokens. Finally, the findings of this chapter are summarized and discussed in a conclusion Section 6.8 on p. 272.

Methods and data used for this study include participant observation (see Section 2.2.1 from p. 20), sociodemographic and sociolinguistic survey data (see Section 2.2.2 from p. 20) and naturalistic audiovisual recordings (see Section 2.2.5 from p. 29). In the preparation process, the naturalistic audiovisual data were transcribed (see Section 2.3 from p. 38), segmented (see Section 2.4 from p. 40) and annotated. For the latter, the annotation for the following features was used in the analysis of conversational code-switching: language (see Section 2.5.1 on p. 53), code-switching (see Section 2.5.2 from p. 53), addressee (see Section 2.5.3 from p. 54), speech act (see Section 2.5.5 from p. 56) and discourse/conversational strategy (see Section 2.5.6 from p. 57).

6.1 Code-switching between non-final and final intonation units

In the Kamanakam corpus, code-switching has been observed between non-final and final intonation units (see Section 2.4 from p. 40). The switching may take place if a speaker (a) contrasts propositions of the type 'A is/behaves in the state/manner of X, as opposed to A or B being/behaving in the state/manner of Y', (b) pragmatically implicates a conditional/temporal meaning 'If/when X, then Y' or (c) is fronting constituents 'As for A, it is/behaves in the state/manner X'. In the latter type, the speaker often places a certain element in initial position for emphasis.

6.1.1 Type (a)

Type (a) concerns the contrastive juxtaposition of two propositions. Huang (2014: 14) defines propositions as follows:

> "A proposition is what is expressed by a declarative sentence when that sentence is used to make a statement, that is, to say something, true or false, about some state of affairs in the external world. Put the other way round, a declarative sentence, when uttered to make a statement, is said to convey a proposition."

In the Kamanakam corpus, except for two examples, all contrasted propositions are realized in the form of two adjacent intonation units. Pragmatically, both units are declarative statements describing actions that occur simultaneously rather than successively. These actions differ from each other in that they involve two different individuals/parties/entities and/or two different actions. Similarly, it can be observed in other language pairs that a speaker contrasts propositions in the presence of code-switching (e.g., Auer 1995: 131; Kulick and Stroud 1990: 216f.; Maschler 1997: 303; Stroud 1992: 142f.).

In Raunsepna Qaqet, the conjunction *dap* 'and, but, however' can be "used to set up a contrast between two propositions" (Hellwig 2018: 470). In the Kamanakam corpus, *dap* is also used for this purpose, but *dap* is possibly not the only way to convey a contrast between two propositions, as is the case in Raunsepna Qaqet. In the Kamanakam corpus, *dap* is normally found in the

beginning of the second or contrasting intonation unit. As for code-switching, it is observed to occur between two such contrasting propositions with and without the use of *dap*. In Tok Pisin, the conjunction *tasol* 'but' can be used to convey a contrastive meaning of two propositions (cf. Verhaar 1995: 423). As in Qaqet, *tasol* is not mandatory to set up a contrastive meaning, and in the Kamanakam corpus, its use cannot be observed. Table 6.2 shows in columns the minimally contrasting entities protagonist/object, action/existence and combinations of the two in the Kamanakam corpus. In rows, this is put in relation to monolingual (non-CS) and code-switched (CS) language use.

Table 6.2: Types of contrast in the Kamanakam corpus

	Protagonist/Object	Action/Existence	Protagonist/Object + Action/Existence
non-CS	7	3	4
CS	2	2	5

What is evident from 6.2 is that code-switching can be observed in all three contrasting scenarios. Table 6.3 zooms in on the languages and switching direction used in the realization of contrast. In rows, it shows the language that was used for the first proposition in the form of one (or more) intonation unit(s) which may be realized in monolingual Qaqet (Q) or monolingual Tok Pisin (TP). In columns, this is put in relation to the language used for the contrasting intonation unit(s).

Table 6.3: Code-switching and contrast

	2nd Proposition Staying in Q	2nd Proposition CS: Q to TP	2nd Proposition Staying in TP	2nd Proposition CS: TP to Q
1st Proposition in Q	10	3	n.a.	n.a.
1st Proposition in TP	n.a.	n.a.	4	6

The numbers in Table 6.3 show that when speakers contrast propositions, code-switching in both directions is a possible option. Due to the small sample size, it is difficult to derive more specific trends from the numbers.

The following examples show how the contrast of two propositions is realized in monolingual Qaqet with (see Example 86) and without the use of *dap* (see Example 87), in monolingual Tok Pisin (see Example 88), with a switch from Qaqet to Tok Pisin (see Example 89) and with a switch from Tok Pisin to Qaqet (see Example 90). Finally, there is one example of the otherwise rarely occurring (n = 2) juxtaposition of more than one intonation units (see Example 91).

(86)   1   NMS   *sepinaraqam*
                 sepin = ara = qa-em
                 NAME = 3SG.F.POSS = some-SG.RCD
                 'Sepin she [sold] a little'

       [...]

>   8   NMS   *davutmiquasikama*
>   dap = ut = mi = kuasik = ama
>   but = 1PL = all = NEG = ART
>   'but we all did not'   (CodeFSS_KJS20160910A_1; IU 85–92)

Example 86 shows the contrastive juxtaposition of two propositions realized in monolingual Qaqet by using *dap*. Prior to the data extract, NMS, FSS and FWS talk about how a certain group of people were selling bags of peanuts. FWS asks NMS whether she also sold peanuts. This is when the data extract starts. NMS tells FWS how Sepin sold some (1) but all the other people (including NMS) did not sell any (8). What is contrasted here is the protagonist Sepin vs. all others as well as some vs. nothing. Prosodically, NMS separates the two positions in two intonation units, both showing a final rise-fall contour.

> (87)   1   FWS   *quiamamerliqaqerl*
>   kui = ama = merlik = a = kerl
>   quoting = ART = betel nut = DIST = DEONT
>   'it was said that the betel nuts should be there'
>
>   2   FWS   *kusamamerlik*
>   kuasik = ama = merlik
>   NEG = ART = betel nut
>   'but there aren't any'   (CodeFSS_KJS20160910A_1; IU 413–414)

Example 87 shows the contrastive juxtaposition of two propositions realized in monolingual Qaqet without using *dap*. Prior to the data extract, NMS, FSS and FWS were talking about a woman who sells black betel nuts on the market. The black betel nuts are stronger than the regular ones, and people usually chew the former if the regular ones are not available. In the data extract, FWS is contrasting in Qaqet the fact that the regular betel nuts should be available (1), however, they are not (2). Thus, what is contrasted is here the difference between the betel nuts *being* existent and *not being* existent. Prosodically, FWS separates the two positions in two intonation units both showing a final rise-fall contour.

> (88)   1   FLT   *wanpla*   *i*   *woqabaut*   *longap*
>   wanpela   i   wokabaut   long hap
>   one   PRED   walk   there
>   'one walked over there'
>
>   2   FLT   *wanpla*   *i*   *woqabaut*   *longap*
>   wanpela   i   wokabaut   long hap
>   one   PRED   walk   there
>   '[and] one walked over there'
>   (CodeFSS_KJS20161119A_2; IU 1509–1510)

Example 88 shows the contrastive juxtaposition of two propositions realized in monolingual Tok Pisin. Prior to the data extract, FLT began to tell a story in Tok Pisin about a Japanese soldier whom three persons intend to rob. In the data extract, FLT describes in Tok Pisin, how two of the robbers position themselves for the execution of the robbery. Structurally, the two clauses are indistinguishable, since the same wording is used. What is contrasted here are the

two robbers: one robber vs. the other robber, and their location: over there vs. over there. Prosodically, however, FLT separates the two propositions in two intonation units in which (1) shows a final rise and (2) a final fall contour.

(89) 1 NMS *alanginyiamnamarais*
            a = langiny-iam = ne = ama = rais
            NM = package-NC.DU.M = from/with = ART = rice
            'two packages of rice'

     2 NMS *taro   lo   paia*
            taro   long   paia
            taro   PREP   fire
            'taro in the fire'   (CodeFSS_KJS20160910A_1; IU 270–271)

Example 89 shows the contrastive juxtaposition of two propositions in the presence of a switch from Qaqet to Tok Pisin. Prior to the data extract, NMS told FSS and FWS about her plans to cook in celebration of the arrival of FSS's son. In the data extract, NMS contrasts two parts of the meal, along with the manner of preparation for the latter item. Prosodically, she contrasts them by the use of two intonation units that are realized with a final rise (1) and a final fall (2) contour. With respect to code-switching, NMS switches between these units from Qaqet to Tok Pisin. In the first unit, NMS says in Qaqet that she [prepares] two packages of rice (1). In the second unit, she switches to Tok Pisin, stating that she puts the taro in the fire (2). Thereby, she not only contrasts the parts of the meal, but also the way of preparation. Although NMS does not use the verb for cooking when speaking about the rice, it can be assumed that she means it in that way. This interpretation may be supported by the fact that it is the only way the Kamanakam Qaqet prepare rice as well as the fact that she refers to the taro being roasted in the fire. The Kamanakam Qaqet usually prepare taro roots in two different manners, that is, by cutting them into pieces and cooking the pieces in a pot, or by leaving the roots as a whole and roasting them near the fire. The former is similar to the way the rice is prepared. Had the taro been cooked in a pot, similar to the rice, NMS would not have to mention the means of preparation. As NMS decides to roast the taro in the fire instead of boiling it, she obviously contrasts it with the way in which rice is prepared. The switch from Qaqet to Tok Pisin – next to the prosodic cues indicated above – can be observed to accompany the propostional contrast between the entities rice and taro, as well as between the action of cooking and roasting.

(90) 1 IRM *i   stap   tasol   longap*
            i   stap   tasol   long hap
            PRED   stay   only   there
            'he is staying just in the area'

     2 IRM *lain   blong   en*
            lain   bilong   em
            clan   POSS   3SG
            'his relatives'

     3 IRM *ol   i   sta   lo   nambis*
            ol   i   stap   long   nambis
            3PL   PRED   stay   PREP   coast
            'they stay at the coast'

    4   IRM   *dakadequrliqaamuk*
              dap = ka = de = kurli-ka = a-muk
              but = 3SG.M = CONJ = leave-3SG.M = DIR-across
              'but he stays upcountry'

                                      (CodeFSS_KJS20161023_2; IU 570–573)

Example 90 shows the contrastive juxtaposition of two propositions in the presence of a switch from Tok Pisin to Qaqet. Prior to the data extract, FSS and IRM began to talk about a certain person whom FSS has not seen in a long time. This is when the extract begins, and IRM starts to inform FSS by switching to Tok Pisin about the person's whereabouts. At first, IRM states that he would be just in the area (1). However, she goes into further detail: while his family members are at the coast (2, 3), he stays more upcountry (4). It is the latter unit where she switches to Qaqet. Prosodically, IRM contrasts these two pieces of information by putting them into different intonation units. And when uttering the Qaqet unit, she also makes use of the conjunction *dap*. What is thus contrasted here are the protagonists: all vs. he, as well as their location: coast vs. upcountry. Code-switching can be observed to occur in the presence of the contrast of these two propositions.

(91) 1   FLT   *asmude*
                as = medu
                still = past
                'still in the past'

      2   FLT   *dequrliqamaravuk*
                de = kurli-ka = mara = a-vuk
                CONJ = leave-3SG.M = here = DIR-up
                'he stayed here on top'

      3   FLT   *malanivaqa*
                ma = lanivaqa
                ART.ID = NAME
                'in Lanivaqa'

      4   FLT   *orait*
                orait
                alright
                'alright'

      5   FLT   *i*   *go*   *bek*   *gen*
                i   go   bek   gen
                PRED go   back again
                'he went back again'

6	FLT	*em..	stap	tamblo*
		em	stap	tambelo
		3SG	stay	down below
		'he stayed down below'		(CodeFSS_KJS20161119A_2; IU 92–97)

Example 91 shows the contrastive juxtaposition of two propositions in the presence of a switch from Qaqet to Tok Pisin. This example is one of the two examples in which the contrast is not conveyed between two adjacent intonation units. That is, the contrast for each proposition stretches over more than one intonation unit (1–3 vs. 4–6). In the data extract, FLT tells FSS a story about a certain person moving around Kamanakam. He states in Qaqet that in the past (1) this man stayed on top of the mountain (2) in the hamlet Lanivaqa (3). Then, FLT switches to Tok Pisin, stating that this man moved to a new location (5) and stayed down below (6). What is thus being contrasted here are a person's two different residences at two different points in time. The residences differ in that one is located *avuk* 'on the mountain' (2), while the other is *tamblo* 'in the valley' (6). The contrast is accompanied by FLT's use of code-switching from Qaqet (1–3) to Tok Pisin (4–6).

6.1.2   Type (b)

Type (b) concerns the realization of a non-final intonation unit which is followed by a final one. Pragmatically, they can often be interpreted to have a conditional/temporal meaning. That is, conditional/temporal and matrix clause are each realized within a separate intonation unit. In the Kamanakam corpus, the conditional/temporal clause precedes its matrix clause in both Qaqet and Tok Pisin. For Tok Pisin, this is also what Mühlhäusler (1985b: 405) observes based on corpus material collected in other areas of PNG. Prosodically, conditional/temporal clauses in both language varieties can be observed to be marked via a final rise-fall contour. The matrix clause can be observed to be predominantly realized as a final unit, but it may also be in the form of a non-final unit. In Kamanakam Qaqet, the conditional/temporal clause can be structurally marked via the conjunction *ivit* (<*i-pit*) 'when, if' (n=2). The latter then occurs near the left periphery of the unit. Similarly in Tok Pisin, the conjunctions *sapos* 'suppose, if' and *taim* 'when' can be used for the same purpose. However, Mühlhäusler (1985b: 405) and Verhaar (1995: 435f.) remark that *sapos* may also be omitted; this can be observed for all coded Tok Pisin conditional clauses in the corpus. In contrast, the use of Tok Pisin *taim* to convey a temporal meaning can be frequently observed in the Kamanakam corpus. As for code-switching, it is observed to occur between the intonation units expressing conditional/temporal and matrix clause. Similarly, switches between matrix and conditional clauses have also been observed for other language pairs (e.g., Backus 2003: 252-255; Kulick and Stroud 1990: 221f.; Nortier 1990: 132).

Table 6.4 shows in rows the language used for the conditional/temporal clause being either in Qaqet (Q) or Tok Pisin (TP). In columns, the language used for the conditional/temporal clause is put in relation to the language used for the matrix clause. For the latter, the speakers either stayed in Qaqet, switched (CS) from Qaqet to Tok Pisin, stayed in Tok Pisin or switched from Tok Pisin to Qaqet. I use the term 'clause' to keep conditional and matrix unit structurally apart without necessarily relying on the 'intonation unit'. This is because in one very short monolingual Qaqet example, the conditional as well as the matrix clause are realized within a single intonation unit. Similarly, Cruttenden (1997: 71) describes that the same phenomenon can be observed in English in the sequence of two short clauses. However, in all other monolingual and code-switched examples, conditional and matrix clause are each realized in their own intonation unit.

Table 6.4: Code-switching and conditional/temporal utterances

	Matrix clause by staying in Q	Matrix clause with CS: Q to TP	Matrix clause by staying in TP	Matrix clause with CS: TP to Q
Conditional/ temporal clause in Q	4	2	n.a.	n.a.
Conditional/ temporal clause in TP	n.a.	n.a.	12	0

The numbers in Table 6.4 show that code-switching to Tok Pisin is an option for conditional/temporal clauses uttered in Qaqet. Due to the small sample size, it is difficult to interpret to which extent code-switching to Qaqet could play a role for conditional clauses uttered in Tok Pisin.

The following examples show how conditional/temporal utterances are realized in monolingual Qaqet (see Example 92), monolingual Tok Pisin (see Example 93) and with a switch from Qaqet to Tok Pisin (see Example 94 and 95).

(92) 1 FLT *qerlivitnyimatnasiqi*
kerl = i-pit = nyi = matna = se = ki
DEONT = AWAY-up = 2SG.SBJ.NPST = work.NCONT.PST = to/with = 3SG.F
'if you can work on it'

2 FLT *deqerldinyituqungivetki*
de = kerl = dip = nyi = tuqun = gia = ivet-ki
CONJ = DEONT = FUT = 2SG.SBJ.NPST = say.CONT = 2SG.POSS = ground-SG.F
'you will say that it is your ground'
(CodeFSS_KJS20161119A_2; IU 874–875)

Example 92 shows a conditional/temporal sentence as realized in monolingual Qaqet. Prior to the data extract, FLT and FSS were talking about land ownership issues. In the data extract, FLT basically remarks that: if you can till a piece of land (1), you own the land (2). Structurally, he makes use of the conjunction *ivit*. Prosodically, FLT separates the conditional sentence into two intonation units. He introduces the conditional clause (1) with a final rise-fall contour, whereas the matrix clause is uttered with final falling pitch (2).

(93) 1 FWS *yu   brukim   graun*
yu   bruk-im   graun
2SG   break-TR   ground
'if you break the soil'

2 FWS *bai   taro   kamap*
bai   taro   kamap
FUT   taro   grow
'the taro will grow'   (CodeFSS_KJS20160910A_1; IU 390–391)

Example 93 shows a conditional/temporal utterance as realized in monolingual Tok Pisin. Prior to the data extract, FWS, NMS and FSS were talking about a friend of NMS who helped her to plant taro in a way NMS seems to be unfamiliar with. In the data extract, FWS comments: if you break the soil (1), taro will grow (2). As in the Qaqet example (see Example 92), FWS separates the conditional sentence prosodically into two intonation units. Similarly, the conditional clause (1) in Tok Pisin shows a final rise-fall contour, while the matrix clause shows a final falling pitch (2). Structurally, however, FWS does not make use of the corresponding Tok Pisin conjunction *sapos* to mark the conditional clause (1).

(94) 1   FSS   *kuasikbu*   *namameng*
                kuasik = burlem   ne = ama = meng
                NEG = many   from/with = ART = wood
                'it is not much firewood'

      2   FSS   *kua*   *mapapaqaninmanget*
                kua   ma = papa = ka = nin = ma-nget
                INTRG   ART.ID = father = 3SG.M.SBJ = cook.CONT = OBJ-3N
                'if father is cooking it'

      3   FSS   *em*   *ba*   *olsem*   *las*   *taim*   *i*   *kukim*   *ya*
                em   bai   olsem   las   taim   i   kuk-im   ya
                3SG   FUT   like   last   time   PRED   cook-TR   PTCL
                'it will be like last time he cooked it'

      4   FRU   *mh*
                mh
                yes
                'yes'   (CodeFSS_KJS20161023_2; IU 510–513)

Example 94 shows a conditional utterance as realized with a switch from Qaqet to Tok Pisin. Prior to the data extract given in Example 87, FRU and FSS began to talk about carrying firewood. FSS begins in Qaqet, and tries to convince FRU about the amount of firewood (1). FSS then continues with a conditional construction. He starts in Qaqet: if his father dries out the tree with fire (2), and finishes it in Tok Pisin: then it will be like the last time he did it (3). FRU agrees to this with (*mh*). Similar to monolingual Qaqet and Tok Pisin, the code-switched conditional utterance is distributed over two intonation units. Here, the first unit (2) is marked as a non-final unit which the transcriber (FPM) interprets to be in the shape of an adverbial conditional clause. The second unit (3), FSS presents as its matrix clause. What can be interpreted here as a conditional clause and its matrix clause is additionally accompanied here by a switch from Qaqet to Tok Pisin.

(95) 1   FSS   *vetluraquasik*
                i-pit = lu-ta-a = kuasik
                AWAY-up = DEM-PL.H-DIST = NEG
                'if/when not those things'

      [...]

3 FRU *mh*
         mh
         yes
         'yes'

4 FSS *nogat   taim*
         nogat   taim
         NEG   time
         'never mind'

[...]

6 FSS *pasi   taim*
         pas-im   taim
         block-TR   time
         'killing time'   (CodeFSS_KJS20160901_1; IU 1058–1063)

Example 95 shows another conditional/temporal utterance as realized with a switch from Qaqet to Tok Pisin. Prior to the data extract, FSS named some of the speech situations ('cooking', 'eating' and 'working') to FRU and IRM in which he was asked by me to set up the camera. The data extract begins when FSS finishes naming the speech situations, and starts to conclude in Qaqet: If/when these situations just do not arise (1), then switches to Tok Pisin: then never mind (4) and we just spend the time together (6). Prosodically, FSS separates the conditional/temporal clause (1) and its matrix clause (4) into two intonation units in which the conditional/temporal clause is uttered with a final rise-fall contour, whereas the matrix clause shows a final falling pitch. In the Qaqet clause (1), FSS makes use of the conjunction *ivit* to structurally mark it as a conditional/temporal clause. The construction is accompanied here with a switch from Qaqet to Tok Pisin.

6.1.3 Type (c)

Huang (2000: 266) defines a topic-comment construction as "a construction containing two parts: a topic, which typically occurs first, and a comment – a clause which follows the topic and says something about it". Languages with a rigid SVO word order (e.g., English) favor topics in left-dislocation, whereas languages in SOV (e.g., Japanese) favor right-dislocations (Givón 1983: 19).

The Kamanakam varieties of Qaqet and Tok Pisin share the same canonical word order SVO (cf. Hellwig 2018: 235; Sankoff 1993: 119). In both varieties, elements can be fronted to the initial position (cf. Hellwig 2018: 438f.; Smith 2004b: 737). Prosodically, left-dislocated elements in both varieties are set off as single intonation units and marked via a final rise-fall contour (and an optional pause) (cf. Hellwig 2018: 56f.). This phenomenon can be observed in English, where constituents can be topicalized, and may be set off as single intonation units in order to emphasize them for constrastive purpose (Cruttenden 1997: 70). In Qaqet, what follows the left-dislocated element is further marked syntactically through the conjunction *de* 'and' (cf. 2018: 481). In Tok Pisin, it is the left-dislocated element itself that can show an intensifying particle *ya*. As the final element in the unit, *ya* is then marked by the above-mentioned rise-fall contour. What can be observed in the corpus in regard to code-switching is

that it occurs in the presence of these left-dislocated units. The switching takes place between the fronted material and what follows in the next intonation unit. This type of code-switching is also described for other language pairs, such as Italian–Swiss-German (Franceschini 1998: 60, 68), Spanish–English (McClure 1977: 107) and Taiap–Tok Pisin (Kulick and Stroud 1990: 223f.).

Table 6.5 shows in rows the language used for the left-dislocated topic (T) elements, that is, either in Qaqet (Q) or Tok Pisin (TP). In columns, this is related to the language used for the following commenting material (C), that is, the intonation unit immediately following the intonation unit of the left-dislocation.

Table 6.5: Code-switching and topic-comment

	C by staying in Q	C with CS: Q to TP	C by staying in TP	C with CS: TP to Q
T in Q	34	2	n.a.	n.a.
T in TP	n.a.	n.a.	30	3

The numbers in Table 6.5 show that monolingual language use of either Qaqet (n = 34) or Tok Pisin (n = 30) seems to be dominant when contrasting information via the use of left-dislocations. However, code-switching between left-dislocations and their following material is an option (n = 5). The data further indicates that the switch can occur in both directions, that is, the fronted material can either be in Qaqet and the subsequent unit in Tok Pisin or vice versa.

The following examples show how the topic/comment structure is realized in monolingual Qaqet (see Example 96), monolingual Tok Pisin (see Example 97), with a switch from Qaqet to Tok Pisin (see Example 98) and with a switch from Tok Pisin to Qaqet (see Examples 99 and 100).

(96)   1   NMS   *lura*
                 lu-ta-a
                 DEM-PL.H-DIST
                 'as for them'

       2   NMS   *deramitsapmakusibum*
                 de = ta = mit = se = pe = ma = kusibum
                 CONJ = 3PL.SBJ = go.NCONT.PST = to/with = PLACE = ART.ID = NAME
                 'they went to Kusibum'
                                                          (CodeFSS_KJS20160910A_1; IU 611–612)

Example 96 shows a left-dislocated element and its following material realized in monolingual Qaqet. In the data extract, NMS informs HJP in the presence of FWS and FSS about the whereabouts of a specific group of people. She refers to the latter group in a left-dislocation (1) and then gives information about their location in the following unit (2). NMS prosodically delivers the topic (1) and comment (2) structure in the form of two intonation units. The topic unit shows a final rise-fall contour, whereas the comment unit shows a final fall contour. Further, the comment unit is syntactically marked by the conjunction *de*.

(97) 1 IRM *lain   blong   en*
                 lain   bilong   em
                 clan   POSS   3SG
                 'his relatives'

      2 IRM *ol   i   sta   lo   nambis*
                 ol   i   stap   long   nambis
                 3PL   PRED   stay   PREP   coast
                 'they stay at the coast'

                                              (CodeFSS_KJS20161023_2; IU 571–572)

Example 97 shows a left-dislocated element and its following material realized in monolingual Tok Pisin. In the data extract, IRM informs FSS in the presence of FRU about the whereabouts of a specific group of people. Compared to the above Qaqet example (see Example 96), the Tok Pisin example prosodically behaves in a similar (if not identical) manner. That is, the topic is left-dislocated and realized within a single intonation unit. The following comment is also realized within a single intonation unit. When it comes to the pitch movements at the boundary, IRM similarly utters the left-dislocated element (1) with a final rise-fall contour, whereas the following comment (2) shows a final fall contour. The Tok Pisin example, however, differs from the Qaqet example above in that there is no conjunction used to introduce the comment unit.

(98) 1 FSS *aangerlka*
                 ara = ngerl-ka
                 3SG.F.POSS = spouse-SG.M
                 'her husband'

      2 FSS *kain   man   ya*
                 kain   man   ya
                 type of man   PTCL
                 'what a guy'   (CodeFSS_KJS20160910A_1; IU 321–322)

Example 98 shows a left-dislocated element and its following material realized with a switch from Qaqet to Tok Pisin. In the data extract, FSS refers to a man who has shown a certain behavior he does not agree with. FSS had switched to Qaqet in the intonation unit immediately before the first intonation unit of the data extract, and then paused for a long moment for reasons of turn taking. Thus, when he begins his new turn he still uses Qaqet to introduce the topic 'her husband' (1) which he puts prominently in left-dislocated position. However, he switches to Tok Pisin when commenting on the man's behavior 'what a guy' (2). Thereby, similar to the example above, he puts the topic in fronted position, further marking it by a final rise-fall contour and a pause. In addition, he switches to Tok Pisin for commenting.

(99) 1 NMS *em   disla   kain   taim   ya*
                 em   dispela   kain   taim   ya
                 3SG   DEM   type of   time   PTCL
                 'as for this kind of time'

> 2   NMS   *deditetungriptaqamurlama..*
> de = dip = te = tu = nget = ip = taquarl = murl = ama..
> CONJ = FUT = 3PL.SBJ.NPST = put.CONT = PURP = thus = distantly = ART
> 'they will do it like in the past..'
>
> *tengsingamapusi*
> te = ngsing = ama = pusi
> 3PL.SBJ.NPST = chew betel nut.CONT = ART = strong betel nut
> 'eating strong betel nut'
>
> (CodeFSS_KJS20160910A_1; IU 422–423)

Example 99 shows a switch from Tok Pisin to Qaqet between the left-dislocated element and its following material. Prior to the data extract, NMS, FSS and FWS are talking about a strong type of betel nut (*pusi*) which people seem to resort to if the regular, less strong type is not available. NMS says that it is this kind of time when (1) people go back to eating the strong type of betel nut, as was done in the past (2). NMS prosodically and syntactically marks the first unit as a left-dislocation by assigning it a final rise-fall contour followed by a pause and by introducing the subsequent unit through the conjunction *de*, respectively. Additionally, she switches from Tok Pisin to Qaqet.

> (100) 1   FRU   *somil*
> somil
> sawmil
> 'sawmill'
>
> 2   FRU   *deqerlnavramauslotuera*
> de = kerl = ne = pet = ama = haus lotu = iara
> CONJ = DEONT = from/with = on/under = ART = church = PROX
> 'it should be from the church right here'
>
> (CodeFSS_KJS20161023_2; IU 37–38)

Example 100 shows another switch from Tok Pisin to Qaqet between the left-dislocated element and its following material. Prior to the data extract, FRU gave FSS, IRM and NMS a description of how the mission had built the church buildings in Kamanakam and surrounding areas. In the data extract, FRU dislocates Tok Pisin *somil* 'sawmill' (1) to the left (this would have been the primary means of cutting planks necessary for the construction of the churches). He then switches to Qaqet for the comment part saying that the sawmill was probably set up by a church in the area (2). The latter unit again contains a Tok Pisin insertion *auslotu* (< *haus lotu*) 'church' in the Qaqet frame. Prosodically, the left-dislocation and its following material both show a rise-fall contour. FRU marks the comment unit as non-final, and thus presents this piece of information as incomplete. In the following units, he then further elaborates his remarks, eventually concluding his turn with a final fall contour.

