The stratigraphy of a community

150 years of language contact and change in Babuyan Claro, Philippines

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Except where otherwise acknowledged in the text, this thesis represents the original research of the author.

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Abstract

Language is a reflection of history, and as such, changes in the social life of a community are signaled by corresponding layers of language change.

The island community of Babuyan Claro, located in the far north of the Philippines, demonstrates the importance of this connection. The island is home to the Ibatans, a community which emerged from a century and a half of intense social contact between people from different, but closely related, ethnolinguistic groups: Ivatan and Itbayaten (Batanic) and Ilokano (Cordilleran). The mixed ancestry of the present-day Ibatan people, coupled with sustained social contact among the groups, resulted in the maintenance of bilingualism, which has driven the development of Ibatan as a language distinct from its sister Batanic languages.

Ibatan reflects striking contact-induced linguistic features, not only in the lexicon, but also in structure, namely phonology and morphosyntax. These outcomes of language contact are driven by mechanisms that apply on both the aggregates of the individual and the community (Muysken, 2010). Specifically, patterns of speaker agentivity and language dominance (van Coetsem, 2000) as well as various social factors, such as intensity of social contact (Thomason & Kaufman, 1988), interact to drive contact-induced language change.

Language change therefore is embedded within the socio-historical context of the community. Teasing apart layers of language change then allows us to reconstruct the stratigraphy of a community. That is, particular kinds of contact-induced change are argued to be linked to specific agents of change, agents with varying degrees of language dominance, which are in turn shaped by the social ecology of the community.

The accumulation of social change in the 150 years of the Babuyan Claro community involves changing patterns of agentivity, language dominance, and population structure, which continue to shape the Ibatan language. This case study on Babuyan Claro that links linguistic outcomes to the mechanisms and agents that drive them ultimately allows us to understand the nature of language contact and change more deeply.

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My time doing this research on Babuyan Claro has led me to places and people I have come to call my home communities.

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to dadi and mami,

my strongest anchors

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List of abbreviations

1	1st person	LD	language dominance
3	3rd person	LK	linker
ADJ	adjective	LV	locative voice
AV	actor voice	ND	non-dominant
C	consonant	NML	nominal
CAUS	causative	NOM	nominative
CV	circumstantial voice	NTRL	neutral
D	dual	P	plural
DAT	dative	PAN	Proto-Austronesian
DEI	deictic	PFV	perfective
DET	determiner	PMP	Proto-Malayo-Polynesian
DIR	directional	POL	politeness marker
DIST	distributive	PPH	Proto-Philippines
DOM	dominant	PV	patient voice
DUR	durative	RDP	reduplication
EXT	existential	REC	reciprocal
FUT	future	REF	anaphoric reference
GEN	genitive	RL	recipient language
ILO	Ilokano	S	singular
INC	inchoative	SL	source language
INV	inversion marker	SPA	Spanish
IPFV	imperfective	STAT	stative
IRR	irrealis	UNC	uncertain
IVB	Ibatan	UV	undergoer voice
IVV	Ivatan	V	vowel

1   *Introduction*

It is common for a person to use more than one language in their everyday life. Multilingualism is the norm in many parts of the world, and this may play a role in shaping languages, resulting in various kinds of contact-induced language change. Multilingualism is therefore an ever-present fact in the history of almost any community. If we hope to have a better understanding of how languages develop, then we should crucially account for the roles that multilingualism and language contact play in shaping languages (Chapter 1).

Outcomes of contact-induced language change are driven by various factors and mechanisms, both linguistic and social, and are realized at the level of both individual and community patterns of language use. Innovations by individual speakers are said to be driven by psycholinguistic mechanisms, whereas changes seen in the bilingual community are argued to be primarily motivated by social factors and processes. In order to understand the actuation and diffusion of contact-induced language change, it is important to link outcomes of contact to the mechanisms that drive them, and ultimately, to the agents of change (Chapter 2).

This research project is a case study of language contact in Babuyan Claro, a small island community in the far north of the Philippines (Chapter 3). Population-level language use that is argued to reflect a deeper layer of change (Part 2) is distinguished from synchronic cross-linguistic influence observed in the speech of bilingual individuals (Part 3). The heart of the thesis lies in understanding the transition of contact-induced language change from the individual to the community, following the idea that the mechanisms that have shaped present-day contact outcomes are likely the same kinds of mechanisms that have operated in the past. That is, insights from the ongoing patterns of language use among the people of Babuyan Claro form the basis for reconstructing the social history of the community, particularly population dynamics and patterns of speaker agentivity (Part 4).

CONTEXT

Language contact in Babuyan Claro

Introduction

I was quietly observing two Ibatan children playing during my first night in the port town of Santa Ana as we were waiting for the boat that would take us to Babuyan Claro. They were so engrossed with the invented game they were playing that they did not seem to notice at all how they were speaking different languages to each other: one of them was speaking Filipino, while the other was using Ibatan. This memory of my first day in the field remains vivid to this day, as I see it as an everyday example of how bilinguals seamlessly navigate their linguistic repertoires.

Multilingualism manifests in many forms, and this is observed both in the level of the individual and the community. In the Philippines, it is common to find a person who uses at least three languages in their everyday life—their home language, the regional lingua franca, and Filipino, the national language. Multilingualism arises in different settings, but in the Philippines, it is mainly because of two factors: first, the country's high linguistic diversity, with 184 living languages (Ebarhard et al., 2021) used in close proximity with each other; and second, the colonial history of the Philippines, first under Spain, and later, the United States of America. The country's colonial history has direct linguistic consequences, not only in terms of how both Spanish and English loanwords have entered the lexicon of the Philippine languages, but in some cases, how the language ecologies of communities have been disrupted and reshaped due to certain administrative reforms. This history has led to various contact outcomes such as the emergence of creoles (cf. Fernandez, 2011; Frake, 1971; Lipski, 1988; Perez, 2015; Steinkrüger, 2006), code-switching behavior (cf. Bautista, 1975, 1998, 2004; Santiago, 1979), and the development of new contact relationships among different ethnolinguistic groups in the Philippines.

Of particular importance is the policy of *reducción* during the Spanish rule, which forcibly displaced indigenous populations and relocated them in settlements modeled on Spanish towns. The island community of Babuyan Claro is an outcome of this policy. There is a record of an earlier population on the island in the 1600s, but they were all relocated by the Spanish to the centralized *cabecera* 'town/district capital' on neighboring Fuga Island or to mainland Luzon along with families from other

surrounding islands (de Salazar, 1742; Malumbres, 1918). Similarly, people from the islands of Batanes further north were transferred to the Babuyan islands (Figure 1).

It was in the late 1800s that the first families of present-day Babuyan Claro came to the island. Having been initially relocated to the island of Calayan (one of the islands in Babuyan, and close to the island of Babuyan Claro), Alvaro Alcantara and his wife Maria Sirako, originally from the Batanic-speaking islands of Itbayat and Sabtang in Batanes, along with three other companions, Fidel Nolasco, Maurincio Lagata, and Marcelino Lagata, were attempting to return to Batanes when they were shipwrecked on Babuyan Claro. The following year, another boat, this time carrying an Ilokano-speaking family, was likewise shipwrecked on the island (J. Maree, 2005). In the succeeding decades, more families who come from either Batanic- or Ilokano-speaking backgrounds arrived on Babuyan Claro (see Chapter 3 for further discussion).

This coming together of people from two different linguistic backgrounds led to the development of Ibatan, the local language of Babuyan Claro, as a distinct language characterized by striking contact-induced features that sets it apart from its sister Batanic languages. This thesis primarily aims to investigate the emergence and evolution of Ibatan through models of language contact, linking particular kinds of contact-induced language change to particular points in the history of the Babuyan Claro community (Section 1.3).

Figure 1: The Batanes and Babuyan islands
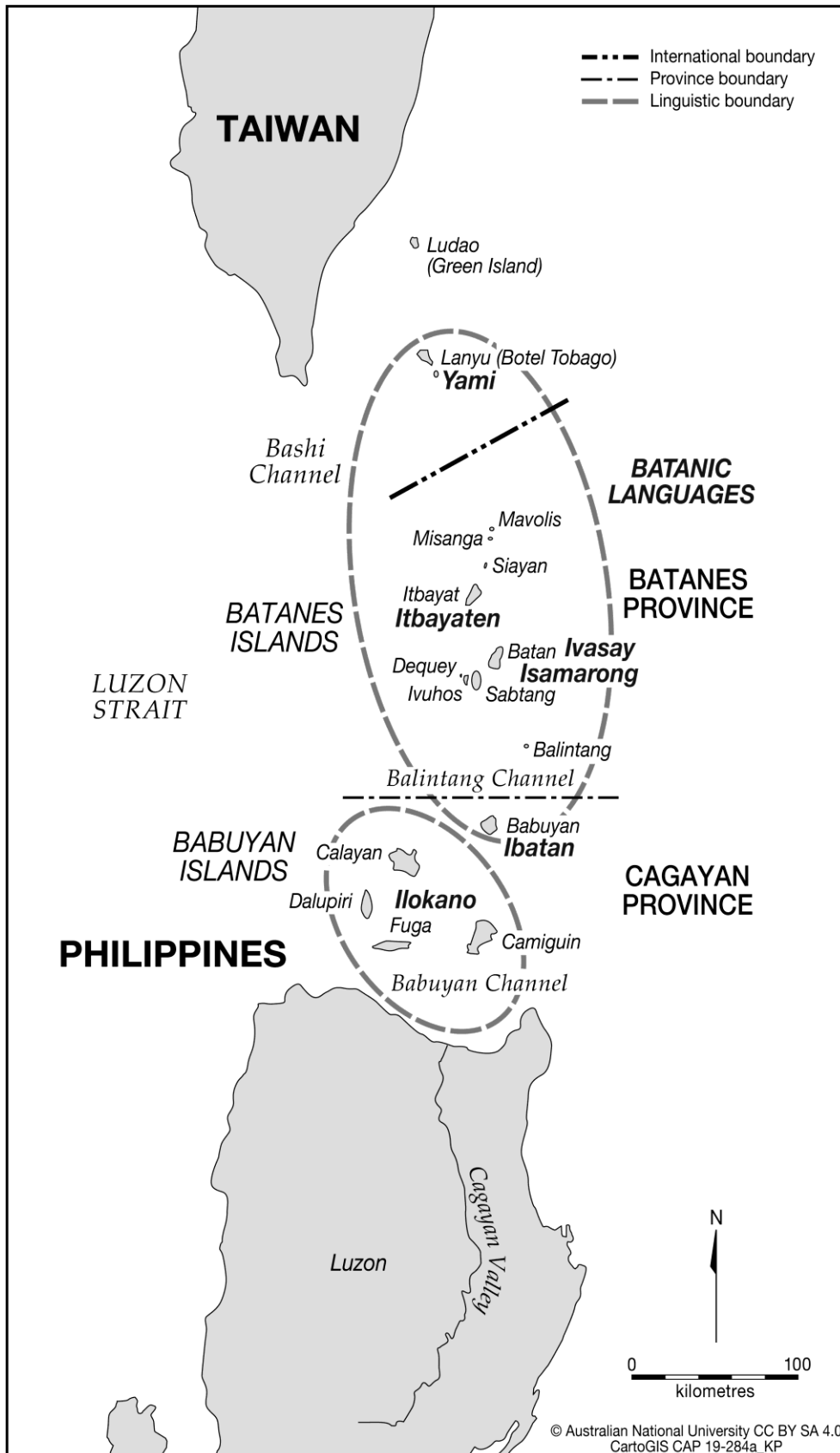
1.1 **Multilingualism on Babuyan Claro**

Based on the 2020 Census of Population and Housing, the total population on Babuyan Claro is 1910 (Philippine Statistics Authority, 2021) but local community officials estimated in 2018 around 2500 to 3000 residents on the island (Gallego, 2020, p. 89) The people on Babuyan Claro are multilingual in at least three languages: Ibatan, Ilokano, and Filipino.[1] The three languages belong to the Malayo-Polynesian branch of the Austronesian language family. Given their genetic relationship, the languages share significant typological similarities, reflected in numerous cognate forms and structures. Despite these shared features, the languages are not mutually intelligible, and they in fact belong to different smaller subgroups of Philippine languages,[2] each with distinctive vocabulary and structure.[3]

Ibatan is the local language of Babuyan Claro. It belongs to the Batanic subgroup, along with Ivatan, Itbayaten, and Yami/Tao (Moriguchi, 1983; Tsuchida et al., 1987, 1989). Compared with the other Batanic languages, Ibatan exhibits distinct linguistic features that can be attributed to contact-induced change (Section 1.2). In terms of vitality, Ibatan is rated as 6b (Threatened) based on the Expanded Graded Intergenerational Disruption Scale (EGIDS), which means that the number of children learning the language are reducing (Ebarhard et al., 2021).

Ilokano is a Cordilleran (also known as Northern Luzon) language used by over six million speakers (Ebarhard et al., 2021). It is the trade language and regional lingua franca of the Babuyan islands and northern Luzon, and in Babuyan Claro, it is being learned by children alongside Ibatan, either as a first language for a small portion of the community, or as a second language by the majority (Section 3.3). There is thus no monolingual speaker in Babuyan Claro, and all the residents are bilingual in both languages.

Finally, Filipino, the national language of the country, is starting to become another player in the language ecology of the Babuyan Claro community. It is based on Tagalog, a Greater Central Philippine language, spoken primarily in Manila and most of mainland Luzon. Filipino, used as a second language by around 45 million people (Ebarhard et al., 2021), is the primary medium of instruction in basic education (in addition to English), and it is used as the language of print and broadcast media. For the Ibatan people, these are the main domains in which Filipino is being learned and used. Moreover, in

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[1] English is taught and used in schools, and speakers are exposed to the language mainly in broadcast and social media, but proficiency in the language is minimal compared to Ilokano and Filipino.

[2] See Blust (1991) for a discussion of the lower-order Philippine subgroups.

[3] See Appendix A for a comparison of some structural features of the three languages.

recent decades, increased geographic mobility and technological improvements[4] enabled the Ibatan people to be more connected to mainland Philippines physically and virtually, and this entails more exposure to Filipino. As a result, we see a further change in the language ecology of the community, with the younger generations of Ibatans reporting increased proficiency and preference towards using Filipino compared to the older generations.

   While Ibatan is still being used in various domains of community life such as the home, the school, the church, and other public domains, it is used alongside Ilokano and Filipino, and it occupies a less privileged social position compared to the two bigger languages. The three languages form a complex patchwork of individual- and community-level patterns of use, which drives contact-induced language change in Ibatan. As mentioned, the people of Babuyan Claro learn both Ibatan and Ilokano in their childhood. Moreover, Ilokano immigrants who come to Babuyan Claro for work or marriage, learn Ibatan in varying degrees, with some reporting only receptive skills in the language, while others have shifted to Ibatan as their everyday language while in the community. It is apparent that multilingualism has been an intrinsic aspect of the community since its early years, but periods of social change have led to corresponding changes in the language ecology of Babuyan Claro, which are then reflected in layers of contact-induced language change in Ibatan (see Chapters 3 and 9). While it is acknowledged that Filipino is starting to become more influential in the community especially among younger speakers, this thesis focuses primarily on contact between Ibatan and Ilokano and its linguistic consequences, given the long-standing relationship between the two ethnolinguistic groups.

1.2   **Ibatan and the Batanic subgroup**

The Batanic (also known as Bashiic or Vasayic) subgroup consists of four languages spoken on the islands bordering the Philippines and Taiwan (Figure 1):

- Yami (or Tao), spoken on the island of Lanyu (Orchid Island), Taiwan;
- Itbayaten (or Itbayat), spoken on Itbayat Island, Batanes;
- Ivatan (or Ivatanen), with dialects Ivasay (or Vasay) and Isamorong, spoken on the islands of Batan and Sabtang in Batanes; and
- Ibatan (or Babuyan), spoken on Babuyan Claro, Cagayan

   The languages reflect varying degrees of mutual intelligibility, and this has led some scholars to classify them as dialects rather than discrete languages (cf. Cottle & Cottle, 1958; Hidalgo & Hidalgo,

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[4] Increased geographic mobility pertains to more frequent sea travels to and from mainland Luzon, while technological improvements primarily refer to access to satellite television and the internet (see Section 3.2 for further discussion).

1971; Reid, 1966; Ross, 2005; Scheerer, 1926; Tsuchida et al., 1987, 1989). Because of the apparent similarity among the languages, reconstructing Proto-Batanic is fairly straightforward (Gallego, 2014; Yang, 2002). However, there are a few conflicting hypotheses regarding the internal subgrouping of the languages. Zorc (1977, p. 41) groups Itbayaten and Ivatanen together, with Yami occupying a separate branch. He makes no mention of a distinct Ibatan language in his work. Moriguchi (1983, 2005) proposes that Vasay and Itbayat each occupies a distinct branch in the subgroup, while Yami, Isamorong, and Babuyan are grouped together. Under this lower-order branch, Babuyan and Isamorong form a closer relationship. He bases his proposal on a number of phonological features that he argues are retentions in Vasay and Itbayat from Proto-Vasayic, as well as some morphosyntactic and lexico-semantic innovations shared by Yami, Isamorong, and Babuyan. In another study that uses Phonostatistics and COMPASS to measure the phonological divergence of the languages and the strength of proposed phonemic correspondences, Yang (2002) groups Ivatan and Ibatan together, while Yami and Itbayat occupies a distinct branch respectively. Finally, Gallego (2014), similar to Yang (2002) makes a similar subgrouping based on a number of proposed innovations, both phonological and lexico-semantic, shared by Ivatan and Ibatan, as well as unique features found in Yami and Itbayat. What makes Ibatan linguistically distinct is several lexical, phonological, and morphosyntactic features which can be attributed to contact-induced language change.

In terms of phonology, Ibatan differs from the other Batanic languages in the realization of Proto-Batanic *b. The consonant *b weakens to a fricative *v* word-initially and medially in all the Batanic languages, except Ibatan. The following examples in Table 1 are illustrative (Gallego, 2014, pp. 83–85).

Table 1: Reflexes of Proto-Batanic *b in the Batanic languages

	'wet'	'black'	'woman'
Yami	*vasa*	ma*v*aheng	ma*v*akes
Itbayat	*vasa*	ma*v*aeng	ma*v*akes
Ivasay	*vasa*	ma*v*aheng	ma*v*akes
Isamorong	*vasa*	ma*v*aheng	ma*v*akes
Ibatan	*basa*	ma*b*aheng	ma*b*akes

Because of the close relationship between Ivatan (Ivasay and Isamorong) and Ibatan as attested by bundles of shared innovations, this weakening of the consonant has likely applied in Ibatan, but this

change was later neutralized because of the influence of Ilokano, which does not have the consonant in its phoneme system (see Appendix A). That is, speakers of Ilokano who spoke Ibatan approximated the fricative *v* with its closest counterpart *b,* and this ultimately reshaped the sound system of Ibatan (see Section 4.2.1.1 and Section 9.2.3 for further discussion).

In terms of morphosyntax, there are several formatives that have arisen because of the influence of Ilokano. An example is the pluralization of human nouns, where Ibatan (IVB) shows two different reduplication patterns. The native pattern involves the reduplication of the first consonant and vowel sequence of the root (i.e., C_1V_1), as in *ka~kaanakan* from the root *kaanakan* 'nephew' in (1). In cases involving the pluralization of Ilokano (ILO) loanwords, namely *baro* 'young man', *barito* 'teenage boy', *balasang* 'teenage girl', and *baket* 'wife/old woman', the Ilokano pattern is carried over, that is, *babbaro* 'young men', *babbarito* 'teenage boys', *babbalasang* 'teenage girls, and *babbaket* 'wives/old women' respectively, which all involve the reduplication of the $C_1V_1C_1$ sequence (2) (R. Maree, 2007, pp. 39–40).[5]

(1) **Native reduplication C_1V_1 with native stem *kaanakan* 'nephew'**

(R. Maree, 2007, pp. 39–40)

Siraw kakaanakan saw ni Pidel…

Siraw	**ka~kaanakan**	sa=aw	ni	Pidel
3P.NOM	**RDP~nephew.IVB**	3P.NOM=REF	DET	Pidel

'Those nephews of Pidel…'

(2) **Ilokano reduplication $C_1V_1C_1$ with Ilokano stem *balasang* 'teenage girl'**

(R. Maree, 2007, pp. 39–40)

Myan asap oho a babbalasang a nanghap so lakay da katakatayisa.

Myan	asa poho	a	**bab~balasang**	a	nanghap	so	lakay	da	katakatayisa.
EXT	ten	LK	**RDP~teenage.girl.ILO**	LK	got	DET	husband	3P.GEN	each.one

'There are ten women who got a husband.'