6.1.4   Conclusion

In conclusion, it has been shown that alongside other cues, Kamanakam Qaqet/Tok Pisin speakers can use code-switching as a device to mark different strategies of what prosodically seems to be an adjacent non-final and a final unit. This includes the contrast of propositions, conditional/temporal and their matrix clauses as well as a topic-comment structure. Other cues, to

which code-switching is added, include the speaker presenting the two propositions in different intonation units, giving the former unit an intonation contour of the type final rise-fall, and/or using other syntactic marking devices, such as conjunctions or intensifying particles. Due to the limited data, it is difficult to comment on any tendencies, for example, regarding the switch direction. Nevertheless, the numbers do indicate that for type (a) and (c), switching in both direction is possible. For type (b), there are no switches in the direction of Qaqet, which may again be due to the small sample size.

6.2 Emphatic agreement

In the literature, the emphasis function of conversational code-switching is most commonly associated with a repetition of the same speaker's previously uttered command or statement within a turn of speaking (e.g., Gumperz 1982: 78f.; Khamis 1994: 235f.; Kulick and Stroud 1990: 214f.; McClure 1977: 106f.). What is also subsumed under the emphasis function are commands which begin new turns of speaking (cf. McClure 1977: 106f.; Zentella 1990: 85). This study builds upon the above-mentioned features of the emphasis function, and incorporates emphatic statements which begin new conversational turns. The latter strategy can be identified in two different ways in the Kamanakam corpus. Therefore, the emphasis strategy is understood here as the speaker's desire to emphasize a statement or command, whether it be in the form of a repetition within a turn of speaking or in a new turn.

In the Kamanakam corpus, one type of emphasis in which code-switching can be observed concerns a speaker's agreement[1]. Generally, when a speaker shows agreement towards an interlocutor's utterance it can be observed that this is done via:

- The partial or full repetition of an interlocutor's last statement

- The use of an agreement discourse marker

Kulick and Stroud (1990: 215) describe agreement via code-switched repetitions within a turn of speaking, that is, the speaker repeats herself/himself. In the Kamanakam corpus, what can solely be observed is agreement via repetition in a new turn, that is, a speaker repeats the utterance of her/his interlocutor to signal agreement.

Code-switching in the context of agreement discourse markers has also been described in other cultural settings (e.g., Hlavac 2006: 1874-1885). In this study, discourse markers used for agreement will be treated as instances of code-switching (but see Brody 1987 for an example of borrowed particles as discourse markers). It will be shown that Tok Pisin discourse markers used for agreement occur more often and in more variation than their Qaqet counterparts. In addition, it is argued that the use of switched discourse markers can be a further cue to mark agreement.

6.2.1 Agreement via repetition

In the Kamanakam Qaqet/Tok Pisin corpus, a possible way to signal agreement is to partially or fully repeat the prior statement of an interlocutor, possibly in a different language. For this type of switch, a Kamanakam Qaqet/Tok Pisin speaker can be observed to combine the repetition with other linguistic and non-linguistic cues, such as a raised voice, a higher voice pitch or

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[1] The Kamanakam data indicates that there are other types of emphasis in which code-switching can be observed. These include emphatic disagreement as well as emphatic commands in child-directed speech.

certain gestural movements. This is also reported for code-switching in other cultural settings (e.g., Huerta 1978: 40: high pitched voice).

Table 6.6 shows Qaqet and Tok Pisin tokens of agreement via repetition from the perspectives: language in which the interlocutor makes a certain statement[2] and language in which the speaker expresses her/his agreement via repetition of this statement. The latter category is further divided into whether or not the speaker simultaneously code-switched while expressing agreement.

Table 6.6: Qaqet and Tok Pisin agreement via repetition

	Speaker agrees by staying in Q	Speaker agrees by switching to TP	Speaker agrees by staying in TP	Speaker agrees by switching to Q
Interlocutor's Q statement	9	0	0	3
Interlocutor's TP statement	0	4	3	0

From Table 6.6 it is evident that agreement can be observed – be it in the form of a partial or full repetition of the interlocutor's previously made statement. What can also be observed is code-switching in the direction of the language the interlocutor used for her/his last statement. However, the number of tokens is very restricted (n = 19) and about one third of them are expressed in combination with a switch (n = 7). The following data extracts demonstrate how agreement via repetition is realized in monolingual Qaqet (see Example 101), Tok Pisin (see Example 102), with a switch to from Tok Pisin to Qaqet (see Example 103) and with a switch from Qaqet to Tok Pisin (see Example 104).

(101) 1   FSS   *mangamarana*
                 ma = ngamarana
                 ART.ID = NAME
                 'Ngamarana'

       [...]

       3   FSS   *daluma*
                 de = lu-em-a
                 CONJ = DEM-SG.RCD-DIST
                 'and this small one'

       4   FSS   *amagalipkadelumanamuk*
                 ama = galip-ka = de = lu = ma = ne = a-muk
                 ART = galip-SG.M = LOC.PART = DEM = from = DIR-across
                 'at the galips and the area across'

---

[2] An interlocutor's mixed intonation unit of the type Qaqet frame with one or two Tok Pisin insertions was treated as still being Qaqet.

5 FLT *mh*
     mh
     yes
     'yes'

6 FSS *murlamakopia*
     murl = ama = kopi = a
     distantly = ART = coffee = DIST
     'before it was coffee'

[...]

9 FLT *murlamakopia*
     murl = ama = kopi = a
     distantly = ART = coffee = DIST
     'before it was coffee'   (CodeFSS_KJS20161119A_2; IU 682–690)

Example 101 shows agreement via repetition in monolingual Qaqet. FSS and FLT are sitting in Lanivaqa. Immediately prior to the data extract, the two talked about the area around them including the bordering hamlet Ngamarana. FLT had mentioned earlier that coffee was grown in the Ngamarana area in the past. In the data extract, FSS, speaking Qaqet, takes up the topic again a short time later. He refers to Ngamarana (1) and includes a specific area within it (3, 4). He states that this area was used for growing coffee in the past (6). FSS offers this statement in the form of a candidate, to which FLT then agrees by fully repeating in Qaqet FSS's utterance (7).

(102) 1 FSS *em* *ol* *disla* *ol* *komik* *ya*
       em ol dispela ol komik ya
       3SG PL DEM PL comic PTCL
       'it is these comics'

    2 FLT *ol* *i..*
       ol i
       3PL PRED
       'they..'

    3 FSS *em* *nau*
       em nau
       3SG now
       'that's it'

    4 FSS *ol* *i* *wok* *lo* *bihainim* *nau*
       ol i wok long bihainim nau
       3PL PRED work PREP follow-TR now
       'everybody is doing it'

5   FLT   *e*
          e
          yes
          'yes'

6   FSS   *kamap   raskol   pasin*
          kamap   raskol   pasin
          come up   criminal   behavior
          'leading to a criminal behavior'

7   FLT   *e*
          e
          yes
          'yes'

8   FSS   *we*
          we
          where
          'where'

9   FSS   *bipo   nogat   ya*
          bipo   nogat   ya
          before   NEG   PTCL
          'in the past there was no such thing'

10   FLT   *bipo   nogat*
            bipo   nogat
            before   NEG
            'in the past there was no such thing'
                                (CodeFSS_KJS20161119A_2; IU 1416–1425)

Example 102 shows agreement via repetition in monolingual Tok Pisin. Immediately prior to the data extract, FLT talked about how the town – probably Kokokpo and/or Rabaul – used to be a safe place. However, when comics became available, people began to imitate what they read. In the data extract, FSS elaborates on FLT's view (1-6) basically paraphrasing what FLT said before. FSS then concludes that before comics came into fashion, this behavior was non-existent (9). FLT then partially repeats FSS utterance, only leaving out the emphasizing particle *ya* (10).

(103) 1 FSS   *aqamngarlnandiaqi*
               a = qama = ngerlnan = de = ia-ki
               NM = some = mother = CONJ = other-SG.F
               'the mother is something else'

2	FSS	*no*	ken	*kisim*	*nogut*
		no	ken	kis-im	nogut
		not	can	take-TR	no good

'one cannot behave this way'

3	NMS	*mh*
		mh
		yes

'yes'

4	NMS	*dinana*
		gia = nan-a
		2SG.POSS = mother-DIST

'it's your mother'

5	FWS	*e*
		e
		yes

'yes'

6	FWS	*mh*
		mh
		yes

'yes'

7	FSS	*dinana*
		gia = nan-a
		2SG.POSS = mother-DIST

'it's your mother'   (CodeFSS_KJS20160910A_1; IU 178–184)

Example 103 shows agreement via repetition with a switch from Tok Pisin to Qaqet. FSS, FWS and NMS are in a 'working' speech situation. They are sitting near the copra drying house, cutting coconuts in halves in preparation for the drying process. In the data extract, FSS starts to talk about a mother and her children. He states that the mother was, something else (1), which in this context means that she works a lot for the family. FSS then complains that one could not behave this way (2) thereby referring to the children who apparently are not helping their mother as much as they should. NMS acknowledges this position in (3). NMS then adds that the woman is their mother after all (4). Thereby, she is supporting FSS's position presented in (2). FWS acknowledges NMS's statement in (5) and (6). In (7), FSS repeats NMS's statement given in (4) to signal agreement. At the same time, he switches from Tok Pisin to Qaqet.

(104)	1	FWS	*araqasna*
			ara = kesna
			3SG.F.POSS = how.much/many

'how much is hers'

2   NMS   *ara*
            ara
            3SG.F.POSS
            'hers'

[...]

5   NMS   *davutmiiquasikama*
            dap = ut = mii = kuasik = ama
            but = 1PL = all = NEG = ART
            'but excluding us all'

6   FWS   *mh*
            mh
            yes
            'yes'

7   NMS   *em   twenti   seven*
            em   twenti   seven
            3SG   twenty   seven
            'it is twenty seven'

8   FWS   *ae*
            ae
            yes
            'yes'

9   FSS   *nau   yet   nau*
            nau   yet   nau
            now   EMPH   now
            'was it just the last time?'

10   NMS   *mh*
             mh
             yes
             'yes'

11   FWS   *mh*
             mh
             yes
             'yes'

12 NMS *dap   guaqam*
          dap   gua = qa-em
          but   1SG.POSS = some-SG.RCD
          'but some is mine'

13 FSS *mani   ya*
          mani   ya
          money PTCL
          'it is money'

[...]

15 FWS *mani   ya*
          mani   ya
          money PTCL
          'it is money'   (CodeFSS_KJS20160910A_1; IU 88–102)

Example 104 shows agreement via repetition with a switch from Qaqet to Tok Pisin. The speech situation is the same as in Example 104 with FSS, FWS and NMS sitting near the copra drying house. Immediately prior to the data extract, NMS talked about how certain people went to the market, to each sell a bag of peanuts. When the data extract begins, FWS asks NMS in Qaqet how much a certain person got for one bag (1). NMS says in Qaqet that this person (2) excluding them (5), (then switching to Tok Pisin), got twenty seven Kina (7). FSS then asks in Tok Pisin if this was just the last time (9) to which NMS (10) and FWS (11) agree. NMS then states by switching back to Qaqet that either some of the money belongs to her or she got also one bag (12). FSS concludes in Tok Pisin that it is money afterall (13). FWS then agrees to this by fully repeating FSS's utterance while switching from Qaqet to Tok Pisin (15).

6.2.2 Agreement via discourse markers

A second type of emphatic agreement concerns the use of Qaqet and Tok Pisin discourse markers. The first question that may be raised in this context is whether Tok Pisin discourse markers have already come to be part of the Qaqet lexicon (or vice versa) and therefore have to be considered as borrowings rather than instances of code-switching. In the Kamanakam corpus, Qaqet and Tok Pisin discourse markers used for agreement always constitute intonation units by themselves with considerable pauses before and after the unit. Usually, they do not show signs of integration in the other language[3]. As for the status of Kamanakam Qaqet/Tok Pisin agreement discourse markers, I will follow de Rooij's (2000: 464) argumentation regarding the status of French discourse markers in Shaba Swahili/French discourse:

> "[T]he widespread Shaba Swahili/French bilingualism, that is, the coexistence of these languages, ensures that for bilingual speakers French markers always retain at least something of their status as French words, and hence their saliency within Shaba Swahili/French discourse, and can never become truly part of their Shaba Swahili lexicon. Looked at in this way, the high incidence of French markers may just as well be seen as the result of high frequency codeswitching."

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[3] However, one example *aturu* 'NM = true' makes use of the Qaqet noun marker and thereby resembles its Qaqet counterpart *arevan* 'NM = truth'.

Thus, what is argued in this study is that the Shaba Swahili/French bilingualism and the frequent use of French discourse markers are comparable to the situation that can be observed for Qaqet/Tok Pisin speakers in the Kamanakam corpus, namely, that there is Qaqet/Tok Pisin bilingualism with the frequent use of Tok Pisin discourse markers for agreement.

Further, de Rooij (2000: 447f.) argues that the frequent use of French discourse markers in Shaba Swahili/French code-switching discourse results from the markers' function as contextualization cues. In this context, he (2000: 447f.) also argues for a clustering of French discourse markers with other contextualization cues to mark their overall saliency:

> "What we have, then, is a clustering of the following contextualization cues: code switch + discourse marker + pitch contour + pause(s). The clustering of these cues further enhances the saliency of French."

This clustering of cues resembles the situation observed for the use of code-switched agreement discourse markers in the Kamanakam corpus. However, it cannot be argued that a particular pitch contour is used for switched Qaqet/Tok Pisin agreement discourse markers. Here, further analysis is required to (dis-)confirm the pitch contour as a relevant cue.

Table 6.7 below shows the different Qaqet and Tok Pisin lexemes for expressing agreement, as found in the Qaqet/Tok Pisin Kamanakam corpus. The otherwise frequently used interjections *mh* 'yes' and *a'ee* 'okay' are not considered in this analysis, as they cannot be assigned to a specific language.

Table 6.7: Forms to signal agreement in the corpus

Q	Transl.	TP	Variants	Transl.
taqurla	'like this'	*em*	em, em ya, em nau, em stret	'that's it'
arevan da	'truth' 'right, you don't say'	*tru oke rait*	t(u)ru, trup(e)la, tru ya, tru yet, tru yet ya	'true' 'okay' 'right'

Table 6.7 shows that in the Kamanakam corpus, the number of lexemes used for approval in Qaqet and Tok Pisin is comparable. In addition, Tok Pisin makes use of a number of intensifiers such as *ya*, *yet*, *nau* and *stret*. Similarly, Qaqet *taqurla* 'like this' is already an intensified form of *taquarl* (< *taquarl = a*). Other forms not found in the corpus, but frequently heard in Kamanakam Tok Pisin, include *em tasol* or *em tasol ya*. Table 6.8 shows the frequency of use of Qaqet and Tok Pisin forms of agreement from the same perspective as already outlined for Table 6.6 above.

Table 6.8: Use of Qaqet and Tok Pisin agreement forms in the corpus

	Speaker agrees by staying in Q	Speaker agrees by switching to TP	Speaker agrees by staying in TP	Speaker agrees by switching to Q
Interlocutor's Q statement	8	24	10	4
Interlocutor's TP statement	1	5	19	2

According to Table 6.8, if an interlocutor makes a statement in Qaqet, it is an option for

the speaker to stay in Qaqet, to switch to Qaqet, to stay in Tok Pisin or to switch to Tok Pisin in order to signal agreement. The same holds true if an interlocutor makes a statement in Tok Pisin. What is also evident is that overall, Qaqet agreement discourse markers are used at a lower frequency, compared to Tok Pisin ones. What can also be observed is the tendency for a more frequent use of code-switched Tok Pisin agreement discourse markers compared to Qaqet ones if the interlocutor's statement was in Qaqet.

In the following, it is shown how agreement via the use of discourse markers is realized in monolingual Qaqet (see Example 105), monolingual Tok Pisin (see Example 106), with switch from Tok Pisin to Qaqet and back to Tok Pisin (see Example 107), a switch from Tok Pisin to Qaqet (see Example 108) and a switch from Qaqet to Tok Pisin (see Example 109).

(105) 1 NMS *ngua..*
              ngua
              1SG
              'I..'

              ngunemaendi
              ngu = ne = ma = eddie
              1SG.ASSOC = from/with = ART.ID = NAME
              'me and Eddie'

              dunenin
              dip = une = nin
              FUT = 1DU.SBJ.NPST = cook.CONT
              'we two will cook'

       2 FSS *dapkuasik.. xxx*
              dap = kuasik
              but = NEG
              'but no..'

       3 FSS *[LAUGH]*
              laugh
              laugh
              'laugh'

       4 FWS *[LAUGH]*
              laugh
              laugh
              'laugh'

       5 FSS *[LAUGH]*
              laugh
              laugh
              'laugh'

6   NMS   *arevan*
           a = revan
           NM = truth
           'true'   (CodeFSS_KJS20160910A_1; IU 290–295)

Example 105 shows agreement via the use of the discourse marker *arevan* 'truth, true' in
monolingual Qaqet. Immediately prior to the data extract, NMS, FWS and FSS talked about the
arrival of FSS's son. In the data extract, NMS suggests in Qaqet that she and Eddi will cook in
celebration of the arrival of FSS's son (1). In response to this, FSS makes a joke in Qaqet that is
not fully understandable on the recording (2) and that everyone laughs at (3-5). Finally, NMS
agrees in Qaqet to FSS's utterance in (2) by saying *arevan*.

(106)   1   FLT   *na   wanpla   mama*
                 na   wanpela   mama
                 CONJ   one   mother
                 'and one mother'

        2   FLT   *ol..*
                 ol
                 3PL
                 'they'

        3   FSS   *tupla   papa*
                 tupela   papa
                 two   father
                 'two fathers'

        4   FLT   *man   ya   em*
                 man   ya   em
                 man   PTCL   3SG
                 'this man he'

        [...]

        6   FLT   *man   blong   yalam   ya*
                 man   bilong   yalam   ya
                 man   POSS   NAME   PTCL
                 'is a man from Yalam'

        [...]

        8   FLT   *lemigel*
                 lemigel
                 NAME
                 'Lemigel'

9   FLT   *talakua*
          talakua
          NAME
          'Talakua'

10 FLT   *em   wanpla   papa*
          em   wanpela   papa
          3SG   one   father
          'he is one father'

11 FSS   *tru   yet   ya*
          tru   yet   ya
          true   EMPH   PTCL
          'true'   (CodeFSS_KJS20161119A_2; IU 168–178)

Example 106 shows agreement via the use of the discourse marker *tru* 'true' in monolingual Tok Pisin. Prior to the data extract, FLT talked about the family ties of residents who have inhabited the focal hamlets in the past. In the data extract, FLT refers in Tok Pisin to the parents of a certain person. He states that this person had one mother (1) and two fathers (3) who took care of him. He goes on by stating that the name of this person who came from *Yalam*[4] is *Lemigel* (4, 6, 8) and *Talakua* was the name of one of his fathers (9-10). Finally, FSS agrees in Tok Pisin to FLT's statements by saying *true yet ya*.

(107) 1 FSS *seto   kam   nau*
                seto   kam   nau
                NAME   come   now
                'Seto will come soon'

       2 FWS *da*
                da
                right
                'right'

       3 FSS *mh*
                mh
                yes
                'yes'

       4 FSS *askutu   perlsetnamavetiamek*
                as=kuasik   perlset=ne=ama=avet-ki=a-mek
                still=NEG   finish.CONT=from/with=ART=house-SG.F=DIR-down
                'we haven't finished the house down there yet'

---

[4] Yalam is a Qaqet village that is located further inland; see Fajans (1997) whose ethnographic description is based on research in the villages Yalam and Lan.

5   FWS   *oke*
            oke
            okay
            'okay'

6   FWS   *turu*
            tru
            true
            'true'   (CodeFSS_KJS20160910A_1; IU 245–250)

Example 107 shows agreement via the use of the discourse markers *da* 'right' as well as *oke* 'okay' and *turu* 'true'. Here, the speaker (FWS) makes a switch from Tok Pisin to Qaqet and back to Tok Pisin. In the data extract, FSS speaks about the arrival of his son and the completion of the new house, while FWS agrees with his statements. Prior to the scene, the two of them mainly used Tok Pisin over a longer period of time. In (1), FSS refers to his son who is about to come soon. FWS agrees to this with *da*, thereby switching to Qaqet (2). Then, FSS acknowledges FWS, agreement (3) and explains that the new house is not finished yet; this, he does by also switching to Qaqet (4). FWS now shows his agreement by saying *oke* and *turu* thereby switching back to Tok Pisin. The scene involves two scenarios described in Table 6.8, that is, the interlocutor's statement (FSS) in Tok Pisin and the speaker's switch to Qaqet and the interlocutor's statement in Qaqet and the speaker's switch to Tok Pisin. Thus, the speaker (FWS) agrees both times by switching to the other language.

(108) 1   FWS   *bai   taro   kamap*
                   bai   taro   kamap
                   FUT   taro   come up
                   'taro will grow'

       [...]

      12   FSS   *davangerltilim*
                   dap = a = ngerl-ki = de = medu
                   but = NM = spouse-SG.F = CONJ = past
                   'and the wife, before'

                     qimtimaket
                     kia = mit = te = maket
                     3SG.F.SBJ = go.NCONT.PST = PURP = market
                     'she went to the market'

      13   NMS   *kua*
                   kua
                   where
                   'where?'

14 FSS *kerevat*
          kerevat
          NAME
          'Kerevat'

15 NMS *hmhm*
          hmhm
          yes
          'yes'

16 FSS *maketim*   *blakpla*   *buai*
          maket-im   blakpela   buai
          sell on the market-TR   black   betel nut
          'selling black betel nut on the market'

17 FSS *guari*
          gua-ta
          1SG.POSS-PL.H
          'sorry'

18 NMS *daqaverlset*
          de = ka = verlset
          CONJ = 3SG.M.SBJ = finish.NCONT
          'and there is nothing left?'

19 FSS *mh*
          mh
          yes
          'yes'

20 FSS *perlset*
          perlset
          finish.CONT
          'finished'

21 FWS *[SOUND]*
          sound
          sound
          'sound'

22 FWS *arevan*
          a = revan
          NM = truth
          'truth'   (CodeFSS_KJS20160910A_1; IU 491–412)

Example 108 shows agreement via the use of the discourse marker *arevan* 'truth, true' and

a switch from Tok Pisin to Qaqet. In the data extract, FSS, NMS and FWS are talking about a woman who sells a type of betel nut on the market. Prior to the scene, FWS used Tok Pisin over a longer period of time (1), FSS switched between Qaqet and Tok Pisin, while NMS mainly used Qaqet. The actual scene begins with FSS speaking Qaqet, and describing the woman as someone who used to go to market earlier (12). Then NMS asks FSS to which market she used to go (13). He answers with *Kerevat*, referring to the central market in a town situated about 35 kilometers away (14). NMS agrees with *hmhm* (15), and FSS specifies by switching to Tok Pisin, what NMS sold on the market, namely black betel nut (16). FSS then seems to somehow feel sorry for her, which he marks by switching back to Qaqet (17). NMS utters the assumption in Qaqet that there is probably nothing left of the betel nuts (18), and FSS agrees (19) in Qaqet (20). FWS clicks with his tongue to signal astonishment (21) and agrees with FSS's statement by switching to Qaqet (22). This example describes the scenario given in Table 6.8 in which the interlocutor's Qaqet statement (FSS) is agreed to by the speaker (FWS) while simultaneously switching to Qaqet.

(109)   1   NMS   *tiamensasari*
                  kia = men = sesari
                  3SG.F.SBJ = come.NCONT.PST = to.there
                  'she goes there'

        2   FSS   *mh*
                  mh
                  yes
                  'yes'

        3   FSS   *aangerlka*
                  ara = ngerl-ka
                  3SG.F.POSS = spouse–SG.M
                  'her husband'

        4   FSS   *kain   man   ya*
                  kain   man   ya
                  type of   man   PTCL
                  'what a guy'

        5   FSS   *no   sa   rispekt   ol   samting   blo   papa*
                  no   save   rispekt   ol   samting   bilong   papa
                  not   HAB   respect   3PL   something POSS   father
                  'he does not respect his father's properties'

        6   NMS   *tru   ya*
                  tru   ya
                  true   PTCL
                  'true'   (CodeFSS_KJS20160910A_1; IU 319–324)

Example 109 shows agreement via the use of the discourse marker *tru* 'true' and a switch from Qaqet to Tok Pisin. The data extract shows a conversation between FSS, FWS and NMS in which FSS complains about the manners of a man, and to which NMS agrees. Prior to the scene,

FSS switched between Qaqet and Tok Pisin for a period of time, while NMS spoke mainly Qaqet with some minor switches to Tok Pisin. The scene begins with NMS last statement in Qaqet (1). FSS referrs to this man in Qaqet, whom he introduces with a left-dislocation (3) (see Examples 88 and 89 from p. 179 and 180 for details on this type of switch). He then switches to Tok Pisin to comment on the man and his behavior (4, 5). NMS agrees to FSS's statement while switching to Tok Pisin (6). The example describes the scenario (Table 6.8) of the interlocutor making a statement (FSS) in Tok Pisin to which the speaker (NMS) agrees simultaneously by switching to Tok Pisin.

6.2.3 Conclusion

The numbers in Table 6.6 lead me to the following interpretations:

1. It seems to be possible to show agreement by repeating an interlocutor's statement.

2. Agreement is realized in the language of the interlocutor, which can lead to code-switching.

3. If the speaker has not been using the same language as her/his interlocutor, s/he may switch to this very language in order to demonstrate a more emphatic agreement of the interlocutor's statement. Kulick and Stroud (1990: 215) describes the same for Taiap/Tok Pisin code-switching.

The data in Table 6.8 lead me to the following interpretations:

1. Qaqet and Tok Pisin make use of discourse markers for agreement.

2. Irrespective of the interlocutor's preceding statement, Tok Pisin is more often used for agreement.

It is conceivable in this context that discourse markers from the other language can be used as a form of contrast to emphasize agreement, similar to what Kulick and Stroud (1990: 215) describe for agreement via repetition in Taiap/Tok Pisin code-switching of the Gapun people, and what de Rooij (2000) describes in more detail for Shaba Swahili/French code-switching. In this sense, the switch would be interpreted as one of many cues to emphasize the agreement – in principle, this occurs irrespective of the switching direction. However, the more frequent use of Tok Pisin agreement discourse markers could point to them being a further cue. This would be similar to how de Rooij (2000) explains the more frequent use of French discourse markers in Swahili/French discourse.

6.3 Language play

According to Gibbs et al. (2014: 577) "[a] traditional assumption within linguistic pragmatics is that humor often arises when people make an utterance that expresses some incongruity between what is literally said and pragmatically implied". Though this definition of humor may not include all different forms of humor found in the corpus, it serves as one of the reference points for its identification. Irony, on the other hand, "is traditionally defined as cases where speakers/writers aim to communicate the opposite of what they literally say" (2014: 576). In this study, the two may be generally subsumed under the term language play. In the corpus, the most apparent signal of language play seems to be (an) interlocutor(s) laughing at a speaker's

statement. However, sometimes a statement which was not intended to be funny by the speaker may still provoke (an) interlocutor(s) to laugh. These statements were not considered as language play in the corpus. On the other hand, there may be statements the speaker marked as language play, which do not result in any laughter by the interlocutor(s) (Attardo 2003: 1288). These instances were, as far as they could be identified, considered for the coding of language play. Laughter may not exclusively derive from a stimulus. For example, a speaker may laugh in order to signal her/his humorous intention (2003: 1288). These instances were considered in the coding process. Moreover, laughter can also be caused by non-humorous stimuli (e.g., tickling) or triggered by imitation (e.g., by observing other people laugh) (2003: 1288). These instances were not considered in the coding process as this type of laughter is not a reaction to a speaker's verbally expressed language play.

Several studies have demonstrated how code-switching can be used to mark humor or irony (McConvell 1988; McCormick 2001; Siegel 1995; van Boeschoten 2006; Woolard 1988). Siegel (1995) has evaluated sociolinguistic and anthropological studies dealing with humor, which is achieved via the use of code-switching. He (1995: 100) concludes that code-switching can mark humor in three different ways:

> "First, it may be a signal that joking is taking place; second, the switch itself may be the object of humor; and third, the variety of language to which one switches may be considered funny."

In bilingual societies, the first type may arise when a particular language is considered more appropriate for language play (Siegel 1995: 100). As a so-called contextualization cue, the switch may convey social meaning, and indicate how the utterance is to be interpreted (1995: 101). In this sense, "a switch to the code appropriate for humor can be a signal that the content is not serious" (1995: 101). For the second type, it is the random use of code-switching itself, which causes humor (1995: 102). It happens in situations in which monolingual language use is considered the norm (1995: 102). The third type may appear if the language of a particular group becomes stereotyped, and is ridiculed by another group (1995: 102).

From the analysis of the corpus, the second and third types can be excluded. For the second type, it has been pointed out (see Section 5.1 from p. 118) that the settings in which code-switching can be observed are subject to informal language use. These informal settings are characterized by code-switching between Qaqet and Tok Pisin, as opposed to more formal settings in which the use of Tok Pisin is the predominant norm. From this point of view, code-switching in informal contexts does not violate the norm, and hence code-switching itself can not be considered the object of language play. Furthermore, a rapid Qaqet/Tok Pisin code-switching mode supported by signs of amusement from an interlocutor could also not be detected in the corpus. As for the third type, during fieldwork I have witnessed radio broadcasts of Tok Pisin-speaking comic performers who mimicked, for example, speakers of Australian-English or American-English or speakers of Tok Pisin from various areas for the purpose of language play. Similarly, a number of researchers have observed how the peculiarities of pronunciation in the different regions of PNG are the basis for language play in the form of teasing (Laycock 1985: 304; Mühlhäusler 1985d: 261; Smith 2002: 43). In Kamanakam, I witnessed how Tok Pisin speakers showing particular regionalisms that deviate from local norms were sometimes subject to teasing. Thus, it can not be ruled out that people in Kamanakam also mimic Tok Pisin speakers from other regions for the purpose of language play. In the corpus, however, this type of style-shifting can not be observed. In the analysis, it was solely the first type of language play which was identified as being used by the speakers in their realization of language play.

Structurally, code-switching with regard to language play mainly occurs between two monolingual intonation units, that is, from a monolingual language A to a monolingual language B. However, language play has also been observed to occur in mixed intonation units. For example, speakers insert Tok Pisin words into a Qaqet language frame, seemingly with the goal to achieve a humorous effect. It could be argued that the insertions from the other language qualify here as a type of intra-intonation unit code-switching as they are intended to achieve a conversational effect, which is to mark language play. Similarly, for his study on language play in Fijian/Hindi code-switching Siegel (1995: 106f.) includes Hindi insertions in a Fijian frame. He (1995: 106) argues that the Hindi words used for language play structurally have a lot in common with Hindi loan words in Fijian that are not used for language play. First, the former are phonologically integrated. Second, they are morphological adapted, although less frequent than Hindi loan words. Third, all joking words have Fijian equivalents; in contrast, only some integrated loan words do also. Fourth, a significant number of Fijians who use Hindi words for language play have very little competence in Fiji Hindi or Pidgin Hindustani. From his observations Siegel (1995: 106) concludes:

> "It seems, then, that the most important factors determining whether a word is used for joking are related to perceptions of the speakers: (a) the word is not normally used in Fijian, and (b) it is clearly of Hindi origin."

Or more generally, (a) the word of language A is not normally used in language B, and (b) is clearly of language A. He (1995: 106) further explains that it is a matter of the perceived markedness of the words by the participants: the latter may perceive the joking words as marked and the loan words as unmarked; and it is they who have to be aware that a switch occurred. Siegel's analysis of marked other-language insertions bears some similarity to his first type of code-switching, where a change to the other language appropriate for language play signals that the content is to be interpreted as non-serious. Likewise, Siegel's two other types seem not to be applicable to the analysis of other-language insertions. As a consequence, the latter are also analyzed in terms of the first type.

6.3.1 Language play and code-switching

Table 6.9 gives the number of tokens for language play in the context of monolingual and code-switched language use within the corpus. It covers instances of language play that the speaker realized by staying in Qaqet (Q) or staying in Tok Pisin (TP). Further, it covers language play in conjunction with code-switching (CS) from Qaqet to Tok Pisin and vice versa. Since the coding revealed switches from both, Qaqet and Tok Pisin, to other languages (OL), these numbers were also included. The other languages are Siwai/Buin, Kuanua and English.

Table 6.9: Language play and code-switching

Staying in Q	CS: Q to TP	CS: Q to OL	Staying in TP	CS: TP to Q	CS: TP to OL
8	4	1	14	1	2

The numbers given in Table 6.9 show that language play is predominantly realized in monolingual Qaqet (n = 8) and Tok Pisin (n = 14). Code-switching to the other language can be considered a solid option (n = 8) for the speaker in the context of language play. The used languages indicate that code-switching for language play may not only be restricted to the use of Qaqet and

Tok Pisin, but also include other languages, such as Siwai/Buin, Kuanua and English. From the point of view of Qaqet and Tok Pisin, the numbers indicate that language play can be marked by code-switching in both directions, that is, from Qaqet to Tok Pisin and vice versa.

The following data extracts show language play as realized in monolingual Qaqet (see Example 110), with a switch from Qaqet to Tok Pisin (see Example 111), with a switch from Qaqet to Siwai/Buin (see also Example 111), in monolingual Tok Pisin (see Example 112), with a switch from Tok Pisin to Qaqet (see Example 113) and with a switch from Tok Pisin to English (see Example 114).

(110) 1   FRU   *nyatit..*   *nyatitamatlunya*
                 nya = tit   nya = tit = ama = tlu-nyi = a
                 2SG.SBJ = go.CONT   2SG.SBJ = go.CONT = ART = good-2SG = DIST
                 'go.. go and say goodbye'

       2   GKN   *[LAUGH]*
                 laugh
                 laugh
                 'laugh'

       3   FRU   *dapmiikaamatlunyi*
                 dap = miika = ama = tlu-nyi
                 but = more = ART = good-2SG
                 'say goodbye'

                 aquasnemraqen
                 a = kuasik = nyi = raqen
                 ?? = NEG = 2SG.SBJ.NPST = say.NCONT
                 'or are you not able to talk'

       4   FRU   *xxx*
                 xxx
                 xxx
                 'xxx'

       5   GKN   *[LAUGH]*
                 laugh
                 laugh
                 'laugh'   (CodeFSS_KJS20160901_1; IU 985–989)

Example 110 shows language play realized in monolingual Qaqet. Prior to the data extract, FRU tried to encourage GKN to say something in Qaqet for the recording which she, however, refused. The data extract begins when GKN is about to leave the setting. It begins with FRU encouraging GKN to say goodbye in Qaqet (1). While saying this, FRU smiles as he knows that GKN will probably not do it, since she has refused to speak Qaqet before. GKN laughs about what FRU has just said (2) as it probably is funny to her that FRU does not relent. The smile on FRU's face becomes broader as he repeats his request in Qaqet, and somewhat ironically asks whether GKN is able to speak at all (3). He adds something to his statement in Qaqet, of which

is unfortunately unintelligible (4). However, he keeps smiling, and is seemingly in a humorous mood. GKN laughs again to show her amusement (5).

(111) 1 FSS *nyitludia..* *diadiamuk*
nyi = tlu = gia gia = gi = a-muk
2SG.SBJ.NPST = see.CONT = 2SG.POSS 2SG.POSS = thingy = DIR-across
'you see your.. that thing of yours over there'

2 FSS *dianimgi*
gia = nim-ki
2SG.POSS = picture-SG.F
'your picture'

3 NMS *nyinyim*
nyi = nyim
2SG.SBJ.NPST = look.NCONT
'you look!'

4 NMS *iasi*
iasi
DIST
'over there'

5 FWB *mh*
mh
yes
'yes'

6 NMS *ai*
ai
INTJ
'ai'

7 NMS *ariknyingangmetki*
arik = nyi = ngang = met-ki
supposing = 2SG.SBJ.NPST = walk around.CONT = in-3SG.F
'not that you walk around on it'

8 FWS *lequasiqitluqi*
lu = iara = kuasik = ki = tlu-ki
DEM = PROX = NEG = 3SG.F.SBJ.NPST = see.CONT-3SG.F
'before she did not see it'

9   FSS   *mh*
            mh
            yes
            'yes'

10   NMS   *quasiktitluqi*
            kuasik = ki = tlu-ki
            NEG = 3SG.F.SBJ.NPST = see.CONT-3SG.F
            'she is not seeing it'

11   FWS   *les   but*
            les   but
            lazy   butt
            'lazy ass'

12   FWB   *[SOUND]*
            sound
            sound
            'sound'

13   FWB   *pupu   weri   ya   kati   tarai*
            bubu   meri   ya   kat-im   tarai
            grandparent   woman   PTCL   cut-TR   dry coconut
            'grandmother is cutting dry coconuts'

14   NMS   *nyitluiarliqiaat*
            nyi = tlu = i = arik = kia = at
            2SG.SBJ.NPST = see.CONT = SIM = supposing = 3SG.F.SBJ = fall.NCONT
            'you watch out it may fall down!'

15   FSS   *ha*
            ha
            INTJ
            'hey'

16   NMS   *nyitlu*
            nyi = tlu
            2SG.SBJ.NPST = see.CONT
            'you see?'

17   FSS   *rukutui*
            ruku-tui
            foreskin-??
            'foreskin'

18	NMS	*[Hawks]*		
		hawks		
		hawks		
		'hawks'		

19	FWS	*[LAUGH]*		
		laugh		
		laugh		
		'laugh'		(CodeFSS_KJS20160910A_1; IU 1042–1060)

Example 111 shows language play realized in the context of a switch from Qaqet to Tok Pisin (11), as well as a switch from Qaqet to another language, possibly Siwai or Buin[5] (17) (both are close-related Papuan languages from Bougainville). The latter is, however, partially addressed towards a child (FWB) and partially for entertainment of the other adults present. In the data extract FSS, FWS and NMS are talking about the child FWB and the recording camera. The scene begins with FSS addressing FWB in Qaqet, making her aware that she can see herself on the small screen attached to the camera (1–2). NMS then further encourages her in Qaqet to go to the camera and look (3–4). FWB agrees to this (5). Suddenly, NMS becomes aware that FWB might push over the camera, and reminds her in Qaqet to be careful (6–7). FWS joins the conversation and addresses NMS with a comment in Qaqet, stating that FWB had also not seen the camera (8), to which FSS agrees (9). NMS looks over to FWB, thereby giving FWS feedback in Qaqet that FWB still does not see the camera (10). This is when FWS switches to Tok Pisin, making a derogatory but humorous statement (11). Here, the switch may function to signal that language play is taking place. However, since there is no laughter from the other participants, they may not have considered FWS's statement to be funny. FWB then walks over to the camera, and looks into the small screen attached to it. In the screen, she sees what is being recorded in the moment. She comments in Tok Pisin that she sees her grandmother (NMS) removing the meat (kernel) from dry coconuts (13). NMS, still anxious that FWB might knock over the camera, instructs her in Qaqet to be careful (14). FSS is somewhat annoyed by the possibility that FWB might knock over the camera, and tries to get FWB's attention (15). NMS acknowledges this in Qaqet by asking, *nyitlu* 'you see [what she is doing]?' (16). FSS then switches to a swear word in either Siwai or Buin (17). Following to this, FWS starts to laugh heartily (19) as he is probably familiar with the meaning of the word. Although partially being addressed, it can be assumed that the child does not know the meaning of this word, in contrast to the other adults present. It leads me to the interpretation that FSS mainly uttered this word for the amusement of the other adults. Simultaneously, the switch to the other language may function here as a signal for language play.

(112)	1	NMS	*blong*	*mi*	
			bilong	mi	
			POSS	1SG	
			'as for me'		

	2	NMS	*nogat taim*	*i*	*kam*
			nogat taim	i	kam
			NAME	PRED	come
			'Nogat Taim comes'		

---

[5] FSS states that *rukutui* comes from his foster father's native language Siwai (also called Motuna), and translates it as 'foreskin'. In his Buin-English dictionary, Laycock (2003: 193) lists *ruku* which he also translates as 'foreskin'.

3   NMS   *na   em   bai   kilim   em*
          na   em   bai   kil-im   em
          and   3SG   FUT   kil-TR   3SG
          'and he will kill him'

4   HJP   *ai*
          ai
          INTJ
          'ai'

5   NMS   *na   kaikai   ol   disla*
          na   kaikai   ol   dispela
          and   eat   PL   DEM
          'and eat all this'

6   NMS   *nogat taim   em   i   tok*
          nogat taim   em   i   tok
          NAME   3SG   PRED   say
          'Nogat Taim says'

7   NMS   *mi   nogat   taim*
          mi   nogat   taim
          1SG   NEG   time
          'I don't have time'   (CodeFSS_KJS20160910A_1; IU 759–766)

Example 112 shows language play realized in monolingual Tok Pisin. HJP, FSS, FWS and NMS are in a 'working' speech situation, cutting coconuts in half and removing the kernel. Immediately prior to the data extract, HJP, FWS and NMS talked about a pig that had just arrived, and started eating the coconut meat. This is when the data extract begins. NMS begins to joke that if it were up to her (1), her pig named *Nogat Taim* 'lit. have no time' would come (2), kill this pig (3) and eat the coconut meat itself (5). NMS then makes another joke, that her pig *Nogat Taim* would simply say *mi nogat taim* 'I don't have time' (6–7). The name which NMS has given to her pig somewhat depicts its main characteristic, namely always being in a hurry. The name is thus already a joke in itself. In NMS's imagined situation (2, 3, 5), the pig also behaves as its name *Nogat Taim* implies. This is somewhat reinforced by the rapid way in which NMS gives the sequence of actions. She continues to make the story more ridiculous when she initiates direct speech (6), implying that the pig is able to talk. She finishes her joke by quoting her pig (7).

(113) 1 FLT   *mi   lusim   man*
                mi   lus-im   man
                1SG   leave.TR   man
                'I left him'

2　FLT　*mi　go　long　komgi*
　　　　mi　go　long　komgi
　　　　1SG　go　PREP　NAME
　　　　'I went to Komgi'

3　FLT　*go　long　raunsepna*
　　　　go　long　raunsepna
　　　　go　PREP　NAME
　　　　'went to Raunsepna'

4　FLT　*kambek*
　　　　kambek
　　　　come back
　　　　'came back'

5　FLT　*kain　skul　nabaut　ya*
　　　　kain　skul　nabaut　ya
　　　　type pf　school　around　PTCL
　　　　'[went to] different schools'

6　FLT　*ronowe　nabaut*
　　　　ronowe　nabaut
　　　　run away　around
　　　　'ran away somewhere'

7　FSS　*[LAUGH]*
　　　　laugh
　　　　laugh
　　　　'laugh'

8　FLT　*maget*
　　　　maget
　　　　then
　　　　'afterwards'

9　FLT　*deianmnemnguaseivit*
　　　　de＝ian＝mnem-ngua＝se＝i-pit
　　　　CONJ＝3DU.SBJ＝send/sell.CONT-1SG＝to/with＝AWAY-up
　　　　'the two sent me up there'

10　FSS　*[LAUGH]*
　　　　laugh
　　　　laugh
　　　　'laugh'　　　　　　　　　　(CodeFSS_KJS20161119A_2; IU 1354–1363)

Example 113 shows language play realized in the context of a switch from Tok Pisin to

Qaqet. In the data extract, FLT describes how he ran away from his foster parents as a child. FLT begins his story in Tok Pisin stating that he left his foster parents (1), went to Komgi (2), to Raunsepna (3) and came back (4). He further describes how he attended different schools (5) during that time, but ran away (6). FLT tells his story in a very colloquial fashion, painting a picture of a young rebellious kid. As a consequence, FSS starts to laugh for the first time (7). FLT then switches to Qaqet to deliver the punchline of his story, stating that after some time (8) his foster parents seem to have caught him, and sent him somewhere up in the mountains (9). Following this, FSS laughs heartily (10). FLT delivers the Qaqet part of this story about how his time of rebellion is put to an abrupt end by his foster parents in a fairly dry manner. The switch to Qaqet may additionally support that language play is taking place. Moreover, it also seems to mark the punchline of a story that was already told in a quite humorous way. However, another interpretation to explain FLT's code switch might be that while FLT speaks Tok Pisin, he is the agent, whereas his foster parents take on the role of agent after he switches to Qaqet. The switch could, therefore, also mark the switch of the assigned agent role.

(114) 1 FSS *em*   *wanpla*   *biket*   *meri*   *ya*
              em   wanpela   bikhet   meri   ya
              3SG   one   stubborn   woman   PTCL
              'she is a stubborn girl'

       2 HJP *klia*   *blong*   *en*   *nogat*   *tru*
              klia   bilong   em   nogat   tru
              understanding   POSS   3SG   NEG   really
              'she really has no understanding'

       3 NMS *mipla*   *go*   *daun*   *na..*
              mipela   go   daun   na
              1PL.EXCL   go   down   CONJ
              'we went down and..'

       4 FSS *empty*   *drum*
              empty   drum
              empty   drum
              'empty drum'

       5 FSS *makes*   *a*   *lot*   *of*   *noise*
              makes   a   lot   of   noise
              makes   a   lot   of   noise
              'makes a lot of noise'   (CodeFSS_KJS20160910A_1; IU 882–886)

Example 114 shows language play in the context of a switch from Tok Pisin to another language, which in this case is English. In the data extract, FSS and HJP are talking about the inappropriate behavior of a particular child while NMS is right in the middle of telling a story to FWS. FSS begins to state in Tok Pisin that this child is a stubborn girl (1). HJP acknowledges this by adding in Tok Pisin that the child also does not listen (2). This is when FSS switches to English for a joke in which he compares the child to an empty drum (4) which, if you hit, makes a lot of noise (5). FSS's comparison to the drum has a derogatory function with the goal

to ridicule her apparently loud behavior. The switch to English itself may be interpreted here as a signal that language play is taking place.

6.3.2 Language play and other-language insertions

Table 6.10 gives the number of tokens for language play in relation to insertions from a language other than the language frame it is embedded in. These include a Qaqet frame with Tok Pisin insertions ([Q(TP)], see Example 115) and vice versa ([TP(Q)]). It also includes insertions from another language, which in both cases is Kuanua, in a Qaqet ([Q(OL)], see Example 116) or Tok Pisin frame ([TP(OL)], see Example 117).

Table 6.10: Language play and insertions

[Q(TP)]	[Q(OL)]	[TP(Q)]	[TP(OL)]
3	1	0	1

The numbers in Table 6.10 show that language insertions in a Qaqet or Tok Pisin frame are a possible way to signal language play. There are no tokens of Qaqet insertions in a Tok Pisin frame, which may well be due to the small sample size.

(115) 1 FRU *a*   *nyilu..*   *nyitlu*   *ama*   *buklet*
                 a   nyi=lu..   nyi=tlu   ama   buklet
                 INTJ   2SG.SBJ.NPST=see.NCONT   2SG.SBJ.NPST=CONT   ART   booklet
                 'a have you seen.. do you see the booklet?'

      2 FRU *liklik*   *buklet*   *ya*
                 liklik   buklet   ya
                 small   booklet   PTCL
                 'the small booklet'

      3 FRU *namaaqara*   *xxx*
                 ne=ama=qaqet=a   xxx
                 from/with=ART=person.PL=DIST   xxx
                 'the people xxx'

      4 IRM xxx
                 xxx
                 xxx
                 'all men only know Tok Pisin'

      [...]

      9 IRM *abuklet*
                 a=buklet
                 NM=booklet
                 'the booklet'

[...]

11   IRM   *ama   abuklet*
ama   a = buklet
ART   NM = booklet
'the booklet'

12   FSS   *nasat*
nasat
NAME
'Nasat!'

13   FRU   *na   em   liklik   buklet   ya*
na   em   liklik   buklet   ya
CONJ   3SG   small   booklet   PTCL
'it is a small booklet after all'

14   IRM   *mh*
mh
yes
'yes'

15   IRM   *ambuklet*
ama = buklet
ART = booklet
'the booklet'

16   IRM   *[LAUGH]*
laugh
laugh
'laugh'

17   GKN   *[LAUGH]*
laugh
laugh
'laugh'

18   IRM   *ambuklet*
ama = buklet
ART = booklet
'the booklet'

19	IRM	*[LAUGH]*	
		laugh	
		laugh	
		'laugh'	(CodeFSS_KJS20160901_1; IU 839–857)

Example 115 shows language play realized with Tok Pisin insertion in a Qaqet frame. In the data extract, FRU and IRM are inside their kitchen, talking about a booklet with bible verses that FRU is looking for. During their conversation, FSS and GKN are sitting near-by as bystanders. The scene begins with FRU asking IRM in Qaqet whether she has seen this particular booklet (1). He immediately elaborates on it in Tok Pisin, in order to specify which booklet he actually referring to (2). It is then not entirely clear what FRU says to IRM in Qaqet, as the quality of the recording is unclear and IRM begins to talk simultaneously. From what can be understood, he is referring to some quality all men in Kamanakam seem to have (3). IRM picks up on FRU's statement, and comments that the men would only know Tok Pisin (and not Qaqet) (4). The following intonation units (5–8) are skipped since they consist of two children having a conversation of their own. IRM then starts to pick up on the word *buklet* 'booklet', which she utters quietly at first with the Qaqet noun marker *a* (9). She then utters it with the Qaqet article *ama* and noun marker *a*; this time, loud enough in order that FRU, who by then is outside searching for the booklet, can hear her (11). The repetition of the word and the sound of her voice indicate that IRM somewhat stumbles over the word. FRU recognizes this and emphatically remarks that it is a booklet after all (and not a book) (13), which could be the reason he called it that in the first place. IRM continues to say the word out loud (15), which causes her and GKN to laugh (16, 17). IRM must have heard that GKN also laughed when she did. IRM turns to GKN. Smiling and raising her eyebrows, she repeats the word again (18) and both laugh (19, GKN inaudible). In summary, it could be argued whether *buklet* 'booklet' is a lexeme normally used in Qaqet talk, as it is clearly Tok Pisin/English. The corresponding Qaqet form in this context would be *ama=langiny-ini* 'the small book'. In an interpretation that favors an analysis of this data extract as language play, the following could be concluded: first, IRM seems to dwell on the word by repeating it to herself due to its unfamiliarity (9, 11). Her following repetitions (15, 18), could be interpreted in the sense that she uses the word deliberately to initiate language play. In doing so, she emphasizes the contrast between the Qaqet *ama=langiny-ini* 'the small book' and what seems to be in her opinion a rather unusual Tok Pisin insertion *ama=buklet* 'the booklet'.

(116)	1	FSS	*xxx*	*ampulapulaqi*	
			xxx	ama=pulapula-ki	
			xxx	ART=coconut palm log-SG.F	
			'you are making a coconut palm log'		

	2	FWS	*alalai*	
			alai	
			swear word	
			'man'	

	3	FSS	*[LAUGH]*	
			laugh	
			laugh	
			'laugh'	(CodeFSS_KJS20160910A_1; IU 941–943)

Example 116 shows language play realized with an insertion in a Qaqet frame. In the data extract, FWS is rolling himself a cigarette, which attracts the attention of FSS because of its unusual size. FSS compares the cigarette to a 'coconut palm log' or a 'tree trunk'[6] and bursts out laughing (1). Half laughing, FWS reacts with a switch to Kuanua for the swear word *alai* (2). As a reaction to FWS's swear word, FSS laughs again (3). In summary, the data extract could be interpreted in the sense that FSS wants to achieve a humorous effect in that he exaggerates the cigarette's unusual size by comparing it to an even bigger item of similar shape. At the same time, the Kuanua insertion is interpreted here as to signal the non-seriousness of the content, and thereby to mark language play.

(117) 1 FWS   *mi   rausim   i   go   daun   pastem*
                 mi   raus-im   i   go   daun   pastaim
                 1SG   remove-TR   PRED   go   down   first
                 'I remove it to go down first'

        2 FSS   *mukmuk   man*
                 mukmuk   man
                 mumbling   man
                 'mumbling man'

        3 FWS   *[SOUND]*
                 sound
                 sound
                 'sound'   (CodeFSS_KJS20160910A_1; IU 502–504)

Example 117 shows language play realized with an insertion in a Tok Pisin frame. In the data extract, FWS, NMS, HJP and FSS are in a 'working' speech situation. Immediately prior to the scene, the participants relocated to a different place to continue their work. FSS is repositioning the camera, and arrives shortly after the other three have taken their places. This is when the data extract begins. FWS says something about the further organization of his work (1). FSS arrives with the camera, and calls FWS *mukmuk man* which probably translates to 'mumbling man' or 'sago man'[7]. The former translation 'mumbling man' seems to be the more plausible one, as FWS was talking rather quietly. Moreover, there is no sago present in any way which could serve as reference point for language play. According to this interpretation, *mukmuk* is considered as Kuanua. It is likely that FSS uses *mukmuk* somewhat jokingly in order to tease FWS for his rather quiet speaking. The simultaneous switch to Kuanua is interpreted here as a signal that language play is taking place.

6.3.3   Conclusion

In summary, it has been shown that language play does predominantly occur in monolingual speech. In the context of code-switching as well, language play is solidly attested, and it is argued that it functions here as a marker for language play. It is shown that among the Kamanakam Qaqet/Tok Pisin speakers, code-switching for language play may occur between in-

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[6] The word *pulapula* could be from Kuanua. Meyer (1961: 328) lists it in his Kuanua-German dictionary and translates it as 'Kokosstamm, runder Baumstamm, Hauptpfosten', i.e. 'coconut palm log, tree trunk, main post'.

[7] Meyer (1961: 264) lists *mukmuk* in his Kuanua-German dictionary as an intransitive verb and translates it as 'für sich reden, brummen, murren', i.e. 'to speak to oneself, to grumble, to mutter'. Mühlhäusler (1985a: 215f.) translates *mukmuk* as 'roasted sago' being among a list of words with no known source language.

tonation units with a switch from a monolingual language A to a monolingual language B. In addition, it is argued that language play may also be marked by an insertion from language A in a frame of a language B. The switches were analyzed according to Siegel's (1995) framework for code-switching in language play.

For code-switching between monolingual intonation units, it is Siegel's first type that has been found in the corpus data. In this type, code-switching functions as a contextualization cue indicating that the switched unit is to be interpreted as language play. Siegel (1995: 101) argues in this context that a code 'appropriate for humor' might signal the non-seriousness of the content. In this study, the question of which language among the Kamanakam Qaqet/Tok Pisin speakers is more appropriate for humor cannot be answered. As with other functions in this study, switching to Tok Pisin seems to be slightly more preferred. However, the numbers of tokens in the corpus are simply too small to draw any extensive conclusions. What can be said is that there seem to be no restrictions on the switch direction when it comes to Qaqet and Tok Pisin. More generally, there also seem to be no restrictions on the language used to mark language play. This is supported by the fact that there are switches to languages other than Qaqet and Tok Pisin with the goal of marking language play[8]. The data available so far indicate that it is the switch itself which marks language play. As for the code appropriate for humor, it could be simply the 'otherness' of the language being switched to, which signals that something humorous is intended. Finally, it has also been argued that Siegel's third type, which is characterized by the fact that the use of a particular variety is considered funny, is likely to occur in Kamanakam. However, the corpus data do not show any examples of this type of language play in relation to code-switching. Therefore, further research is needed to definitively identify this type in the Kamanakam context.

For the insertions from a language A in a frame of a language B, Siegel (1995) has shown how the phenomenon sometimes known as 'code-mixing' or 'nonce-borrowing' can be included in the study of code-switching and language play. In the corpus, there are Tok Pisin insertions in a Qaqet frame, and other language insertions in Qaqet and Tok Pisin frames, but no Qaqet insertions in a Tok Pisin frame. However, the numbers of tokens in the corpus are very small, which makes any conclusions tentative. Again, insertions seem not to be restricted to either Qaqet or Tok Pisin, as two insertions that are possibly Kuanua indicate. As pointed out by Siegel (1995: 106f.), despite their structural similarity to established loan words, the insertions used for language play may be interpreted by the speaker as marked. Siegel further argues that the speaker interprets these insertions as not usually used in language B, and thus of language A. In this sense, the marked insertions may be perceived as joking words by the speaker. For the Kamanakam context, other-language insertions used for language play could thus be interpreted as belonging to Siegel's first type, in which the switch itself draws attention to language play.