Another example of Ilokano influence on Ibatan is the two ways of deriving ordinals, namely the affixes *cha-* and *maika-,* in which the latter has been transferred from Ilokano. To illustrate, the ordinal

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[5] See Reid (2006) for a discussion of the historical development of this pluralization pattern in the Cordilleran languages.

'second' may be derived as *cha-dadwa* or *maika-dadwa* (R. Maree, 2007, p. 95). A final example of contact-induced change is the parallel paradigms for deriving durative verbs in Ibatan. Native stems such as *abang* 'rowboat' (3) are derived with the native set of durative prefixes, whereas non-native stems such as *lampitaw* 'motorboat' (4) are derived with the non-native set. This non-native paradigm has been adapted from Ilokano, and this is discussed in further detail in Chapter 5.

(3) **Native durative *nay-* with native stem *abang* 'rowboat'** (R. Maree, 2007, p. 174)

Nayabang si adi a nangay do Calayan.

Nay-abang	si	adi	a	nangay	do	Calayan.
PFV.AV-rowboat.IVB	DET	younger.sibling	LK	went	DET	Calayan

'Younger sibling rode on a rowboat going to Calayan.'

(4) **Non-native durative *nag-* with non-native stem *lampitaw* 'motorboat'** (R. Maree, 2007, p. 174)

Naglampitaw si adi a nangay do Calayan.

Nag-lampitaw	si	adi	a	nangay	do	Calayan.
PFV.AV-motor.boat.ILO	DET	younger.sibling	LK	went	DET	Calayan

'Younger sibling rode on a motorboat going to Calayan.'

In all these examples, the influence of Ilokano on the structure of Ibatan is apparent since Ilokano grammatical features are clearly distinguishable from native formations. Generally, these Ilokano-influenced features occur with words of foreign origin, the majority of which are Ilokano loanwords. It is also evident that such structural change in Ibatan has arisen through the transfer of lexical items (cf. King, 2000; Seifart, 2015a). That is, loanwords have been transferred into Ibatan as complex formations involving combinations of affixes and stems, which has led to non-native affixes becoming regularized in Ibatan (discussed further in Sections 4.3 and 5.3).

The intense social contact between Ibatan and Ilokano signaled by these linguistic features is corroborated by genealogical records and oral histories (J. Maree, 2005), and arguably, such aspect of linguistic development is as important as language-internal change in understanding the language's and community's history. That is, Ibatan is shaped not only by its ancestry from Proto-Batanic, but at the same time, its deep contact history with Ilokano.

1.3   **The thesis**

This thesis aims to investigate the emergence and development of contact-induced language change in Ibatan embedded within the social history of the Babuyan Claro community,[6] guided by the following research questions:

- What are the mechanisms and linguistic outcomes of contact between speakers of Ibatan and Ilokano?

- How are individual-level bilingual innovations linked to community-level contact-induced language change?

- What do insights on contact-induced outcomes observable in Babuyan Claro at present tell us about the social history of the community?

The narrative stance taken in the thesis is understanding contact-induced language change, and consequently, reconstructing the social past, based on models for language contact that argue for different individual- and community-level factors and mechanisms. This follows the idea that the mechanisms observable at present can be extended to infer past processes and mechanisms. In order to answer the three research questions, it is necessary to tease apart community-level contact outcomes, argued to constitute a deeper layer of change, from individual-level ones, which are taken to comprise a more recent layer. The thesis is thus structured around these distinctions. Part 1 gives a background to the project, including the frameworks used in the study (Chapter 2) and the linguistic landscape of the Babuyan Claro community (Chapter 3). Part 2 presents patterns of community-level contact-induced language change, focusing on the domains of the lexicon (Chapter 4) and morphology, focusing on the parallel durative paradigms of Ibatan introduced in Section 1.2 (Chapter 5). From the aggregate of the community, Part 3 zooms in on the level of the individual, first through a review of the psycholinguistic notion of language dominance, which is at the center of the speaker-based framework for language contact used in the thesis (Chapter 6), and then by investigating how the construct correlates with cross-linguistic influence in the speech of bilingual individuals (Chapter 7). Finally, Part 4 explores the ways the different factors and mechanisms that apply on the levels of the individual and the community can be linked in order to understand how transient and variable individual innovations potentially become widespread language change (Chapter 8). This ultimately forms the basis for reconstructing a detailed history of the Babuyan Claro community, particularly

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[6] Contact outcomes from Ibatan to Ilokano are not included in the scope of the thesis. While apparent cross-linguistic influence can be observed in the Ilokano speech of Ibatan speakers, there is no influence of Ibatan on Ilokano as a whole, if at all, primarily because of the significant difference of the two languages in terms of number of speakers.

periods of social change that have likely driven changes in population structure and language ecology (Chapter 9). How the thesis contributes to reconstructing the prehistory of the wider regions of the Philippines and the Pacific, as well as to general discussions of language contact and change are detailed in the concluding chapter (Chapter 10).

1.3.1 *Data collection, analysis, and caveats*

The primary research questions of the thesis are explored by examining bilingual language use at the levels of both individual speakers and the community, through a corpus of naturalistic speech as well as previous documentation on the Ibatan language, namely R. Maree (2007) and J. Maree et al. (2012). Ethnographic and genealogical studies namely R. Maree (1982) and J. Maree (2005) then provide the socio-historical context of the community.

Primary data for the thesis were collected from 2018 to 2021. This involved two trips to Babuyan Claro and Tuguegarao City in mainland Luzon (April 2018, and August to October 2018), as well as online consultations and recordings with speakers from January 2019 to December 2021. In-person data collection mainly focused on recording spontaneous speech and language profile interviews (detailed in Section 6.3.1 and Section 7.1), whereas most of the work done online concerned transcription, translation, and counterchecking.

The recordings were transcribed and annotated using ELAN, developed by the Max Planck Institute for Psycholinguistics, The Language Archive, Nijmegen, The Netherlands (Sloetjes & Wittenburg, 2008; Wittenburg et al., 2006) and FieldWorks, developed by the Summer Institute of Linguistics, International. The data were transcribed using a Latin-based orthography which is the system used in Babuyan Claro and the Philippines. These were then translated into Filipino, and then to English. Most of the transcription and initial translation was done by research assistants who are native speakers of Ibatan. The annotation process involved several steps. I first segmented the recordings into intonational units on ELAN, and a research assistant transcribed them into Ibatan, and then translated them to Filipino. I then counterchecked the transcriptions against the recordings and translated them to English. Another research assistant did a final check of the transcriptions and translations. Finally, I interlinearized the texts on FieldWorks, still with occasional consultations with the research assistants. The recordings and annotations were all archived with the Endangered Languages Archive, in Gallego (ongoing).

A longer in-person fieldwork was initially planned in 2020 to collect more detailed language profile interviews (Appendix B) and additional spontaneous recordings from a wider number of speakers. However, this was not made possible because of the COVID-19 pandemic, which is still ongoing at the

time of writing, and so I had to resort to working with limited data, as well as online consultations with my research assistants. The nature of the current corpus limits the ways I can utilize the data. For example, some aspects of the thesis could be further enriched with quantitative analysis, but the size of the current corpus as well as the number of speakers are not ideal for such an approach. Despite this, the corpus still contains insightful information that indicates potential correlations between certain variables and patterns of language use (Chapter 7).

1.3.2   *Terminology*

Throughout the thesis, I will be using terminology that is based on the model for language contact set out by van Coetsem (2000). The model, as well as more detailed explanations of the nomenclature are given in Section 2.2.

Bilingualism. This term is used to generally refer to the individual's knowledge and use of two (or more) languages. Patterns and degree of bilingualism differ depending on the individual and the community, and they tend to be domain- and context-specific, such as in terms of linguistic domains (vocabulary and grammar) and linguistic skills (production and reception). In the thesis, the term is used in reference to the speakers' use of Ibatan and Ilokano, but it is used interchangeably with *multilingualism*, acknowledging that the speakers typically have more than two languages in their linguistic repertoires.

Transfer. The term is used in its general sense of transmission of linguistic materials (which includes form and/or pattern) from one language to another. The direction of transfer is always from the *source language* (SL) to the *recipient language* (RL). In this thesis, the focus is on one direction of change, that is, contact outcomes in Ibatan. Hence, the RL is always Ibatan, whereas the SL may be different languages in contact with Ibatan, such as Ilokano, Filipino, Spanish, and English.

Language dominance. This is defined as the individual's relative proficiency and use of the different languages in their repertoire. An individual may either be *dominant* or *non-dominant* in a language, and this depends on several factors (discussed in Chapter 6). Unless specified, language dominance in this thesis pertains to dominance in Ibatan. That is, individuals are described to be either dominant or non-dominant in the language.

Agentivity. This pertains to the nature of bilingualism of the speaker, where typically, a bilingual individual tends to work within the resources of their dominant language. Agentivity is thus intrinsically tied to language dominance, and these concepts form the central tenet in van Coetsem's (1988, 2000) speaker-based framework for language contact. In this thesis, the term (language) agentivity is used to pertain to the speaker being agentive in their use of their languages.

Borrowing transfer. This refers to a specific mechanism of language contact which involves RL agentivity. The agent of the transfer action is linguistically dominant in the RL, and they *borrow* linguistic materials, typically vocabulary, from their non-dominant language (SL) into their dominant language (RL).

Imposition transfer. This pertains to another type of mechanism of language contact involving SL agentivity. The agent of the transfer action is linguistically dominant in the SL, and they tend to *impose* linguistic materials from their dominant language (SL), typically structure such as phonological and grammatical patterns, into their non-dominant language (RL).

Cross-linguistic influence. This is sometimes referred to in the thesis as (bilingual) innovation, which is observed synchronically in the speech of bilingual individuals. This is taken as a transient kind of contact-induced outcome, which varies within and across individuals, driven by the speaker's agentivity and language dominance. Depending on population-level factors and mechanisms, a particular innovation may potentially become established as *contact-induced language change.*

Contact-induced language change. This refers to a kind of contact-induced outcome observed at the level of the population or the community, which is taken to constitute a deeper layer of change in the language. As this involves population-level language use, such kinds of linguistic outcomes have become regularized and widespread, which are used regardless of the speakers' patterns of language dominance. The distinction between cross-linguistic influence and contact-induced language change is discussed further in Section 2.2.

Ibatan. Finally, the name *Ibatan* is used in the thesis to refer to the lect spoken in Babuyan Claro. Currently, it is recognized as a separate language from *Ivatan*, the lect spoken in Batanes. However, I

use the term loosely to also include the variety of Ibatan in transition, that is, its initial years of developing as a distinct language of its own (Chapter 9).

1.4   Contributions to wider discussions and debates

The main thrust of the thesis is understanding pathways of language change from the perspective of contact. While the focus of the research is on a small-scale multilingual community, I hope to be able to extend insights from the case study to wider discussions and debates in linguistics, particularly those that deal with linguistic and social histories.

First and foremost, as the thesis focuses on contact between closely related Philippine languages, the study can contribute to investigating the deeper history of the Philippine languages. It is widely acknowledged that the Philippine languages all descend from the Malayo-Polynesian branch of the Austronesian language family. However, the internal relationship of the languages remains debated in the field of Austronesian linguistics. The apparent similarities among the languages led to the widely accepted view in the early literature that they all descended from a single ancestor language, Proto-Philippines (PPH) (cf. Blake, 1906; Charles, 1974; Conant, 1908, 1911, 1912; Llamzon, 1975; Paz, 1981; Scheerer, 1918). It was only later that scholars began to question its validity, as there is a lack of clearly defined phonological and morphosyntactic innovations that support a single grouping for the Philippine languages (Reid, 1978, 1982; Ross, 2005). In response to this, Zorc (1986) and Blust (1991, 2005) present numerous lexical innovations for PPH. Recently, the debate has been resurrected, first by Smith (2017, pp. 461–472), who stresses the need to re-evaluate the robustness of the proposed lexical innovations to rule out possibilities of parallel development, borrowing, or diffusion. Ultimately, he argues against a unitary Philippine subgroup because of the low quality of the posited lexical innovations. Blust (2019) revisits the debate, adding substantially to his earlier list of lexical innovations, and presenting the merger of Proto-Malayo-Polynesian *d and *z as a phonological innovation for PPH. In a series of commentaries to the paper, Zorc (2020) supports the validity of PPH, but other scholars still argue against it (Liao, 2020; Reid, 2020; Ross, 2020), as they claim that the supposed innovations that Blust (2019) has presented are not shared by all members of the subgroup, and instead form overlapping distribution. While this patterning still points to a common history, the distribution of innovations suggests a gradual differentiation from an earlier dialect network, resulting in the formation of a linkage (cf. François, 2014; Ross, 1988, 1997). Bayesian phylogenetic methods that explore the evolution of languages (cf. Gray et al., 2009; Greenhill & Gray, 2009) have also been utilized to explore the PPH debate. Based on this method, Reid (2017, pp. 10–11) writes that while

most Philippine languages are strongly grouped together, there is no strong evidence that support a single Philippine subgroup of languages.

A linkage scenario for the Philippine languages suggests a rapid expansion of Proto-Malayo-Polynesian (PMP) speakers in island Southeast Asia that left behind an early dialect network in the Philippines, which is the first landing point of PMP outside Taiwan. This dialect network, with PMP as its protolanguage, gradually diversified into various Philippine subgroups, reflecting overlapping patterns of innovations seen among the Philippine languages at present (Ross, 2020, p. 369). This means that the Philippine languages do not form an *innovation-defined subgroup* distinct from Malayo-Polynesian, and they are instead argued to form an *innovation-linked subgroup* (cf. François, 2014, pp. 170–171; Ross, 1995, pp. 45–46). While Blust (2019, pp. 183–184, 2020, pp. 453–454) does acknowledge that the innovations are not shared across all Philippine subgroups, implying a similar scenario where the languages do not form a homogeneous subgroup, he instead argues for PPH as the ancestor of the dialect network, in that the innovations are exclusive among Philippine languages, and are not observed outside the subgroup.

Language contact has also often been cited as one of the reasons for the similarities among the Philippine languages. While a linkage history would typically involve contact among members of the subgroup, the two scenarios are not the same, and there is thus a need to disentangle linguistic signals for the two scenarios in order to have a more accurate reconstruction of prehistory. This smaller-scale case study that explores in detail likely outcomes of contact-induced change among related languages can be applicable in such context of language diversification that involves contact among members of a dialect network. Adding to studies on Austronesian languages such as Blust (1992), Dutton and Tryon (1994), Pallesen (1985), and Reid (1994), this thesis presents how closely related languages develop from an intense history of contact, which is something that has been underexplored (cf. Bowern, 2013; Noonan, 2010; Pat-El, 2013). Investigating how language diversification unfolds in such context contributes to a better understanding of language histories, be it from a linkage relationship or through contact.

More broadly, the thesis also contributes to the fields of contact and historical linguistics by testing and refining theories and models of language contact and change through a detailed empirical study of a small-scale multilingual community. Much of what we know about these phenomena are based on western, industrialized societies (cf. Stanford, 2016; Stanford & Preston, 2009). Insights from a wider range of linguistic contexts, such as those from small-scale societies like Babuyan Claro, provide

new perspectives which can challenge or validate existing assumptions. Within the field of contact linguistics, van Coetsem's (2000) speaker-based framework centers on the notions of agentivity and language dominance in driving contact-induced change, but these constructs and assumptions need to be further operationalized and evaluated through attested cases of bilingual language use (see Chapters 6 and 7). For the field of historical linguistics, the discipline has long put premium on language change arising out of shared ancestry, and changes arising from language contact have been treated as peripheral. It is only in recent decades that contact has started to be regarded as an equally important driver of language change (cf. Ross, 1996; Thomason, 2003). This case study similarly highlights the place of contact in the history of a language and its community.

Finally, the thesis also emphasizes the value of reconstructions that are socially informed. That is, language change is always mediated by the context of the community (cf. Labov, 2001; Ross, 2003, 2013), and so, we can expect that changes in the social landscape of the community are reflected in layers of change in the language. This idea has not been made explicit in the literature for language change, and as one of the main arguments in this thesis, I hope to demonstrate how we are able to make a more nuanced reconstruction of prehistory by linking periods of social change with corresponding layers of language change.

CONTACT

The phenomena of language contact and change

Introduction

Contact has been increasingly recognized as an intrinsic fact of language, and it includes synchronic language use by individual bilinguals, as well as community-level patterns that reflect change over time. The scope that the phenomenon covers makes it relevant to different sub-disciplines of linguistics, such as psycholinguistics, sociolinguistics, language acquisition, and language change. Because of this interdisciplinarity, the field of contact linguistics remains fragmented, reflected in how there is still a lack of a comprehensive theoretical or methodological framework that can adequately account for the mechanisms and transmission of contact-induced change (Appel & Muysken, 1987, p. 7; Jahr, 1992, p. 1; Thomason, 2001, p. ix; van Coetsem, 2000, pp. 39–40; Winford, 2007, pp. 22–23).

How do we approach the phenomenon of language contact? This chapter presents an approach for studying contact-induced language change in Ibatan, from actuation to propagation, based on Muysken (2010). Section 2.1 gives a discussion of the different perspectives in investigating language contact. Section 2.2 presents frameworks that come from these different perspectives, namely van Coetsem (1988, 2000) for the level of the individual, and Thomason and Kaufman (1988) for the level of the community. These are integrated within a wider framework proposed by Muysken (2010). Finally, Section 2.3 presents a discussion of how the general framework is applied for the context of Babuyan Claro, and the ways in which our current understanding of language contact and change can inform our understandings of the history of the community.

2.1 Perspectives in studying language contact

Multilingualism is the norm in many communities around the world, and this arises when speakers from different speech communities come into contact with each other. Such speaker interaction leads to what has been described as language contact, which is the context involving individuals using two (or more) languages at the same time and place, resulting in one (or more) languages having an influence on the other/s. While the use of the term *language contact* has become standard in the field, it can be misleading in that it implies language as an autonomous unit that exists beyond its users.

However the language user in fact occupies a central role as the agent of change—"it is not languages that innovate; it is the speakers who innovate" (J. Milroy & L. Milroy, 1985, p. 345). The idea of the "agentive nature of linguistic [behavior]" (Hoffman & Walker, 2010, p. 59) puts the bilingual speaker as the locus of contact. Investigating the phenomenon of language contact, therefore, involves understanding the links between the speakers as the agents of language change, the factors and mechanisms involved in the process, and the linguistic outcomes that arise from it.

As language contact covers a wide range of contexts, including individual- and community-level language use, synchronic and diachronic change, and structural, cognitive/psycholinguistic, and social processes and mechanisms, the phenomenon has been approached from different perspectives and sub-disciplines of linguistics. Given the interdisciplinarity of the field, many of the findings across the literature are not directly comparable as they deal with different scales, time depth, and contexts, and the arguments from different sub-fields are sometimes in conflict with each other. The following sub-sections discuss key concepts and issues in the field.

2.1.1   *Factors, mechanisms, and outcomes*

One of the main issues in contact linguistics is the oftentimes opaque treatment of processes and outcomes, reflected in the variable use of terminology in the literature. Different terms are sometimes used to refer to the same concept, but at the same time, a single term may carry a wide range of senses. Certain concepts, for instance *borrowing*, can mean both the mechanism and outcome of contact. While the variant use of terms is not a problem so long as the context in which the terms are used is clearly set out, this is not usually made transparent in many studies (van Coetsem, 2000, p. 34). It is thus necessary to clearly delineate outcomes from processes in order to formulate a coherent and consistent approach to language contact (van Coetsem, 2000, p. 37).