6.4 Mode shift

The mode-shift strategy describes a speaker's shift in the mode of discourse. In the literature, code-switching has been observed when a speaker shifts from narrative to external comment or from casual to more formal speech, when interrupting a conversation with a self-directed or rhetorical statement, or when moving out of an interrogative mode (cf. Huerta 1978: 41; McClure 1977: 108ff.; Zentella 1990: 85). In these descriptions, the mode-shift strategy bares some semantic similarity to strategies such as 'personalization versus objectivization' (McClure 1981: 84; Romaine 1995: 164f.) and 'parenthesis' (also named 'side-comment') (Matras 2009:

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[8] This is unusual in that only switching between Qaqet and Tok Pisin can be observed with the other strategies (except for 'swearing', see Section 6.7.4 on p. 269).

118; McClure and McClure 1988: 37f.). The former strategy, is part of Gumperz' (1982: 80) frequently cited classification of conversational functions of code-switching in which he relates it to:

> "the distinction between talk about action and talk as action, the degree of speaker involvement in, or distance from, a message, whether a statement reflects personal opinion or knowledge, whether it refers to specific instances or has the authority of generally known fact".

Gumperz (1982: 83) admits that at this stage "personalization and objectification are merely rough labels for a large class of stylistic and semantic phenomena". Matras (2009: 118) describes the 'parenthesis' strategy as a means to structure conversation "by highlighting a side-comment against the background of the more general narration line". During analysis of the Kamanakam corpus, it was the shift into and out of the narrative mode that could most clearly be associated with code-switching. When going out of the narrative mode, or more precisely, in the transition from narrative to external comment, the mode shift strategy resembles some similarity to the completion strategy (see Section 6.7.2 on p. 264). The issue will be further outlined at the end of this section.

6.4.1   Narratives in the Kamanakam corpus

According to Strömqvist and Verhoeven (2004b: 3) narratives are used "to recapitulate past experience by matching a verbal sequence of clauses to the sequence of events which actually occurred". Toolan (2001: 4-8) lists six typical characteristics of narratives to distinguish them from non-narratives:

1. Narratives show a degree of artificial fabrication or constructedness not usually apparent in spontaneous conversation.

2. Narratives show a degree of prefabrication, that is, bits that the listener has or believes to have seen or heard before.

3. Narratives seem to have a trajectory, that is, they are expected to go somewhere with some sort of development and resolution or conclusion provided.

4. Narratives have to have a teller and an addressee.

5. Narratives are recognized by displacement, that is, things and events are removed, in time and space, from either speaker or addressee.

6. Narratives involve the recall of happenings that are spatially, but, more crucially, temporally remote from the teller and and the addressee.

Strömqvist and Verhoeven's definition, as well as Toolan's characteristics of narratives served as a guideline to identify narrative elements within the corpus. In the Kamanakam corpus, they have been recognized as a sequence of minimally two clauses irrespective of whether they are realized in the form of one or two intonation units. However, they are often much longer, and infrequently peppered with interruptions from the narrator's interlocutors. Spatially, the narratives are centered on the area of the Gazelle peninsula, and temporally, range over several years, or pertain to times before the narrator was born. They show a degree of constructedness in the sense that sequence, emphasis and pace are planned, as described by Toolan (2001: 5).

The trajectory they describe serves to strengthen a point in conversation, to share past experiences with others, and thus to pass on knowledge, and/or to entertain people. Finally, they have a teller and an addressee. See Example 118 in Tok Pisin by the participant FLT as an exemplification of the mentioned characteristics. The data extract shows a sequence of a narrative from FLT about the time when he ran away from his home in Kamanakam to Kokopo town.

(118) 1 FLT *mi   pasim   taim   long..*
            mi   pas-im   taim   long
            1SG   spend   time   PREP
            'I spent time at..'

    2 FSS *enko*
            enko
            NAME
            'Enko'

    3 FLT *enko   i   stap*
            enko   i   stap
            NAME   PRED   stay
            'staying at Enko'

    4 FSS *[LAUGH]*
            laugh
            laugh
            'laugh'

    5 FLT *em   masta   ya*
            em   masta   ya
            3SG   master   PTCL
            'the master'

    6 FLT *wok   lo   painim   mi   long   taun   i   stap*
            wok   long   pain-im   mi   long   taun   i   stap
            work   PREP   find-TR   1SG   PREP   town   PRED   to be
            'he tried to find me in the town'

    7 FLT *nogat   mi   ait   ya*
            nogat   mi   hait   ya
            NEG   1SG   hide   PTCL
            'no I hid myself'

    8 FLT *em   nau*
            em   nau
            3SG   now
            'that's it'

9   FLT   *ai*
            ai
            INTJ
            'ai'

10   FLT   *disla   kain   taim   ya*
            dispela   kain   taim   ya
            DEM   type of   time   PTCL
            'this time'

11   FLT   *i   no..   gutpla   taim*
            i   no   gutpela   taim
            PRED   NEG   good   time
            'it was no.. it was a good time'

                                    (CodeFSS_KJS20161119A_2; IU 1388–1398)

The narrative stretches over more than one intonation unit: FLT goes into narrative mode (1), stretches his story over a series of intonation units (1–7), goes out of narrative mode (8), and delivers an external comment (10–11). FLT's talk is only interrupted once when he initiates self-repair, to which FSS provides a candidate repair with *enko* 'Enko'. The story is displaced spatially as it takes place at an area near Kokopo, which is about 70 kilometers away from the place (Lanivaqa, Kamanakama ward) where he tells this narrative. It is displaced temporally as FLT is talking about something that happened in his youth (he was 64 at the time the recording was made). The narrative is constructed in the sense that he talks in a slower pace. In addition, there is also a certain quality in how he realizes the narrative prosodically. The trajectory of the narrative is that FLT shares a past experience of his youth as an example of what he later describes as a good time.

6.4.2   Mode shift and code-switching

Table 6.11 shows the number of tokens for the mode shift strategy in relation to code-switching within the Kamanakam Qaqet/Tok Pisin corpus. I coded for the particular intonation unit when a speaker went into or out of the narrative mode in relation to whether s/he stayed in Qaqet (Q), switched (CS) from Qaqet to Tok Pisin (TP), stayed in Tok Pisin or switched from Tok Pisin to Qaqet.

Table 6.11: Mode shift and code-switching

	Staying in Q	CS: Q to TP	Staying in TP	CS: TP to Q
Going into narrative mode	21	5	12	5
Going out of narrative mode	15	6	12	9

The numbers given in Table 6.11 show that code-switching in mode shifts does occur among the Qaqet/Tok Pisin speakers of Kamanakam. This includes a speaker going into and out of the narrative mode. However, staying in Qaqet or Tok Pisin when shifting into or out of the narrative mode seems to be more dominant compared to switching to the other language.

There are further characteristics of code-switching in relation to mode shift that are not evident from Table 6.11. For example, a shift away from the narrative mode does not always entail an external comment. It may be the case that at the end of a narrative, the speaker simply addresses someone else, signals completion of his talk/narrative, is involved in repairing his or another interlocutor's talk or changes the topic. In these examples, the mode-shift strategy may overlap with other strategies in which code-switching can be observed, such as the addressee-shift, completion, repair or topic shift strategy. Table 6.12 shows the numbers of different ways in which speakers go out of the narrative mode.

Table 6.12: Types of going out of the narrative mode

Going out of narrative mode	Staying in Q	CS: Q to TP	Staying in TP	CS: TP to Q	Total
Addressee shift	3	1	0	1	5
Completion	1	1	3	0	5
External comment	10	3	7	8	28
Repair	1	0	2	0	3
Topic shift	0	1	0	0	1

According to Table 6.12, external comments are the predominant form of leaving the narrative mode among the Qaqet/Tok Pisin speakers in the corpus.

Another characteristic concerns the narrative mode of Qaqet/Tok Pisin speakers, which often involves the use of direct and indirect speech. Direct speech has also been observed to be subject to code-switching. The topic is therefore presented in more detail in Section 6.5 on p. 227. Within a narrative turn, code-switching to signal quotation occasionally leads to a situation which is relevant for the analysis of the mode-shift function: for example, a speaker begins to tell a narrative in Qaqet, and ends it in Tok Pisin. However, the switch to Tok Pisin cannot be said to signal mode shift here. In such situations, the speaker may have switched to Tok Pisin to mark the quotation (or another) strategy, for example, and may choose to retain this language until the end of narrative mode. Generally, there is no strict switching pattern to mark mode shift at narrative boundaries. That is, when a speaker switches to the other language for the intonation unit introducing the narrative mode, it does not necessarily entail a switch when going out or vice versa. It has been observed that code-switching either occurs when going into or when going out of the narrative mode; there is no double marking.

Another characteristic concerns the situation when a speaker shifts to the external comment mode after having finished her/his narrative. The speaker may do this by switching to the other language, followed by a switch back to finish her/his comment (see Example 119).

(119) 1 NMS: narrative *mitupla   toktok   lo   en*
                          mitupela   toktok   long   em
                          1DU.EXCL   talk   PREP   3SG
                          'as we two talked to him'

    [...]

3   NMS: narrative   *nogat*
                        nogat
                        NEG
                        'no'

4   NMS: narrative   *em   pait   wantem   ol   gorgor*
                        em   pait   wantaim   ol   gorgor
                        3SG   fight   with   PL   bush
                        'he fought with the bushes'

5   NMS: comment   *kekaramasetaapasin*
                        kerl = ka = taquarl = ama = seto = aa = pasin
                        DEONT = 3SG.M = thus = ART = NAME = 3SG.M.POSS = behavior
                        'it's thus like Seto's behaviour'

[...]

7   NMS: comment   *pait   wantem   o   yogor   i   kam   daun*
                        pait   wantaim   ol   gorgor   i   kam   daun
                        fight   with   PL   bush   PRED come   down
                        'fighting with the bushes which come down'

8   NMS: comment   *slip*
                        slip
                        sleep
                        'sleeping'

[...]

10   NMS: comment   *karai*
                        krai
                        cry
                        'crying'

11   NMS: completion   *em   olsem*
                        em   olsem
                        3SG   in this way
                        'it's like that'

                                    (CodeFSS_KJS20160910A_1; IU 827–837)

In Example 119, NMS is near the end of a Tok Pisin episode about her grownup son when he was little. While in narrative mode, she switches to Qaqet to signal her shift to external comment mode, in which she compares him to her grandson. The data extract begins when NMS states in Tok Pisin that her son refused to listen as they and a friend of hers talked to him (1, 3). As a result, her son fought with the bushes (4). NMS then switches to Qaqet while

going into external comment mode, stating that her grandson, Seto, shows a similar behavior (5). NMS switches back to Tok Pisin to finish her external comment, in which she lists the behaviors that her son and grandson have in common (7, 8, 10). She finishes her remarks with a summarizing statement to signal completion (on the completion strategy see Section 6.7.2 on p. 264). NMS's switch to Qaqet (5) functions here as a cue for her shift from narrative to external comment mode. It solely puts emphasis on this transition, as is evident from her switch back to Tok Pisin while still being in external comment mode. There is, however, also a case where a speaker interrupts herself/himself during a narrative with an external comment, and then goes on and finishes it (see Example 120). Here, a switch to signal a transition back into the narrative mode could *not* be observed.

(120) 1 NMS: narrative *romana   i   kirap   tok*
                          romana   i   kirap   tok
                          NAME   PRED   start   say
                          'Romana began to say'

       2 NMS: narrative *yupla   hariap*
                          yupela   hariap
                          2PL   hurry up
                          'you all hurry up!'

       3 NMS: narrative *ba   mipla   go   lotu   ya*
                          bai   mipela   go   lotu   ya
                          FUT   1PL.EXCL   go   church   PTCL
                          'we will go to church'

       4 FWS *we*
                we
                where
                'where?'

       5 NMS: narrative *nogat   taim*
                          nogat   taim
                          NEG   time
                          'there is no time'

       6 NMS: narrative *a..   nogat   nem*
                          a..   nogat   nem
                          a   NEG   name
                          'a.. there is no name'

       7 NMS: narrative *nogat   namba*
                          nogat   namba
                          NEG   number
                          'there is no number'

8   FWS   *nema*
            nema
            who
            'who?'

9   NMS: narrative   eh..   *nogat*   *n.. namba*   *nogat*   *nem*   *moa*
                       eh..   nogat   n.. namba   nogat   nem   moa
                       eh   NEG   number   NEG   name   more
                       'eh.. there is no n.. number and no name anymore'

10   FWS   *hmhmhmhm*
            hmhmhmhm
            yes
            'yes'

11   NMS: comment   *mekutaqanyan*
                     miika = ut = taqa = nyan
                     more = 1PL.SBJ = properly.CONT = laugh.NCONT
                     'we really laughed'

12   NMS: narrative   *nyiesaqamadum*
                       nyi = es = a = qama = da-em
                       2SG.SBJ.NPST = eat.NCONT.FUT = NM = some = taro-SG.RCD
                       'eat some taro'

13   FWS   *[LAUGH]*
            laugh
            laugh
            'laugh'

14   NMS: narrative   *dakedeasmaqavel*
                       dap = ka = de = as = ma = qavel
                       but = 3SG.M = CONJ = still = ART.ID = bush
                       'and he was still in the bush'
                                                    (CodeFSS_KJS20160910A_1; IU 847–860)

In the data extract given in Example 120, NMS again picks up the story in Tok Pisin about her son (see Example 119 and its description). She switches to Qaqet to introduce an external comment, but stays in that language when going back into narrative mode. FWS, who was her addressee for the story all along, and so far had only listened, begins to engage with NMS's story by initiating other-repair, showing agreement and laughing. NMS begins to continue her story in Tok Pisin by quoting her friend Romana, who prompts all present in the story to hurry up, as they need to go to church (1–3). FWS, to whom it is not quite clear which church is being referred to, thereupon initiates repair in Tok Pisin by asking NMS *we* 'where?' (4). In the following, someone other than Romana (probably NMS) reacts to Romana's prompt. This person must have felt rushed by Romana's prompt, which NMS renders in direct speech as: "there is no time anymore", humorously exaggerating this by stating that "there is no number" and "there

is no name" anymore (5–7, 9). FWS, who also seems not to be sure who NMS referring to, again initiates repair by switching to Qaqet, asking *nema* 'who?' (8). NMS then roughly repeats some of her statements (6–7) again in (9). In the meantime, FWS seems to have figured out who NMS is referring to, and agrees (10). NMS is probably talking about what people in Kamanakam often refer to as the white man's sense of time. This is often contrasted with *PNG taim* 'Papua New Guinean [sense of] time'. The latter is said of people who are generally more relaxed, and whose daily routine is not so much driven by the clock, but rather the weather and the natural course of the sun. NMS then switches to Qaqet, while also shifting into the external comment mode, by stating that they laughed about what was being said about the time (11). NMS stays in Qaqet while going back into the narrative mode, here, directly quoting (probably) herself: "you [her son] eat a piece of taro" (12). To this, FWS reacts with a laugh (13). NMS continues that her son, however, was still playing/hiding in the bush (14). The extract shows that mode shift can also be signaled with a switch to the other language within ongoing narratives. Here, the switch has the function to emphasize the shift into the external comment mode, while afterwards, when going back into narrative mode, there seems to be no need to switch back.

There are two examples of code-switching to signal mode-shift which I have not included in Table 6.11 above. Here, the Qaqet use in the narrative mode is determined by an external factor, and thus not naturally occurring, as in the other examples. In these switches, the participant reads aloud Bible verses translated into Qaqet from a booklet. The speaker's language use is thus determined by the language the booklet is written in, and not subject to his own choice. He switches twice to Tok Pisin when initiating an external comment with *lukim* 'you see?' (see Example 121), and on one occasion he does not switch. Despite being somewhat less natural examples of mode shift, the two scenarios can be considered as further support of the existence of a mode shift function of code-switching in this environment.

(121) 1 FRU: narrative *qanem*   *amageluqa* *magabriel*
        ka = nem   ama = agelu-ka ma = gabriel
        3SG.M.SBJ = send.NCONT ART = angel-SG.M ART.ID = NAME
        'he sends the angel Gabriel'

   [...]

   3 FSS *mh*
      mh
      yes
      'yes'

   4 FRU: narrative *savrama*   *luqupkia* *vet*
        se = pet = ama   luqup-ki = a ivet
        to/from = on/under = ART place-SG.F = DIST on/under
        'to go to a town in'

         magalili
         ma = galili
         ART.ID = NAME
         'Galilee'

5	FSS	*mh*
		mh
		yes
		'yes'

6	FRU: comment	*lukim*
		luk-im
		look-TR
		'you see' (CodeFSS_KJS20160901_1; IU 878–883)

Prior to the scene in example 121, FRU brings a booklet with verses from the Qaqet translation of the New Testament to the cooking house, where the adults FSS, IRM and GKN are waiting for him. He wants to read Qaqet excerpts from the booklet to GKN, which he thinks she and others like her might not be able to reproduce or understand. Survey data on GKN's language competence and data on her language use extracted from the corpus recordings indicate that she has a primarily passive competence of Qaqet. More generally, FRU also wants to demonstrate that the Qaqet competence of the younger generations is decreasing. The data extract describes a scene in which FRU starts to read to GKN the Bible verse Luke 1:26. In doing so, FRU has to switch into the mode of a reader which is marked by his slower speech rate and the considerable pauses he makes after each clause (1, 4). FSS uses the pauses to confirm what FRU has just read (3, 5). After FRU has recited a part of the verse, he stops and switches from reader mode to external commentary (6). At this point, he also switches from Qaqet to Tok Pisin in order to mark the transition from one mode to the other.

6.4.3   Conclusion

The observations on code-switching in relation to mode shift presented above may well be effected by the small sample size. For the time being, what can be observed leads me to the following interpretation:

1. Code-switching seems to function as an additional cue to signal a shift into and out of the narrative mode. This may be supported by the fact that code-switching occurs when a speaker shifts into narrative mode, when introducing external comments within narratives as well as after narratives.

2. Narratives do not necessarily require code-switching at both ends in order to mark a shift into this mode.

3. The direction of the switch does not seem to be a relevant factor. It is instead the switch itself that draws attention to mode shift.

4. Code-switching to signal mode shift can be considered optional and not the rule.

The mode shift function from narrative to external comment resembles some similarity to the completion function described in Section 6.7.2 on p. 264. For example, external comments with an evaluative or summarizing function also tend to occur after narratives. Unlike the completion function, however, a mode shift to an external comment does not necessarily involve turn completion followed by turn transition to another speaker. Moreover, code-switching as a marker for mode shift may also occur when introducing the narrative mode itself; in the completion function, code-switching solely occurs at the end of a speaker's sequence of talk. Though the completion function does not strictly distinguish narrative from non-narrative talk, the distinctive features of the mode shift function serve to keep the two functions apart.

6.5 Quotation

Code-switching in the presence of quotations has been observed in various languages and cultural settings (e.g., Gumperz 1982: 75f.; Khamis 1994: 243f.; Kulick and Stroud 1990: 217f.; McClure and McClure 1988: 35ff.; Tay 1989: 411; Zentella 1997: 94). It involves a speaker's use of code-switching for direct or indirect speech, for example, in the course of a speaker's retelling of a story. Here, the speaker may switch to the language of another person when quoting her/his utterances. The overall effect may be to enrich the story, to make it more vivid and, at the same time, render it more authentic.

In the following, I show how Kamanakam Qaqet/Tok Pisin speakers introduce speech reports. What is crucial in this context is the question whether Qaqet and Tok Pisin make use of direct and indirect speech in order to convey speech reports, and if so, how both are distinguished.

6.5.1 Quotation in Qaqet and Tok Pisin

In the Kamanakam corpus, Qaqet participants speaking Tok Pisin often introduce speech reports by the use of *tok* 'say', *ting* 'think' or *askim* 'ask'. In addition, the speaker can make use of a number of complementizers, such as *long* or *se* (for a discussion of these complementizers see Smith 2002: 158-161). Similarly, in Qaqet, speakers make use of reporting verbs including *taqen/raqen* 'say, talk', *tuqun/ruqun* 'say', *lsil/sil* 'say', *snes/nes* 'shout' or *snanbet* 'ask'. Additionally, the speaker may hold the pitch level whereas the word prior to the quote is uttered with final glottalization (cf. Hellwig 2018: 61). The speaker may also hold the pitch level, and utter [maʔ] prior to the quoted content (cf. 2018: 62). However, it is also possible in Kamanakam Qaqet to introduce speech reports solely by means of reporting verbs.

Apart from spatial and temporal deixis, Aikhenvald (2008: 385) refers to personal deixis as "a major property distinguishing direct and indirect speech" and "in many languages it is indeed the only way of telling direct and indirect speech apart". Aikhenvald (2008: 384) describes how direct speech can be distinguished from indirect speech on the basis of personal deixis. In the former:

> "the speech report content corresponds exactly (or more or less so), to what the 'Original Speaker', that is, the author of the speech report content, had said."

In the latter, in contrast:

> "the report may be made without using his or her exact words [...]. Then the person reference within a speech report is adapted to the perspective of the Current Speaker."

Further, in direct (122) and indirect speech (123) the subject of the speech report may (a.) or may not be (b.) coreferential with the original speaker (Aikhenvald 2008: 384, including the examples).

(122) a. John$_i$ said: 'I$_i$ saw Fred yesterday'

b. John$_i$ said: 'He$_j$ saw Fred yesterday'

(123)   a.   John$_i$ said (that) he$_i$ had seen Fred the previous day

      b.   John$_i$ said (that) he$_j$ had seen Fred the previous day

When comparing Examples 122a. and 122b., in direct speech there is a shift in personal deixis when the subject$_j$ of the quoted content *is not* coreferential with the original speaker$_i$ (Aikhenvald 2008: 384) as evident from Example 122b. In contrast, when comparing Examples 122a. and 123a., the subject$_i$ of the quoted content *is* coreferential with the original speaker$_i$. Still, the personal deixis of the subject shifts from first to third person. This is due to the fact that a shift from direct to indirect speech also entails a shift from the original speaker's point of view (or deictic center) to that of the current speaker (2008: 385). In principle, Aikhenvald's (2008: 384f.) observations on personal deixis in speech reports also apply to Qaqet and Tok Pisin, which suggests that direct and indirect speech is distinguished in both languages.

However, personal deixis does not always function as a clear-cut marker to distinguish direct from indirect speech. For Tok Pisin, Smith (2002: 195) points out that when the current speaker is identical with the original speaker, that is, a first person narrator is reporting her/his own speech, direct speech may not be clearly distinguishable from indirect speech. Consider Example 124 from a Tok Pisin speaker in the Eastern Highlands cited in Smith (2002: 195):

(124) | mi | tok | (")mi | no | lukim | ples |
|-----|------|-------|-----|----------|-------|
| mi | tok | mi | no | luk-im | ples |
| 1SG | talk | 1SG | NEG | look-TR | place |

na	mi	mas	i	go	stap	pastaim(")
na	mi	mas	i	go	stap	pastaim
CONJ	1SG	must	PRED	go	stay	first

'I said "I haven't seen the place and I must go"'
or: 'I said that I hadn't seen the place and must go'

                                                  (Eastern Highlands, M, 16)

Rarely, the above mentioned Tok Pisin reporting verbs are combined with complementizers. In the corpus, there are two examples of this, including one example for *long* and one example for *se.* The complementizer *olsem* 'this, like this', however, does not appear in the corpus. Example 125 shows *long* introducing direct speech, whereas in Example 126 *se* introduces indirect speech. For Tok Pisin spoken in other regions of PNG, Mühlhäusler (1985c: 414) observes that indirect speech can either follow directly after reporting verbs such as *tok* or via the complementizers *long, olsem* or *se.* Similarly, Smith (2002: 195) observes that *olsem* can be used to introduce both direct and indirect speech, but he states that it can also be omitted. Considering the Kamanakam Tok Pisin examples, it seems likely that complementizers generally can be used to introduce direct and indirect speech. However, due to the small number of the examples, one cannot draw any more detailed conclusions for Kamanakam Tok Pisin regarding the use of each of the three complementizers.

(125) 1 NMS | *na* | *em* | *i* | *tokim* | *mi* | *long* |
|--------|------|------|-----------|------|--------|
| na | em | i | tok-im | mi | long |
| CONJ | 3SG | PRED | talk-TR | 1SG | COMPL |

              ''and he told me that'

2   HJP   *mh*
          mh
          yes
          'yes'

3   NMS   *bai   mi   go   baim   pik*
          bai   mi   go   bai-m   pik
          FUT   1SG   go   buy-TR   pig
          'I will buy a (piece of) pork'

                                              (CodeFSS_KJS20160910A_1; IU 688–690)

(126)   FSS   *mi   ting   se   kuru   ya*
              mi   ting   se   kuru   ya
              1SG   think   COMPL   kuru   PTCL
              'I thought that it was kuru'

                                              (CodeFSS_KJS20160910A_1; IU 1014)

For Tok Pisin, Smith (2002: 195) assumes that "[i]ntonation may be the only distinguishing feature" of direct and indirect speech. For the Kamanakam varieties of Tok Pisin and Qaqet, it is my impression that there seem to be prosodic differences in speakers' realization of direct and indirect speech. The quoted content in direct speech often appears to be expressed more vividly in Qaqet and Tok Pisin by means of different intonational features. The latter has also been observed in other languages, such as English (Couper-Kuhlen 1999: 12ff.; Jansen et al. 2001), German (Günthner 1999: 687-691) or Dolakha Newar, a Tibeto-Burman language spoken in Nepal (Genetti 2014: 62-72). In the Kamanakam varieties of Qaqet and Tok Pisin, direct speech reports are predominantly separated into distinct intonation units, along with a considerable pause before the quoted content. The demarcation of direct speech as distinct intonation units by means of prosody is also reported for other languages, such as Brazilian Portuguese (Oliveira and Cunha 2004) and Dolakha Newar (Genetti 2014: 63ff.). Indirect speech in Qaqet and Tok Pisin, on the other hand, is expressed more uniformly without a pause before the report. The following examples show typical realizations of direct speech in monolingual Qaqet (see Example 127) and Tok Pisin (see Example 128) as opposed to indirect speech in monolingual Qaqet (see Example 129) and Tok Pisin (see Example 130).

(127)   1   FLT   *duretuqunnara*
                  de=ure=tuqun=ne-ta
                  CONJ=1PL.SBJ.NPST=say.CONT=from/with-3PL.H
                  'and we said to them'

        2   FLT   *kurlinya*
                  kurli-nyi=a
                  stay/leave-2SG=DIST
                  'stay!'   (CodeFSS_KJS20161119A_2; IU 1228–1229)

In Example 127, direct speech is introduced and conveyed in monolingual Qaqet. The speaker (FLT) introduces the upcoming direct speech with the reporting verb *tuqun* 'say', and ends the intonation unit with a level pitch and final glottalization (1). He makes a short pause of about 100ms, and begins to utter the direct quote (2). As the quote is supposed to be in

imperative mood, he acts this command out with final rise intonation which Hellwig (2018: 56) describes as the typical intonation pattern for imperatives. Regarding personal deixis as a distinguishing feature, the following can be concluded: if the quote was intended to be conveyed as indirect speech, this would have entailed a shift of the deictic center from the original to the current speaker. Among other changes, this would then have led to a shift in the personal deixis of the subject marking from second person to third person.

(128) 1 NMS *romana   i   kirap   tok*
                romana   i   kirap   tok
                NAME   PRED   start   say
                'Romana began to say'

       2 NMS *yupla   hariap*
                yupela   hariap
                2PL   hurry up
                'you all hurry up!'

       3 NMS *ba   mipla   go   lotu   ya*
                bai   mipela   go   lotu   ya
                FUT   1PL.EXCL   go   church   PTCL
                'we will go to church'
                                              (CodeFSS_KJS20160910A_1; IU 847–849)

In Example 128, direct speech is introduced and conveyed in monolingual Tok Pisin. The speaker (NMS) introduces the upcoming direct speech with the reporting verb *tok* 'say' and level pitch (1). She makes a pause of about 800ms, and over the next two intonation units (2–3), utters the direct quote. The first unit of the quote is in imperative mood, whereas the second is in indicative mood. Compared to the introduction unit, she definitely speaks louder and more vividly as if she wanted to mimic shouting. From the perspective of personal deixis, if the quote was intended to be conveyed in indirect speech, this would have entailed a switch from second to third person (2) and from first to third person (3).