The approach towards understanding the nature of language contact is usually bottom-up, wherein the mechanisms and processes are inferred on the basis of outcomes, as these are the ones that are directly observable. Thus, the early literature has mainly focused on the classification of contact outcomes, oftentimes modeled in terms of scales, asymmetries, or hierarchies, wherein it is argued that linguistic materials have varying degrees of transferability (cf. Curnow, 2001, pp. 417–419; Haugen, 1950, p. 224; Lass, 1997, p. 189; Muysken, 2010, p. 271; Seifart, 2019, pp. 15–18). For instance, in terms of word classes, nouns, are said to be more transferable than verbs, and both are in turn argued to be more transferable than pronouns and other function words (cf. Haspelmath & Tadmor, 2009; Haugen, 1950; van Hout & Muysken, 1994). Related to this is the differences in the transferability across different grammatical levels, where open classes are said to be the most

transferable, followed by closed classes, syntax, non-bound function words, bound morphemes, and finally, phonemes (cf. Curnow, 2001, p. 417; Ross, 1988, p. 12). Seifart (2019, p. 15) gives a summary of the proposed hierarchies or asymmetries in the literature, presented in Table 2:

Table 2: Asymmetries in the transferability of materials, adapted from Seifart (2019, p. 15)

Asymmetries:[7]	Based on:	Described in:
Free > bound Derivation > inflection	Formal properties of individual morphemes	(Gardani et al., 2015)
Lexical > grammatical meaning Affective > non-affective meaning	Semantic/pragmatic properties of individual morphemes	(Matras, 2007)
Interrelated sets > non-interrelated sets	Properties of sets of morphemes	(Seifart, 2012)
Gap-filling > not gap-filling Congruent > non-congruent structures	Intersystemic constraints	(Field, 2002)

As mentioned, these hierarchies or asymmetries that have been proposed as early as Whitney (1881) are based on typologies of contact outcomes that are then taken to reflect processes and mechanisms. While much of the early literature has focused on such classifications, recent works on language contact investigate the processes, mechanisms, factors, and contexts that have shaped them (Muysken, 2010, p. 271; Winford, 2005, p. 375, 2007, pp. 24–25). Various factors and mechanisms are argued to underpin contact-induced language change. One of the earliest influential works on language contact is Weinreich (1953), who identified some factors in shaping outcomes of language contact, such as the relative stability of the linguistic elements, as well as structural or typological similarity between the languages in contact (also discussed in Section 8.2.1.1). The asymmetries in Table 2 that Seifart (2019) has presented are mainly underpinned by the idea that materials that are more stable (measured in terms of structuredness, frequency of use, entrenchment within the grammatical system, and automaticity in cognitive processing) are less transferable across languages (van Coetsem, 2000, p. 106). To illustrate, inflection, which is considered to be a more stable aspect of

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[7] The properties before the symbol > are argued to be more transferable than those that follow it.

grammar, is said to be less transferable than derivation (cf. Gardani, 2008, 2012). In the same vein, verbs, which tend to be more inflected (and thus more structured and stable) than nouns are likewise argued to be more resistant to transfer (Curnow, 2001, p. 415).[8] Based on a cross-linguistic comparison of loanwords, Tadmor (2009, pp. 61–63) presents empirical evidence for this claim, with loanwords comprising 31% of all nouns in the cross-linguistic database, compared to 14% found for verbs. Wohlgemuth (2009) also investigates the transferability of verbs through a similar cross-linguistic study, arguing for different mechanisms and pathways, as well as adaptation strategies in the languages examined. Finally, one of the most frequently cited and widely accepted asymmetry is the transferability of lexical forms compared to grammatical ones. Lexical items are highly transferable in that they are considered a less stable aspect of language, and in terms of semantic properties, they carry concrete meanings (Seifart, 2019, p. 16). From the previously mentioned cross-linguistic study of loanwords by Tadmor (2009, pp. 59–60), content words in the database reflect 25.2% loanwords, as compared to function words which only reflect 12.1%. However, while it has been widely demonstrated in the literature that more stable materials such as structural forms and patterns tend to be less transferable, structural transfer can be facilitated if the languages in contact are structurally compatible (Field, 2002, p. 42; Meillet, 1921, pp. 84, 87; Weinreich, 1953, p. 44; Winford, 2005, p. 387). To cite an example, Chamoreau (2012, p. 84) describes Yucatec Maya, which has a weak gender distinction, that reflects Spanish diminutive suffixes marked for gender, namely -ito and -ita. In contrast, other Mesoamerican languages which do not distinguish gender only reflect the suffix -ito. Another example is the case of the Australian Aboriginal languages Ritharngu and Ngandi, where Ngandi has adopted several formatives from Ritharngu such as the ergative-instrumental suffix -tu, facilitated by the close morphosyntactic similarity between the languages (Winford, 2005, p. 389).[9]

In the past, the asymmetries, scales, or hierarchies discussed above have also been modeled as implicational universals, most notably by Moravcsik (1978). However, many studies that followed the work have presented counterexamples for these claims, some of which are presented in Table 3:

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[8] Matras (2007, p. 48) adds that verbs are also more conceptually complex, in that they carry both referential (or lexical) and grammatical (i.e. predication) functions.

[9] The transfer was also driven by a gap-filling motivation, in which the ergative-instrumental category was not originally present in Ngandi (Winford, 2005, p. 389).

Table 3: Counterexamples to proposed universals in language contact

Proposed universal constraint	Counterexample	Source
derivation > inflection	Bolivian Quechua reflecting inflectional *-s* 'plural' from Spanish, but without other Spanish derivational affixes	(Campbell, 1993, p. 103)
verbs > nouns	Saramaccan reflecting 30% of all verbs as loanwords from Portuguese, compared to nouns with only 12%	(Good, 2009, p. 931)
lexical > grammatical	Structural convergence among northern Vanuatu language, but at the same time showing lexical divergence	(François, 2011)
	Takia keeping its phonology and vocabulary, but reflecting syntactic and semantic structures modeled after Waskia	(Ross, 1996)

Often cited across the literature is Campbell's (1993) work, which has demonstrated through counterexamples how the proposed constraints for linguistic transfer do not apply universally. Similarly, through a quantitative study of affix borrowing, Seifart (2015b) claims that typological similarity only plays a minor role in facilitating structural transfer. While it is indeed true that the constraints do not apply in absolute, taking these asymmetries and constraints as general tendencies for language contact may not only serve as a guide to infer diachronic pathways of change, but more broadly, these may also offer insights into the properties of human language, particularly regarding the stability gradient of linguistic materials (Seifart, 2019, p. 15).

In the field of contact linguistics, it is widely accepted that purely structural/linguistic factors and mechanisms are not sufficient in accounting for contact-induced language change. The emphasis on a holistic approach towards language contact by including social factors has been articulated as early as Weinreich (1953, p. 3). Most prominently, the landmark work of Thomason and Kaufman (1988, p. 35), shifting away from the structuralist tradition that has been dominant in the prior decades, go as far as claiming that "it is the sociolinguistic history of the speakers, and not the structure of their language, that is the primary determinant of the linguistic outcomes of contact". From this standpoint, it is argued that any kind of contact-induced change is possible given enough intensity of social contact.

Other subsequent studies challenge the claims made by Thomason and Kaufman (1988). In terms of constraints, some scholars maintain the position that contact outcomes follow systematic patterns and constraints, such as Myers-Scotton (1993b, 2002) on code-switching and convergence, Treffers-Daller (1999) and Silva-Corvalán (2008) on structural constraints, and Heine and Kuteva (2005) on grammatical replication. Moreover, in terms of predicting likely outcomes primarily on social factors, Aikhenvald (2002, p. 3) comments that "typologically different linguistic structures tend to change in different ways, even when the speakers share a great deal of sociolinguistic history." These disagreements in the literature stem from the fact that the phenomenon of language contact has been approached from different perspectives and sub-fields, involving language use across different contexts, scales, and time depth, and it is thus necessary to tease apart contact outcomes from these different levels, and systematically link them together within a more coherent framework.

2.1.2 *Aggregates, levels, and scales*

It has been demonstrated in the early literature how language contact follows general tendencies or pathways, which are underpinned by various linguistic constraints, but these are not exceptionless, and it is the interaction of different factors, both linguistic and social, that shapes the kinds of outcomes that may arise in a given setting. A context-dependent approach is thus a fruitful way to investigate the phenomenon. Curnow (2001, p. 434) writes about the need to consider not only linguistic factors but also socio-political and historical data in understanding a specific contact situation. Moving away from the "simplistic dichotomous thinking" (Dorian, 1993, p. 152) of accounting for contact outcomes in terms of linguistic versus social motivations and processes, context-dependent frameworks engage with the phenomenon more holistically. Braunmüller and House (2009, p. 5) write:

> "There is a place for both explanations: the internal systemic one stressing the structural characteristics of language, i.e., how the various parts of the grammatical system make up a coherent and functional whole, and the external social explanations of contact and change, [emphasizing] the speakers, their varieties, contexts, social networks, and the relative prestige of the languages involved as motors of variation and change and/or resistance to them."

While the different contexts and perspectives for language contact have been recognized in the field (cf. Darquennes et al., 2019, p. 3; de Bot & Bülow, 2020, p. 168; Seifart, 2019, pp. 13–14), their distinctions have not often been made transparent across the literature (Muysken, 2010, p. 267). Data

on language contact belong to different levels that are distinguished in terms of the dimensions of aggregation and time depth, as well as in terms of data sources and sub-disciplines. Generally, these levels involve different ways language contact can play out, which are described by Muysken (2010, p. 267) in terms of *scenarios*, defined as "the organized fashion in which multilingual speakers, in certain social settings, deal with the various languages in their repertoire." These distinctions are summarized in Table 4.[10]

Table 4: Four levels of aggregation and time depth in studying language contact based on Muysken (2010, p. 268)

	Space (aggregate)	Time	Sub-discipline	Scenarios
Person	Bilingual individual	0-50 years	Psycholinguistics	Brain connectivity
Micro	Community	20-200 years	Sociolinguistics	Specific contact scenarios
Meso	Geographical region	Generally 200-1000 years	Historical linguistics	Global contact scenarios
Macro	Larger areas of the world	Deep time	Areal typology	Vague or no contact scenarios

The aggregates in which contact outcomes are most clearly observable are the individual and the community. On the level of the individual, one of the most common consequences of language contact is bilingualism. The outcomes observable in this level mainly depend on the individual's nature and degree of bilingualism (which involves factors such as age of onset of bilingualism, sequence of language acquisition, and mode or environment of learning). Individual-level bilingualism is underpinned by cognitive or psycholinguistic mechanisms, which include both general language processing mechanisms (language perception and production, pragmatics, and intentionality) as well as specific processing mechanisms involving bi-/multilingualism (de Bot & Bülow, 2020, p. 168). The kinds of variation observed among the language use of bilingual individuals comprise potential change that can be propagated across the community, and this depends on social factors and processes, which are likewise of two types, one involving general social mechanisms, which pertain to frequency of

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[10] MacWhinney (2018, p. 295), in discussing language learning and processing, similarly identifies different "timeframes" that involve processing, consolidation, social diffusion, and genetic diffusion respectively.

speaker interaction and the social value attached to the language/s (cf. Croft, 2000, p. 166), as well as mechanisms and processes that specifically involve population-level bilingualism, such as the nature of social contact in the community (Thomason & Kaufman, 1988, pp. 47–48) (also see Section 8.2.1). The aggregates concerning wider geographical regions, in contrast, involve deep time, which tends to "differentiate, equalize, and obliterate the outcome of language contact" (van Coetsem, 2000, p. 276), making it difficult to tease apart outcomes of language contact from other kinds of language change (Epps et al., 2013, p. 210). A fine-grained, context-dependent approach to language contact brings together insights from different perspectives, which can more fully account for linguistic outcomes at various levels of aggregation.

2.2   A scenario approach for language contact

Muysken (2010) argues for a scenario approach for language contact, which takes into consideration the range of different scales and levels of aggregation at which language contact is relevant.[11] Each level involves the interaction of linguistic, psycholinguistic, and social factors and mechanisms in shaping contact outcomes. Muysken (2010, pp. 271–278) identifies several scenarios for language contact,[12] which he describes in terms of likely linguistic outcomes (or the linguistic features most likely to be affected), the relative frequency of occurrence of the scenario, and the various underpinning linguistic constraints and social factors (such as the social hierarchy of the languages involved). The scenarios he identifies are process-oriented (in contrast to outcomes-oriented), which relates to Curnow's (2001, pp. 412–413) distinction between *paths of development* and *resulting situation.* This is because "resulting situations of change and contact can be quite opaque as to the factors that have brought them about, while the individual paths of development may be much more transparent" (Muysken, 2010, p. 271). The strength of the scenario approach is its emphasis on linking various perspectives on language contact, where "a specific linguistic result is linked to a historical setting, involving specific people (age, ethnicity, mix) with specific languages, languages interacting following specific scenarios, which are governed by well-defined processing constraints." This therefore allows

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[11] Other works that similarly propose an integrated framework for studying language contact and bilingualism, covering sub-disciplines such as neurolinguistics, psycholinguistics, and sociolinguistics are MacWhinney (2018) and Zenner et al. (2019)

[12] Namely (1) borrowing, (2) grammatical convergence under prolonged stable bilingualism, (3) L2 learning, shift, and substrate formation, (4) relexification, (5) leveling, (6) simultaneous acquisition of two languages by children, (7) metatypy or restructuring, (8) insertional code-switching, (9) adjunction and alternational code-switching, (10) language attrition and death, and (11) creation of symmetric contact languages or jargons.

us to consider how different kinds of explanations might be more or less useful at the different levels of aggregation. Ultimately, understanding the outcomes of language contact in a given setting should ideally be approached from the topmost level of the bilingual individual, before proceeding to the speech community, and then to larger geographical regions.

2.2.1   *The bilingual individual*

Individual-level contact outcomes are argued to be primarily driven by psycholinguistic mechanisms. Van Coetsem's (1988, 2000) model of language contact takes a fine-grained speaker-based approach that centers on the notions of *speaker agentivity* and *language dominance* in determining the kinds of linguistic materials that are likely affected by *transfer* (see Section 1.3.2 for a brief definition of terms)*.*

Transfer pertains to the general transmission of linguistic materials (including form and pattern[13]) from SL to RL. The individual is taken to be the agent of the transfer action, in which they tend to work within the resources of the languages in their repertoire. Typically, the agentive language is the individual's linguistically dominant language.[14] Language dominance relates to the speaker's relative proficiency and use of their different languages (discussed in detail in Chapter 6). The patterns of individual-level dominance determine the application of the two transfer types, *borrowing transfer* which involves RL agentivity, and *imposition transfer* involving SL agentivity. Language dominance and speaker agentivity interacts with the *stability gradient of language* (see Section 2.1.1) in determining the outcome of language contact.

RL agentivity, which applies among speakers who are linguistically dominant in the RL, is underpinned by *borrowing transfer,* in which a speaker *borrows* linguistic materials from their non-dominant SL into their dominant RL. Such cases typically result in lexical borrowings, as vocabulary is argued to be a less stable (thus easily transferable) aspect of language. As such, lexical transfer may involve little to no knowledge of the SL, since it does not require direct contact with speakers of the SL. Moreover, the extent to which RL-dominant speakers adapt the foreign items into the RL reflects their degree of proficiency and knowledge of the SL. That is, a greater degree of (phonological and morphological) adaptation is indicative of lesser proficiency in the SL. This may result in the loanword becoming completely unrecognizable in the RL, as seen in the Spanish word *virgen* adapted as Taos

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[13] Also known as direct~indirect transfer/diffusion, borrowing~replication, transfer of fabric~pattern, and MAT~PAT borrowing (cf. Gardani, 2020, pp. 104–106; Grant, 2020, p. 20; Matras & Sakel, 2007).

[14] But this may be affected during the process of acquiring another language. As acquisition progresses, the individual may also work within the resources of the language they are acquiring, but the extent to which this affects language use depends on the individual's degree of dominance in that language.

[m'ilxina] (Haugen, 1950, p. 215). In comparison, SL agentivity, which concerns speakers who are linguistically dominant in the SL, is underpinned by *imposition transfer*, in which linguistic materials from a speaker's dominant SL gets imposed onto their non-dominant RL. This typically results in the imposition of grammatical and phonological structures, which are argued to be more resistant to transfer, and thus have the tendency to be retained in non-dominant speech. As an example, Winford (2005, p. 380) cites the study of Namser (1991, pp. 352–353) on German-speaking Austrian students using English as a non-dominant language. The speakers showed several instances of structural imposition, such as the imposition of German semantic patterns seen in the loan translation *ill-car* 'ambulance' (modeled after German *Krankenwagen*), as well as morphological imposition reflected in the plural form *dog-e* 'dogs' (using the German plural suffix).

Essentially, these two transfer types involve psycholinguistic processes and mechanisms (primarily *imitation* and *adaptation*) that drive the kinds of outcomes reflected in the individual's innovative use of the RL, either as sporadic loanwords (RL agentivity) or as "catastrophic modification" by means of systematic structural imposition (SL agentivity) (van Coetsem, 1988, pp. 20, 25). There are also cases, however rare, of symmetrical or balanced bilingualism, which is underpinned by a third transfer type, involving the *neutralization* of psycholinguistic constraints. Van Coetsem (1995, p. 81) argues that this allows for unconstrained language manipulation, and the kinds of contact outcomes that result from this are a matter of selecting which linguistic materials are transferred to the RL (as opposed to being constrained by the stability gradient of language). The selection process is argued to be determined by the social function of language, such as self-identification or communication. This aspect of language contact involving balanced bilingualism is left largely unexplored in van Coetsem's (2000) framework. Table 5 presents a brief summary of the transfer types and contact outcomes proposed by van Coetsem (2000).

Table 5: Language dominance, agentivity, and the transfer types based on van Coetsem (1988, 2000)

Language dominance			Agentivity	Transfer Type	Typical Outcome
ND SL	⇨	DOM RL	RL Agentivity	borrowing transfer	Borrowing of lexicon
DOM SL	⇨	ND RL	SL Agentivity	imposition transfer	Imposition of phonological/ morphological/ grammatical materials

2.2.2   ***The bilingual community***

Whether or not the innovations in individual-level bilingual language use scale up to the level of the community is argued to be a social process. Contact outcomes used by the community are argued to be structurally and socially embedded, and they constitute a deeper layer of change in the language.[15] One of the frameworks for analyzing community-level contact-induced change is Thomason and Kaufman (1988). They argue that the social context of the contact situation primarily shapes linguistic outcomes, and that linguistic constraints are merely secondary (Thomason & Kaufman, 1988, p. 35).

They make a broad distinction between *language maintenance* and *language shift,* which are respectively underpinned by the mechanisms of *borrowing interference* and *interference through shift*.[16] This binary distinction is argued to influence contact outcomes at the community level. In cases of language maintenance (borrowing interference), native speakers typically incorporate foreign features such as vocabulary into their language. In cases of language shift (interference through shift), a portion of the population consist of speakers who have learned the RL albeit imperfectly, with the 'errors' they made in learning the RL becoming incorporated into the language.

Another aspect of Thomason and Kaufman's (1988) framework is the notion of *intensity of social contact* as a variable relevant in both contexts of maintenance and shift. The social contexts that underlie intensity of contact are different in the two situations, where the length of social contact between the two groups and the level of bilingualism of the RL speakers are relevant for cases of language maintenance, whereas the size of the shifting group and their level of bilingualism are relevant for cases of language shift (Thomason & Kaufman, 1988, pp. 47–48). In terms of outcomes, intensity interacts with language-internal constraints, such as stability and typological compatibility. In language maintenance, the typical outcome is borrowing of vocabulary, as this domain is less stable compared to grammatical elements. In cases involving extensive bilingualism that persists over a long period of time, however, structural borrowing becomes more probable. In language shift, it is the stable aspects of language that tend to remain in the speech of the shifting population, which manifest as interference in the RL. This is typically seen in SL-influenced phonological or grammatical patterns in the RL, or even major typological restructuring in cases involving a large shifting population.

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[15] However, it is also possible that ongoing sociodemographic change can affect the linguistic repertoires of speakers within the community (cf. Arnal, 2011; Hendriks et al., 2018; King, 2000), thus reflecting population-level variation.

[16] These cases are categorized under *normal transmission.* Thomason and Kaufman (1988) make a separate category they label as *abnormal transmission,* which subsumes the formation of pidgins and creoles.

The two-way split between language maintenance and shift, while indeed useful in categorizing general contact outcomes, is inadequate in a scenario approach, which underscores the wide range of contexts possible for language contact. For instance, the mechanisms and outcomes that are said to apply in either case of maintenance and shift can be observed in a single community. This is acknowledged by Thomason and Kaufman (1988, p. 45), citing the case of Ethiopic Semitic reflecting the application of both types of interference at once. Speakers of Ethiopic Semitic have borrowed words and structural features from Cushitic, and at the same time, Cushitic speakers in the process of shifting to Ethiopic Semitic have incorporated features of their original language into it. Winford (2005, pp. 398–400) also critiques the binary distinction between maintenance and shift, citing the case of Anglo-Romani, which has been described both as an outcome of "actual language shift with maintenance of Romani vocabulary" (Thomason & Kaufman, 1988, p. 49), as well as a language that underwent "complete grammatical replacement" due to "extensive borrowing" (Thomason & Kaufman, 1988, p. 103). These conflicting descriptions reflect how either scenario can be invoked for the linguistic outcomes observable in Anglo-Romani.

Crucially, it is important to consider a wider range of factors and mechanisms to understand contact outcomes in a particular setting. For example, as discussed above, intensity of contact can have different impacts in cases of maintenance and shift. Psycholinguistic factors also need to be teased apart from socio-historical processes, as Winford (2005, p. 399) comments on the case of Anglo-Romani. Finally, the propagation of contact-induced change is argued to be driven by social mechanisms, which pertain to general processes such as patterns of speaker interaction (cf. J. Milroy & Milroy, 1985), as well as to those specific to bi-/multilingual communities, such as the social relationship of the groups in contact, as well as attitude and motivations for learning the language/s (cf. Winford, 2003, p. 2). Accounting for the interrelationship and interaction of these factors and mechanisms allows us to take our analysis beyond the binary distinction of language maintenance and shift, providing further nuance into our understanding of the nature of social contact, and through it, language contact, and the outcomes of change.

2.2.3   *Bridging the two aggregates of contact*

The contact outcomes that are motivated by agentivity and language dominance of individual bilingual speakers constitute the pool of innovative features that can lead to community-level language change. In terms of linking the aggregates of the individual and the community, the mechanisms from the two frameworks discussed in Section 2.2.1 and Section 2.2.2 can be brought together. Van Coetsem (1988, 2000) and Thomason and Kaufman (1988) both argue for the importance of language dominance and

agentivity in shaping contact outcomes, but at different levels of aggregation: the individual and the community respectively. Stapert (2013, p. 99) gives a schematic diagram that summarizes the interaction of the psycholinguistic and sociolinguistic mechanisms and their specific outcomes as modeled in van Coetsem (1988, 2000) and Thomason and Kaufman (1988), adapted in Table 6 below.

Table 6: Interaction between social setting, psycholinguistic mechanisms, and linguistic outcomes adapted from Stapert (2013, p. 99)

MAINTENANCE	ND SL	*Borrowing*	DOM	RL	
		⇨			
	ND RL	*Imposition*	DOM	SL	SHIFT
		⇦			

⇩

Preservation of stable elements (structure):

→ lexical change in maintenance situation

→ phonological and syntactic changes in shift situation

The diagram highlights the points of overlap across the two models. Community-level language maintenance in Thomason and Kaufman (1988) relates to borrowing transfer (RL agentivity) following van Coetsem (1988, 2000), which typically results in lexical change. Language shift as described by Thomason and Kaufman (1988), in contrast, relates to what van Coetsem (1988, 2000) describes as imposition transfer (SL agentivity), which results in phonological and syntactic change. It is important to emphasize that as the two models deal with different aggregates, individual-level mechanisms cannot be directly invoked for the whole community. For instance, community-level language shift is not always exclusively associated with imposition transfer, and similarly, imposition transfer does not always entail community-level language shift. Winford (2005, pp. 390–394) gives the case of Prince Edward Island (PEI) French described by King (2000) as an example. The ongoing community-level shift to English has led to differences in patterns of language dominance among individual speakers, which reflects the co-occurrence of both imposition and borrowing transfer in PEI French. Code-switching, which involves incorporation of English vocabulary into PEI French, is indicative of RL agentivity, while instances of structural change such as preposition stranding in PEI French modelled after English is argued to reflect imposition transfer.

A scenario approach to language contact, as outlined by Muysken (2010), adds to the models proposed by van Coetsem (1988, 2000) and Thomason and Kaufman (1988) by setting out the different levels of aggregation and how they relate to different perspectives in investigating language contact. However, there is still much to discover about how the different levels and perspectives are linked. Muysken (2010, p. 267) writes that the different levels need to be approached separately in order to ascertain whether or not the insights from the lower levels scale up to the higher levels of aggregation. In systematically accounting for contact outcomes and mechanisms, Muysken (2013) proposes an approach in linking findings across different perspectives through speaker optimization strategies.[17] However, there is still much to know about how change crosses from the level of the individual to the level of the community. That is, as van Coetsem (2000, p. 59) acknowledges, individual-level contact outcomes can be transient, as they tend to get lost as one's language dominance shifts. Moreover, contact outcomes tend to be more difficult to trace as one goes further back in time (van Coetsem, 2000, p. 276). Therefore, not all innovative features observed among bilingual individuals become widespread change in the community. Moreover, while Thomason and Kaufman (1988, p. 47) claim that population size determines the diffusion of change in cases of language shift, that is, a large number of non-dominant speakers vis-à-vis RL-dominant speakers, the motivation for RL-dominant speakers to adopt innovative features is still unclear. Similarly, prolonged extensive bilingualism in cases of language maintenance does not directly address how an innovative feature arises and becomes in widespread use by the community.

This question of transition is one of the problems of language change outlined in Weinreich, Labov, and Herzog (1968). How do we account for the transition of (contact-induced) change within the linguistic system, across speakers, and across different points in time? Evolutionary frameworks for language change such as Croft (2000) argue that change, including those that are contact-induced, begins with a pool of variants which undergoes selectional pressures, and "[change] is the shifts we see in the frequency of variants over time" (Bowern & Evans, 2015, p. 5).

We can distinguish two main stages in this process, namely *innovation* and *propagation*. The innovation stage of change concerns the creation of novel variants, whereas the propagation stage governs the population-level selection of a particular variant over others. Relating these stages to the aggregates of contact discussed earlier, innovation happens in the speech of bilingual individuals, and

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[17] The strategies identified are namely (1) maximizing structural coherence of the first language, (2) maximizing structural coherence of the second language, (3) matching L1 and L2 patterns, and (4) relying on universal principles of language processing.

this mainly concerns psycholinguistic mechanisms such as the notion of language dominance. Propagation concerns community-level language use, and in this stage, not only do bilingual psycholinguistic mechanisms apply, but social factors are argued to drive the diffusion of change. That is, the propagation of change is dependent on the specific setting and history of the community, wherein different sociolinguistic contexts may result in the structural convergence of languages, as in the cases of Kupwar, Maharashtra, India described by Gumperz and Wilson (1971) and some of the languages of Papua New Guinea described by Ross (2007), the maintenance of linguistic boundaries, as in the case of the Sui people of south-western China described by Stanford (2009), and lexical divergence described in northern Vanuatu languages by François (2011).

   One of the reasons why the transition problem of (contact-induced) language change remains an open question is the wide array of factors that are argued to shape change. As discussed in Section 2.1, there has been no consensus in the literature about how exactly these factors correlate with specific outcomes, and how much weight these factors carry in driving language change. While some scholars argue for an "anything goes" approach in language contact given the complex social aspect of the phenomenon, there are systematic ways in which we can investigate the transition problem. One such approach is through *path analysis*, which is a technique that takes several variables and assesses the strength of their interrelationships in order to determine the most likely pathway towards a specific outcome (Lleras, 2005). This is taken as an initial stage in building statistical models for a complex social phenomenon such as language contact. This technique is discussed in further detail in Section 8.2.

2.3   A scenario approach for language contact in Babuyan Claro

As the case study on Babuyan Claro aims to understand contact-induced change from innovation to propagation, it is ideal to take a holistic approach that brings together different perspectives in accounting for contact outcomes at different levels of aggregation, as in Muysken (2010). The frameworks discussed in the Section 2.2 are taken as templates against which the current data can be fitted and through which they can be interpreted. That is, patterns of individual-level language use are seen to reflect innovative features that comprise the topmost layer of contact outcomes in Ibatan, while those observed at the level of the community are argued to comprise a deeper layer of change. These different kinds of linguistic outcomes need to be teased apart in order to link them to specific contexts and scenarios (involving agents and mechanisms of change) that likely underpin them. Thus, the thesis is structured following this distinction. Community-level change is first discussed in Part 2, in order to tease apart widespread change from innovative features observed in individual-level

language use discussed in Part 3. Linking the factors and mechanisms in the two aggregates based on the models proposed by van Coetsem (1988, 2000) and Thomason and Kaufman (1988) is explored in Part 4.

A nuanced understanding of how the interaction of various mechanisms shapes linguistic outcomes by testing frameworks and models for language contact and change allows us to make certain predictions about the general pathways of language change. Additionally, it also serves as a good foundation for understanding the past of a community. One of the primary research aims of the thesis is to be able to reconstruct the social history of the Babuyan Claro community, primarily concerning population dynamics, language ecology, and patterns of speaker agentivity based on linguistic data. This follows the idea that the mechanisms that apply synchronically can be used to infer the kinds of mechanisms that have applied in the past, and this is known as the *Uniformitarian Principle* (UP).

Speaker-based models such as van Coetsem (2000) are within the scope of the UP because we can assume that the mechanisms governing human cognition have not changed. Arguing that there is a fundamental difference between child/preadolescent and adult language learning and use (cf. Kerswill, 1996) as demonstrated in several case studies from a wide variety of contexts such as Gurindji Kriol (McConvell & Meakins, 2005; Meakins, 2012), Light Warlpiri (O'Shannessy, 2008, 2012, 2020), Sheshatshiu (Clarke, 2009), and the English of Cantonese immigrants (Matthews & Yip, 2009), Ross (2013, p. 37) gives some generalizations that link typical linguistic outcomes with the life stages in which bilingual individuals learn and actively use their languages, summarized in Table 7.

Table 7: Typical outcomes associated with life-stage loci of change based on Ross (2013, p. 37)

Life stage of bilingualism		Typical outcome
Bilingually induced change in preadolescent children		Lexical calquing, especially on a large scale
		Lexically based grammatical calquing
		Syntactic restructuring
		Complication
Shift	Preadolescent children	Transfer of specialist vocabulary
	Adult	Phonological copying in the absence of other significant contact effects
		Constructional calquing in the absence of lexical calquing
		Perhaps simplification

While it is argued that these differences are mainly underpinned by differences in cognitive mechanisms involved in child and adult language processing, these psycholinguistic principles may not apply when looking at community-level language use as "multilingual speakers do not exist in a sociolinguistic vacuum" (Muysken, 2010, p. 267). In terms of population dynamics, Haugen (1950) and Thomason and Kaufman argue for the interaction of patterns of language dominance and population structure (that is, the proportion of dominant and non-dominant speakers) in driving the kinds of contact outcomes that are likely to occur. Other social factors, such as the nature of the social network and the social value attached to the languages in contact, are also important, and these factors and mechanisms mediate the propagation and embedding of linguistic innovations. Because of the complexities brought by social processes, a linguistic signal may not be readily attributed to a specific socio-historical scenario. Moreover, the linguistic features observable synchronically may constitute several layers of change in the language, which correspond to layers of socio-historical change in the community. This is seen in many cases of contact, in which distinct periods of social change led to different linguistic outcomes, such as in Reef Islands (Næss, 2020; Næss & Jenny, 2011), in Singapore Baba Malay (Lee, 2018), and in Dolgan (Stapert, 2013).

Therefore, a straightforward application of UP presents risks in reconstructing social and linguistic histories. Bergs (2012) reviews some traditional sociolinguistic variables namely social class, gender, and social networks to illustrate the limits of UP. He concludes that while the fundamental claims in sociolinguistics do seem to follow UP, that is, that language has always been variable in terms of the mentioned categories, how they applied across different communities vary greatly (Bergs, 2012, p. 96). Labov (1994, p. 23) likewise writes that many of the social concepts and models used to investigate particular linguistic phenomena, such as norms, standards, and prestige, may greatly differ across communities and across time periods. Finally, Trudgill (2020, p. 45) argues that "[i]f . . . social factors can have an influence on language structure, then the common faculty of the human mind will produce different types of language structure in different societies, in different places, at different moments in human history. And that will mean that the linguistic present might not altogether be like the linguistic past."

Taking these caveats in mind, the UP is still taken as a guiding principle in historical (socio)linguistics, in tandem with new methods and analytical tools, such as the ecology of language (Bergs, 2012, p. 96), and enriched by more context-dependent frameworks in studying linguistic phenomena such as language contact. For instance, while it is certainly complex to link linguistic signals with social settings

as discussed above, we know that the direction of language change is not random and in fact proceeds within an organized set of interacting mechanisms. Ross (2013, p. 194) writes:

> "We will not get very far in devising a methodology for diagnosing prehistoric language contact unless we are willing to start with some bold but clear generalizations, and then to proceed by making equally clear [generalizations] about the exceptions. Only in this way will we be able to relate patterns in the data back to the varying circumstances of contact-induced change."

A context-dependent approach towards the phenomenon of language contact and change allows us to make stronger links between mechanisms and outcomes. Through this, attempts at how to reconstruct the social past on the basis of linguistic outcomes have been made. One such work is Ross (2003), wherein he outlines the link between types of non-catastrophic contact-induced change (i.e. those that do not lead to language generation such as pidginization and creolization) and the structure of social networks, mainly based on current generalizations regarding language contact (Table 8).

Table 8: Types of language change and corresponding social network structure according to Ross (2003, p. 193)

Social network structure	Type of change
Closed (and tightknit)	Complexification, such as phonological compactness, morphological opacity, suppletion
Open, tightknit, polylectal	Lexical calquing and metatypy on the model of the secondary lect (which is the intergroup language)
Open, looseknit, polylectal	Language shift from the primary lect (the smaller, emblematic language of the community) to the secondary lect (the intergroup language); may lead to reshaping the phonology of the secondary lect on the model of the primary lect
Open, looseknit, monolectal	Simplification and regularity, which results from the speakers adopting the lingua-franca form of their lect

Acknowledging the social aspect of language use by accounting for the complex social factors that drive change thus allows us to make more nuanced reconstructions of the past (cf. Pakendorf, 2014). The field of historical sociolinguistics (or sociohistorical linguistics), which aims "to investigate and provide an account of the forms/uses in which variation may manifest itself in a given community over

time, and of how particular functions, uses and kinds of variation develop within particular languages, speech communities, social groups, networks and individuals" (Romaine, 1982, p. x) highlights the importance of reconstructions that are socially informed. There is thus the need for more case studies from a wide variety of contexts, particularly those from small-scale multilingual ones, in order to have a fuller understanding of the processes and mechanisms governing language change (cf. Stanford, 2016).

   This case study on Babuyan Claro that explores in detail the linguistic outcomes of contact between speakers of Ibatan and Ilokano and the mechanisms that have likely driven their emergence and propagation is hoped to contribute to building a stronger empirical foundation for the fields of language contact and change. A major challenge that the case study presents is the close genetic relationship and typological similarity between Ibatan and Ilokano. First, it can be problematic to ascertain whether a particular shared feature is the result of inheritance from their common ancestor language or the result of contact, or even a combination of both (Bowern, 2013, pp. 421–423; Pat-El, 2013, p. 315). Second, even in known cases of contact, it is sometimes difficult to measure the full extent in which the structure of a language has been affected by contact if the languages share significant structural similarities.[18] Despite these challenges, it has been shown that the methods of historical linguistics are robust in teasing apart inherited and contact features (Bowern, 2013; Harrison, 2003), as already demonstrated in the context of Philippine languages such as Blust (1992), Pallesen (1985), Reid (1994), and Zorc (1993). In addition, Ibatan and Ilokano are languages belonging to separate Philippine subgroups, with several linguistic features that distinguish them from each other (see Appendix A). These differences thus serve as diagnostic features that can be used to distinguish contact from inheritance. Another challenge for the case study is in terms of reconstructing the community's history, given Babuyan Claro's dynamic sociolinguistic landscape. While the community is a young one, with only 150 years of history, it has undergone several periods of social change (Section 3.2). This dynamic nature of the community, therefore, is likely reflected in Ibatan, the local language. Thus, it can be difficult to untangle the layers of language change that correspond to periods of social change. Fortunately, some aspects of the community's history have been documented (J. Maree, 2005; R. Maree, 1982), and these works, coupled with additional information on recent changes in Babuyan Claro, provide further context for the reconstruction. While the dynamic

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[18] This follows the claim that language contact tends to affect sets of structural features rather than isolated ones (cf. Seifart, 2012, 2017).

sociolinguistic landscape of Babuyan Claro presents a challenge, it is also an opportunity, in that we are able to witness language change in correspondence with social change as they unfold.

CHAPTER 3

LANDSCAPE

The sociolinguistic landscape of Babuyan Claro[19]

Introduction

"This is the story told by the first people. Long ago, so they say, there were entirely no people living on Babuyan Island. Those people who traveled by boat, traveled with great risk since they did not have motors in their boats. They depended instead on sails and on the wind to move the boat from one place to another. Unfortunately, the winds are unpredictable and many boats were driven off course by the strong winds. Some of these boats were stranded here on Babuyan Claro. There were boats from Batanes and some from the mainland. This is why today the language here is so mixed up. When the boats first came, there were only a few people, perhaps only thirty. Since that time the people have multiplied to the numbers we have here today."

[On the coming of the first Ibatans, told by Feliciano Derecho Rayuan in 1980, then section captain of Babuyan Claro, in R. Maree (1982, p. 37)]

Patterns of language use, both by the individual and the community, are deeply tied to the social, political, and cultural contexts of the community. This chapter presents the dynamic sociolinguistic setting of Babuyan Claro, in which periods of socio-political change in the history of the community are argued to correspond to layers of language change, not only in terms of patterns of multilingualism, but also in the features of the Ibatan language itself.

The narrative stance taken in this chapter is one that highlights the complex and dynamic sociolinguistic landscape of Babuyan Claro. That is, understanding social, cultural, and political changes in the community and how they are linked with evolving patterns of language use, and ultimately, the development of linguistic features in Ibatan, allows us to reconstruct a more detailed picture of the sociolinguistic history of the community (Chapter 9). Section 3.1 gives a brief description of the island of Babuyan Claro, detailing the conditions that fostered the emergence of the Ibatan community.

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[19] An earlier version of this chapter has been published as a journal article in Gallego (2020).

Section 3.2 presents the different phases in the history of the community, which continue to shape individual- and community-level patterns of multilingualism. This dynamic language ecology, particularly language use, ideologies, and experiences, which then contribute significantly to shaping language dominance, are discussed in Sections 3.3 and 3.4. Finally, Section 3.5 gives some concluding remarks.

3.1   The island of Babuyan Claro

The Babuyan and the Batanes group of islands, consisting of more than thirty islands, islets, and rocks scattered over two degrees of latitude, comprise the northernmost islands of the Philippines (R. Maree, 1982, p. 9) (Figure 1 in Chapter 1, repeated below). Until several decades ago, this region has been relatively isolated from the rest of the country, given the extreme difficulty in crossing the Babuyan and Balintang Channels. While the two regions are considered politically separate, with the Babuyan islands belonging to the province of Cagayan and the islands of Batanes belonging to the province of Batanes, the two regions share similarities not only in terms of physical environment, but also in terms of certain aspects of their cultural and social histories.

Figure 2: The location of Babuyan Claro

The island of Babuyan Claro belongs to the Babuyan group of islands along with Camiguin, Dalupri, Fuga, and the municipal center of Calayan. The etymology of the toponym *Babuyan* (used for both Babuyan Claro specifically as well as the whole region more broadly) is uncertain. Anecdotally, people claim that the word comes from the Filipino and Ilokano word *baboy* 'pig', with the derivation *babuy-an* meaning 'the place of the pig', or 'the island where pigs are raised'. However, the history of the toponym suggests otherwise. The most likely source is the Proto-Malayo-Polynesian word *buya 'look at, watch (as a performance)' (Blust & Trussel, 2020), reflected in Ilokano, Isneg, Bontok, Hanunoo *buya* and Ivatan and Itbayaten *vuya*. Alonso (1966, pp. 85–87) suggests that *Babuyan* is a mispronunciation of the derived form *ma-buya* 'to see, view, visible', which R. Maree (1982, pp. 16–17) argues is likely, given the visibility of Babuyan Claro's most prominent volcano (at about 3,800 feet above sea level) from any point in the archipelago. Babuyan Claro is also locally known as *Kurug,* or *Kurug a Babuyan.* The etymology of *Kurug* is likewise unclear, as it is neither a Batanic nor an Ilokano word. Ibanag, another language spoken in the Cagayan region, offers a clue to its source, reflecting the word *kurug* 'true' (M. O. P. Fernandez, 1867). *Kurug a Babuyan* has also been translated in older Spanish documents as *Verdadero Babuyan* 'true Babuyan', which is in line with the current official name of Babuyan Claro, where *claro* is Spanish for 'clear' (Alonso, 1966, p. 86).[20]

In terms of topography, Babuyan Claro is a small island with a rugged terrain, and there is thus a general lack of arable land and exploitable natural resources (R. Maree, 1982, p. 9). It has two prominent volcanoes, Mt. Babuyan, locally known as *Pokis* which either means 'baldy' in Ilokano, or a 'type of plant' in Ivatan, and Mt. Pangasun, which is locally known as *Chinteb a Wasay* 'cut of the axe'. Major volcanic activity on the island has been reported at least three times since 1919 (R. Maree, 1982, p. 28). In terms of subsistence, while agriculture is the primary livelihood for the Ibatans at present, it is made difficult by the poor soil quality as well as the long monsoon season *ammyan*, from around September to February, when cyclonic winds can reach more than 240 kilometers per hour (R. Maree, 1982, p. 11). Fishing is an alternative livelihood, but like farming, this is only ideal during the dry season *rayon*. These conditions on the island then mean that the community can only produce enough resources to support its own local needs. Moreover, in times of natural calamities, which bring periods of food shortages and sickness, the community receives little to no external support, leaving people vulnerable and needing to recover by themselves. Babuyan Claro's rugged coastline, with massive cliffs

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[20] In addition, the name of Babuyan Claro is juxtaposed with the other name for the neighboring Fuga Island, which has been called *Babuyan Chico* 'little Babuyan'.

and few natural harbors, has contributed to the isolation of the community. Even at present, mobile and telephone communication within and outside of Babuyan Claro remain immensely limited, and while fishing boats have begun to travel to and from the island more and more frequently, the absence of commercial transport as well as the rough current that runs along Babuyan Channel makes travel difficult, especially during the long monsoon season.