(129) 1 NMS *miikaqi*
                miika = ki
                more = 3SG.F
                'as for her'

       2 NMS *diqiasilidikiatit*
                de = kia = sil = i = dip = kia = tit
                CONJ = 3SG.F.SBJ = say.NCONT = SIM = FUT = 3SG.F.SBJ = go.CONT
                'she said she will go'
                                              (CodeFSS_KJS20160910A_1; IU 279–280)

In Example 129, indirect speech is introduced and conveyed in monolingual Qaqet. The speaker (NMS) introduces the person whom she is about to quote in a left-dislocated intonation unit (1). In the following unit (2), NMS then introduces indirect speech with the reporting verb *sil* 'say', presenting what this person has said. There is no long pause between reporting verb and quoted content. There is also no change in vividness (for example, marked by increased loudness or by clear frequency differences in the intonation contour) between the framing clause

and the quoted content itself. The latter shows, instead, constant fall. Personal deixis can not be considered as a distinguishing feature here, as the example could be interpreted in three different ways: (a) As a direct quote in which the subject is not coreferential with the original speaker: *she$_i$ said: 'she$_j$ will go'*, (b) As an indirect quote in which the subject is coreferential with the original speaker: *she$_i$ said (that) she$_i$ will go*, or (c) As an indirect quote in which the subject is not coreferential with the original speaker: *she$_i$ said (that) she$_j$ will go*.

(130) 1 FSS *bipo   mipla   go   bungim   em   em   na*
                bipo   mipela   go   bung-im   em   em   na
                before   1PL.EXCL   go   meet-TR   3SG   3SG   CONJ
                'before we went to meet them and'

       2 FSS *i   tok   bai   mipla   go   bungim   em   em*
                i   tok   bai   mipela   go   bung-im   em   em
                PRED   say   FUT   1PL.EXCL   go   meet-TR   3SG   3SG
                'saying that we will go meet them'

                                                    (CodeFSS_KJS20160910A_1; IU 330–331)

In Example 130, indirect speech is introduced and conveyed in monolingual Tok Pisin. The speaker (FSS) introduces indirect speech in the second intonation unit (2) with the reporting verb *tok* 'say' presenting what he and his relatives said to another group of people. As in the Qaqet example, there is no long pause between reporting verb and quoted content. Again, there is also no change in vividness in the unit containing the quote, that is, there is no increase in volume, and the intonation contour is flat with a final rise-fall movement, which is indicative for a non-final unit of a declarative utterance (Hellwig 2018: 56). Personal deixis cannot be considered as a distinguishing feature here. As with Example 124 above, the first person narrator is reporting his own speech. In this case, it does not lead to a shift in personal deixis of the subject in either direct or indirect speech.

6.5.2   Quotation and code-switching

Personal deixis and intonation were used to assign the identified Qaqet and Tok Pisin speech reports to either direct or indirect speech. See Table 6.13 for a summary.

Table 6.13: Quotation and code-switching

	Staying in Q	CS: Q to TP	Staying in TP	CS: TP to Q
Direct speech	10	6	10	1
Indirect speech	16	0	4	0

The numbers in Table 6.13 indicate that direct and indirect speech are present in both monolingual Qaqet and monolingual Tok Pisin. The numbers further show that code-switching in the presence of direct speech is attested in both directions, that is, with a switch from Qaqet to Tok Pisin and vice versa. As opposed to direct speech, there seems to be no code-switching present in indirect speech.

(131)   1   NMS   *setoqatden*
                   seto = ka = tden
                   NAME = 3SG.M.SBJ = come.CONT
                   'Seto comes'

        2   NMS   *iasiqataqanmaben*
                   iasi = ka = taqen = ma = ben
                   DIST = 3SG.M.SBJ = say.CONT = ART.ID = NAME
                   'then he tells Ben'

        3   NMS   *nogat   taim*
                   nogat   taim
                   NEG   time
                   'there is no time'   (CodeFSS_KJS20160910A_1; IU 229–231)

Example 131 is part of a 'working' speech situation taking place in Saqalames at an outdoors location near the copra drying house. Here, NMS, FSS and FWS are working and talking with each other. In the course of the conversation, they come to a point where NMS remarks that there is no time nowadays, meaning that the pace of life is getting faster. She wants to underpin her point by telling FWS a short episode about her grandson. In the episode, Seto comes (1) and tells Ben (2) that there is no time (3). For the latter part, NMS makes use of a direct quote, and switches from Qaqet to Tok Pisin to render Seto's words. At this point in time, Seto did not speak Qaqet, which makes it very probable that when he originally uttered this statement he was speaking Tok Pisin, just as NMS does in the quote. The quote itself could be interpreted as a means to enrich the story, by making it more vivid. Similarly, the switch from Qaqet to Tok Pisin could serve as another device to make the story even more authentic.

The cell in Table 6.13 showing the numbers for code-switching to the other language in relation to direct speech also includes switches which were already made in the utterance introducing the actual direct speech (e.g., 'he said like this'). This occurs only rarely (n = 2), but it does so in both directions, that is, from Qaqet to Tok Pisin and vice versa. See Example 132 for the direction Qaqet to Tok Pisin.

(132)   1   NMS   *ahlurlqiqi*   *taqadrlem*
                   a = slurl-ki = ki   taqa = drlem
                   NM = big-SG.F = 3SG.F.SBJ.NPST   properly.CONT = know
                   'grandmother knows well'

        2   HJP   *ol   sa   longlong   ya*
                   ol   save   longlong   ya
                   3PL   HAB   to be stupid PTCL
                   'they are stupid'

        3   HJP   *ol   i   sa   raun   lo   mandres   ya*
                   ol   i   save   raun   long   mandres   ya
                   3PL   PRED   HAB   to go around PREP   NAME   PTCL
                   'they walk around in Mandres'

4	FSS	*mh*				
		mh				
		yes				
		'yes'				

5	NMS	*na*	*em*	*i*	*tokim*	*mi*	*long*
		na	em	i	tok-im	mi	long
		CONJ	3SG	PRED	talk-TR	1SG	COMPL
		'and he told me that'					

6	HJP	*mh*				
		mh				
		yes				
		'yes'				

7	NMS	*bai*	*mi*	*go*	*baim*	*pik*
		bai	mi	go	bai-m	pik
		FUT	1SG	go	bai-TR	pig
		'I will buy pork'				

<div align="right">(CodeFSS_KJS20160910A_1; IU 684–690)</div>

Example 132 is part of the same speech situation described in Example 131. Meanwhile, an additional speaker, HJP, has arrived at the scene. Prior to this data extract, the four participants were talking about their pigs. NMS contributes to the conversation in Qaqet, but also switches to Tok Pisin for other conversational strategies. NMS then shifts the topic to a party that wants to buy a piece of pork from her, but she somehow does not believe it. She refers in Qaqet to an older woman who knows the story she is about to quote (1). HJP agrees that the party seems to be fooling her, by stating that they are stupid (2) and often walk around in Mandres (3). The latter is an oil palm plantation east of Kamanakam. The plantation is traversed by the road that leads to Kerevat and Kokopo. Some residents in Kamanakam claim that the place is associated with people who may not be trustworthy. NMS then refers to someone who approached her from that party in order buy a (piece of) pork for herself/himself. Here, NMS uses direct speech, and simultaneously switches to Tok Pisin as she begins to report what the person has said to her (5, 7). Unfortunately, it is not entirely clear who approached her. This makes it difficult to conclude on the language competence of the person, which would have given an indication of whether s/he spoke Qaqet or Tok Pisin with NMS. In case it was Tok Pisin, one could analyze NMS's switch to Tok Pisin as in Example 131 above, where NMS echoes the language used by the speaker she is quoting. Another possibility may be that she uses Tok Pisin to indicate that the statement is a quotation. However, there are no other clear examples in the corpus to support this interpretation.

6.5.3 Conclusion

The observations made for quotation in relation to code-switching leads me to the following interpretation:

A number of researchers (e.g., Borman 1977: 327; Chafe 1982: 48; Schiffrin 1981: 58, 60; Tannen 1986) have shown that direct speech, as opposed to indirect speech, may be used to render an oral narrative episode more vivid and authentic. It can therefore be assumed that in

the Kamanakam varieties of Qaqet and Tok Pisin, direct speech is likewise used in this sense. The speaker's employment of code-switching in this context could be interpreted here as one of numerous cues to strengthen the vividness of the narrative episode. In the corpus, the other cues have been identified as prosodic – as an audible feature to distinguish direct from indirect speech in the first place – and to a lesser extent as gestural. Besides these cues, code-switching seems to have the capacity to help make the episode more entertaining and informative for the audience.

The original language used by the person being quoted is often not retraceable. In examples where it is traceable, such as in Example 131, the speaker NMS indeed reports in the original language used by the person being quoted. This is also observed for examples where the speaker stays within a particular language when directly quoting someone. Code-switching in this sense has also been observed by other researchers (e.g., McClure and McClure 1988: 35; Tay 1989: 411) and would be what Khamis (1994: 244f.) calls a quote of direct speech in which the quote language is the same as the original language. However, Khamis particularly remarks that this occurs in free discourse. She also observed direct quotes in narrative discourse, but to a lesser extent. In the Kamanakam context, more metadata on the quoted people would be needed in order to ascertain whether code-switching serves the function of rendering the narrative episode more authentic by using the language the quoted person actually used.

Code-switching has also been observed to mark the beginning of direct speech itself, in which the switching direction, and hence the original language used is irrelevant (Auer 1995: 119; Zentella 1997: 95). For this type of switch, Auer (1995: 119) states that "the only function of code-alternation is to provide a contrast between the conversational context of the quote and the reported speech itself". Whether this type of code-switching is also present in the corpus can ultimately not be clarified with the current metalinguistic data available. Both types can be interpreted as providing cues to strengthen the vividness of a narrative episode. However, the type identified in the data contrasts with Auer's type, in that the former adds to the level of vividness and authenticity by making use of the original language as a further cue.

In the corpus, code-switching in indirect speech is not an option. This could be interpreted as follows: if direct speech is generally used to make a story more vivid, as opposed to indirect speech, and code-switching serves as a cue to further enhance the vividness and authenticity of such an episode, it may explain why no code-switching occurs in indirect speech in the Kamanakam corpus. On the one hand, this interpretation would strengthen the contrast that has already been ascribed to direct and indirect speech in monolingual discourse; on the other hand, it would further support the role code-switching plays in adding vividness and authenticity to a narrative episode in the multilingual Kamanakam context.

6.6   Repair

In conversation analysis, Schegloff et al. (1977) have proposed a two-fold distinction to approach the 'organization of repair' in conversation, that is, self-repair versus other-repair and self-initiated repair versus other-initiated repair. They define the former as repair which is carried out by the speaker herself/himself versus repair that is performed by (an)other individual(s) (1977: 361). The latter, they define as repair which is initiated by the speaker herself/himself (i.e., s/he is the 'trouble source') versus repair that is initiated by (an)other individual(s) (i.e., by any party other than the speaker of the 'trouble source') (1977: 364). This distinction adds up to four types of repair:

1. Self-initiated self-repair

2. Other-initiated self-repair

3. Self-initiated other-repair

4. Other-initiated other-repair

By making use of the conversation-analytic approach, Auer (1984a, 1998) and other researchers (e.g., Cashman 2001: 187-190; Li Wei 1994: 167-172) have shown how code-switching can serve to contextualize one or more of the above types of repair. Similarly, the language socialization paradigm developed by Ochs and Schieffelin (1984, 1986) "is deeply indebted to the theoretical insights and methodological tools" of conversation analysis (Kulick and Schieffelin 2005: 351). In the context of repair, Schieffelin (1994: 31) shows how "code-switching can serve as an important means of repairing as well as facilitating conversation".

The repair paradigm may also be an umbrella for semantically similar conversational strategies in which code-switching can be observed. For example, other-initiated self-repair may be another way to approach a function of code-switching which McClure (1977: 107f.) has termed clarification. The latter, she defines as the "repetition of an utterance in translation [...] as a means of resolving ambiguity or clarifying a potential or apparent lack of understanding". Another conversational function of code-switching, which Auer (1984a: 54, 88f.) understands as a type of self-initiated self-repair, has been referred to in the literature as elaboration. Auer (1984a: 54) describes elaboration as a type of self-initiated self-repair as follows:

> "Such repair [i.e., self-initiated self-repair] may either be a correction of the first portion of the utterance (the *reparandum*), or its elaboration/clarification. In the first case, the new formulation annuls the old one, i.e. the speaker treats it so as to be interpreted as being false or inadequate (for whatever reason), and to be disregarded by the recipient; in the second case, the new formulation provides additional information without annulling the old one."

Thus, he treats elaboration as the kind of self-initiated self repair that "does not take back the first utterance, but paraphrases it" (Auer 1984a: 89). Similarly, McClure (1977: 107) assigns code-switching an elaboration function when a speaker wishes "to repeat a message including additional information". For Huerta (1978: 40) in contrast, code-switching has an elaboration function when a speaker wants "to elaborate on something already said or to explain something previously mentioned". Thus, from Huerta's point of view, elaboration does not necessarily involve a repetition of the previous message. However, in the Kamanakam corpus, both types of elaboration are found. In consequence, this study defines elaboration in the realm of self-initiated self-repair as the speaker's wish to elaborate on or to explain a previously uttered intonation unit, regardless whether s/he thereby repeats (portions of) the previous unit or not. The incorporation of the clarification and the elaboration function into the paradigm of repair has the advantage that it accounts and locates these functions as one among of the other variants in the organization of repair.

Coding the Kamanakam corpus for repair reveals that Schegloff et al.'s (1977) above outlined framework, as well as Auer's (1984a: 54) subclassification ('correction', 'elaboration') of self-initiated self-repair, are applicable to the data. Table 6.14 shows the quantity number of each repair type in the Kamanakam corpus.

Table 6.14: Types of repair in the Kamanakam corpus

Self-initiated self-repair		Other-initiated self-repair	Self-initiated other-repair	Other-initiated other-repair
Correction	Elaboration			
291	85	31	6	6

The numbers given in Table 6.14 show that self-initiated self-repair is the dominant form of repair in the Kamanakam corpus. Generally, the numbers are in line with what Schegloff et al. (1977: 377) conclude from their study, namely that there is an organizational preference of self-initiated over other-initiated repair, as well as self-repair over other-repair. The following sub-section deals with the analysis of those types of repair in which code-switching could be observed in the corpus either during repair initiation or during repair itself. This includes self-initiated self-repair as correction, self-initiated self-repair as elaboration and other-initiation of repair. Examples for these types of repair are presented and discussed throughout the section.

6.6.1 Self-initiated self-repair as correction

Table 6.15 shows the numbers for self-initiated (SIR) self-repair (SR) in the corpus (see Section 2.5.6 from p. 57 to see how this type of repair is coded). What is given in the rows is the language in which the repair is initiated. This is either Qaqet (Q), Qaqet with Tok Pisin insertion(s) ([Q(TP)]), Tok Pisin (TP) or Tok Pisin with Qaqet insertion(s) ([TP(Q)]). What is also included is repair initiated by the use of quasi-lexical fillers such as *a* or *eh*. However, they are treated separately here as they cannot be assigned to a language. The columns show the language in which self-repair is achieved. Here, basically the same categories apply for language. However, the additional (Other) category refers to those cases of repair where the speaker was in search of a name for a particular person or place. These are shown as a different category, as it is not possible to assign proper nouns to Qaqet, Tok Pisin or other languages.

Table 6.15: Self-initiated self-repair as correction

	Other	SR: Q	SR: [Q(TP)]	SR: TP	SR: [TP(Q)]
SIR: Q	14	148	23	16	0
SIR: [Q(TP)]	1	0	2	1	0
SIR: TP	3	5	0	72	0
SIR: [TP(Q)]	0	0	0	0	0
SIR: a/eh	1	2	0	3	0

Table 6.15 shows that in self-initiated self-repair, code-switching is an additional means to achieve repair, but in the majority of the cases, repair is achieved without it. Both switching directions are attested, that is, from Qaqet to Tok Pisin (n = 16) as well as from Tok Pisin to Qaqet (n = 5). There is also a number of Tok Pisin insertions (n = 25) in a Qaqet frame when speakers initiate repair in Qaqet. In contrast, Qaqet insertions in a Tok Pisin frame, when a speaker initiates repair in Tok Pisin, are non-existent. In this context, it may be noted that only a few (n = 7) mixed units of the type [TP(Q)] can be observed in the corpus (see [tpi(byx)] in Table 4.1 on p. 91). As for other-language insertions, they could not be identified in the corpus,

that is, neither in the initiation of self-repair nor in self-repair itself.

Working with American English, Schegloff (2013) introduced 10 'operations' which describe how self-initiated self-repair can be achieved. These operations also seem to be applicable to the description of self-initiated self-repair in the Kamanakam corpus. However, as is evident from Table 6.16, not all 10 operations could be identified in the corpus[9].

Table 6.16: Repair operations of self-initiated self-repair as correction

	In/between monolingual IUs	Between code-switched IUs	In mixed IUs
Searching	154	17	12
Recycling	59	3	7
Aborting	16	1	1
Replacing	11	0	3
Inserting	4	1	1
Deleting	1	0	0

Operations found for monolingual Qaqet and Tok Pisin in the Kamanakam corpus include 'searching' (Example 133, 134 and 135), 'recycling' (Example 136 and 137), 'aborting' (Example 138 and 139), 'replacing' (Example 140 and 141) and 'inserting' (Example 142 and 143). Searching and recycling are the most frequent for both languages, whereas the other operations occur considerably less frequently. The operation 'deleting' (Example 144 and 145) is identifiable under certain conditions, as will be outlined under the cited examples. Operations other than searching and recycling tend to occur in conjunction with others (e.g., recycling). In this context, Schegloff (2013: 59) notes that, for example, the insertion or replacing operation can be *framed* by the recycling operation. In these cases, "the recycled element(s) *figure* in the repair segment but *not* as the repair *itself*; they are resources, but not the product" (2013: 59)[10]. This will become apparent for some of the examples presented and discussed below.

(133)   NMS   *baraqama.. hlurlki*
                 barek = ama   slurl-ki
                 BEN = ART   big-SG.F
                 'for the.. big sister'   (CodeFSS_KJS20160910A_1; IU 259)

(134)   FSS   *em   ol..   wok   blong   bipo   ya*
                 em   ol   wok   bilong   bipo   ya
                 3SG   PL   work   POSS   before   PTCL
                 'this is.. the work from before'   (CodeFSS_KJS20160901_1; IU 221)

(135)   NMS   *a..   nogat   nem*
                 a   nogat   nem
                 a   NEG   name
                 'a.. there is no name'   (CodeFSS_KJS20160910A_1; IU 852)

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[9] The four operations that could not be identified in the Kamanakam corpus are: parenthesizing, sequence-jumping, reformatting and reordering.

[10] As a consequence, cases in which an operation only *figures* in the repair segment were not counted as instances of repair in their own right. Thus, only the repair operation which constitutes the *product* was counted.

Searching is the most frequent operation of self-initiated self-repair in addition to the recycling operation. It refers to the speaker's search for words or phrases of which the source of the problem is quite clear ('precises') or unclear ('delicates') (Schegloff 2013: 49f.). In both languages, searching is marked by a hesitation pause. In the corpus, monolingual Qaqet (Example 133) shows some additional features: the last word prior to a hesitation pause may also be uttered with final glottalization and level pitch (especially when ending on *ama* or *ma*). For Raunsepna Qaqet, Hellwig (2018: 61) states that speakers make use of the latter two features "when searching for words or continuations". In monolingual Tok Pisin (Example 134), the last word prior to the hesitation pause often seems to show a falling intonation. However, in a few Tok Pisin examples, speakers appear to make use of the Qaqet pattern. Filler words to mark word-finding problems do occur, although considerably less frequently (Example 135). They include quasi-lexical fillers (*a* and *eh*) and lexical fillers (e.g., Qaqet: *nema* 'who', *taquarl* 'thus, like this' / Tok Pisin: *husat* 'who', *wanem* 'what'). The lack of quasi-lexical fillers is similar to what Frye (2019: 95f.) has observed in her corpus of Pear Stories collected with Qaqet speakers in the neighboring Raunsepna ward. In her corpus, "only one utterance possibly containing hesitation particles" can be identified (2019: 96).

(136) 1   IRM   *nyi..*
                  nyi
                  2SG.SBJ.NPST
                  'you..'

       2   FSS   *mh*
                  mh
                  yes
                  'yes'

       3   IRM   *nyinarli*
                  nyi = narli
                  2SG.SBJ.NPST = hear
                  'listen'

                                                      (CodeFSS_KJS20160901_1; IU 870–872)

(137)   IRM   *sapos   i..   i   laik   kam   em*
                  sapos   i   i   laik   kam   em
                  if   PRED   PRED   want   come   3SG
                  'If they want, they can come'
                                                      (CodeFSS_KJS20161023_2; IU 451)

Recycling is marked by the speaker's partial repetition of a stretch of talk (Schegloff 2013: 59). In both languages, it can involve the speaker trailing off a unit by the use of falling intonation, and then taking it up again in a new intonation unit, as can be seen for Qaqet in Example 136. Alternatively, the speaker rapidly repeats parts of talk without interrupting the intonation flow, as presented for Tok Pisin in Example 137.

(138) 1 FLT *kiurletelselma..*
              ki = iurlet = lesela-ka = ma
              3SG.F.SBJ.NPST = pull.NCONT = child-SG.M = ART.ID
              'she gave birth..'

       2 FLT *ia*
              ia
              sorry
              'sorry'

       3 FLT *kiangerlvitnemagalip*
              kia = ngerlvit = ne = ma = galip
              3SG.F.SBJ = marry = from/with = ART.ID = NAME
              'she married with Galip'

                                            (CodeFSS_KJS20161119A_2; IU 506–508)

(139) 1 FSS *mama   i..*
              mama   i
              mama   PRED
              'mother is..'

       2 FSS *ol   kolos   ya   stap   nau*
              ol   klos   ya   stap   nau
              PL   clothing   PTCL   stay   now
              'when the clothes arrive'

       3 FSS *em   i   go*
              em   i   go
              3SG   PRED   go
              'she will go'

                                            (CodeFSS_KJS20160910A_1; IU 205–207)

Aborting may either refer to abandoning altogether what was said, or the way in which something was, in favor of another utterance (Schegloff 2013: 52f.). The former type is exemplified in Example 138, in which the Qaqet speaker aborts his talk, 'she gave birth..' (1) and apologizes with *ia* 'sorry' for his wrong statement (2). The use of the interjection *ia* could be understood here as a lexical filler functioning as a second marker of repair. He starts a new intonation unit, which probably still refers to the same person but otherwise to different content 'she married with Galip' (3). The latter type is illustrated in Example 139 for Tok Pisin. Here, the speaker aborts his talk, 'mother is..' (1) to insert the conditional clause 'when the clothes arrive' (2), before coming back to the point in (3) he probably already wanted to make in (1), namely that his mother is going to leave.

(140)   FLT *qalsil..*   *kilsil..*
              ka = lsil   ki = lsil
              3SG.M.SBJ = say.CONT   3SG.F.SBJ.NPST = say.CONT
              'he said.. she said..'

> *ka..*   *kasalgumam*
> ka   ka = sal = gua = mam
> 3SG.M.SBJ   3SG.M.SBJ = give birth = 1SG.POSS = father
> 'he.. he gave birth to my father'
>
> (CodeFSS_KJS20161119A_2; IU 1006)

(141)   FLT   *siksti   sam..   siksti   seven   o*
              siksti   samting   siksti   seven   o
              sixty   something   sixty   seven   or
              'sixty-some.. sixty-seven or'

                                                    (CodeFSS_KJS20161119A_2; IU 51)

Replacing refers to the speaker's substitution of wholly or partially articulated elements (Schegloff 2013: 43). In Example 140, the Qaqet speaker recycles the verb *lsil* 'say.CONT' while substituting the personal marking *ka* '3SG.M.SBJ' with *ki* '3SG.F.SBJ.NPST'. In Example 141, the same speaker, now in Tok Pisin, substitutes *samting* 'something' with the more precise *seven* 'seven' in order to self-repair his talk.

(142)   FSS   *dapmani..*   *dapkuamanini*
              dap = ma = nini   dap = kua = ma = nini
              but = ART.ID = NAME   but = INTRG = ART.ID = NAME
              'and Ni.. and Nini?'

                                                    (CodeFSS_KJS20161119A_2; IU 846)

(143)   FSS   *namba   elev..   ten   eleven   ya*
              namba   eleven   ten   eleven   ya
              number   eleven   ten   eleven   PTCL
              'the elev.. tenth eleventh [month]'

                                                    (CodeFSS_KJS20160910A_1; IU 243)

Inserting refers to the insertion of one or more new elements in the ongoing stretch of talk (Schegloff 2013: 64). In Example 142, the speaker stops in the middle of saying the name *Nini*, and inserts the question particle *kua* 'INTRG' before the name, which turns the unit into a question. In this example, the inserting operation has a similar effect as the reformatting operation, which is otherwise not attested in the Kamanakam corpus. The latter operation describes repair scenarios in which, for example, declarative statements are reformatted into interrogatives (Schegloff 2013: 62). In Example 143, the speaker stops after *eleven* 'eleven' and inserts *ten* 'ten' before again recycling *eleven*.

(144)   NMS   *akerl..*   *dinya..*
              as = kerl   dip = nya
              still = DEONT   FUT = 2SG.SBJ
              'and.. you will..'

nyatesamareesaqatik
nya＝tes＝ama＝reis＝a＝ka＝tika
2SG.SBJ＝eat.CONT＝ART＝rice＝DIST＝3SG.M.SBJ＝EMPH
'you eat rice now'

(CodeFSS_KJS20160910A_1; IU 262)

(145)	HJP	*long*	*william*	*tu..*	*william*	*tu*	*bai*	*karim*	*sampla*
		long	william	tu	william	tu	bai	karim	sampela
		PREP	NAME	also	NAME	also	FUT	carry	some

'for William too.. William too will carry some'

(CodeFSS_KJS20160910A_1; IU 566)

Deleting refers to the deletion of one or more elements already articulated in the ongoing stretch of talk (Schegloff 2013: 45). There are only very few examples of this phenomenon. Example 144 has a Tok Pisin insertion *rees* 'rice' in a Qaqet frame, which can be considered here as a borrowing (see Section 4.3 from p. 93). Here, the speaker deletes *dip* 'will' (*dinya*) during her recycling of *nya* '2SG.SBJ' (*nyatesamareesaqatik*). Example 145 was uttered by a non-Qaqet speaker in his late 70s, who has lived his adult live among the Kamanakam Qaqet. However, as he did not grow up among Kamanakam Qaqet speakers, his talk was not considered elsewhere in this study for the analysis of conversational code-switching. In the example, the speaker deletes the preposition *long* 'for' (*long William tu*) when recycling *William tu* 'William too' (*William too will carry some*).

Operations of self-initiated self-repair that are used in conjunction with code-switching are searching (Example 146 and 147), recycling (Example 148) and aborting (Example 149).

(146) 1 NMS *tatitte..*
ta＝tit＝te
3PL.SBJ＝go.CONT＝PURP
'they went to..'

2 NMS *salim* *kolos*
sal-im klos
sell-TR clothing
'sell clothes'

(CodeFSS_KJS20160910A_1; IU 135–136)

The code-switched Example 146 above shows how the speaker (NMS) begins an intonation unit in Qaqet, initiates self-repair (1) and self-repairs her talk in a new intonation unit via the use of Tok Pisin (2). NMS begins in Qaqet, and self-initiates repair with a falling pitch, glottalization on the last syllable and a following hesitation pause. She then switches to Tok Pisin to perform the self-repair. From a structural point of view, she seamlessly connects the two languages despite the hesitation pause, with no signs of recycling or aborting her speech. Thus, in reference to Schegloff (2013), the speaker's self-initiated self-repair could be analyzed here as being achieved by employing the searching operation.