The first families of the community, who came to Babuyan Claro in the late 1800s, had to adapt to the tough conditions on the island. It was also this relative isolation of the region that allowed for a distinct Ibatan culture and language to develop. The harsh environment of Babuyan Claro meant that the first families had to rely on each other to survive. At present, the Ibatans have continued to practice *mayyoho*, or now more popularly known as *mangawis*, which roughly translates as 'reciprocal work' or 'helping each other in a formal way'. Moreover, *bonggoy*, or cooperative work groups, are often contracted to help with different kinds of work, such as agriculture and construction. It is this social setting that has facilitated contact-induced language change in Ibatan.

3.2   The history of the Babuyan Claro community[21]

Archaeological and historical evidence show that there was an earlier settlement on Babuyan Claro, but it was completely depopulated in the 1600s mainly because of the eruption of *Chinteb a Wasay*, along with the policy of *reducción*, or the resettlement of populations into towns and plazas during the Spanish colonial period (de Salazar, 1742, p. 519; Malumbres, 1918). The Batanes islands underwent similar relocations starting in 1718 until 1867 (Alonso, 1966; R. Maree, 1982, pp. xvi–xvii), wherein the Ivatan and Itbayaten people were moved to the islands of Fuga and Calayan, as well as mainland Luzon (J. Maree, 2005; R. Maree, 1982). During this time, it is likely that the relocated Batanic populations had considerable interaction with Ilokano speakers in the region, leading to bilingualism. The following sub-sections detail the history of the Babuyan Claro community as the first families, initially relocated to the Babuyan islands from Batanes, arrived and settled on Babuyan Claro.

3.2.1   *The founding families of Babuyan Claro*

It was around 1869 that the first Ibatans came to Babuyan Claro. This five-person group from Calayan and Camiguin, headed by Alvaro Alcantara and Maria Seriaco, both of Batanic ancestry, and accompanied by Ilokanos Fidel Nolasco, Mauricio Lagata, and Marcelino Lagata,[22] were shipwrecked

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[21] This is discussed in further detail in Chapter 9.

[22] Alvaro Alcantara and Maria Seriaco were originally from Sabtang and Itbayat islands of Batanes, and they were relocated

on Babuyan Claro in their attempt to go back to Batanes. Not long after, two more groups, again coming from Calayan but this time tracing their ancestry to Ilokano-speaking families from mainland Luzon, arrived on the island. For the next 50 years or so, Babuyan Claro witnessed arrivals of small groups of people from Batanic- and Ilokano-speaking backgrounds, detailed in Table 9.

Table 9: The founding families of Babuyan Claro (J. Maree, 2005; R. Maree, 1982)

Year	Immediate Source	Background	Names
1600s		Uncertain ethnolinguistic background	Original settlers of Babuyan Claro relocated to neighboring Babuyan islands and mainland Luzon following *reducción*[23]
1869	Calayan and Camiguin	Ivatan, Itbayaten, Ilokano	Alvaro Alcantara, Maria Seriaco, Fidel Nolasco, Mauricio Lagata, Marcelino Lagata
1870	Calayan	Ilokano	Giyang Dican, Maria Elvinia
1887	Calayan	Ilokano	Jose Tomas, Anastacia Tomas, Salvador Tomas
1893	Calayan	Ivatan	Mariano Derecho, Antonio Nolasco
1903	Camiguin	Ilokano	Antonio Tugade
1904	Camiguin	Ilokano	Lucresia Simon, Susanna Simon,[24] Victoria Viloria, Domingo Viloria
1918	Calayan	Ilokano	Bernandino Rosales

Since the arrival of the first families on the island in the late 1800s, the population on Babuyan Claro maintained a steady increase. Based on census reports and genealogical reconstruction by R. Maree

to the Babuyan islands following the policy of *reducción.*

[23] It is important to note that the present-day Ibatans are not (directly) descended from this original population on Babuyan Claro. See Footnote 24 regarding the possible history of the population.

[24] Susanna Simon, who was an Ilokano from the island of Camiguin, apparently spoke Ibatan and knew the pre-Hispanic history of Babuyan Claro. Antonio Tugade, who was also from Camiguin, seemed to have known and spoken Ibatan as well, as he was hired by US government officials to translate for them during their census on the island from 1903 to 1905. It is uncertain how both of them knew Ibatan, but J. Maree (2005, p. xxii) argues that perhaps Susanna Simon's ancestors were linked to the pre-Hispanic population on Babuyan Claro reported in the 1600s. It is difficult to validate this claim at this point, but further research on archaeology and genetics may shed some light regarding this early Babuyan Claro community.

(1982, p. 20) as well as updated genealogical records from J. Maree (2005), Table 10 presents the population of Babuyan Claro from 1860s to 1980.

Table 10: Population census from 1860s to 1980 (J. Maree, 2005; R. Maree, 1982)

Year	Population	Year	Population	Year	Population
1869	5	1900	49	1975	472
1870	7	1910	68	1980	612
1880	17	1920	103		
1890	29	1930	162		

It is apparent from genealogical and historical records that the Babuyan Claro community is an outcome of the coming together of families from either Batanic- or Ilokano-speaking ancestry. However, ethnographic and genealogical records suggest that the first two generations also kept ethnolinguistic lines distinct, in that there has been a preference for marrying within one's own deme, which are local kin groups that are related to one another through intermarriage and are bound by common residence and consanguinity (Murdock, 1949, p. 62). This entails linguistic endogamy, or marrying within one's own linguistic group.[25] There was also a general rule against marrying someone within the settlement area. Marriage practices among the Ibatans had more to do with finding marriageable partners outside one's settlement, and not much with establishing alliances between families (R. Maree, 1982, p. 92). It was only when there was a lack of marriageable women that the men were forced to marry outside their demes (R. Maree, 1982, pp. 51–52). In terms of residence, the ideal settlement pattern on the island was matrilocal, where the husband goes to live with his wife's matri-deme (R. Maree, 1982, p. 59).[26] However, as inheritance is bilateral, where both male and female offspring have equal rights to their parents' land, the man retains access to his own family area (R. Maree, 1982, pp. 52–53). While the greatest density of settlements is located on the southern slopes of *Chinteb a Wasay,* there was no central residential area until the late 1980s, rather, settlements were dispersed across the whole island (R. Maree, 1982, p. 63).

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[25] This is in contrast with linguistic exogamy reported by Epps (2012, 2018) in the Amazon among other cases.

[26] R. Maree (1982) uses the tern *uxorilocal,* which disassociates residence from genealogical ties, as the Babuyan Claro community follows a bilateral line of descent. Moreover, the matrilocal rule of residence in the community is not strictly enforced, as 40% of marriages are found to be patrilocal.

All in all, ethnographic evidence suggests that the first few generations of families on Babuyan Claro generally kept to their own ethnolinguistic lines via linguistic endogamy, hence also keeping linguistic distinctions across demes. Land ownership (including the use of swidden fields for agriculture) was kept within one's family, and settlements were scattered across the island. Social alliances in the community were established based on ethnolinguistic factors (R. Maree, 1982, p. 92), primarily one's descent from either Ibatan- or Ilokano-speaking family. These community norms reflect the ideological preference in maintaining the boundaries between Ibatan and Ilokano. This then facilitated the maintenance of both Ibatan and Ilokano in the community. That is, despite the Ibatan families being outnumbered by Ilokano families (Table 9), they have maintained the use of Ibatan instead of shifting to Ilokano, driven by this ideological motivation.

However, there were also important instances of marrying outside one's linguistic group. Beyond going against the norm of linguistic endogamy, these intermarriages have resulted in co-existing linguistic groups within a settlement. An example is the Tomas family of Ilokano origin who arrived from Calayan in 1887. Jose and Salvador Tomas married into the Ibatan-speaking Alcantara family, but for the following generations, the Tomas men married into other Ilokano-speaking families even as they continued to reside in Alcantara territory (R. Maree, 1982, p. 52). These cases of intermarriage, while not the norm during this time, established and maintained bilingualism within the family, and forged connections across Ibatan- and Ilokano-speaking networks.

It is this setting that must have favored the emergence and maintenance of the Ibatan language during these initial decades. That is, it can be argued that the Ibatan language developed amidst an ecology characterized by egalitarian multilingualism, which involved little village-internal hierarchy, where groups existed in mutual respect and little to no dominance or prestige of one group over the others (cf. François, 2012, p. 93). This is typical in many small-scale societies, with children growing up bi-/multilingual instead of shifting to a bigger (or socially dominant) language (Ross, 2013, p. 28).

3.2.2 *The laod and daya clusters*

The general preference in the early years of the Babuyan Claro community to keep ethnolinguistic lines separate is reflected in how residential settlements have developed. While settlements on Babuyan Claro are scattered across the whole island, the greatest density is found in the southern slope of *Chinteb a Wasay,* along Idi to Rakwaksong from west to east. This concentration of settlements forms the basis of the geographic regions *laod* 'west' and *daya* 'east', where *laod* refers to the *sitios* 'hamlets' of Kadinakan, Idi, Barit, and Kasakay (circled in Figure 3), whereas *daya*, while technically referring to the *sitios* east of *laod,* has come to refer to all other sitios outside *laod*, also including settlements

along the slopes of *Pokis* on the western part of the island.[27] The map of Babuyan Claro detailing these key areas is shown in Figure 3.

Figure 3: Some *sitios* 'hamlets' in Babuyan Claro

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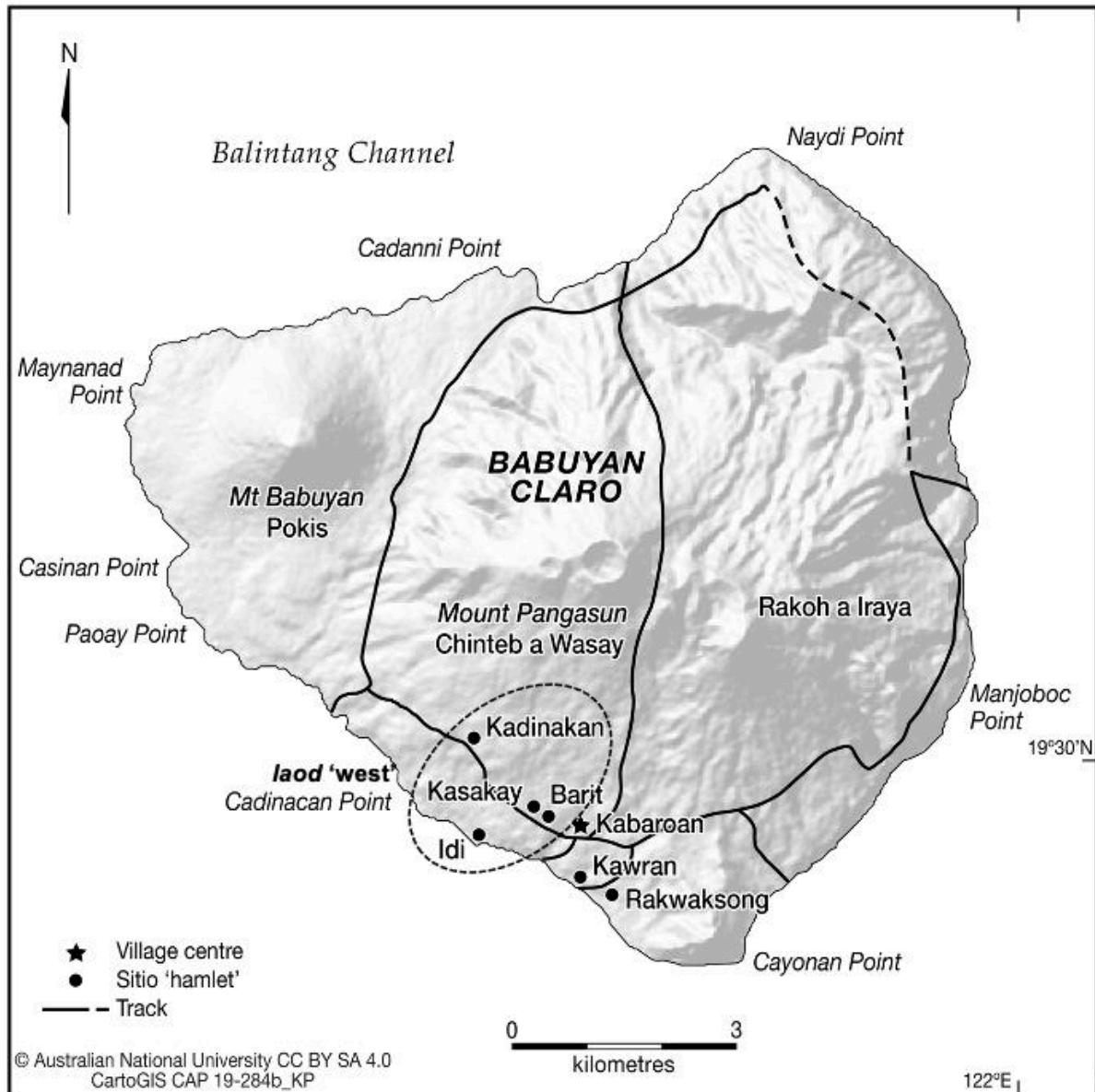
[27] The terms *laod* 'west' and *daya* 'east' are loanwords from Ilokano, which are used as cardinal directions in Ibatan. In addition, the native words *idawod* 'offshore, the area out to sea, away from the shore' and *iraya* 'seashore (in reference to someone or something offshore moving towards the shore)' (J. Maree et al., 2012) are also used in Ibatan, which are cognates of *laod* and *daya* respectively. These forms are ultimately descended from PAN *lahud 'downstream, toward the sea' and *daya 'upriver, toward the interior' (Blust & Trussel, 2020), which are commonly used as directional terms in Austronesian and Philippine languages (Adelaar, 1997; Blust, 1997; Gallego, 2018, pp. 70–77).

The distance between *laod* and *daya* is only a kilometer or so, and it would only take a couple of minutes' walk to get from the *sitios* of Idi, Barit, and Kasakay (in *laod*) to Rakwaksong (the center of Babuyan Claro, located in *daya*). Thus, people from *laod* are able to travel daily to Kabaroan and Rakwaksong in *daya*, which are the *sitios* where the stores, the rural health unit, and the school are all located. However, despite the short distance between *laod* and *daya*, there exists an apparent social division between the two regions, based primarily on the nature of the residential settlements, and this is reflected in clusters of social interaction of differing strength and intensity, which coincide with individual speakers' language ideology and use. Small but significant clusters of speakers residing in *laod,* consisting mostly of mixed Ibatan–Ilokano families, show greater affinity towards Ilokano as their everyday language, whereas families situated in *daya* show greater affinity towards Ibatan. The divide between the two regions, and hence the clusters within the social network that form around them, is particularly prominent in that the speakers have identified differences in language use based on these clusters, where those from *laod* show mixing in their use of Ibatan and Ilokano, while those from *daya* generally keep the two languages (synchronically) separate, as they claim to speak "pure" Ibatan (Section 3.3).

3.2.3   *The rise of Ilokano*

The divide between *laod* and *daya* has developed because of the preference in the first two generations of families in Babuyan Claro to keep ethnolinguistic lines separate. However, because of the chronic shortage of marriageable men and women (because of incest taboos and the small population of the community), there were increasing instances of intermarriage in the third and succeeding generations of families, leading to the dissolution of linguistic endogamy which was the norm in the early years of Babuyan Claro. By this time, a distinct Ibatan identity has developed, which is the result of the people's mixed Batanic and Ilokano ancestry. The Ibatan identity associated with the people's residence and ties to Babuyan Claro is juxtaposed with the increasing dominance of Ilokano in the wider region of the Babuyan islands and northern Luzon. While egalitarian multilingualism resulted in the emergence of the Ibatan language and its co-existence with Ilokano during Babuyan Claro's initial years, the integration of the community within the wider administrative region of Calayan has led to the shift in the nature of multilingualism to a hierarchical one. That is, Ibatan became the language largely used in the home and the immediate community, while Ilokano became the language used in the more public domains of religion, education, and other official institutions.

In the 1970s, the center of community activities was in the *laod* region, which is where most Ilokano-speaking families reside. The Catholic church and cemetery were built in the *sitio* of Idi, effectively making it the village center. During this period, most of the population were Roman Catholics, and religious services and activities were mostly conducted in the Ilokano language. Before the 1990s, teachers on Babuyan Claro were Ilokano immigrants, and so instruction was done in Ilokano, and to a limited extent, Filipino. The only school on the island did not go further than Grade 3 during the 1980s, and then up to Grade 6 until 2004. Thus, students needed to continue their schooling in the municipal center of Calayan, which is about a five-hour boat ride from Babuyan Claro. Because of the difficulty in transportation, the students would have to stay in Calayan for most of their years of schooling, only returning to Babuyan Claro occasionally. Calayan, as mentioned, is the municipal center of the Babuyan group of islands. Aside from schooling, the people of Babuyan Claro would have to go to Calayan if they needed to conduct official business with the municipal government, such as paying taxes and filing and requesting official documents. In Calayan, the Ibatan people mostly use Ilokano, with the Ibatan language only used with fellow Ibatans. With Ibatan comprising the minority group in the region, coupled with the prominent status of the Ilokanos on Babuyan Claro and beyond, the vitality of the Ibatan language was severely threatened during this period.

3.2.4   *The revitalization of Ibatan*

Changes in religion, education, political status, and overall geographic mobility in Babuyan Claro have led to the empowerment and more vigorous use of Ibatan beginning in the 1980s, with the arrival of the Summer Institute of Linguistics (SIL) (Quakenbush, 2007, pp. 54–55). Rundell and Judith Maree of SIL came to Babuyan Claro in 1978 to study and document Ibatan for the main purpose of bible translation. They were helped by a small group of Ibatan speakers, one of whom is Lucio Ramos. Because of his experience with SIL, he became the first Ibatan to convert to Protestantism. During this time, he was living with his wife's family in Rakwaksong, located in *daya,* and he initiated the construction of a Protestant Church, which was later transferred to Kabaroan, likewise located in *daya.* At present, most of the community go to this Protestant Church in Kabaroan, with religious activities, including the church service itself and bible fellowships, typically done in the Ibatan language.[28] Catholics, who are now the minority on Babuyan Claro, mostly consist of families who reside in *laod,*

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[28] Ilokano is still used occasionally, and this depends on who the speaker is during the religious service. When asked why they use Ilokano instead of Ibatan, they would say that this is in consideration of Ilokano immigrants present during the service, especially those who are not yet familiar with the Ibatan language.

in addition to more recent Ilokano immigrants, and their religious activities continue to be conducted in the Ilokano language.

In addition to the Protestant Church, a rural health unit as well as the first water supply on the island were likewise constructed in Kabaroan. With these facilities, in addition to the school and the first store on Babuyan Claro, and more recently the *barangay* 'village' hall, all located in Kabaroan, the center of community activities has been effectively transferred from *laod* to *daya.* According to R. Maree (personal communication), the choice of Kabaroan was intentional: "If [the] Ibatan [language] was going to survive, we had to give the area in which [the] Ibatan [people] lived some greater prominence." It was this greater prominence of the *daya* region, along with other socio-political changes, that triggered another change in the language ecology of Babuyan Claro, specifically the greater use of Ibatan.

Reading proficiency in Ibatan was boosted with the production and publication of Ibatan books, readers, and even a newspaper. In 1996, the publication of the Ibatan translation of the New Testament of the Bible encouraged more Ibatan people to read in their language, and many of them have come to prefer reading the Ibatan translation rather than the Ilokano or Filipino one. In 2004, the local school on Babuyan Claro was expanded to include high school, and in 2016, started to offer the additional years of senior high school. Thus, the students can now opt to stay in Babuyan Claro for the duration of their primary and secondary education. Moreover, the mandatory use of the mother tongue as the medium of instruction from Kindergarten up to Grade 3 means that students start their schooling in Ibatan. However, logistical problems still limit the use of the Ibatan language in school. The Department of Education has not yet developed textbooks in the Ibatan language, and so students still need to use materials written in Ilokano. There are also limited teaching positions for local Ibatan teachers, with the majority of the teachers still Ilokano-speaking immigrants, and with varying proficiencies in Ibatan. Thus, while the local school tries to implement the use of the Ibatan language in the relevant levels, the medium of instruction ultimately depends on the individual class teachers. Beyond Grade 3, Filipino and English are officially mandated as the medium of instruction, but actual language use still varies, especially when the situation requires it, with the teacher sometimes switching to either Ilokano or Ibatan to supplement instruction. In general, recent educational reforms have led to less exposure to Ilokano, with the introduction of Ibatan as the medium of instruction in the early years of schooling, but more importantly, because the Ibatans do not have to go to Calayan for further education during their formative years. This then means that the younger generations of Ibatans do not undergo the same kinds of experiences the older generations went through, such as

getting discriminated against based on their language and ethnicity. Those who continue to university in mainland Luzon do not report significant issues arising from their minority status. This is because regional centers such as Tuguegarao, Cagayan, where many of the Ibatan people go for university, are also ethnolinguistically diverse, and so more tolerant of linguistic differences.

The Ibatan people are now officially recognized by the state as a distinct ethnolinguistic group, with their Certificate of Ancestral Domain Title awarded on 1 June 2007 (CADT Number R02-CAL-1206056) (National Commission on Indigenous Peoples, in Padilla (2012)). This recognition then grants them exclusive rights to natural resources on Babuyan Claro and five kilometers of the surrounding ocean. This was done through the *Indigenous Peoples Rights Act* of 1997, with the help of the National Commission on Indigenous Peoples of the Philippines (Ebarhard et al., 2021). Processing this recognition required the Ibatan people to officialize their indigenous political structure through the formation of *Kakpekpeh no Mangalkem* (KAKMA), which serves as a council of elders or leaders of the community, and its official organization *Ibatan CADT Holders' Organization* (ICHO), which serves as the community's legal body. They are led by the *Apong Malkem*, presently Cruzaldo Rosales, who serves as the chieftain of the Ibatan people. This indigenous political structure exists alongside the governmental administrative division of the *barangay* 'village'. Thus, along with KAKMA, the community is also led by the *barangay* council, headed by a chairperson, presently Analiza Nuñez. Both types of leadership and authority are recognized in Babuyan Claro, with KAKMA dealing with traditional and internal issues that concern the Ibatan community, and the *barangay* council dealing with matters relating to the larger administrative levels of governance, such as with Calayan at the municipal level, and Cagayan at the provincial level. With the awarding of their ancestral domain title and the official recognition of the Ibatan indigenous political structures, we see the empowerment of the Ibatan people, particularly in exercising their rights to their land and sea, and all this ultimately has contributed to the revitalization of the Ibatan language.

3.2.5   *Further integration of Babuyan Claro*

Increased geographic mobility has connected the Ibatan to the rest of the Philippines. Trips from Babuyan Claro to both Batanes and mainland Luzon have become more frequent (albeit via fishing boats, as no commercial vessels travel to and from the island), and this has enabled the people of Babuyan Claro to expand their social networks and to become more integrated within the nation state. There is increased participation by the Ibatan people in the national scene, such as in national conferences and activities organized by the Philippine government. In addition, more and more students are choosing to continue their schooling in either Tuguegarao in the province of Cagayan in

mainland Luzon, or in the town of Basco in Batanes, which entails greater exposure to either Filipino or Ivatan. The more frequent social contact with the Ivatans of Batanes, specifically, has increased the Ibatan people's awareness of their Batanic ancestry, not only driven by the Ibatan's genealogical knowledge, but also through the mutual intelligibility between Ibatan and Ivatan.[29] Technological improvements on the island have also enabled the people to gain more access to broadcast and social media. More families are getting access to satellite television, and the younger generations are becoming more actively engaged in social media through the establishment of satellite internet on Babuyan Claro in 2018.

These socio-political changes are driving an ongoing change in the language ecology of the community. As mentioned, the Ibatan people are becoming less exposed to Ilokano, compared to the past. This is not to say that the presence of the Ilokano language has weakened in the community; Ilokano is still a strong second language for a majority of the Ibatan people and it remains the lingua franca for the region. However, the Ibatan people no longer have to do their schooling in Calayan, which has significantly changed the language and social experience of the younger generations, and this has ultimately contributed to changes in their language ideologies (Section 3.4). This, along with the further integration of the Ibatan community into the nation state, has allowed for an expansion in the linguistic repertoire of the speakers. Compared to the older generations, the younger generation of Ibatans report greater proficiency in Filipino, with some preferring to use it over Ilokano. This is sometimes reflected in instances of receptive multilingualism (cf. Singer, 2018), where an Ibatan would respond to an Ilokano speaker in Filipino (if not in Ibatan) rather than in Ilokano, and this is quite prominent in their language choice on social media.[30]

To sum up, it is apparent that periods of socio-political change correspond to changes in the language ecology of Babuyan Claro, that is, individual- and community-level patterns of language use (Section 3.3). However, it is important to emphasize that these periods in the history of Babuyan Claro

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[29] The attitude of the Ivatans of Batanes towards the Ibatans is vastly different. The Ivatans regard the Ibatans of Babuyan Claro as *ipula*, which is a term used to refer to Filipinos who are not Ivatan. This is despite the languages of the two groups being very closely related, as evidenced by their names. To contrast, the Ivatans treat the Itbayatens of Itbayat Island as fellow Ivatan. This difference is possibly because of the long-standing contact between the Ivatans and the Itbayatens, whereas (resumed) contact with the Ibatans has only been fairly recent. (This is based on personal communication with Edwin Valientes, a speaker of Ivatan, who is an anthropologist working on the ethno-archaeology of Batanes.)

[30] Some speakers, when asked, say that they prefer to use Filipino instead of Ilokano when talking to an Ilokano speaker as Filipino is a more "neutral" language, that is, neither of the interlocutors are native speakers, placing them on equal footing.

are by no means discrete, in that these phases still in fact overlap. That is, the *laod* and *daya* divide is still a salient feature of the community, Ilokano maintains its strong presence in the region, the ongoing integration of Babuyan Claro into the larger Philippine nation entails an increasing influence of Filipino among the younger generations, and finally, all these are in tension with how the people develop their views on the Ibatan identity.

3.3   **Patterns of multilingualism**

Multilingualism has been the norm in Babuyan Claro since the early years of the community, and at present, it is impossible to find a monolingual speaker on the island. Ibatan, Ilokano, and Filipino are the languages shared by all, but the speakers have varying degrees of dominance in each language, and this depends on their personal histories and experiences. Moreover, some individuals have larger linguistic repertoires, which include Ivatan and Itbayaten of Batanes, other Philippine languages, and English. Filipino and English are learned formally in school, while Ivatan and Itbayaten are learned if the person spends some time in Batanes.[31] Finally, other Philippine languages are learned either from an immigrant parent or outside Babuyan Claro.

A person's degree of dominance in each of their languages depends on the ways they learn and use them (cf. Treffers-Daller, 2016, 2019) (see Chapter 6). Language ideologies also play an important role in shaping patterns of language use, and consequently, language dominance, especially in multilingual contexts (Hendery, 2012; Woolard & Schieffelin, 1994, p. 60). In Babuyan Claro, its dynamic socio-political landscape has an influence not only on the language ecology of the community (Section 3.2), but also on patterns of language dominance among individual speakers. These dynamics of multilingualism are best understood in terms of the individual's family history. Generally, Babuyan Claro is comprised of families who are:

- **Pure Ibatan families** descending from the founding families who came to the island in the period between 1869 to 1920s (Section 3.2.1);
- *Ibakano* **families**, or mixed Ibatan–Ilokano families, who have lived on Babuyan Claro for several generations (Section 3.2.2); and
- **Recent Ilokano immigrants**, who have married into Ibatan families.

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[31] Individuals who know Ivatan and Itbayaten have spent time in Batanes for higher education, and they claim it was easy for them to pick up the languages because of their close similarities with Ibatan.

Admittedly, more sophisticated labels can be used to accurately capture differences in language experiences and use across the three broad categories, but I have opted to use these terms based on how the people of Babuyan Claro describe and label themselves. These labels are thus ideologically laden and are descriptive of how the speakers use and view the languages in their repertoire. These are discussed in the following sub-sections.

3.3.1   *Pure Ibatan families*

Individuals who identify as "pure" Ibatans descend from the founding families of Babuyan Claro. While the founding families are distinguished based on their ancestry to either Batanic- or Ilokano-speaking families (Section 3.2.1), this sharp distinction only applied during the first two generations of the community. Increasing instances of intermarriage in the succeeding generations have resulted in the development of a distinct Ibatan identity. To illustrate, R. Maree (1982, p. 43) writes that the Ramos family, the youngest of the founding families who came to Babuyan Claro from the Ilokano-speaking Camiguin island in 1945, identifies as Ibatan, choosing to "marry and raise their families as [Ibatan]" while at the same time acknowledging their Ilokano ancestry.[32]

Pure Ibatan families mostly reside in the *daya* region of Babuyan Claro, such as the *sitio* 'hamlet' of Kabaroan, which is the village center. *Daya* is thus associated with people speaking "pure" Ibatan, in contrast to *laod* which is known for families who (synchronically) mix Ibatan and Ilokano. This is evidenced in interviews among speakers, such as (5) and (6).

(5) Gallego (ongoing): IVB1-20180801_01_02

     KG   If I were to learn Ibatan, which place should I go to learn it?[33]

     DR   Here in our place.

     KG   Where is that?

     DR   Here.

     KG   Kabaroan?

     DR   Yes. There's a lot of Ibatan here.

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[32] Originally, the Ramos family came from the town of Claveria in mainland northern Luzon, but they moved to Calayan island, and then to Camiguin, before finally settling on Babuyan Claro. The succeeding generations of the Ramos family have maintained bilingualism in Ibatan and Ilokano, but they maintain connections with their heritage community in Calayan (R. Maree, 1982, p. 43)

[33] The interviews were conducted in Filipino, and the transcripts presented here have been translated to English.

(6) Gallego (ongoing): IVB1-20180823_08_01

    KG   People say that there is a difference in the speech of *daya* and *laod.*

    SC   That's because in *daya,* it's mostly pure Ibatan.

    ND   Yes, Ibatan.

    SC   And in *laod,* there's already a mix.

    ND   There's a mix of *Ibakano,* oh, *Ilokano.*

In terms of language acquisition and use, individuals who come from pure Ibatan families acquire both Ibatan and Ilokano in childhood from their families and immediate community. They use Ibatan in most of their everyday communication, and only use Ilokano in marked contexts, for instance when joking or upset. Accounting for Filipino, moreover, adds further variation among individuals, where some prefer using Filipino over Ilokano in speaking and reading,[34] while others still prefer the use of Ilokano. Finally, in terms of cultural heritage and identification, these individuals categorically identify themselves as "pure" Ibatan. This is illustrated in Figure 4, taken from the language profile interview with SR. She is an Ibatan who resides in Kabaroan, and when asked to color the figure the way she sees herself in terms of ethnicity, she colored the figure solid red, representing how she considers herself pure Ibatan.[35]

Figure 4: Representing ethnic identification by SR

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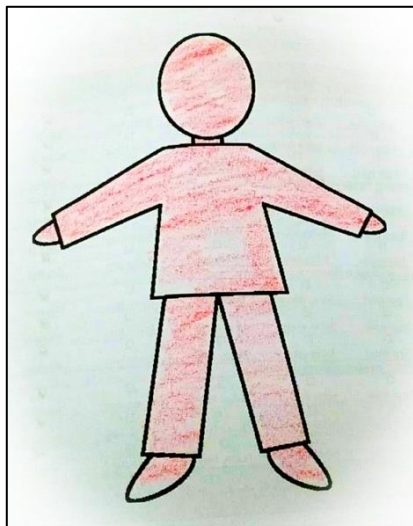
[34] This is most salient in the domain of reading, as people are generally more exposed to reading in Filipino because of schooling.

[35] This elicitation method roughly follows Singer's (2018) language portraits.

3.3.2   *Ibakano families*

The term *Ibakano* is a blend of Ibatan and Ilokano, which is used to refer to individuals who come from mixed Ibatan and Ilokano families. While the early history of the Babuyan Claro community involves a similar scenario of intermarriage between the two ethnolinguistic groups, this is considered a deeper layer in the history of the community, which crystallized as a distinct Ibatan identity. The mixed marriages associated with *Ibakanos,* in comparison, are relatively more recent. Having been on Babuyan Claro for several generations,[36] these families have come to comprise a discrete cluster within the larger social network, known by their distinctive language use characterized by code-switching between Ibatan and Ilokano, typically with Ilokano as the matrix language, illustrated in (7).[37]

(7) Ilokano–Ibatan code-switching (Gallego (ongoing): IVB1-20180830_04, 283-286

      a.   ILO   *Inserrek da man diay kwarto nga napan da nangcheck-upan*

                         kanianan ngem

                         'They put (him) in the room where he was checked up but…'

      b.   IVB   *naw na nga* **may-tay~tagadan***.*

                         '(his mouth) just remained slack.'

    Ibakanos are mostly associated with the *laod* region, primarily the *sitios* 'hamlets' of Barit and Kasakay, as the most prominent *Ibakano* families, such as the Mapolon family, reside there. Similar to the *daya* speakers, they have acquired both Ibatan and Ilokano in childhood, but in contrast, they prefer the use of Ilokano as their everyday language, albeit one that is mixed with Ibatan features. This is described by XX3 in (8).

(8) Gallego (ongoing): IVB1-20180811_03_01

     XX3   In Kasakay, there are some (*Ibakanos*), but not all. There is one family there that mixes Ilokano and Ibatan.

     KG   Do you sometimes talk to them?

     XX3   Yes ma'am.

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[36] This distinguishes them from more recent Ilokano immigrants who have arrived on the island in the past decade or so.

[37] I asked some Ilokano speakers who don't know Ibatan to listen to the particular *Ibakano* recording in (7) and they were able to translate the content accurately, except for the part where the speaker switched to Ibatan.

KG   When they talk to you, do they use Ibatan?

XX3   Sometimes they use Ilokano.

KG   And when they speak Ibatan, they mix it with Ilokano?

XX3   When they talk among themselves, that's when they mix.

KG   But when they use Ibatan with you, they don't?

XX3   They use Ibatan without mixing.

KG   And when they talk among themselves…

XX3   That's when they mix Ilokano with their Ibatan. They don't speak pure Ibatan anymore.

Many of those who claim to speak "pure" Ibatan describe such mixing by *Ibakanos* as *dyido*, or a crooked way of speaking Ibatan. For them, this kind of behavior needs to be corrected to be able to show that they are truly Ibatan, as stated by DR in (9). As for the people in *laod,* they are aware that they are called *Ibakanos* by others, and they use the term to refer to themselves as well. In contrast with the people from *daya,* they do not see any problem with how they use their languages, given that it is their natural way of speaking. This is evidenced by an interview with BM, who identifies as Ibakano, in (10).

(9) Gallego (ongoing): IVB1-20180808_01_02

KG   Do you think people should change the way they speak Ibatan?

DR   Yes ma'am, especially in Kasakay.

KG   Why do you want them to change their speaking?

DR   Because I think when they're on the island, when they're a resident here, they need to fix how they use Ibatan. It's like they're not from the island if they don't speak proper Ibatan.

KG   What specifically do they need to fix?

DR   Their *Ibakano,* ma'am. They need to separate Ilokano and Ibatan. They mix the languages and it's not pleasant to hear.

(10) Gallego (ongoing): IVB1-20180830_06_01

KG   Do you think it's okay to mix Ibatan and Ilokano?

BM   Yes ma'am.

KG   As long as people understand.

BM   Yes.

KG   Did you try to change the way you talk?

BM   Not at all.

Regarding ethnic identification, the Ibakanos also identify themselves as mixed despite being born and raised on Babuyan Claro, mainly because of how they mix the languages they speak, demonstrated in (11). This mixed identity is also clearly illustrated in Figure 5, wherein the same speaker, BM, used a mix of blue and red to represent her mixed Ibatan–Ilokano identity. How the Ibakanos see themselves vis-à-vis the Ibatan identity of Babuyan Claro demonstrates how the notion of ethnicity is layered and multivalent (Newlin-Łukowicz, 2019, p. 285). On the one hand, while they can be considered Ibatans given that Babuyan Claro is their heritage community, within the Babuyan Claro community, on the other hand, they are considered mixed because of their use of the Ilokano language, also reflecting their strong ties to their Ilokano ancestry.

(11) Gallego (ongoing): IVB1-20180830_06_01

NT   If you are going to choose, how do you see yourself, Ibatan, Ilokano, or mixed?

BM   Definitely mixed, because I mix my languages.

Figure 5: Representing ethnic identification by BM
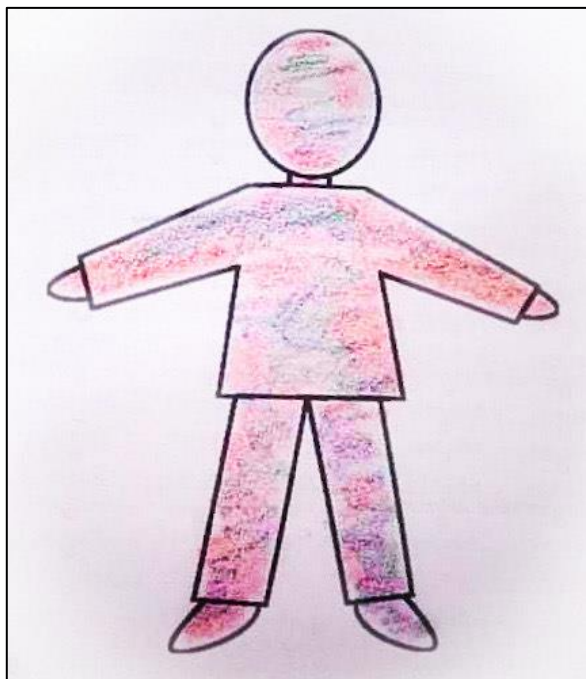
3.3.3   *Recent Ilokano immigrants*

The final category of families on Babuyan Claro is comprised of new Ilokano immigrants who have married into the community. These immigrants go to Babuyan Claro for work, typically as teachers, health workers, farmers, and fishermen, and they mostly come from neighboring Babuyan islands such as Camiguin, Dalupiri, and Calayan, which are all Ilokano-speaking communities. Their dominance in Ibatan varies depending on the people with whom they frequently interact. Those who are more closely tied to Ibatan speakers from *daya* are quick to learn Ibatan, and often come to use it more frequently than Ilokano. Even when talking with fellow Ilokanos, they would choose to speak in Ibatan (12).

(12) Gallego (ongoing): IVB1-20180901_04_01

KG   I noticed that when you three (Ilokanos) talk to each other…

LS   We use Ibatan.

KG   Do you still use Ilokano to each other?

LS   No. It's really Ibatan.

MT   Ibatan.

KG   Is it awkward to be using Ilokano to each other? Like you're not used to Ilokano anymore?

MT   We only use Ilokano now when we talk to other Ilokanos who don't speak Ibatan.

In contrast, Ilokano immigrants who are closely tied to families from *laod* prefer to use Ilokano despite having learned Ibatan. Such speakers report a certain degree of proficiency in Ibatan and occasionally use the language, especially with Ibatan speakers, but still revert to using Ilokano in most situations. Others avoid using Ibatan on most occasions but claim that they understand the language after having lived on Babuyan Claro for many years (reflecting receptive multilingualism). Language learning and use among Ilokano immigrants also appears to differ in terms of gender, wherein Ilokano women tend to learn Ibatan and use it with their children, while Ilokano men tend to report lesser proficiency in Ibatan, as they prefer to use Ilokano more frequently even on Babuyan Claro. This is demonstrated by XX6, a male Ilokano immigrant, who has been on Babuyan Claro for several years (13).

(13) Gallego (ongoing): IVB1-20180919_04_01

    XX6   Most of the time, I use Ilokano, even when I am talking to an Ibatan. If I'm talking to a kid, that's when I use Ibatan because that's when I'm comfortable using it.