(147) 1 FRU *takubar* *ol* *hap* *ya*
takubar ol hap ya
NAME PL place PTCL
'Takubar and similar places'

2   FRU   *dequrlama..*
          de = taquarl = ama
          CONJ = thus = ART
          'and like this..'

3   IRM   *ae*
          ae
          yes
          'yes'

4   FRU   *hap   blo   misin*
          hap   bilong   misin
          place   POSS   mission
          'area of the mission'

                                                    (CodeFSS_KJS20161023_2; IU 69–72)

Example 147 shows how, in the Kamanakam context, code-switched lexical fillers can be used in the searching operation to help the speaker initiate self-repair as opposed to code-switching that is used to support the repair itself (see Example 146). In the example, the speaker switches from Tok Pisin to Qaqet for a lexical filler *dequrlama* 'and like this' to signal word-finding problems. He utters this filler with final glottalization and level pitch (a common way in Qaqet to mark an upcoming hesitation pause), and thereby initiates self-repair (1). The speaker then switches back to Tok Pisin to complete self-repair (2). The hesitation pattern (lexical filler + glottalization + level pitch + hesitation pause) may have given the speaker enough time to overcome his word-finding problems. Code-switching in this context could be another device to mark the initiation of self-repair.

(148)   1   FRU   *ngen..*
                  ngen
                  2PL.SBJ
                  'you all..'

        2   FRU   *a..   yupla   noken..*
                  a..   yupela   noken
                  a   2PL   NEG
                  'a.. you all cannot..'

        3   FRU   *kurlimang*
                  kurli = ma = nget
                  stay/leave = thingy = 3N
                  'leave everything'

                                                    (CodeFSS_KJS20160901_1; IU 753–755)

Example 148 shows how code-switching is employed in the operation of recycling in self-initiated self-repair. In the data extract, the speaker (FRU) initiates repair by abruptly interrupting his talk after the Qaqet personal pronoun *ngen* '2PL' (1). In a new intonation unit (2), he first makes use of a quasi-lexical filler *a* to signal searching, and then recycles the personal

pronoun in Tok Pisin: *yupla* '2PL'. While it seems as if he would be on the way to finish his self-repair in Tok Pisin, he interrupts himself again. In the final unit (3), he makes use of the replacing/recycling operation. Here, he replaces/recycles Tok Pisin *noken* 'cannot, may not' by switching to Qaqet using *kurli* 'stay, leave, not' instead and finishes his talk in Qaqet. In this example, the recycling operation could be interpreted as a way to reboot one's speech, similar to the aborting operation, but without abandoning the way of getting across one's message. In the process of recycling, the speaker may then try to make use of the almost same wording, albeit in a different language.

(149) 1   FSS   *yu   karim..*
                 yu   kar-im
                 2SG   carry-TR
                 'you bring..'

       2   FSS   *nyiralen..*
                 nyi = raqen
                 2SG.SBJ.NPST = say.NCONT
                 'say..'

                 tiralamerlitka
                 ki = ral = a = qama = merlik-ka
                 3SG.F.SBJ.NPST = carry.NCONT = NM = some = betel nut-SG.M
                 'she should bring some betel nut'
                 (CodeFSS_KJS20160901_1; IU 235–236)

Prior to the situation 149, FRU, FSS and IRM were in the cooking house in Saqalames. FRU calls for GKN to come inside. The latter stands outside the cooking house a bit farther away. In the scene, FSS wants to tell FRU the message he should relay to GKN. FSS begins in Tok Pisin, but abruptly stops his attempt, hesitating and thereby initiating self-repair. As he starts a new intonation unit, he abandons his original message, which in terms of Schegloff (2013: 52f.) would qualify as the aborting operation. At the same time, he switches to Qaqet in order to achieve self-repair. FSS confirms this view in a metacomment he has given on this very example.

> *"mi laik tokim em long karim buai i kam lo tok pisin bat mi mistek na mi tokim em long tok ples."*

> "I wanted to tell him in Tok Pisin to ask her to bring betel nut, but I made a mistake, and I told him in Qaqet."   (FSS, 23.09.2016)

In his quote, FSS's 'mistake' probably refers to the fact that first he wants to request FRU in Tok Pisin to simply repeat what he is about to say, that is, something like *yu karim buai* 'carry betel nut'. He then must have decided otherwise, and aborts his conversation and starts over in Qaqet. He then begins with *nyiralen..tiralamerlitka* 'say..she should bring some betel nut'.

6.6.2   Self-initiated self repair as elaboration

As described above, according to Auer (1984a: 54) 'elaboration' refers to another branch of self-initiated self-repair, in which the speaker elaborates on her/his previously uttered stretch

of talk instead of annulling it. This conceptual difference is the reason why self-initiated self-repair as elaboration is treated separately from self-initiated self-repair as correction. Table 6.17 shows the numbers for self-initiated self-repair as elaboration (El) in the corpus. The rows refer to the type of language speakers used in the intonation unit (IU) immediately prior to the intonation unit of the elaboration. The type of language was coded as Qaqet (Q), Qaqet with a Tok Pisin insertion ([Q(TP)]), Tok Pisin (TP) or Tok Pisin with a Qaqet insertion ([TP(Q)]). The columns refer to the intonation unit in which the elaboration was made. The categories are similar to the categories presented in the rows. However, they differ in that it was also considered whether the elaboration was a name (Na), a Qaqet frame with an other-language insertion ([Q(O)]) or a Tok Pisin frame with an other-language insertion ([TP(O)]).

Table 6.17: Self-initiated self-repair as elaboration

	El: Na	El: Q	El: [Q(TP)]	El: [Q(O)]	El: TP	El: [TP(Q)]	El: [TP(O)]
IU: Q	1	35	7	0	4	0	0
IU: [Q(TP)]	0	2	0	0	6	0	0
IU: TP	3	7	0	0	19	0	1
IU: [TP(Q)]	0	0	0	0	0	0	0

Table 6.17 shows that elaboration is predominantly achieved monolingually (n = 53). However, code-switching to the other language is a solid option (n = 11) for self-initiated self-repair as elaboration. Also attested is code-switching from a Qaqet frame with Tok Pisin insertion to Tok Pisin (n = 6).

Example 150 shows elaboration in monolingual Qaqet, and Example 151 shows it for monolingual Tok Pisin. Example 152 shows elaboration with the use of code-switching from Qaqet to Tok Pisin, and Example 153 shows the same in the opposite direction. Example 154 shows two elaborations with a switch from Qaqet to Tok Pisin and then back to Qaqet. Example 155 shows two elaborations with switches from Qaqet to a Qaqet frame with Tok Pisin insertion and then to Tok Pisin.

(150) 1   FSS   *lura*
                 lu = ta
                 DEM = PL.H
                 these ones

       2   FSS   *dearalanginygade..*
                 de = ara = langiny-ka = de
                 CONJ = 3SG.F.POSS = book-SG.M = CONJ
                 'her book and..'

       3   FSS   *kiimukma..*   *malin*
                 ki = i-muk = ma   ma = lin
                 3SG.F = AWAY-across = ART.ID ART.ID = NAME
                 'it is downhill with.. with Lin'

```
    4   HCK   [SOUND]
              sound
              sound
              'sound'


    5   FSS   linaralanginyga
              lin = ara = langiny-ka
              NAME = 3SG.F.POSS = book-SG.M
              'Lin's book'
```
<div align="right">(CodeFSS_KJS20160901_1; IU 35–39)</div>

Example 150 shows how elaboration is achieved monolingually in Qaqet. Here, the speaker (FSS) talks in Qaqet about the book in which he writes the metadata of the recordings he makes with his daughter for a project on language acquisition. First, he refers to some papers on which he has temporarily written the specifics of the new recordings (1). These notes belong to the recording book of his daughter Lin (2). The book momentarily is located downhill at their house (3), meaning the book in which he will eventually transfer his notes on paper. FSS elaborates on his remarks in Qaqet by specifying that it is his daughter's book (5). In his last remark, he does not annul his previously made statement(s), but elaborates on them, possibly to allow his addressees to better understand him.

```
(151)  1   FSS   nogat   man   bai   stilim    yu
                 nogat   man   bai   stil-im    yu
                 NEG     man   FUT   steal-TR   2SG
                 'nobody stole from you'


       2   FLT   mh
                 mh
                 yes
                 'yes'


       3   FSS   ol   man   i      no    sa     lo     stil
                 ol   man   i      no    save   long   stil
                 PL   man   PRED   NEG   HAB    PREP   steal
                 'the people did not use to steal'
```
<div align="right">(CodeFSS_KJS20161119A_2; IU 1432–1434)</div>

Example 151 shows how elaboration is achieved in monolingual Tok Pisin. Prior to the data extract, FSS and FLT talked about how, in the past, stealing was something that people did not do in nearby towns such as Kokopo and Rabaul. First, FSS states that there was nobody who stole from you (1). He then further elaborates on his statement, saying that the people did not use to steal (2). In this last unit, he does not annul the previous unit, but elaborates and paraphrases it.

```
(152)  1   FLT   luina
                 lu-ini-a
                 DEM-SG.DIM-DIST
                 'this little one'
```

2   FLT   *deqerlmalemigellavaqa*
          de=kerl=ma=lemigel=lava-ka
          CONJ=DEONT=ART.ID=NAME=child-SG.M
          'he is Lemigel's child'

3   FLT   *lauimgamalpas*
          la=uim-ka=malpas
          this.day=child-SG.M=NAME
          'before it was the child of Malpas'

4   FKW   *[SNIFF]*
          sniff
          sniff
          'sniff'

5   FLT   *[LAUGH]*
          laugh
          laugh
          'laugh'

6   FLT   *na   wanpla   mama*
          na   wanpela   mama
          CONJ   one   mama
          'and one mother'

                                              (CodeFSS_KJS20161119A_2; IU 163–168)

Example 152 shows elaboration with a switch from Qaqet to Tok Pisin. In the data extract, the speaker (FLT) refers to a child that seems to have been adopted by the new husband of the mother. While speaking Qaqet, FLT introduces this child (1) specifying that it is the child of a man named Lemigel (2). He then elaborates on this in Qaqet, adding that earlier, it was the child of a man named Malpas (3), who most likely was also the biological father. Then FLT switches to Tok Pisin, explaining that there is one mother (6), which most likely means that she has married a new man (Lemigel). If the mother were different as well, it would allow the conclusion that the child was adopted by another family, which is a common practice in Qaqet society. In summary, FLT first elaborates in Qaqet (3) and then in Tok Pisin (6) on his statement made in (1–2). The switch to Tok Pisin for the second elaboration could be interpreted here as the speaker's wish to set off the first elaboration (3) against the second (6). As described above (see p. 234), this type of elaboration has the goal to give further explanation of what was said immediately prior to the elaboration (Huerta 1978: 40). At the same time, however, the switch could also have been used by the speaker to set a semantic contrast of the type 'two fathers but only one mother'. Therefore, in addition to the elaboration function of self-initiated self-repair, the switch could be interpreted as also having similarities with the contrasting-information strategy (see Section 6.1 from p. 177).

(153) 1 NMS *em*
              em
              3SG
              'him'

     2 NMS *bai*   *mi*   *pasim*   *gen*
              bai   mi   pas-im   gen
              FUT   1SG   tie-TR   again
              'I will tie it again'

     3 NMS *mi*   *nogat*   *taim*
              mi   nogat   taim
              1SG   NEG   time
              'I don't have time'

     4 NMS *ngutaqansamarutka*
              ngu = taqen = se = ma = rut-ka
              1SG.SBJ.NPST = say.CONT = to/with = ART.ID = belly-SG.M
              'I'm talking about the belly'
                                 (CodeFSS_KJS20160910A_1; IU 671–674)

Example 153 shows elaboration with a switch from Tok Pisin to Qaqet. In the data extract, the speaker (NMS) refers in Tok Pisin to a certain pig (1) which she wants to tie up (2), because she does not have the time to keep looking for it (3). She then switches to Qaqet in order to elaborate that she is going to tie it around its belly (4). NMS thus gives additional information and clarification in Qaqet about the way she is going to tie this pig.

(154) 1 NMS *divuru..*   *tluraqamadurlaika*
              dip = ure   tlu = te = a-qama = durlaik-ka
              FUT = 1PL.SBJ.NPST   see.CONT = PURP = NM = some = chicken-SG.M
              'we will.. look for some chickens'

     2 NMS *kakaruk*   *blo*   *peles*
              kakaruk   bilong   ples
              chicken   POSS   place
              'chicken from the area'

     3 NMS *adurlaiqiam*
              a = durlaik-iam
              NM = chicken-DU.M
              'two chickens'
                                 (CodeFSS_KJS20160910A_1; IU 266–268)

Example 154 shows elaboration with a switch from Qaqet to Tok Pisin and back to Qaqet. Prior to the data extract, FSS, FWS and NMS were talking about what to cook when FSS's son comes to visit the family. For the meat part of the meal, NMS suggests in Qaqet that they should look for a chicken (1). She then elaborates on her initial statement by switching to Tok Pisin, specifying that for the meal it should be a chicken from the area (2). Finally, she switches

back to Qaqet, further elaborating on that they should get two chickens (3). The elaborations are basically a repetition in translation, while additional information is added. With the last switch, however, the noun class suffix *-ka* 'SG.M' is replaced with *-iam* 'DU.M'. This could be interpreted as a correction. However, since there are no features (e.g., hesitation, etc.) that typically accompany the initiation of self-repair as correction (cf. Auer 1984a: 54), the switch could be interpreted instead as serving to further specify the type and quantity of the chicken.

(155)   1   FSS   *luavuk*
                  lu = a-vuk
                  DEM = DIR-up
                  'there on top'

        2   FSS   *prapaiaman*
                  pet = ama = paiaman
                  on/under = ART = copra drier
                  'at the copra drier'

        3   FLT   *mh*
                  mh
                  yes
                  'yes'

        4   FSS   *simen*
                  simen
                  cement
                  'cement'   (CodeFSS_KJS20161119A_2; IU 62–65)

Example 155 shows elaboration with a switch from Qaqet to a Qaqet frame with Tok Pisin insertion and then a switch to Tok Pisin. In the data extract, FSS tries to specify a certain location to FLT. He begins in Qaqet to roughly specify the location with *luavuk* 'there on top' (1). In the next unit, he further narrows the area by inserting a Tok Pisin term *paiaman* 'copra drier' (2) of which there are not many in the aforementioned area. FLT acknowledges this (3). FSS then further specifies the location by switching to Tok Pisin, pointing to another detail of this copra drier, namely that the foundation is made of *simen* 'cement' (4). This detail is of crucial importance as most houses in the area do not have a foundation of cement. The use of the Tok Pisin insertion *paiaman* as well as the switch to Tok Pisin for the word *simen* could have been influenced to some extent by the fact that they are technical terms that may have no equivalent in Kamanakam Qaqet. However, the fact that *simen*, in contrast to *paiaman*, is not uttered with Qaqet morphology indicates a switch to Tok Pisin.

6.6.3   Other-initiated repair

As outlined above, other-initiated repair may lead to self-repair or other-repair. The analysis of the Kamanakam corpus has shown that the most variation in terms of code-switching is found in the sequence of other-initiated repair, but not in the subsequent sequence of self- or other-repair. Therefore, the focus will be on this first repair sequence. As a result, instances of other-initiated repair were counted, regardless of whether they ultimately resulted in self-repair, other-repair

or even non-repair. This type of code-switching has already been described for other language pairs (e.g., Bailey 2000: 187f., Milroy and Li Wei 1995: 150ff.).

Other-initiated repair in Kamanakam is realized via different strategies. Firstly, it can be realized by the use of a question word, such as *what?*, *who?* or *when?* and thus has the form of a content question. Alternatively, the other person signals the wish for repair with a quasi-lexical *mh?* or *(h)a?* combined with content question intonation (see Section 2.4.1 on p. 48). In both cases, it leaves the speaker of the trouble source the possibility for self-repair or some other party the chance to perform other-repair. Secondly, the other person may propose a so-called 'candidate repair' (Schegloff et al. 1977: 377). The latter describes the other person's offer to the speaker of the trouble source for a possible repair in the form of a polar question. The speaker of the trouble source can then either decide to agree or disagree, and perform a repair by herself/himself (Kendrick 2015: 174).

Table 6.18 shows the occurrences of other-initiated repair (OIR) in the form of a content question in the corpus. This includes question words as well as non-lexical *mh?* or *(h)a?* combined with content question intonation. The columns are divided according to whether other-initiated repair was introduced by staying in Qaqet (Q), switching to Tok Pisin (TP) (and vice versa) or by using non-lexical *mh?* or *(h)a?*. For the rows, the instances of other-initiated repair are put in relation to language and other forms used by the speaker of the trouble source (TS), which lead the other person to initiate repair in the first place. They may include Qaqet (Q), Qaqet with a Tok Pisin insertion ([Q(TP)]), Qaqet with an other-language insertion ([Q(O)]), Tok Pisin (TP), Tok Pisin with a Qaqet insertion ([TP(Q)]), Tok Pisin with an other-language insertion ([TP(O)]), a name (Name), a sound (Sound) or an unknown language (Unknown).

Table 6.18: Other-initiated repair in the form of a content question

	OIR by using *(h)a?* or *mh?*	OIR by staying in Q	OIR by switching to TP	OIR by staying in TP	OIR by switching to Q
TS: Q	7	3	1	1	4
TS: [Q(TP)]	2	4	0	0	0
TS: [Q(O)]	0	0	0	0	0
TS: TP	0	2	1	4	4
TS: [TP(Q)]	0	0	0	0	0
TS: [TP(O)]	1	0	0	0	0
TS: Name	1	0	1	0	0
TS: Sound	1	0	0	0	0
TS: Unknown	0	1	0	0	1

Table 6.18 shows that when the speaker of the trouble source speaks monolingual Qaqet or Tok Pisin, other-initiated repair is attested in all possible constellations: by staying in monolingual Qaqet or Tok Pisin, as well as with a switch to monolingual Qaqet and Tok Pisin[11]. What is also evident from Table 6.18 is that repair is often initiated by quasi-lexical means (in the corpus via *(h)a?* or *mh?*), especially when the trouble source was uttered in Qaqet (n=7). In the following, it is argued that other-initiated repair is a "conversational structure" (cf. Auer 1995: 120) in which code-switching serves three different functions:

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[11] A switch refers here to a speaker-internal switch (i.e., the language s/he used in IU X compared to IU Y). The trouble source constitutes here the base for comparison which should explain why there is a switch at all at this point.

1. Emphatic contrast

2. Language accommodation

3. Maintaining the speaker's language preference

The first belongs to what Auer (1984a: 12, 1999: 310) defines as discourse-related, and thus conversational, code-switching. The second and third function are participant-related (cf. Auer 1984a: 12, Auer 1999: 310) and thus located within situational code-switching. Although dealing with two different types of code-switching, it was decided to analyze these functions coherently within the realm of the repair paradigm.

What is presented in the following are examples of code-switching in which the trouble source is uttered in Qaqet. Other-repair is initiated in response to this by either staying in Qaqet (see Example 156), with a switch from Qaqet to Tok Pisin (see Example 157), by staying in Tok Pisin (see Example 158), or with a switch from Tok Pisin to Qaqet (see Example 159). In the opposite direction, examples are given in which the trouble source is uttered in Tok Pisin, in response to which other-repair is initiated by staying in Tok Pisin (see Example 160), with a switch from Tok Pisin to Qaqet (see Example 161), by staying in Qaqet (see Example 162), or with a switch from Qaqet to Tok Pisin (see Example 163). The respective function(s) is/are briefly discussed after each example. The interpretations will be summarized again at the end of this section.

(156)   1   FRU   *dengen*
                   de = ngen
                   CONJ = 2PL
                   'and you all?'

        2   IRM   *nema*
                   nema
                   who
                   'who?'

        3   FRU   *ngen*
                   ngen
                   2PL
                   'you all'   (CodeFSS_KJS20160901_1; IU 386–388)

Example 156 shows a trouble source uttered in Qaqet to which other-repair is initiated by also staying in Qaqet. In the scene, FRU, GKN and IRM are present. Prior to the data extract, FRU and IRM predominantly spoke Qaqet, whereas GKN just arrived at the scene, speaking Tok Pisin. Immediately prior to the scene, FRU told GKN how he had already done his part of the daily work. The data extract begins when FRU asks GKN in Qaqet *dengen* 'and [what about] you all?' (1). Here, FRU makes use of the Qaqet pronoun *ngen* '2PL'. Thereby, he is not only addressing GKN but also other people associated with her. IRM is not sure who is included in *ngen* '2PL', so she asks in Qaqet *nema* 'who [do you mean]?' (2). FRU self-repairs his utterance by repeating the Qaqet pronoun *ngen* (3), implying that he is including IRM as well. In the above example, the two main interlocutors FRU and IRM had established a temporary common Qaqet-use in the intonation units prior to the data extract. As a consequence, accommodation to the interlocutor and self-preference for a certain language seem to balance each other out.

(157) 1 IRM *tikaut..   tikutmii*
                    tika=ut   tika=ut=mii
                    EMPH=1PL   EMPH=1PL=all
                    'we.. we all'

      2 FSS *utmaqas*
                    ut=ma=qasing
                    1PL=ART.ID=hair
                    'we all'

      3 FSS *mh*
                    mh
                    yes
                    'yes'

      4 NMS *iasmakeuregilmet*
                    iasi=ma=ke=ure=gilmet
                    DIST=??=??=1PL.SBJ.NPST=split
                    'recently we broke'

                      nangaamalamesa
                      ne=ngama=ama=lamesa-ka
                      from/with=some.NSPEC=ART=coconut-SG.M
                      'the coconut again'

                          daqamat
                          de=ka=mat
                          CONJ=3SG.M.SBJ=take.NCONT.PST
                          'and he took it'

      5 IRM *mh*
                    mh
                    yes
                    'yes'

      6 IRM *sat*
                    husat
                    who
                    'who?'   (CodeFSS_KJS20161023_2; IU 275–280)

Example 157 shows a trouble source uttered in Qaqet to which other-repair is initiated and accompanied by a switch from Qaqet to Tok Pisin. In the scene, FRU, IRM, FSS and NMS argue about who would be part of the following recording session(s). Prior to the data extract, FRU suggested that IRM and NMS perform a dance. The recorder (FSS), however, invites everyone present to be part of the recording. This is when the data extract begins, and IRM repeats FSS's Qaqet statement (1). She thereby addresses FRU, which gives her statement the connotation 'you see, it's all of us, and not just me (IRM) and NMS'. At the same time, FSS repeats his

invitation *utmaqas* 'we all' (2) and again confirms (3) what IRM said in (1). NMS then states that recently they (i.e., NMS and others) broke coconuts, and he (i.e., FSS) recorded it (4). IRM acknowledges NMS's statement (5). However, IRM seems not to be sure who is included in 'we', that is, who NMS is talking about. She thus initiates repair by switching to Tok Pisin asking *[hu]sat?* 'who?' (6). As this is the only example of the configuration 'Qaqet trouble source → initiation of other-repair by a switch from Qaqet to Tok Pisin', the function of the switch is difficult to interpret. NMS and IRM are two Qaqet-dominant elders. Thus, if IRM's language choice was somehow participant-related, one would expect no switching, and IRM staying in Qaqet. There are also no arriving participants who could have triggered IRM's language choice. As possible situational factors are ruled out, the switch to Tok Pisin may be interpreted here as the speaker's wish to convey emphatic contrast. The latter may have the possible goal of giving her initiation of repair further emphasis. This analysis is, however, very tentative as further examples would be needed to support this interpretation.

(158)   1   IRM   *amadilka*
              ama = gil-ka
              ART = small-SG.M
              'the small one'

        2   IRM   *qaimek*
              ka = i-mek
              3SG.M = AWAY-down
              'is down below?'

        3   FSS   *em   i   stap*
              em   i   stap
              3SG   PRED   to be
              'he is there'

        4   IRM   *xxx*
              xxx
              xxx
              'xxx'

        5   FSS   *wanem*
              wanem
              what
              'what?'   (CodeFSS_KJS20161023_2; IU 620–624)

Example 158 shows a trouble source uttered in Qaqet to which other-repair is initiated by staying in Tok Pisin. In the data extract, IRM and FSS talk about the whereabouts of FSS's child. Immediately before the scene, FSS spoke Tok Pisin while IRM spoke Qaqet with occasional switches to Tok Pisin. IRM begins to ask in Qaqet whether the small one is down below (1–2), referring to whether a certain child is located at FSS's house which is situated further downhill. FSS affirms this by staying in Tok Pisin (3). IRM's following utterance in Qaqet (?) (4) leads FSS to initiate repair by staying in Tok Pisin asking *wanem* 'what?' (5). FSS's staying in Tok Pisin could be interpreted here as maintaining his current preference for Tok Pisin. Since both IRM and FSS are fluent in Qaqet and Tok Pisin, this configuration is a possible option.

(159) 1 FLT *deskuasikkadrlem*
de = as = kuasik = ka = drlem
CONJ = still = NEG = 3SG.M.SBJ = know
'and he did not know yet'

[...]

3 FSS *turu*
tru
true
'true'

4 FLT *atikalevrinimara*
ka = tika = lu = ivet-ini = mara
3SG.M.SBJ = EMPH = DEM = ground-SG.DIM = here
'it is this little area here'

[...]

6 FSS *liniqua*
lu = ini = kua
DEM = SG.DIM = where
'where is this little one?'

7 FLT *atikaquilamakakau*
ka = tika = kui = lu = ama = kakau
3SG.M.SBJ = EMPH = quoting = DEM = ART = cocoa
'it is said this cocoa'

dengdengnangetde
dengdeng = ne = nget = de
stop:REDUP = from/with = 3N = CONJ
'is next to it'

(CodeFSS_KJS20161119A_2; IU 568–574)

Example 159 shows a trouble source uttered in Qaqet to which other-repair is initiated and accompanied by a switch from Tok Pisin to Qaqet. Prior to the data extract, FSS and FLT started to talk about land ownership issues, including about a person who would have had the right to claim ownership of a certain piece of land, but did not know about it. The language used immediately before the data extract is predominantly Qaqet. In the scene[12], FLT begins to repeat in Qaqet that this person did not know about it yet (1), that is, his right to claim ownership of the land. FSS emphatically agrees to this, and at the same time switches to Tok Pisin by stating *turu* 'true' (3). FLT continues in Qaqet by pointing out to FSS where the little area is located (4). FSS, however, is not sure where this area is located. He thus initiates other-repair, and

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[12] In the meantime, the child HCK has conversation of her own (2, 5).

at the same times switches back to Qaqet asking *liniqua* 'where was this little one?' (5). FLT self-repairs his trouble source (4) in Qaqet, by further specifying to FSS the location of the area (7). The switch to Qaqet (6) is a follow up to the conversational switch to Tok Pisin *turu* 'true' (3) for emphatic agreement. The switch back to Qaqet could thus be interpreted here as the speaker's accommodation to the interlocutor's used/preferred language.

(160) 1 FWS *i*   *no*   *olsem*   *ol*   *narapla*   *ya*
                i   no   olsem   ol   narapela   ya
                PRED   NEG   like   PL   another   PTCL
                'not like the other ones'

       2 FSS *nogat*   *ros*   *tu*
                nogat   ros   tu
                NEG   rust   also
                'it also has no rust on it'

       3 FSS *narapla*   *ya*
                narapela   ya
                another   PTCL
                'the other one'

       4 FSS *jenis*   *i*   *baim*   *ya*
                jenis   i   bai-m   ya
                NAME   PRED   buy-TR   PTCL
                'Janice bought it'

       5 FSS *aninit*   *nau*   *ya*
                aninit   nau   ya
                underneath   now   PTCL
                'which is underneath now'

       6 FWS *husat*
                husat
                who
                'who?'

       7 NMS *jenis*
                jenis
                NAME
                'Janice'   (CodeFSS_KJS20160910A_1; IU 353–359)

Example 160 shows a trouble source uttered in Tok Pisin to which other-repair is initiated by also staying in Tok Pisin. In the data extract, FWS, FSS and NMS are talking in Tok Pisin about two water barrels in FSS's home. The extract begins with FWS praising the quality of the first barrel, in the sense that it was not like the other cheaper ones (1). FSS recognizes this by adding that the barrel is made of rustproof material (2). FSS then comes to the second barrel (3), which is the one his wife Janice has bought (4), elaborating that this barrel is now

under the canopy of the house (5). FWS initiates repair by asking in Tok Pisin *husat* 'who?' (6). This is then other-repaired by NMS, who repeats the name 'Janice'. In the above example, the two main interlocutors FSS and FWS had established a temporary common Tok Pisin-use in the intonation units prior to the data extract. Thus, language accommodation to the interlocutor as well as each speaker's self-preference for a certain language seem to balance each other out.

(161) 1 FWS *sali   sampla   lo   yumi*
                sal-im   sampela   long   yumi
                sell-TR   some   PREP   1PL.INCL
                'sell something to us'

       2 FWS *na   yumi   baim*
                na   yumi   bai-m
                CONJ   1PL.INCL   buy-TR
                'and we will buy it'

       3 FSS *ai   i   salim   handret   kina*
                ai   i   salim   handet   kina
                INTJ   PRED   sell-TR   hundred   kina
                'ai they sell it for a hundred kina'

       4 FWS *em   tru   yet   ya*
                em   tru   yet   ya
                3SG   true   EMPH   PTCL
                'this is true'

       5 FWS *em..   rait   daram   yet   ya*
                em   rait   dram   yet   ya
                3SG   right   drum   EMPH   PTCL
                'this is.. the right barrel'

       6 FSS *nana*
                nana
                what
                'what?'

       7 FWS *rait   daram   yet   ya*
                rait   dram   yet   ya
                right   drum   EMPH   PTCL
                'the right barrel'

                                    (CodeFSS_KJS20160910A_1; IU 345–351)

Example 161 shows a trouble source uttered in Tok Pisin to which other-repair is initiated and accompanied by a switch from Tok Pisin to Qaqet. In the data extract, FWS and FSS are talking about someone who has/sells water barrels of good quality. FWS begins to think aloud in Tok Pisin that if that person sold their barrels (1), he and others would buy them (2). FSS objects in Tok Pisin that they actually sell the barrels for one hundred Kina per piece (3). FWS

acknowledges this in Tok Pisin (4), and praises the quality of the barrel, saying that it is just the right barrel for him (5). FSS initiates repair by asking and at the same time switching to Qaqet *nana* 'what?' (6). FWS then self-repairs the trouble-source intonation unit (5) by repeating most of it in Tok Pisin (7). The switch to Qaqet could be interpreted here as a way to emphasize or contrast the initiation of repair.

(162)   1   NMS   *deramitsapmakusibum*
                   de = ta = mit = se = pe = ma = kusibum
                   CONJ = 3PL.SBJ = go.NCONT.PST = to/with = PLACE = NAME
                   'they went to Kusibum'

        [...]

        5   HJP   *ol   i   go   antap*
                   ol   i   go   antap
                   3PL   PRED   go   on top
                   'they went up'

        6   HJP   *mi   bihain   long   ol   i   go   antap*
                   mi   bihain   long   ol   i   go   antap
                   1SG   after   PREP   3PL   PRED   go   on top
                   'I followed all who went up'

        [...]

        8   NMS   *nemda*
                   nema-ta
                   who-PL.H
                   'who are they?'

        [...]

        10 HJP   *mulu   wantem..   maria*
                   mulu   wantaim   maria
                   NAME   with   NAME
                   'Mulu with Maria'

                                              (CodeFSS_KJS20160910A_1; IU 612–621)

Example 162 shows a trouble source uttered in Tok Pisin to which other-repair is initiated by staying in Qaqet. In the data extract, HJP and NMS are talking about the whereabouts of a number of people in their neighborhood. Immediately before the scene, NMS speaks predominantly Qaqet, while HJP speaks Tok Pisin. NMS begins in Qaqet stating that a certain party went to Kusibum (1). To this, HJP stated in Tok Pisin that the people went uphill (5) and that he followed all of them (6). NMS, however, is unsure who exactly HJP is referring to, and initiates

other-repair by staying in Qaqet and asking *nemda* 'who are they?' (8)[13]. HJP self-repairs his trouble source (5, 6) in Tok Pisin by stating their names (10), using the Tok Pisin preposition *wantaim* 'with'. NMS's staying in Qaqet may be interpreted here as being due to her momentary strong preference for Qaqet. Daily conversations with HJP have shaped her attitudes towards the degree to which HJP understands Qaqet. Thus, she probably believes that the latter will understand her speaking Qaqet. The other example is similar when it comes to maintaining the speaker's own language preference.

(163) 1 FSS *asna*
              a = kesna
              NM = how.much/many
              'how many?'

     2 NMS *aquingen*
              a = kui = ngen
              ?? = quoting = 2PL
              'maybe you all'

     3 FWS *nguabupti*
              ngua = bup = ki
              1SG.SBJ = fill = 3SG.F
              'I'll fill it up'

     4 FSS *kuimamunyinyisauqa*
              kui = mama = nyi = nyim = se = kua
              quoting = mama = 2SG.SBJ.NPST = look.NCONT = to/with = where
              'mama where are you looking?'

     5 FSS *kusibum*
              kusibum
              NAME
              'Kusibum?'

     6 NMS *kusibum*
              kusibum
              NAME
              'Kusibum'

     7 NMS *tatitte..*
              ta = tit = te
              3PL.SBJ = go.CONT = PURP
              'they went to'

---

[13] In the meantime, the child FWB approaches the scene, and calls for her grandmother NMS (7, 9).

8   NMS   *salim*   *kolos*
            sal-im   klos
            sell-TR   clothing
            'sell clothes'

9   FSS   *mi*   *no*   *save*
            mi   no   save
            1SG   NEG   know
            'I don't know'

10   FWS   *kolos*   *blo*   *husat*
            klos   bilong   husat
            clothing   POSS   who
            'whose clothes?'

                                   (CodeFSS_KJS20160910A_1; IU 129–138)

Example 163 shows a trouble source uttered in Tok Pisin to which other-repair is initiated and accompanied by a switch from Qaqet to Tok Pisin. In the data extract, NMS, FSS and FWS, first talk about helping a certain person harvesting cocoa. FSS then switches topics, and the participants begin to talk about a number of people who went to sell clothes. Immediately prior to the data extract, NMS predominantly spoke Qaqet with occasional switches to Tok Pisin, whereas FSS and FWS constantly switched back and forth between Qaqet and Tok Pisin. FSS begins in Qaqet to ask how many people are needed for harvesting the cocoa (1). NMS replies in Qaqet with *aquingen* 'maybe you all' (2), that is, FSS, FWS and possibly some of their family members. FWS adds in Qaqet that he will fill it up (3), meaning that he is going to fill the harvested cocoa beans into sacks. FSS then changes topics by asking NMS in Qaqet where she is looking (4). He immediately adds a candidate, 'Kusibum', which is the name of a hamlet in the more inland part of Kamanakam (5). NMS acknowledges this by repeating the name of the hamlet (6). NMS then begins to explain why she is looking in this direction, because a number of people seem to have gone there to (7) sell clothes (8). NMS switches here from Qaqet (7) to Tok Pisin (8) for self-repair. FSS also switches to Tok Pisin, and says that he knows nothing about it (9). FWS seems to have trouble tracking who NMS is referring to, and then initiates repair by asking NMS with a switch to Tok Pisin *kolos blo husat* 'whose clothes?' (10). In the following, NMS initiates self-repair. FWS's switch to Tok Pisin (10) could be interpreted as an act of language accommodation towards the NMS's Tok Pisin use (8). Alternatively, NMS's self-repaired utterance by switching to Tok Pisin may also have triggered FWS's switching to Tok Pisin. As there are no further examples of this configuration, the analysis cannot be further supported at this point.

6.6.4   Conclusion

In summary, the corpus data indicate that among adult Kamanakam Qaqet/Tok Pisin speakers, monolingual self-initiated self-repair clearly predominates, compared to self-initiated self-repair that is realized with the help of code-switching. The operations which Schegloff (2013) identified to describe self-initiated self-repair in American English are also applicable to describe this type of repair in monolingual Qaqet and Tok Pisin, as well as in Qaqet/Tok Pisin code-switching. In the corpus, there are fewer operations found in conjunction with Qaqet/Tok Pisin code-switching (searching, recycling, aborting) compared to monolingual Qaqet and Tok Pisin speech (searching, recycling, aborting, replacing, inserting, [deleting]). Searching, which is

the most frequent operation in monolingual talk, is also the most frequent in conjunction with code-switched self-initiated self-repair. Despite being infrequent, lexical fillers are present in monolingual as well as in code-switched self-initiated repair. As in monolingual talk, the operations seem to be predominantly marked by a hesitation pause. In addition, self-repair that is initiated in Qaqet tends to show the same features as in monolingual Qaqet, that is, the last word prior to a hesitation pause may be uttered with final glottalization and level pitch. However, other phenomena, such as falling pitch, may also be observable.

Code-switching can be interpreted as an optional device used to support a number of operations in self-initiated self-repair. In the searching operation, code-switching has been observed to be used in the initiation of self-repair with the help of code-switched lexical fillers to signal word-finding problems as a further contextualization cue. In self-repair itself, code-switching seems to play a role in overcoming word-finding problems. In the recycling operation, the function of code-switching may be less transparent. Similarly, Schegloff (2013: 59) argues for his studies on American English that "[r]ecycling has various uses, of which I'm sure I understand only a few". In the data, one of the ways in which the recycling operation may be used in conjunction with code-switching is to reboot one's own speech in another language without abandoning the wording altogether. In the aborting operation, code-switching may help the speaker to reboot her/his speech, using a different way to get across one's message. A switch in the aborting operation could also be interpreted as a signal to the listener that abandonment of the way to convey a message is taking place. The switching direction seems to not be of importance, although switching from Qaqet to Tok Pisin occurs slightly more often. Rather, the act of switching itself functions as a device to either signal that self-repair is initiated, or to master self-repair.

Elaboration has been presented as another branch of self-initiated self-repair. In this type of repair, previously uttered intonation units are not annulled, but elaborated upon. This may be in form of a partial repetition (adding additional information) or in the form of specifying the previous intonation unit without necessarily repeating what was being said. In the corpus, elaboration is predominantly realized monolingually. However, code-switching in both directions seems to be a solid option in elaboration.

Code-switching for elaboration in the form of a partial repetition may be used to paraphrase the previous utterance (Auer 1984a: 88f.). It can be speculated if this is done "to bring out a different aspect of the argument" (Sankoff 1972: 47) for which the speaker feels the other language is better suited, or to simply signal that an elaboration is in progress. For elaboration in the form of a further specification of the previous unit, code-switching may act as a (further) marking device in order to signal to the addressee that additional information is being conveyed. In the case of elaboration extending over several intonation units, code-switching may also be used to distinguish single units of elaboration from each other. In the context of the different types of elaboration, the switch direction seems to be of minor importance, and the switch itself bears meaning. The examples of code-switching in elaboration have also shown that the latter may overlap with other conversational functions.

The analysis of the corpus examples of other-initiated repair leads me to the interpretation summarized in Table 6.19. The table shows the configurations of other-initiated repair as being observed in the corpus in relation to the three above presented functions: 1. Emphatic contrast, 2. Language accommodation and 3. Maintaining the speaker's language preference as a result of the analysis. Each configuration of other-initiated repair combines the language of the trouble source with the language in which repair was other-initiated, along with information on whether it incorporates a switch (e.g., TP, i.e. the speaker stays in Tok Pisin; Q→TP, i.e. the speaker switches from Qaqet to Tok Pisin).

Table 6.19: Other-initiated repair and its functions

No.	Ex.	Trouble source	Other-initiated repair	Emphatic contrast	Language accommodation	Speaker's preference
1	156	Q	Q		Yes	Yes
2	157	Q	Q→TP	Yes		
3	158	Q	TP			Yes
4	159	Q	TP→Q	(Yes)	Yes	Yes
5	160	TP	TP		Yes	Yes
6	161	TP	TP→Q	Yes		
7	162	TP	Q			Yes
8	163	TP	Q→TP		Yes	

The observations presented in Table 6.19 can be understood as follows:

1. Staying in the same language as the language of the trouble source (see line no. 1 and 5) may be interpreted as language accommodation balancing out with the speakers' own language preference.

2. Switching to a language other than the language of the trouble source (see line no. 2 and 6) may be interpreted as a the speaker's wish to signal emphatic contrast in order to highlight the initiation of repair.

3. Staying in a language other than that of the trouble source (see line no. 3 and 7) could be due to the fact that the language preference of the repair-initiating person at this point in time outweighs that of the speaker of the trouble source. Sociolinguistic interviews indicate that all participants have at least passive knowledge of Qaqet, which makes a categorical switch to a preferred language of a speaker unnecessary.

4. Code-switching of the repair-initiating person to the same language of the trouble source (see Table line no. 4 and 8) could be used to accommodate to the perceived language preference s/he has towards the speaker of the trouble source. In this context, it could also be argued that the repair-initiator's switching to the preferred language may be used as means to facilitate the speaker's self-repair.

Other-initiated repair and self-initiated repair are both used as a contextualization cue to emphasize contrast (i.e., emphatic contrast). In addition, other-initiated repair is determined by two characteristics that can be ascribed to participant-related situational code-switching (see Section 5.2 from p. 144). This may be due to the fact that in other-initiated repair, two speakers are involved (i.e., speaker A = trouble source, speaker B = other-repair initiator). That is, speaker A needs to linguistically react to speaker B's trouble source, but also to her/his language use. In contrast, in self-initiated repair, only one speaker is involved (i.e., speaker A = trouble source and self-repair initiator). Here, speaker A needs to only account for her/his own trouble source (and make herself/himself understood). In this sense, other-initiated repair is more open for participant-related code-switching than self-initiated repair, in which the speaker is mainly occupied with overcoming her/his own trouble source with the option of (further) marking this by a switch.

6.7 Other functions

Functions that have also been observed to occur in the Kamanakam corpus include addressee shift, completion, repetition and swearing. Due to the lack of further examples, they are only discussed briefly from a qualitative and not from a quantitative perspective.

6.7.1 Addressee shift

The addressee shift (or addressee specification) function shares some qualities with participant-related situational code-switching, in that it centers around a speaker's interlocutors. The latter is defined to cause a switch when "the relevant characteristics of the new addressee are different from those of the previous addressee", whereas the addressee shift function occurs in those situations where the participants' characteristics remain the same (McClure 1977: 110). Here, it may be used to "to help clarify the fact that a new person is being addressed" (1977: 110). The addressee shift function has been frequently observed in different cultural settings (e.g., Amuda 1994: 129; Auer 1984a: 32-39; Cashman 2001: 179-183; Gardner-Chloros 2009a: 79f.; Gumperz 1982: 77)

In Kamanakam, people predominantly interact in groups, which in terms of addressee specification, often leads to shifts between equally addressing everyone in this group and only addressing particular individuals (see Section 2.5.3 on p. 54). The simplest case of addressee shift is when a particular speaker shifts from addressing a particular individual to addressing another individual. What may also be included are shifts from one particular group of individuals to another. Finally, a shift from one particular group of individuals to a single individual, usually not part of the former group (or vice versa) may also be treated as addressee shift. In the Kamanakam corpus, a speaker may occasionally shift from addressing a particular group to a single individual from this group. If the shift is sharp enough and therefore clearly identifiable, for example, by a question or a request, this then is also considered to be addressee shift. What is, however, not treated as addressee shift in this study is the opposite case in which a speaker addressing a particular individual extends his attention to another person already present within the scene. In this case, it is better to speak of an expansion of the circle of addressees. Therefore, in this study, it was decided that the inclusion of additional addressees is not accounted for in the addressee shift function. Another type of addressee shift excluded from the analysis concerns instances where the shift is a result of a response to another person. For example, someone other than the current addressee may initiate repair. In the process of self-repair, the speaker is then forced to shift her/his attention to the repair-initiating individual. However, this type of addressee shift is triggered by external factors, and not a result of the speaker's own initiative. In consequence, code-switching could not function as a device to mark this shift as the speaker's signal to address a different person. The following data extract is the example in the corpus that best illustrates addressee shift and code-switching. In the data extract, speaker and addressee are noted in the manner: speaker → addressee (e.g., FSS → FWS denotes that FSS addresses FWS).

(164) 1 FSS → FWS *narapla* *ya*
                     narapela   ya
                     another   PTCL
                     'the other one'

2 FSS → FWS *jenis   i   baim   ya*
                    jenis   i   baim   ya
                    NAME   PRED   buy-TR   PTCL
                    'Jenis bought it'

3 FSS → FWS *aninit   nau   ya*
                    aninit   nau   ya
                    underneath   now   PTCL
                    'which is underneath now'

4 FWS → FSS *husat*
                    husat
                    who
                    'who?'

5 NMS → FWS *jenis*
                    jenis
                    NAME
                    'Jenis'

6 FWS → NMS *ah*
                    ah
                    ah
                    'ah'

7 NMS → FWS *tiavanbraqi*
                    kia＝van＝barek-ki
                    3SG.F.SBJ＝buy.NCONT＝BEN-3SG.F
                    'she bought it for herself'

8 FSS → NMS *tunavaqia*
                    te＝una＝va-ki＝a
                    PURP＝1DU.POSS＝thingy-SG.F＝DIST
                    'the thing is for the two of us'

9 NMS → FWS *luqiairamek*
                    lu-ki-iara＝a-mek
                    DEM-SG.F-PROX＝DIR-down
                    'it is down there'

10 FSS → FWS *narapla   ya*
                    narapela   ya
                    another   PTCL
                    'the other one'

11 FSS → FWS *sanap   mi   dring   wara   long   en*
                sanap   mi   dring   wara   long   em
                stand   1SG   drink   water   PREP   3SG
                'which stands and I drink water from it'

12 NMS → FWS *tavanera*
                ta = van = iara
                3PL.SBJ = buy.NCONT = PROX
                'they bought it'

13 FSS → FWS *ol   i..   ol   i   givim*
                ol   i..   ol   i   giv-im
                3PL   PRED   3PL   PRED   give-TR
                'they.. they gave it'

14 FWS → FSS *tru   yet*
                tru   yet
                true   EMPH
                'true'

15 FWS → NMS *ah*
                ah
                ah
                'ah'

16 FWS → NMS *wanem   taim   bai   yu   karim   stik taro   ya*
                wanem   taim   bai   yu   kar-im   stik taro   ya
                what   time   FUT   2SG   carry-TR taro seedling   PTCL
                'when will you carry the stick taro?'

17 FWS → NMS *mande*
                mande
                Monday
                'Monday?'

18 NMS → FWS *mh*
                mh
                yes
                'yes'

19 FSS → NMS *diarim   nane*
                gia = rim   nana
                2SG.POSS = taro what
                'what kind of taros?'

20   NMS → FSS   *guaim*
                    gua = rim
                    1SG.POSS = taro
                    'my taro'

                                              (CodeFSS_KJS20160910A_1; IU 355–374)

Example 164 shows a slightly longer data extract from a conversation between FSS, FWS and NMS, where code-switching, among other functions, is used to signal addressee shift. In the conversation, the participants firstly speak about FSS's new water tanks, and secondly about the organization of NMS's taro planting. All three participants are fluent in Qaqet and Tok Pisin. Prior to the scene, FSS predominately used Tok Pisin for a period of time, with minor switches to Qaqet, FWS used Tok Pisin, and NMS predominantly spoke Qaqet. In the scene, FSS speaks Tok Pisin when addressing FWS, but he switches to Qaqet when addressing NMS. The scene begins with FSS explaining to FWS in Tok Pisin that one water tank was bought by his wife Jenis (1–3). To this, FWS initiates other-repair in Tok Pisin, *husat* 'who' (4). Instead of FSS, NMS repairs FWS's repair request by repeating the name Jenis to FWS (5). FWS indicates his understanding with *ah* (6). NMS then gives FWS some additional information in Qaqet, specifying that Jenis bought the tank for herself. This is when FSS switches from Tok Pisin to Qaqet correcting NMS in that Jenis not bought the tank for herself, but for the two of them (i.e., Jenis and FSS) (8). Here, the switch could signal either repair of NMS's statement or a shift in addressee from FWS to NMS (or both). Recall, however, that FWS was using Tok Pisin before the scene whereas NMS used predominantly Qaqet. Thus, it is assumed that this period may have led to a temporary 'one participant–one language' association by FSS. As a result, the switch to Qaqet may rather be described as a device to signal this shift in addressee. Auer (1988: 208) argues in this context that "[f]or quite often, changing the language when addressing a new partner is only the functional aspect of adapting to his or her language preference which diverges from that of the preceding addressee". As language accommodation is assumed to be one of the main rationales for participant-related situational code-switching among Kamanakam Qaqet/Tok Pisin speakers (see Section 5.2 from p. 144), it could be speculated that the 'one participant–one language' association is ultimately related to it. NMS then continues in Qaqet, specifying the location of the tank (9). FSS continues to talk about the second tank (10–11). Thereby, he makes a shift in addressee back to FWS, while also switching back to Tok Pisin. Thus, FSS still upholds a temporary 'one participant–one language' association. This further supports the idea that two switches of FSS carry an addressee specifying function. NMS again gives FWS some additional information about the second tank (12), which FSS repeats in Tok Pisin (13), and FWS acknowledges (14) by staying in Tok Pisin. Still speaking Tok Pisin, FWS suddenly switches topics to the organization of NMS's taro planting, by asking when she plans to plant them (15–16). He anticipates the answer by adding the polar question *mande* 'Monday?' (17) which NMS affirms (18). This is when FSS again makes a shift in addressee back to NMS, while again simultaneously switching back to Qaqet. It can be assumed that FSS's temporary 'one participant–one language' is still in force, which made him switch back to Qaqet at this point. NMS's immediate answer in Qaqet *guaim* 'my taro' (20) may count as further evidence that FSS aimed to specifically address NMS and not FWS.

6.7.2 Completion

For the completion function, it is argued that code-switching can be involved when a speaker wishes to signal (turn) completion. In the Kamanakam corpus, a speaker may switch to the other language for her/his last intonation unit. Several studies have observed this type of code-

switching among bilinguals in different cultural settings (e.g., Auer 1988; Sebba 1993: 109; Li Wei 1994: 157ff.; Kulick and Stroud 1990: 217). However, each of the researchers listed understand/describe the function somewhat differently. For example, for Italian–German bilingual children in Germany, Auer (1988: 199) states that code-switching can signal a "change between informative and evaluative talk, for instance, after stories (including formulations and other summing-up techniques)". For London English–London Jamaican bilinguals in Great Britain, Sebba (1993: 109ff.) describes how the turn-final part "typically consists of a short stretch of Creole which brings the turn to a pointed conclusion, by summarizing or reaffirming the speaker's main point". For English–Cantonese bilinguals in Great Britain, (Li Wei 1994: 159) argues that turn-final code-switching "marks the end of the current speaker's turn and the selection of the next turn speaker". Finally, for Taiap–Tok Pisin bilinguals in PNG, Kulick and Stroud (1990: 217) state that a speaker may code-switch to "emphatically summarize and complete his story". All studies describe a switch to the other language at the turn-final part of the speaker's talk. Most of them ascribe the turn-final switch a similar function, that is, to evaluate, summarize, reaffirm and/or complete what the speaker said before. Li Wei stresses the fact that in his data, turn-final switches signal a speaker's wish for turn transition to another speaker. In his description of completion, the focus is on turn completion, but more so on the speaker preparing turn transition.

In the Kamanakam corpus, code-switching can be observed when a speaker signals completion. This includes switching in both directions, that is, from Qaqet to Tok Pisin and vice versa. What is usually completed with a switch in the Kamanakam corpus is a stretch of minimally two intonation units (including the switched unit). The stretch of talk normally involves a series of statements, which the speaker concludes with a statement in the final unit in order to summarize or evaluate her/his remarks. (see Example 165). What can be also observed is a speaker ending her/his remarks with a code-switched tag-question (see Example 166). The latter type of switch explicitly refers to what Li Wei (1994: 159) described in his data as turn transition.

(165) 1 FSS *kuanyinintaqurla*
kua=nyi=nin=taquarl=a
INTRG=2SG.SBJ.NPST=cook.CONT=thus=DIST
'why do you cook like this'

2 FSS *kualuqiaqi..*   *kiarainga*
kua=lu-ki-a=ki   kia=raing=a
INTRG=DEM-SG.F-DIST=3SG.F.SBJ.NPST   3SG.F.SBJ=sing.NCONT=DIST
'why is this girl singing'

3 FRU *mh*
mh
yes
'yes'

4 FSS *nemaqavinbanysaqa*
nema=ka=vin=bany=se-ka
who=3SG.M.SBJ=step.NCONT=come=to/with-3SG.M
'who is coming here'

5   IRM   *mh*
          mh
          yes
          'yes'

6   FSS   *na   mipla   toktok   i   go   kam   em*
          na   mipela   toktok   i   go   kam   em
          CONJ   1PL.EXCL talk   PRED   go   come   3SG
          'and we are just talking'

                                      (CodeFSS_KJS20160901_1; IU 47–52)

Example 165 shows code-switching and turn completion with a switch from Qaqet to Tok Pisin. The data extract from the beginning of the recording shows a stretch of talk by FSS directed at FRU and IRM. Between FSS's otherwise uninterrupted remarks, the latter two each reply with a *mh* in order to mark affirmation. In the extract, FSS, who also functions as the recorder here, briefly explains to FRU and IRM what I as a researcher want FSS to find out by making this recording. He begins in Qaqet to list a series of goings-on in form of rhetorical questions which include why IRM cooks like that (1), why their daughter sings (2) and who else (usually) comes to their house (4). After a brief pause, FSS finishes his turn by completing this series of rhetorical questions with a statement (6). It is this last statement in which FSS switches from Qaqet to Tok Pisin. The statement appears to mark the superordinate activity, that is to talk about the aforementioned activities cooking, singing and visitors. At the same time, the switch can be interpreted here as a (further) cue to signal completion of his remarks.

(166) 1   FSS   *em   olsem*
                 em   olsem
                 3SG   COMPL
                 'it's like that'

       2   FSS   *bai   yupela   lukim*
                 bai   yupela   luk-im
                 FUT   2PL   look-TR
                 'you all will see'

       3   FSS   *nau   mama   i   no   nap   bisi   lo   baim   meri   na*
                 nau   mama   i   no   inap   bisi   long   bai-m   meri   nau
                 now   mama   PRED   NEG   able   busy   PREP   buy-TR   wife   now
                 'now the mother is not able to buy the bride'

       4   FWS   *[LAUGH]*
                 laugh
                 laugh
                 laugh

       5   FSS   *anyulu*
                 a=nyi=lu
                 ??=2SG.SBJ.NPST=see.NCONT
                 'you see?'

6	NMS	*mh*	
		mh	
		yes	
		'yes'	

7	FWS	*[LAUGH]*	
		laugh	
		laugh	
		laugh	

8	FWS	*tru*	*yet*
		tru	yet
		true	EMPH
		'that's true'	(CodeFSS_KJS20160910A_1; IU 213–220)

Example 166 shows code-switching and turn completion with a switch from Tok Pisin to Qaqet. In the data extract, FSS, FWS and NMS are talking about the bride price, a custom which according to several Qaqet participants has its origin in the Tolai culture. Here, the family of the husband offers a certain amount of (shell) money to the family of the wife in order to seal the marriage. Prior to the data extract, FSS talked in Tok Pisin about the behavior of a particular mother's son. In the extract, he continues in Tok Pisin, expressing the opinion that the son's behavior could cause the mother to refuse to pay the bride price for her son's future wife (1-3). In the following, FWS laughs (4), and after a short pause, FSS finishes his turn with a code-switched tag-question *anyulu* 'you see?' (5). NMS then acknowledges FSS's remarks (6) to which FWS after laughing (7) concurs as well (8). The switch in (5) marks FSS's turn completion. At the same time, it invites the other participants to comment on his remarks by prompting a speaker change.

6.7.3 Repetition

Several scholars (e.g., Gumperz 1982: 78f.; Zentella 1981: 236) have included 'repetition' or 'reiteration' in their list of conversational functions of code-switching. Here, the two often serve an emphasis function. Accordingly, Auer (1995: 120) describes the terms 'repetition' and 'reiteration' as misleading in the sense that they denote a conversational structure and not a conversational function. Auer's statement can be supported by two code-switching functions in the Kamanakam corpus, which to a certain extent use repetition as a conversational structure. First, partial repetition accompanied by code-switching can be observed in self-repair as elaboration (see Section 6.6.2 on p. 243). However, this type of repetition is not in the form of a literal translation. The repeated content is paraphrased, and more importantly, extra information is added, which is why the repetition ultimately functions as an elaboration. Further, repetition and code-switching can be observed when a speaker repeats *another* speaker's statement, which in this context is argued to bear an agreement function (see Section 6.2.1 on p. 189).