    KG   You're not afraid of making mistakes.

    XX6   Yes, but when (talking to adults), I really don't use Ibatan. But I can understand everything. I can speak it, but I rarely do. I just use Ilokano when talking to adults.

Ilokano immigrants who have married into the community and who have reported a certain degree of proficiency in Ibatan have all come to regard themselves as mixed in terms of ethnicity. This is seen even among speakers such as XX6, who avoids using Ibatan in most occasions (14). This change in their ethnic identification is not only because they have already learned Ibatan, but also because of their ties to the Babuyan Claro community. Those who reflect stronger ties have a more positive attitude in learning and using Ibatan, as they want to raise their children as "pure" Ibatan, seen in (15) and (16).

(14) Gallego (ongoing): IVB1-20180919_04_01

    KG   How do you see yourself? Ilokano, or mixed?

    XX6   Perhaps if we talk in percentage, a huge part of me is still Ilokano because I only rarely use Ibatan.

    KG   So not like 50-50?

    XX6   No, maybe 70-30. It won't even reach 60-40 because I still use Ilokano more often.

(15) Gallego (ongoing): IVB1-20211003_01_01

    LT   Now we have two children who are pure Ibatan, because even if I'm not pure Ibatan, they are considered pure because I married an Ibatan. I am thankful because even if I could not appreciate it at first, I am now happy because I am already considered an Ibatan.

(16) Gallego (ongoing): IVB1-20211006_01_01

    JD5   That's what I thought, how will I teach my children if I don't know Ibatan? How can I talk to my children if I don't know how to speak Ibatan?

This fluidity of ethnicity is not only demonstrated in how these Ilokano immigrants see themselves, but also in how other people regard them. For instance, CD is an Ilokano immigrant from Calayan, and he claims to have experienced the same kind of discrimination the Ibatans have experienced on Calayan because of their language and ethnicity (17).

(17) Gallego (ongoing): IVB1-20180919_02_01

CD   In Calayan, people make fun of the Ibatans, their language. Of course, because I grew up in Calayan, (I also thought that way), but when I came here, I realized that their language is also good.

KG   And when you came here (in Babuyan Claro), you have experienced how it is?

CD   Yes, and when I use Ibatan in Calayan, the people there also make fun of me.

KG   Oh, so you experienced that as well?

CD   Yes, and I tell them, at least when I talk to my wife in Ibatan, you don't understand what we're saying.

The way the Ilokano immigrants describe themselves as being mixed, similar to the *Ibakanos* discussed in Section 3.3.2, shows how ethnic affiliation may change over a person's lifetime (Newlin-Łukowicz, 2019, p. 285). Despite the negative associations with being Ibatan, most prominently observed in Calayan, these Ilokano immigrants say they are proud to be considered a member of the Babuyan Claro community, and this positive attitude is reflected in their willingness to learn and use the Ibatan language. As an example, Figure 6 shows how JD5 colored the image to represent how she sees herself in terms of ethnicity and language use.[38] She partly colors the head, the smallest part of the figure, with yellow, representing Filipino, which she only uses occasionally at home and school. She colors the remaining part of the head, as well as the arms with blue to represent Ilokano, her heritage language and community, as it will catch her in case the Ibatan people do not accept her. Finally, she colors the lower half of the body, the largest part, with red, representing her Ibatan identity: "Here with the Ibatan people, I was able to feel complete. Here with the Ibatan people, I learned to stand on my own two feet, and I was able to raise my own family."

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[38] The explanation in Figure 6 is written in Filipino.

Figure 6: Representing ethnic identification by JD5
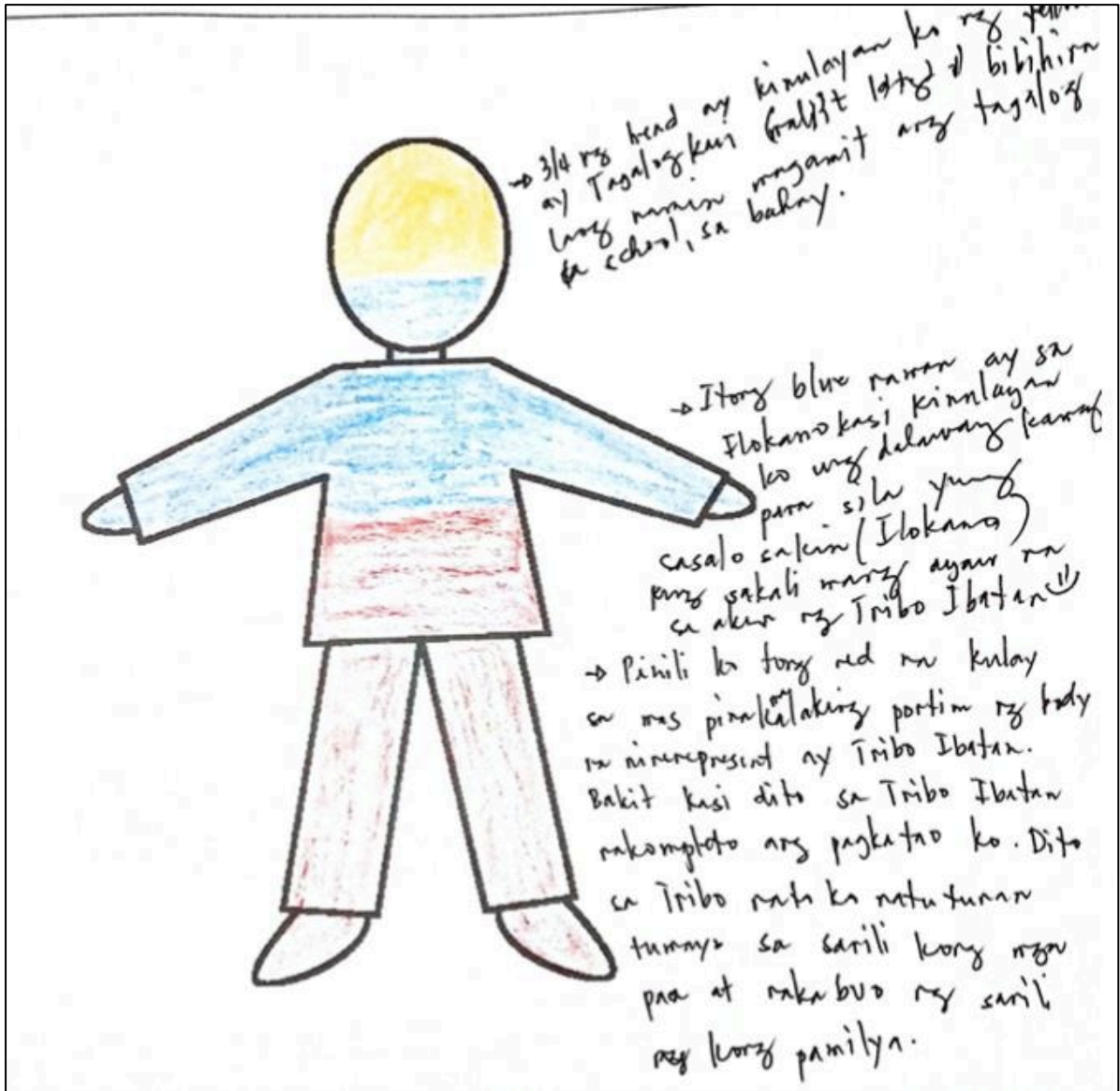
3.4   **Language ideologies and language dominance**

Van Coetsem (2000) argues that contact-induced outcomes are driven by the psycholinguistic notion of language dominance, which is in turn mediated by sociolinguistic parameters, like domains and contexts of language use (Lanza, 2004, p. 237). In addition, language ideologies also play an important role in shaping language dominance (Gertken et al., 2014, p. 212), which relate to wider concepts such as ethnicity and identity (cf. Jia et al., 2002; V. Marian et al., 2007). Therefore, investigating patterns of language dominance necessitates a good understanding of these equally complex notions.

Language ideology is broadly defined as "shared bodies of common sense notions about the nature of language in the world" (Rumsey, 1990, p. 346), which involves ideas such as how an individual should

speak, the value attached to a particular linguistic variety, as well as how one's identity is shaped, constructed, and performed through language (Horner & Bradley, 2019, p. 298; Woolard & Schieffelin, 1994, p. 55). The complexities of understanding language ideologies stem from how these ideas and views are intersectional, fluid, layered, and multiple, which are observed at different levels, scales, and time depth.

Language ideologies are uncovered through linguistic practice, such as metalinguistic discourse, or explicit talk about language, as well as implicit metapragmatics, or actual language use (Woolard, 1998, p. 9). Interviews with the people of Babuyan Claro, which explore their views on language and language use, reveal how the use of "proper" Ibatan indexes a clear Ibatan identity, as well as strong ties to Babuyan Claro. This intersection between ethnicity and place (Newlin-Łukowicz, 2019, p. 286) is clearly demonstrated in DR's statement in (9), where he associates the use of "proper" (unmixed) Ibatan with ties to the island: "It's like they're not from the island if they don't speak proper Ibatan." Language use is thus intimately connected to identity construction. For Ilokano immigrants, they display belongingness to the Babuyan Claro community by learning and using the Ibatan language. As LT and ET2 talk about Ibatan identity, as well as the island identity attached to it, they demonstrate this intersectionality and fluidity (Newlin-Łukowicz, 2019, p. 285).

(18) Gallego (ongoing): IVB1-20211003_01_01

LT   I am now happy because I am already considered an Ibatan. I can proudly say that I
            am an Ibatan. I married an Ibatan.

ET2   And I am thankful because we can be called islanders, and that my wife got used to
            our life. So, I am thankful to my wife, and to God.

Language ideologies are also layered, as they operate differently at various levels, such as over different time periods (Blommaert, 2005, pp. 173–174). This layering can be seen when people talk about what they consider "pure" in contrast with "mixed" in terms of language use, as well as ethnicity. What people describe as "pure" Ibatan identity pertains to the people's mixed Batanic and Ilokano ancestry. This genealogical awareness can be observed when people talk about their personal histories. The conversation with CR, the current chieftain of the Ibatans, whose ancestry is traced to Bernandino Rosales who came to the island in 1918, is a clear example (19).

(19) Gallego (ongoing): IVB1-20180909_05_01

    KG   Chieftain, your mother is Ilokano, right?

    CR   Yes, she is.

    KG   But when you talked to her when you were growing up...

    CR   Oh of course she already became Ibatan and has forgotten her Ilokano. Since she got married to my father, they stayed here. She was only 15 years old then. She did not return to Camiguin. That was around 1945.

In the same vein, what people label as "pure" Ibatan language pertains to a mix of Batanic and Ilokano features that comprises a deeper layer of language change. This is demonstrated by how people talk about Ibatan in relation to Ivatan and Itbayaten of Batanes. While they consider the languages similar, they often describe Ibatan as mixed with Ilokano in contrast with Ivatan and Itbayaten, which they describe as *marahem* 'deep'. However, when they talk about the mixed language use of the *Ibakanos*, which can be regarded as a more recent layer of change, they regard such as a crooked way of using their language/s (20):

(20) Gallego (ongoing): IVB1-20180826_02_01

    RR2   In *laod,* they mix the languages.

    KG   Mixed Ibatan and Ilokano?

    RR2   Their Ibatan is mixed with Ilokano.

    KG   Do you think that's a good thing, or is it something that needs to be corrected?

    RR2   (laughs) They say *halo-halo*[39] is good, but...

    SR   When it comes to language, it's not pleasant to hear.

    RR2   Unpleasant.

    KG   Like crooked?

    RR2   Yes, crooked. They are destroying their language. When they speak Ilokano, it's crooked. When they speak Ibatan, it's also crooked.

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[39] *Halo-halo,* which is literally translated as 'mixed', is a well-known Filipino dessert made up of a huge variety of ingredients.

Varying views on ethnicity and language use also reflect the multiplicity of ideologies among speakers. As Hendery (2012, p. 26) writes, "each individual in a speech community holds his or her own views on language, culture, identity and social [organization] (and may, of course, hold different views with regard to the different 'layers' referred to by Blommaert)." This is seen in the differences between people tied to *laod* and *daya,* as well as differences between the older and the younger generations. Those who consider themselves as "pure" Ibatans, mainly from *daya,* hold strong attachments to Ibatan as their heritage and dominant language. The value placed on Ibatan is also revealed in their negative views on synchronic code-switching, which they consider as a corruption of their language, as described by SR and RR2 in (20). As for Ilokano, some Ibatans of *daya*, especially the younger ones, show ambivalent attitudes towards the language, mainly because of the community's complicated relationship with the Ilokano-speaking municipal center, where the Ibatans report experiences of discrimination. This is apparent in some younger Ibatan speakers who report a preference for using Filipino over Ilokano, as they see Filipino as a neutral language (see Footnote 30 in Section 3.2.5). In comparison, the older generations are still more comfortable in speaking Ilokano than Filipino, and they describe their Filipino as *dyido* 'crooked'. This generational difference in language use is not simply a matter of difference in language dominance, but also reflects how the generations differ in terms of their portrayal of ethnicity. That is, some of the younger generation appear to be more conscious of maintaining the use of the Ibatan language in order to distinguish themselves from Ilokano, as compared to the older generations.[40]

As for individuals strongly tied to *laod*, they show the opposite orientation, where families have shifted or are shifting to Ilokano as their everyday language, even at home, demonstrating that Ilokano remains the socially and linguistically dominant language in *laod.* For these speakers, moreover, code-switching between Ibatan and Ilokano is regarded as a natural way of using their languages, which is something that doesn't need correcting. The apparent multiplicity of ideologies reflected in language use is summed up by CR (21).

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[40] How the generations differ in internalizing their ethnicity, which entails differences in language use, is a complex issue that is embedded within the generations' experiences, life histories, and integration within the larger region/s, among many others. See Hutchinson and Smith (1996) for an in-depth discussion of the notion of ethnicity.

(21) Gallego (ongoing): IVB1-20180909

CR	Because of discrimination from the Ilokanos, there are a few who wanted to abandon Ibatan (language).
KG	I see, that's why they choose to speak Ilokano.
CR	Yes, that's why they shifted to Ilokano.
KG	Are there only a few of them?
CR	Yes, just a few.
KG	Are there still cases like that now?
CR	Not anymore. The people now understand how important our language (Ibatan) is.
KG	That's why Ibatan is more actively used now?
CR	Yes, a bit, not like before. Maybe that's what's going to happen (language shift) over there (*laod*), because there are mixed people there, those who married Ilokanos.

Finally, shared experiences among the people of Babuyan Claro, especially in relation to Calayan, the town center, are also seen to shape language ideologies. As the Ibatan people are a minority group within the municipality of Calayan, they experience marginalization in the region, which includes instances of linguistic discrimination. Despite these negative experiences, many Ibatans still maintain the use of their language, even during their time outside Babuyan Claro. They see the use of Ibatan as their secret code, and they take multilingualism as an advantage despite the ongoing marginalization of the Ibatan community, seen in (22) and (23). This illustrates how language ideology relates to the notion of positionality (Horner & Bradley, 2019, p. 297), following Irvine's (1989, p. 255) definition of language ideology as "the cultural system of ideas about social and linguistic relationships, together with their loading of moral and political interests." Therefore, as language ideologies are derived from the social experience of language use (and multilingualism), these ideologies, in turn, shape how one interprets language and language use within the fabric of the society (Woolard & Schieffelin, 1994, p. 62).

(22)Gallego (ongoing): IVB1-20180810_01_01

    XX2   In Calayan, there's discrimination.

    KG   When you were in high school?

    XX2   Yes.

    KG   Discrimination in what way?

    XX2   They look down on people from Babuyan (Claro).

    KG   They tease you?

    XX2   Yes, they tease us. They mock how we speak.

    KG   Did you want to just shift to Ilokano because of that?

    XX2   Not really. If it's just us (Ibatans), we'd use Ibatan.

(23) Gallego (ongoing): IVB1-20180826_02_01

    SR   They (Ilokanos) laugh at us but at least we understand Ilokano but they don't understand Ibatan.

From the discourse on language use, ethnicity, and identity among the people of Babuyan Claro, it is apparent how one constructs and performs their identity through the use of their language/s. Language ideology, therefore, can affect "patterns of language acquisition, style switching, shift, change, and policy" in the context of multilingual communities (Woolard & Schieffelin, 1994, p. 60). Hendery (2012) has demonstrated how linguistic features result from an ideological process among the people of Palmerston Island. Several studies have also demonstrated links between the use of particular linguistic variants and language attitudes or ideologies, such as Sharma (2003) and Wassink and Dyer (2004). Finally, language ideologies are seen to influence language choice and use, which then entails the influence of language ideologies on patterns of language dominance. Thus, measuring the construct of language dominance involves accounting not only for psycholinguistic components that relate to language proficiency, but also experiential and attitudinal variables that are reflective of language ideologies (cf. Gertken et al., 2014; Marian et al., 2007).

3.5   **Conclusion**

Mixing is a salient theme on Babuyan Claro, observed not only in the linguistic features of Ibatan, both synchronically and diachronically, but also in how the speakers view their ethnicity and identity (Gallego, 2020, p. 107). Ethnic Ibatans strongly tied to *daya* see themselves as "pure" Ibatans, but with acknowledgement that being Ibatan means descent from both Batanic and Ilokano ancestry. Those

from mixed families see themselves as ethnically "mixed", but interestingly, even Ilokano immigrants do not see themselves as "pure" Ilokanos anymore, since they have come to use Ibatan as well. The speakers' layered perceptions of language and ethnicity, all told within the narrative of mixing, continuity, and change, constitute an accurate reflection of the sociolinguistic history of Babuyan Claro (Chapter 9). These ideas about ethnicity, identity, and language are seen to influence language choice and use, which then affect patterns of language dominance. All in all, the shape of a speaker's linguistic repertoire is argued to be the sum of interacting factors that prevail at the levels of the individual and the community.

As small, previously isolated communities become more integrated into the modern nation state, the sociolinguistic contexts on which the communities are built become more fragile (Childs et al., 2014, p. 172). Babuyan Claro is a clear example of this fragile sociolinguistic setting, where the kind of egalitarian multilingualism that existed in the past, which favored the emergence of Ibatan, has changed to a more hierarchical one at present, leading to shifts in the language ecology of the community, as in how the speakers view and use their different languages. While particular socio-political changes have resulted in more positive attitudes and greater use of the Ibatan language, its viability in the future is not certain, precisely because of the dynamic nature of the community. The nature of social contact between Ibatan and Ilokano, and more recently Filipino and Ivatan, has led and will lead to changes not only in linguistic structures but also in the patterns of multilingualism of individuals and the community. Understanding this interplay in Babuyan Claro provides a good window onto the processes of language emergence, contact, continuity, and change within a small-scale multilingual community, and with its dynamic landscape, we are presented with the opportunity to observe the interaction of social, political, cultural, and linguistic changes as they happen.

2   *The community*

Ibatan is characterized by contact-induced features that reflects Babuyan Claro's complex contact history. The extent in which such features are traced to Ilokano demonstrate the nature of social contact between speakers of the two languages. Contact-induced change in Ibatan can be observed across different domains of the language, such as a huge proportion of loanwords in its vocabulary (Chapter 4) as well as the development of a parallel durative paradigm in its verbal morphology (Chapter 5). That grammar, a relatively stable domain of language, has been reshaped in Ibatan due to contact, is indicative of an intense contact history with Ilokano.

Thomason and Kaufman (1988) propose a model for language contact which depends on the intensity of contact and the nature of community bilingualism. However, the known history of Babuyan Claro suggests that the development of contact outcomes in Ibatan cannot be directly attributed to one specific scenario. That is, different contact-induced features that constitute layers of language change are linked to different agents, and these ultimately correspond to layers of social change.

It is said that language change is a reflection of social change (Labov, 2001; Meillet, 1921; Sturtevant, 1947). Thus, the diffusion of change across the community is argued to be socially embedded. This part of the thesis gives a discussion of contact-induced language change in Ibatan, that is, contact outcomes seen at the population level. How does contact-induced change propagate across the community? This question is investigated by first tracing the actuation of change to the bilingual individual (Part 3), and then exploring the transition of individual-level innovations to community-level language use (Part 4).