For code-switching between Taiap and Tok Pisin, however, one may argue that Kulick and Stroud (1990: 215) have identified repetition as a conversational function in its own right. Here, "repetition of the same utterance in two languages is quite often used simply for the sake of repetition" (1990: 215). They argue that "Gapun villagers do not share common Western notions that repetition is unnecessary or tiresome". In fact, Kulick and Stroud (1990: 215)

observe repetition to occur in the Gapun villagers' most common speech genres which "require that speakers repeat themselves and the speech of others again and again". Therefore, repetition is part of the Gapun villagers' culturally specific way of talking. See the following Example 167 in the Kamanakam corpus. Here, repetition cannot be associated with one of the above presented functions of repetition (i.e., emphasis, repair or emphatic agreement).

(167) 1 FSS *man   ya*
              man   ya
              man   PTCL
              'the man'

       2 FSS *wok   olsem   ol   morobe   ya*
              wok   olsem   ol   morobe   ya
              work   like   PL   NAME   PTCL
              '[he] works like the Morobe people'

       3 FSS *turlama..   morobane*
              taquarl = ama   morobe = ani
              thus = ART   NAME = DIST
              'like the Morobe people'

       4 NMS *mh*
              mh
              yes
              'yes'

       5 FWS *mh*
              mh
              yes
              'yes'   (CodeFSS_KJS20160910A_1; IU 394–398)

Example 167 shows code-switching and repetition with a switch from Tok Pisin to Qaqet. Prior to the data extract given in example 167 FSS and FWS asked NMS about her plans to plant taro, namely, when she wants to plant it, what kind of taro she wants to plant and where she wants to plant it. In the course of the conversation, NMS shifts the topic to another person who will also plant taro after she has finished. FSS remarks in Tok Pisin that this person plants the taro like the Morobe people (1). He then instantly repeats the part 'like the Morobe people' of his previous intonation unit by switching to Qaqet. His instant repetition in translation cannot be interpreted as having an elaboration function, as no additional information is added. FWS and NMS are both fluent in Qaqet and Tok Pisin which therefore makes it unnecessary for FSS to repeat his utterance due to a potential lack of understanding on the part of the two interlocutors. I have not actively investigated whether repetition is also present among the Kamanakam Qaqet speakers in the sense Kulick and Stroud describe it. It is, however, my impression that conversations/talk among Qaqet/Tok Pisin speakers in Kamanakam can have a repetitive nature. This repetitiveness may range from single intonation units to whole stretches of a person's talk. The repetition may either be performed by the speaker herself/himself or by other interlocutors in some way. It remains therefore a question for future research to investigate the functions of this type of repetition and code-switching.

6.7.4 Swearing

According to Ameka (1992: 111) swear and taboo words belong to the class of secondary interjections "which have an independent semantic value, but which can be used conventionally as utterances by themselves to express a mental attitude or state". A number of studies have shown that the use of code-switched swear and taboo words occurs in different cultural settings (e.g., Essizewa 2007: 258; Dewaele 2004, 2010a, 2010b: 189-214; Heller 1988: 79; Marley 2013: 89).

In a study with 1039 multilinguals speaking a total of 75 different L1s, Dewaele (2004: 212) showed that swear and taboo words uttered in the participants' L1 are perceived to have much more emotional force than in their L2. Depending on the communicative intention, the different degree of the emotional force can either favor or hinder the use of swear and taboo words in the speakers' L1 or L2 (2004: 219). For example, Essizewa (2007: 258) reports that for members of the Kabiye in Togo "swearing is generally frowned upon". As a consequence, Kabiye speakers switch to Ewe and other languages when uttering taboo or swear words "because other languages carry less emotional force than Kabiye for Kabiye speakers".

In the Kamanakam corpus, Qaqet speakers can be observed to switch to Tok Pisin, English, Siwai and Kuanua when uttering swear words. Therefore, the swear words documented in the corpus are all non-Qaqet, which does not necessarily mean that there are no words used for swearing in Qaqet. The range of functions of swear words in Kamanakam includes negative attitudes, including disagreement or insult, but also more positive connotations, for example, when used in connection with language play (see Section 6.3.1 on p. 205) or to signal surprise. The only attested word used in a non-language play code-switching context is *alai* from Kuanua which Meyer (1961: 10) translates as 'difficult person, animal'. Similarly, Marley (2013: 89) reports for Qaqet speakers in Raunsepna that "Kuanua use peaked on swearing, and in informal conversations with community members, people reported that swearing in Kuanua is not uncommon". In the Kamanakam corpus, other swear words used in non-language play contexts can only be observed in monolingual Tok Pisin stretches of talk. They include *paken* 'fuck(ing)' or *paktap* 'fucked up'.

As for the word *alai*, FVS identified it in one of the transcription sessions (26/09/2016) as *tokples tolai* 'the language of the Tolai people', i.e. as Kuanua. In addition, in Example 168 the speakers IRM and FRU demonstrate that they are well aware of the fact that *alai* is a swear word from Kuanua, and that its use seems to be frowned upon.

(168) 1   IRM   *nyanitnyitaqan*
　　　　　　　nya = an = ip = nyi = taqen
　　　　　　　2SG.SBJ = come.NCONT.FUT = PURP = 2SG.SBJ.NPST = say.CONT
　　　　　　　'you come and say'

　　　　　　　　　amalingiqasavramaqira
　　　　　　　　　ama = lengi-ka = se = pet = ama = ki = iara
　　　　　　　　　ART = language-SG.M = to/from = on/under = ART = thingy-SG.F = PROX
　　　　　　　　　'something in [our] language'

　　　　2   GKN   *alai*
　　　　　　　alai
　　　　　　　swear word
　　　　　　　'man'

3   IRM   *a   askurlinyitaqanmunge*
          a   as＝kurli＝nyi＝taqen＝ama＝vu-nget
          a   still＝stay/leave＝2SG.SBJ.NPST＝say.CONT＝ART＝bad＝3N
          'a, don't say bad things'

4   IRM   *e   senaqinarlia*
          e   saqi＝nani＝ki＝narli＝a
          e   again＝can＝3SG.F.SBJ.NPST＝hear＝DIST
          'e, [the camera] also can hear it'

5   FRU   *ei*
          ei
          INTJ
          'ei'

6   FRU   *nyusavrama*
          nyi＝urut＝se＝pet＝ama
          2SG.SBJ.NPST＝grab/hold.NCONT＝to/with＝on/under＝ART
          'you keep switching to the'

          mrenasalingiqa
          mrenas＝a＝lengi-ka
          tolai＝NM＝language-SG.M
          'Tolai language'

                                      (CodeFSS_KJS20160901_1; IU 340–345)

Example 168 shows code-switching (probably from Tok Pisin) to Kuanua for the swear word *alai*. Prior to the data extract, IRM, FRU and FSS tied to call GKN to say something in the recording that is being made. When GKN arrives, IRM asks her in Qaqet to say something in Qaqet (1). This is when GKN switches from (probably) Tok Pisin to Kuanua to utter the swear word *alai* (2). In this context, it may be noted that in a sociolinguistic survey GKN has rated herself as having a 'basic' competence in Qaqet. In the evaluation of another survey, it was shown that on average, other speakers 'sometimes' use Qaqet when addressing her (see Section 5.2.1 on p. 145). In the rest of the recording, except for a one-word Qaqet intonation unit, GKN only speaks Tok Pisin, which is why I believe she spoke Tok Pisin before her switch to Kuanua. In the following, IRM tells GKN in Qaqet to not use swear words (3) because the camera is recording (4). This is when FRU gets into the conversation (5) reminding her that she is using Kuanua here (and not Qaqet) (6). Given the context that GKN is prompted by IRM to do something in front of the camera, I interpret GKN's use of the swear word *alai* here as a sign that ranks between surprise and disagreement.

(169)   1   FSS   *nemaqa   kaiatnaqi*
                  nema-ka   ka＝iurlet＝ne-ki
                  who-SG.M   3SG.M.SBJ＝pull.NCONT＝from/with-3SG.F
                  'which man pulled her?'

2	FLT	*kerlma..*	*malemigel*
		kerl = ma	ma = lemigel
		DEONT = ART.ID	ART.ID = NAME
		'here.. Lemigel'	

[...]

4	FSS	*alai*	
		alai	
		swear word	
		'man'	(CodeFSS_KJS20161119A_2; IU 211–214)

Example shows code-switching from Qaqet to Kuanua for the swear word *alai*. Prior to the data extract, FLT was telling FSS something about the marriage and family relationships of former Qaqet inhabitants in the hamlets Lanivaqa, Saqalames, Altiaqa and Ngamarana. FLT then proceeds to talk about married couples that got separated because another man 'pulled' the wife (away from her husband). The data extract begins when FSS asks FLT in Qaqet which man, pulled, a certain Qaqet woman to marry him (1). To this, FLT replies in Qaqet that the man's name was Lemigel (2). FSS then calls out in surprise the Kuanua swear word *alai* (4). Given the context that FLT is giving information about marriage relationships, I interpret FSS's use of the swear word *alai* here as a sign of surprise about information that was new to him.

In summary, Example 168 shows that swearing is frowned upon at least for the participant IRM. In non-language play contexts, no Qaqet swear words can observed to be used in monolingual Qaqet. In monolingual Tok Pisin, the use of *paken* 'fuck(ing)' or *paktap* 'fucked up' is attested. Code-switched Qaqet and Tok Pisin swear words can not be observed in the corpus. The Kuanua swear word *alai* is the only attested code-switched swear word. At this point, it cannot be concluded whether *alai* is used because Kuanua carries a lower emotional force, as has been described for the Kabiye speakers in Togo. The non-occurrence of any Qaqet swear words could, however, support this view.

6.7.5 Conclusion

In summary, this section has provided a qualitative analysis of the conversational strategies for which a quantitative analysis was not an option due to the lack of examples. They include addressee shift, completion, repetition and swearing.

Addressee shift bears some similarity to participant-related situational code-switching. It differs from the latter, in that addressee shift accompanied by code-switching may be specifically used to signal that a new person is being addressed when the constellation of participants remains the same. For the data extract presented from the Kamanakam corpus, it is argued that code-switching is used here as a (further) device to signal addressee shift.

Code-switching is used as an additional device to mark turn completion and turn transition. The former is to signal that a speaker has finished her/his remarks. The latter additionally invites another person present to take over the role of the speaker.

Repetition can be considered as a conversational structure which serves in the realization of a particular conversational strategy. In the Kamanakam corpus, this can be observed in the realization of self-repair as elaboration (see Section 6.6.2 on p. 243) and emphatic agreement (see Section 6.2.1 on p. 189). Based on Kulick and Stroud's (1990: 215) observations and an example from the Kamanakam corpus, it is argued that repetition (in the other language) could

be a conversational strategy in its own right. As such, it plays an important role in societies where repetition is an integral part in the organization of speech.

For swearing, it was argued that it bears some similarity with language play (see Section 6.3.1 on p. 205), in that swear words are used in both conversational strategies. Swear words for swearing were distinguished from language play in that they are used in a non-language play context. Similar to language play, swear words used for swearing are not restricted to Tok Pisin. As was argued in other studies on swearing, switching to the other language for swearing may be explained with the fact that this particular language carries less emotional force.

6.8   Conclusion

In line with the previously mentioned assumptions (see Section 2.1.3 on p. 19), this chapter has shown that Kamanakam Qaqet/Tok Pisin speakers use code-switching as an additional means to convey a communicative effect. I have presented a list of 10 conversational strategies in the presence of which code-switching can be observed. It has been shown that these discourse strategies are predominantly realized monolingually. In this sense, code-switching can be considered optional and not the rule. Further, these strategies co-occur with other cues – for example prosodic ones – which can be observed in monolingual as well as code-switched discourse. The data does not allow for statements regarding the importance of direction of the switch. So far, code-switching has been observed in both directions, that is, from Qaqet to Tok Pisin and vice versa. It has been shown that the same or similar functions have been found in other cultural settings.

Chapter 7

Conclusion

7.1 Summary and discussion

This study has presented an analysis of the code-switching behavior of adult Kamanakam Qaqet/ Tok Pisin speakers.

7.1.1 Sociolinguistic profile

Chapter 3 has presented an overview of the sociolinguistic situation of Kamanakam ward. This study was based on the code-switching behavior of two families and individuals from their social network. The aim of this chapter was to show how the two families fit into the sociolinguistic profile of the four focal hamlets Saqalames, Lanivaqa, Altiaqa and Ngamarana within Kamanakam ward, as well as to give an overview of the situation in Kamanakam.

For this purpose, in addition to cultural and infrastructural information, sociodemographic and sociolinguistic aspects of the Kamanakam Qaqet people were analyzed. Variables of interest included population figures, the relative distribution of different ethnic groups within Kamanakam and the distribution of blocks and hamlets throughout Kamanakam ward. More detailed information has been provided on the household and marriage structure (incl. age, sex, occupation, ethnicity, language competence, education). Almost all variables were analyzed quantitatively, and summarized in the form of percentages, mean values and median values. The aim was twofold: firstly, to indicate the distribution tendencies and show average figures for the four focal villages, and secondly, to compare the results with those of the two focal families.

The results show that Kamanakam is dominated by hamlets, and that the majority of the hamlets/blocks are situated farther away from the road (i.e., back). The focal hamlets of this study, and thus the area where the focal families reside, are situated near the road (i.e., front, focal family A) and farther away (i.e., back, focal family B). In the focal hamlets, the majority perceives themselves as Qaqet or Baining (Qaqet).

Marriages that are other than Qaqet–Qaqet make up for 25.92% in the focal hamlets. The focal families reflect a tendency which is more and more common in Kamanakam, that is, the settlement of non-Qaqet people. For focal family A, this is evident in the form of a mixed marriage (Qaqet–Tolai). For focal family B, one marriage partner stems from a mixed marriage (Baining [Qaqet]–Baining [Qaqet] ; Tolai).

The influence of non-Qaqet-speaking settlers and their marriage to Qaqet speakers is assumed to play a role in the reported lower Qaqet proficiency compared to Tok Pisin, the latter

being spoken by the vast majority of residents. The lower Qaqet competence reflects, on the one hand, the lack of Qaqet fluency among non-Qaqet settlers, and on the other hand, the incomplete learning of the Qaqet language by speakers from mixed marriages. In focal family A, the first pattern can be observed in that the Tolai marriage partner has a basic Qaqet competence. In both focal families, there is one language partner stemming from a mixed marriage. Both marriage partners in family B perceive themselves as fluent in Qaqet. However, it is currently not possible to say if there was already an incomplete learning of Qaqet in their generation. Anecdotal comments by the two marriage partners and by other speakers of their age group, identify the Qaqet language as spoken by the elderly and/or by Qaqet people from further inland as 'deeper' than what they are able to speak today. Similar to this study, a number of other studies have reported a competitive relationship between Tok Pisin and other regional languages of PNG. (e.g., Kuot: Lindström 2002: 80ff.; Nalik: Jenkins 2000: 64-70; Taiap: Kulick 1992: 265f.).

7.1.2   Code-switching and borrowing

The analysis of the code-switching behavior of the focal families and their social networks has shown that one type of code-switching can be safely identified: inter-intonation unit code-switching. In addition, it could be observed that the Kamanakam Qaqet/Tok Pisin speakers make use of what was termed mixed intonation units in this study. For the latter, it was not always apparent whether the mixed units constitute intra-intonation unit code-switching or instances of borrowing.

Chapter 4 offered a means to identify the status of mixed intonation units in the Kamanakam corpus. Mixed intonation units have been defined as one-to-three word items of a language A being embedded in a language frame of a language B. It has been established that mixed intonation units make up for 8.97% of what is otherwise predominantly identified as monolingual Qaqet and Tok Pisin intonation units. Further, it has been shown that the majority of these mixed intonation units concern Tok Pisin nouns (61.81%) and verbs (14.57%) in a Qaqet language frame.

The Tok Pisin nouns and verbs were analyzed for a number of features from two diametrically opposed approaches (Myers-Scotton vs. Poplack). Both approaches have shown that the majority of Tok Pisin verbs can be termed as borrowings. For Tok Pisin nouns, in contrast, there was a discrepancy between the two approaches: according to Poplack et al., the majority of the nouns can be considered as intra-intonation unit code-switching, whereas according to Myers-Scotton, the majority would have to be considered as borrowings. In the analysis of situational and conversational code-switching, this study followed Myers-Scotton's approach.

As a consequence, the majority of the inserted material could not be analyzed as code-switching. This was relevant for situational topic-related switching (see Section 5.3.2 from p. 165). An exception in which other-language-insertions were analyzed as intra-intonation unit code-switching concerns the 'language play' strategy in the speakers' conversational code-switching (see Section 6.3 from p. 203).

7.1.3   Situational code-switching

Situational code-switching occurs when distinct varieties are associated with changes in setting, participant and topic (e.g., Gardner-Chloros 2009b: 106f.). Chapter 5 has provided an analysis of the factors setting, participant and topic in relation to the code-switching behavior of the focal families and their social networks.

For the setting factor, it has been shown that the use of Tok Pisin dominates in public settings, in contrast to non-public settings, in which the use of Qaqet/Tok Pisin code-switching predominates.

For the participant factor, sociolinguistic surveys, attitudinal interviews and staged recordings have pointed to the key role of two variables leading to bilingual accommodation:

1. The way a speaker perceives an interlocutor's Qaqet 'competence'

2. This perception being established in previous interactions through habitual language 'use'

In sociolinguistic surveys and attitudinal interviews, the two variables have been identified to cluster with other variables, namely 'ethnicity', 'place of birth', 'age', and 'social role'. In the staged scenario, it has been confirmed that the speakers' switching to Tok Pisin or staying in Qaqet is dependent on the Qaqet competence of the interlocutor. In this regard, it was found that an active Qaqet competence is of secondary importance. It was observed that if an interlocutor could follow the conversation, and therefore had a sufficient passive Qaqet competence, the speaker would stay in Qaqet. Conversely, it could be observed that speakers would switch to Tok Pisin when speaking with an interlocutor who not only spoke Tok Pisin, but was also perceived as not being able to follow a conversation in Qaqet.

For the topic factor, sociolinguistic surveys indicated a Qaqet use that lies between 'sometimes' and 'mostly' for traditional topics and between 'rarely' and 'sometimes' for modern topics. A subsequent series of attitudinal interviews has pointed to the variables 'vocabulary' (see previous section) and 'speech genre' that can be associated with topic-related switching. The former refers to the vocabulary needed to address a certain topic. Here, the analysis pointed to a lack of core vocabulary leading to either a complete switch to Tok Pisin or to the use of Tok Pisin non-core vocabulary in mixed units. For speech genre, it was pointed out that it is "governed by specific conventions, generally recognized by members of a culture" (Biber and Conrad 2009: 34), which includes for example "curse, blessing, prayer, lecture, imprecation, sales pitch, etc." (Hymes 1967: 25). In this regard, talking about 'bride price' has been identified as something that is unknown in the Qaqet culture. It is therefore termed an unknown speech genre, which leads to the use of Tok Pisin as the more appropriate language to address this topic.

In conclusion, the participant factor seems to play a key role in situational code-switching. This has also been reported by Marley (2013: 113) for Qaqet speakers in Raunsepna. Relevant variables of the participant factor can be observed to intersect with variables of the setting factor in the sense that the make-up of the participant determines a certain language use in public compared to non-public settings. For the topic factor, in addition to two topic-related variables, participant- and setting-related variables were mentioned by participants as determinants of whether a certain topic is more likely to be discussed in Qaqet or Tok Pisin.

Participant-related switching with bilingual accommodation as a driving factor is also reported for other speaker communities in PNG. The variables discussed in this study can also be found as governing variables in studies on speech communities in PNG and around the world. For example, for the Gapun people, Kulick and Stroud (1990: 210) report linguistic accommodation with other-vernacular speakers from neighboring villages. For the Buang people, Sankoff (1968: 201) observes the tendency to use the language of the predecessor in the discussion. Speaker communities in other parts of the world show how 'language competence', 'ethnicity' and 'age' are similarly identified as underlying variables. McClure and McClure (1988: 45) concludes that "[i]n Vingard Saxon code-switching, it was primarily the language competence of the participants which determined switching". For the Luyia speakers in Nairobi, Myers-Scotton (1995) identifies 'ethnicity' as governing variable in an interaction between a security guard and an enquirer. Here, "the security guard discovers that the enquirer comes from his

own ethnic group" (1995: 114). "By switching from Swahili to Luyia, the guard acknowledges (and makes salient) their shared ethnic-group membership" (1995: 87). Finally, among the Gurindji Aborigines of the Victoria River District of the Northern Territory of Australia, Mc-Convell (1988: 112) observes "the tendency to use Kriol more than Gurindji when speaking to younger people" and thus 'age' as a governing variable.

7.1.4 Conversational code-switching

Chapter 6 has provided an analysis of conversational strategies which can be observed in the presence of code-switching. Code-switching in this sense has been termed conversational code-switching. It is defined to occur when situational factors (setting, participant, topic) remain constant, and the speaker wishes to convey a specific communicative effect through code-switching (e.g., Li Wei 2013: 367).

This study has presented a list of 10 conversational strategies in the presence of which code-switching can be observed. In addition, this study has identified the same conversational strategies in monolingual language use. From a qualitative point of view, this was done with the aim of being able to structurally compare the discourse strategies and their implementation in monolingual and code-switched contexts. From a quantitative point of view, the frequency of monolingual and code-switched discourse strategies provides measurable data on the role that code-switching plays among Kamanakam Qaqet/Tok Pisin speakers.

Qualitatively, it was shown how certain structural features go along with the monolingual realization of the identified discourse strategies. These include prosodic, syntactic, lexical and pragmatic features. Further, it was shown that these features are still used in the code-switched realization of the same discourse strategies. The findings therefore support Gardner-Chloros et al.'s (2000: 1307f.) view that code-switching as a contextualization cue may be used 1. Instead of other markers, 2. To double mark or strengthen the marking of already present cues, 3. In alternation with other resources available (2000: 1307f.). As a result, the second possibility can be said to be predominant in Kamanakam Qaqet/Tok Pisin conversational code-switching.

However, for the strategy 'language play', it has been argued that code-switching functions as marker to signal that the switched unit is to be interpreted as 'language play'. Therefore, it can not be decided at this point whether code-switching is here used instead of (an) other marker(s), in alternation with other resources or as *the* single marker.

Quantitatively, it could be observed that the 10 discourse strategies are predominantly realized monolingually. Therefore, conversational code-switching for Kamanakam Qaqet/Tok Pisin speakers can be considered as optional and not the rule. As for the direction of the switch, the analyzed data does not contain enough tokens to make reasonable statements in this regard. So far, code-switching has been observed in both directions, that is, from Qaqet to Tok Pisin and vice versa.

It has been shown that all of the functions described were observed as such or in a similar manner in other cultural settings. The findings therefore add to their importance from the perspective of an otherwise underdescribed language pair.

7.2 Future research

7.2.1 General

This study was carried out as part of a longitudinal investigation on the language development of Qaqet children in Raunsepna and Kamanakam. The focal groups of this study were chosen with

a view towards the long-term goals of the project. Future research, therefore, could compare the patterns of code-switching among adults with the patterns of code-switching in their child-directed speech, and the effects these patterns may have on children's language development.

For Raunsepna, Frye (2019) has presented a study of patterns of child-directed speech, and compared these patterns to adult-directed speech. In contrast to what can be observed for the focal hamlets in Kamanakam, in Raunsepna, children still acquire Qaqet as their first language (Hellwig 2020: 7). Frye (2019: 182) has shown that among speakers of Raunsepna Qaqet, child-directed speech constitutes a separate register with distinctive features. A possible starting point could therefore be to investigate whether these features can be observed in the child-directed speech of Kamanakam Qaqet/Tok Pisin speakers, and what role code-switching plays in this regard. Although the current study focused on adult-to-adult code-switching, code-switching in child-directed speech has been observed during participant observation and in naturalistic recordings that are part of the Kamanakam code-switching corpus. In addition, sociolinguistic interviews (see Section 5.3.2 from p. 165) suggest that code-switching is used in the process of language learning.

As for adult-to-adult code-switching, the public and non-public settings identified in this study, for which no language use data has been collected, could be the next starting point for a future research project. Data from other settings, sub-settings and speech situations may provide a more differentiated picture of language use.

7.2.2 Sociolinguistic profile

In order to get a fuller picture of the sociolinguistic profile of Kamanakam ward, one would need to extend the collection of sociodemographic and sociolinguistic survey data to other hamlets within Kamanakam ward and to other wards where Qaqet people traditionally live.

For the more remote Raunsepna, Marley (2013: 98) reports that "there is a strong preference for endogamous unions", yet "marriage to outsiders and non-Qaqets is not an uncommon phenomenon". According to Hellwig (2018: 6) there are "very few non-Qaqet spouses who have married into the community". As for language competence and patterns of language use, it is known that the adults in Raunsepna are bilingual in Qaqet and Tok Pisin, with the latter being reserved for non-Qaqet interlocutors (Frye 2019: 34; Hellwig 2018: 6; Marley 2013: 118). It would be interesting to investigate to which degree the Raunsepna-type scenario can be observed nowadays in less accessible Kamanakam hamlets further away from the road.

A comparison of the sociodemographic and sociolinguistic data collected in this study with similar data from 10 to 25 years' time would provide valuable insights regarding the degree to which changes can be observed in the Kamanakam community. This can help to contextualize the results of this study from a diachronic perspective.

7.2.3 Code-switching and borrowing

In this study, two approaches from contact linguistics were used to investigate the borrowing status of Tok Pisin-inserted nouns and verbs in a Qaqet language frame. These are Myers-Scotton's diachronic approach and Poplack et al.'s synchronic approach. Criteria for Poplack et al.'s approach were defined as "the adaptation of lexical material to the morphological and syntactic (and usually, phonological) patterns of the recipient language" (1995: 200). Poplack et al. defined two more criteria to identify other-language inserted material as established loan-words, namely "native-language synonym displacement, and widespread diffusion, even among recipient-language monolinguals" (1995: 200). During the fieldwork, data were collected for a range of nouns and verbs in order to analyze the displacement of Qaqet lexemes through Tok

Pisin forms. However, the data has yet to be analyzed. Adding the two additional criteria may help to identify the status of the Tok Pisin-inserted material in a more rigorous manner.

7.2.4   Situational code-switching

Being focused on the micro-sociolinguistic factors of code-switching, this study did not investigate the macro-sociolinguistic context (see e.g. McClure and McClure 1988 for a study dealing with a comparison of the two). For public settings involving public institutions (e.g., church and school), it has been proposed that the use of Tok Pisin may also be determined by macro-sociolinguistic factors. This could include, for example, the role language policy plays in PNG when it comes to the use of English, Tok Pisin and local vernaculars in public institutions (e.g., Lynch 1990; Romaine 1992). Therefore, an investigation of these factors for the Kamanakam Qaqet/Tok Pisin context could provide further insights into language use in the public settings.

7.2.5   Conversational code-switching

In order to get a more detailed understanding of conversational code-switching in the Kamanakam Qaqet/Tok Pisin community, the analysis of more naturalistic audiovisual recordings will be a crucial factor. At the very least, this should provide more tokens of conversational code-switching. This, in turn, would allow a more differentiated qualitative analysis of the already identified discourse strategies, and also bring more discourse strategies to light, in which code-switching can be observed. From a quantitative point of view, a larger data set would help to identify more stable trends regarding the use of conversational code-switching, switching direction, etc.

Similar to situational code-switching, sociolinguistic interview data were collected, and staged audiovisual recordings were made, to investigate conversational code-switching. However, the data has yet to be analyzed. By analyzing the interview data, it might be possible to determine whether participants are aware of the use of code-switching for certain discourse strategies. The staged audiovisual data was collected to investigate whether the use of conversational code-switching could be re-enacted in scenarios similar to those seen in the naturalistic recordings. Analysis of this data could therefore help support the use of code-switching as a contextualization cue in the discourse strategies identified in this study.

Further investigation of contextualization cues (e.g., prosodic, gestural, etc.) in monolingual discourse, in direct comparison to code-switched discourse, can provide a deeper understanding of the role that code-switching has in this regard. This comparative scenario could also help us to better understand how certain discourse strategies are achieved in monolingual discourse.

From a synchronic perspective, re-visiting the field site again after 10 to 25 years' time, and comparing the Qaqet/Tok Pisin code-switching between then and now could be insightful in various ways (see Si 2011). From a sociolinguistic point of view, variables of interest may include the type and frequency of discourse strategies which can be observed in the presence of code-switching. From a structural point of view, other variables to be investigated could include the type and frequency of code-switching (inter-intonation unit code-switching vs. mixed units) or the frequency of language use (Qaqet vs. Tok Pisin).

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