LEXICON

Lexical transfer in Ibatan[41]

Introduction

The lexicon is a record of a community's history. Not only is this seen in how the vocabulary of a language can inform our understandings of people's culture and society (forming the foundation for cultural reconstructions of proto-languages such as Blust (1995) and Ross et al. (1998) among many others), but also, loanwords in a language can be reflective of the nature, intensity, and patterns of interaction across communities (cf. Arnal, 2011; Poplack, 2017; Poplack et al., 1988). For example, the distribution of loanwords across different semantic fields like religion, economic and livelihood activities, and knowledge and value systems, are indicative of the kinds of relationship that exist between groups of people. Moreover, how these loanwords are adapted and integrated into the language relates to individual- and population-level patterns of agentivity and multilingualism. Finally, it is argued that lexical transfer is one of the main drivers for contact-induced change, that is, it allows for subsequent structural change to happen in a language (King, 2000).[42]

This chapter deals with contact-induced change in the lexicon of Ibatan, with the following research questions:

- To what extent has language contact affected the Ibatan lexicon?
- What are the consequences of lexical transfer in Ibatan?

Section 4.1 presents the patterning and distribution of loanwords in Ibatan. Their community-level adaptation and integration, as well as how they have driven structural and semantic change are discussed in Section 4.2. Finally, the implications of the patterning of loanwords in Ibatan regarding the socio-historical context of the Babuyan Claro community are presented in Section 4.3.

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[41] Sections of this chapter have been published as a book chapter in Gallego (2022).

[42] However, this is not the only pathway for structural change, as there are several cases of apparent structural change with little to no lexical transfer (cf. Epps, 2012; Ross, 1996 among others).

4.1   **Loanwords in Ibatan**

In this chapter, the patterning of loanwords is investigated from two angles—first, the distribution of loanwords in relation to native vocabulary (Section 4.1.1), and second, the distribution of loanwords themselves (Section 4.1.2). The methods used in this chapter are based on the Loanword Typology Project (LTP) by Haspelmath and Tadmor (2009), which sets out a comparative and global approach for understanding lexical transfer. A fixed set of 1,460 lexical meanings covering general concepts as well as culture-specific items are used to determine the proportion of loanwords in relation to native vocabulary. Consistent with the categorizations and nomenclature in the LTP, the items are categorized into 24 semantic fields (Table 11), and semantic word classes, which roughly correspond to traditional part of speech categories, namely nouns, verbs, adjectives, adverbs, and function words[43] are also identified for each (see Haspelmath and Tadmor (2009) for a full discussion).

Table 11: Semantic fields in the LTP

	Semantic field label	Number of meanings
(1)	The physical world	75
(2)	Kinship	85
(3)	Animals	116
(4)	The body	159
(5)	Food and drink	81
(6)	Clothing and grooming	59
(7)	The house	47
(8)	Agriculture and vegetation	74
(9)	Basic actions and technology	78
(10)	Motion	82
(11)	Possession	46
(12)	Spatial relations	75
(13)	Quantity	38
(14)	Time	57

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[43] While function words are not lexical elements, these are included in the analysis in order to test existing assumptions about the transferability of different kinds of linguistic materials.

	Semantic field label	Number of meanings
(15)	Sense perception	49
(16)	Emotions and values	48
(17)	Cognition	51
(18)	Speech and language	41
(19)	Social and political relations	36
(20)	Warfare and hunting	40
(21)	Law	26
(22)	Religion and belief	26
(23)	Modern world	57
(24)	Miscellaneous function words	14
	Total	**1460**

Data for the meaning list come from the Ibatan dictionary by J. Maree et al. (2012), counterchecked by Ibatan-dominant speakers. Loanwords are distinguished from native vocabulary based primarily on J. Maree et al. (2012), which contains etymological information for each lexeme (Figure 7). This is also verified through the methods of comparative historical linguistics, for instance via diagnostic reflexes of the forms from Proto-Malayo-Polynesian (PMP) and Proto-Austronesian (PAN),[44] the word's phonological structure, as well as inflectional and/or derivational formatives that occur with it.[45]

For each loanword, the SL is identified, likewise based on the information provided by J. Maree et al. (2012). There are cases in which the word cannot be identified as native or not (that is, there is no clear indication of loanword status in terms of phonology or derivation), and these are not included in the analysis. There are also instances where J. Maree et. al (2012) do not explicitly identify a lexeme as a loan, but evidence such as those given above suggest so. These items are then treated as loanwords, but in cases wherein the SL cannot be identified with confidence, the SL is tagged *uncertain*.

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[44] For example, PAN/PMP *daRaq is reflected as *dara* in Ilokano and *raya* in Ibatan, showing different reflexes for PAN/PMP *R, namely *r* in Ilokano and *y* in Ibatan. Such diagnostic reflexes therefore can be used as evidence to identify whether or not a word is native in the language. That is, forms that do not show the expected reflexes are taken to be borrowed into the language.

[45] Structure is used as a diagnostic tool in determining the etymology of a word as Ibatan has parallel native and non-native structures which occur with native and non-native stems respectively. However, while this is typically the rule, there are apparent exceptions, leading to hybrid formations. This is discussed in further detail in Chapter 5.

SLs may either be immediate or ultimate (Haspelmath & Tadmor, 2009, p. 16). For example, Sanskrit loanwords have been transferred into the lexicon of many Philippine languages indirectly through other immediate SLs such as Malay and Filipino. Similarly, Spanish loanwords in the Ibatan lexicon may have been transferred indirectly through Ilokano. There are cases where the immediate SL is clearly identifiable. For instance, *saksi* 'witness, testify' ultimately from Sanskrit *sakshin* 'witness' is labeled as an Ilokano loanword as it has been transferred into Ibatan through Ilokano. However, in many other instances, especially concerning Spanish loanwords, this cannot be easily done because of the lack of historical data that can indicate how and when the loanword has been transferred in Ibatan, that is, either directly from Spanish or indirectly from an immediate SL, most likely Ilokano. In such cases, the loanwords are traced to Spanish as the SL, and this admittedly underestimates the impact of the immediate SLs in Ibatan.

Figure 7: Sample lexemes with etymological information in Maree et al. (2012)

To understand how lexical change motivates further language change, apparent phonological and morphological adaptation are noted, as well as semantic change and effect (discussed in Section 4.2). Semantic change concerns how the meaning of the loanword changed from the SL to the RL, which may be through shift, narrowing, and broadening. In other instances, the meaning of the form has been retained, and these are tagged as retention (Section 4.2.1.3). Semantic effect concerns how the loanword has affected the Ibatan lexicon, which may be through introducing new concepts which did not exist in Ibatan in the past (insertion), the creation of synonymous concepts in the language, either through pairing with native terms or with other loanwords (coexistence), or the replacement of native terms with loanwords (replacement) (Haspelmath, 2009, p. 49) (Section 4.2.2.2).

Aside from the meaning list used in the LTP (Section 4.1.1), a wider range of data from J. Maree et al. (2012) is also utilized in the study (Section 4.1.2). Doing so offers a richer view of how lexical transfer has affected Ibatan, primarily regarding the impact of different SLs in the language. Investigating loanwords in Ibatan from these two perspectives presents interesting insights into lexical transfer. First, the LTP provides a starting point to determine how Ibatan compares with other languages in terms of lexical transfer. This also allows for further understanding about the outcomes of particular contact settings. That is, while it is argued that no two languages would reflect exactly the same contact outcomes despite the communities sharing similar sociolinguistic history (Thomason, 2008, p. 44), it is by doing a cross-linguistic comparison of contact scenarios within their social contexts that allows for a better understanding of the mechanisms that give rise to various linguistic outcomes (Muysken, 2010, p. 278). Second, understanding loanwords using a wider range of data set allows us to directly assess the nature and impact of social contact in the Babuyan Claro community, as it provides more detailed insights into the mechanisms and strategies that govern lexical transfer.

4.1.1   *Distribution of loanwords vis-à-vis native vocabulary*

Following the considerations set out in the LTP, a total of 1784 words in Ibatan were collected. Out of the total number of words, 779 (43.67%) are loanwords coming from a variety of SLs, namely Ilokano, Spanish, English, Filipino, Chinese, and Japanese (Table 12 and Figure 8).

The proportion of loanwords found for Ibatan (IVB) at 43.67% is significantly higher than the cross-linguistic mean of 24.2%, which effectively makes Ibatan a high borrower following Tadmor's (2009, p. 57) categorization. The main SLs for these loanwords are Ilokano (ILO) at 24.66% and Spanish (SPA) at 17.04%. The other SLs, including Filipino, have made a minimal impact on the lexicon of Ibatan, each reflecting less than 1% of the loanwords in the collected wordlist. For some of the items in the list (only

5 out of 1784), it is unclear whether the word is a loanword or a native term given the close relationship between Ibatan and Ilokano, and so these are labelled *uncertain*. Similarly, some items are clearly loanwords but the SL cannot be determined with certainty, and these are thus likewise labelled *uncertain*. The discussion that follows focuses on Ilokano and Spanish as the main SLs of the loanwords in Ibatan, and the other SLs are combined under a single grouping labelled *others.*

Table 12: Distribution of native and loanwords in Ibatan following the LTP

Source Language	Total	Percent
Native (Ibatan)	1000	56.05%
Loanword	779	43.67%
• Ilokano	• 440	• 24.66%
• Spanish	• 304	• 17.04%
• English	• 8	• 0.45%
• Filipino	• 5	• 0.28%
• Chinese	• 3	• 0.17%
• Japanese	• 1	• 0.06%
• Uncertain	• 18	• 1.01%
Uncertain	5	0.28%
TOTAL	1784	100%

Figure 8: Proportion of loanwords vis-à-vis native vocabulary in Ibatan
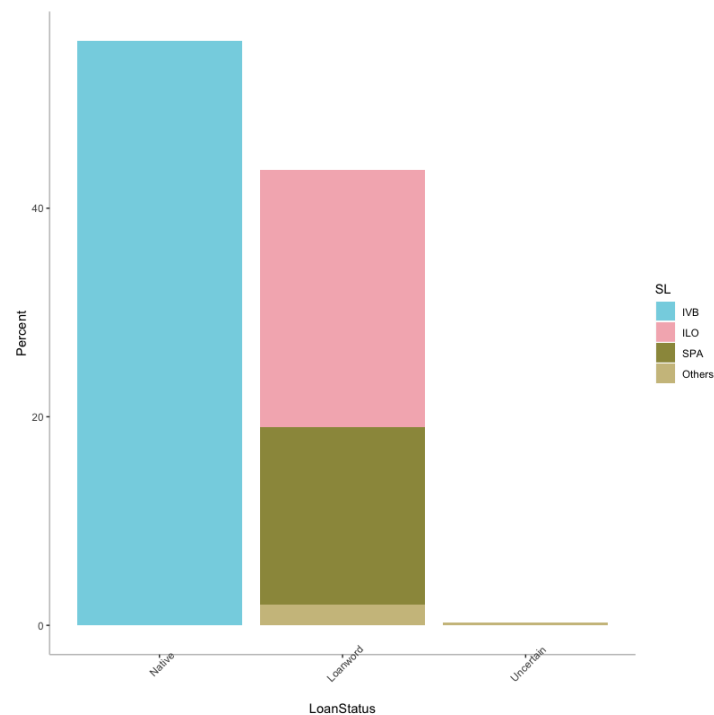
4.1.1.1   *Distribution of vocabulary according to semantic word class*

The findings for Ibatan agree with the cross-linguistic results of the LTP regarding the transferability of various word classes, albeit showing a higher percentage across the different categories. In Ibatan, content words reflect a higher loanword proportion compared to function words. Specifically, nouns show a significant proportion of loanwords at 50.79% compared to other word classes namely verbs (35.83%), adjectives (37.29%), and adverbs (33.33%). Function words comprise the least number of loanwords, albeit still reflecting a high proportion of 32.61% (Table 13 and Figure 9).

Table 13: Distribution of vocabulary according to semantic word class

Word Class	Native	Loanwords	Loanwords as %
Nouns	462	482 (5 uncertain)	50.79%
Verbs	326	182	35.83%
Adjectives	111	66	37.29%
Adverbs	8	4	33.33%
Function words	93	45	32.61%
Total words	1000	784	43.67%

Figure 9: Plotting the distribution of vocabulary according to semantic word class
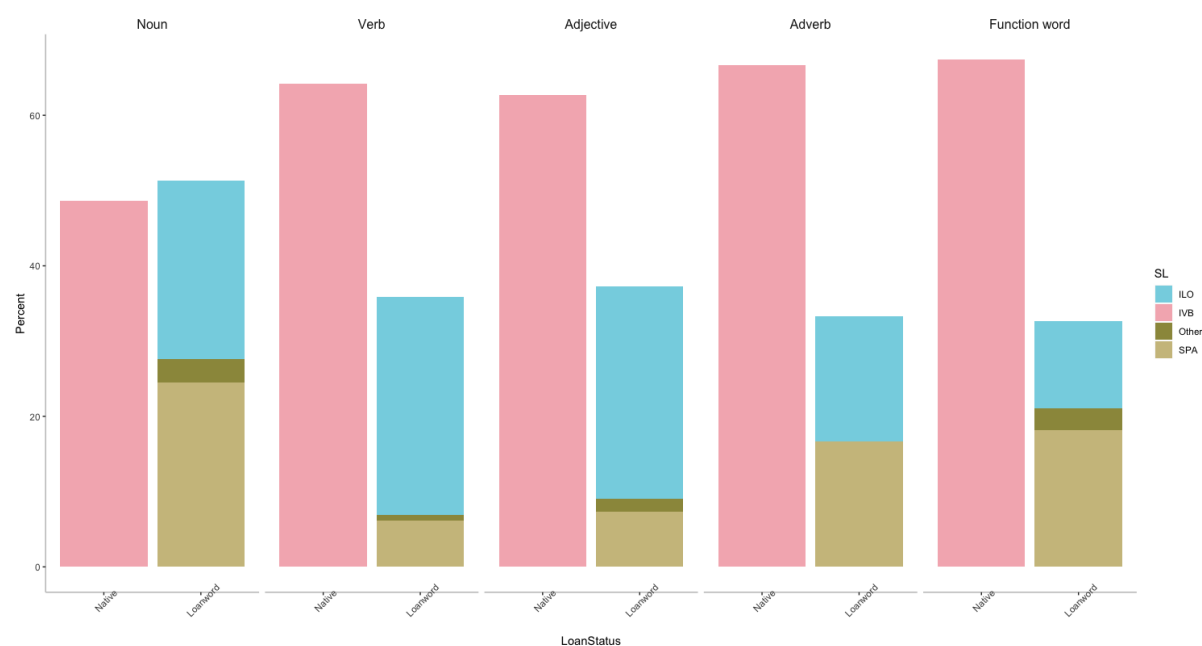
Examining the distribution of words by SL in terms of semantic word class highlights some asymmetries in lexical transfer. That is, Ilokano and Ibatan, which are typologically similar and share a close genetic affinity, show a similar patterning in the distribution of word classes. In contrast, those from more typologically distant SLs such as Spanish, appear to be more restricted to the transfer of nouns (Figure 10). That materials which are said to be relatively more resistant to transfer such as verbs (in contrast with nouns) have been transferred from Ilokano into Ibatan is most likely because of the typological similarity between the two languages (Haugen, 1950, p. 220; van Coetsem, 2000, p. 122; Weinreich, 1953, p. 1). Verbs are said to be more structured in that they are highly inflected, and this makes it difficult for speakers to distinguish the root, which then makes them less likely to be transferred into another language. At the same time, the structuredness of verbs make them difficult to be incorporated into the RL (Curnow, 2001, p. 415). However, these constraints can be neutralized if the two languages in contact are structurally similar. Given that Ibatan and Ilokano share several cognate forms and structures, for instance, voice morphology distinguishing actor from undergoer, as well as several verbal affixes used in derivation and inflection (Section 5.1 and Appendix A), Ibatan is seen to readily accept and integrate Ilokano verbs into its grammar. The speakers' level of bilingualism in the two languages also facilitates to the transferability of Ilokano verbs, in that it is easier for them to identify the internal morphological structure of the verbs. In contrast, Spanish loanwords are largely restricted to nouns, given the typological distance between Ibatan and Spanish. In addition, direct contact between speakers of Ibatan and Spanish has been minimal (perhaps restricted to the time the first families of Babuyan Claro were in Calayan or mainland Luzon prior to their arrival to the island), and thus, Ibatan speakers had little knowledge of Spanish. These factors then inhibit the transferability of elements such as verbs and other structural materials from Spanish into Ibatan.

Figure 10: Plotting the distribution of vocabulary across SLs by semantic word class
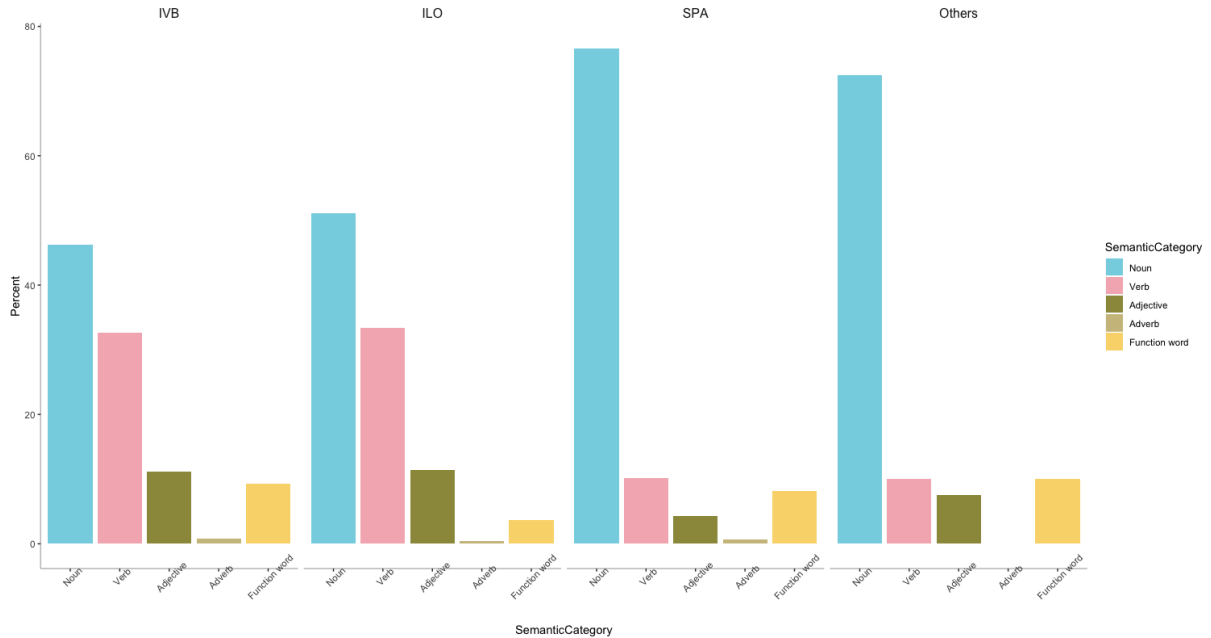
4.1.1.2   *Distribution of vocabulary according to semantic field*

In investigating which semantic fields have been most affected by language contact, the domains of LAW (80%), RELIGION AND BELIEF (77.78%) and WARFARE AND HUNTING (66.10%) are seen to yield the highest percentage of loanwords, apart from the domain of MODERN WORLD (90.24%), where there is a natural expectation of finding a substantial proportion of loanwords. In contrast, the semantic fields with the least number of loanwords are THE PHYSICAL WORLD (27.47%), and THE BODY (26.24%), in addition to MISCELLANEOUS FUNCTION WORDS (22.73%), which has long been argued in the literature to be a domain that is particularly resistant to transfer (Table 14 and Figure 11) (Tadmor, 2009, p. 59).

Table 14: Distribution of vocabulary according to semantic field

Semantic Field	Native	Uncertain	Loanwords	Proportion of loanwords vs native vocabulary
Modern world	4	0	37	90.24%
Law	4	0	16	80%
Religion and belief	7	1	28	77.78%
Warfare and hunting	19	1	39	66.10%
Social and political relations	21	0	37	63.79%
Clothing and grooming	22	0	31	58.49%
Possession	24	0	31	56.36%
Speech and language	34	0	36	51.43%
Food and drink	36	0	38	51.35%
Emotions and values	39	0	41	51.25%
Time	39	0	41	51.25%
The house	22	0	23	51.11%
Quantity	32	0	29	47.54%
Cognition	45	0	35	43.75%
Basic actions and technology	76	0	59	43.70%
Kinship	34	0	24	41.37%
Animals	45	1	29	38.67%
Agriculture and vegetation	50	1	26	33.77%
Motion	87	0	42	32.56%
Sense perception	45	0	19	29.69%
Spatial relations	84	0	35	29.41%
The physical world	66	0	25	27.47%
The body	148	1	53	26.24%
Miscellaneous function words	17	0	5	22.73%
TOTAL	**1000**	**5**	**779**	**43.67%**

Figure 11: Plotting the distribution of vocabulary according to semantic field
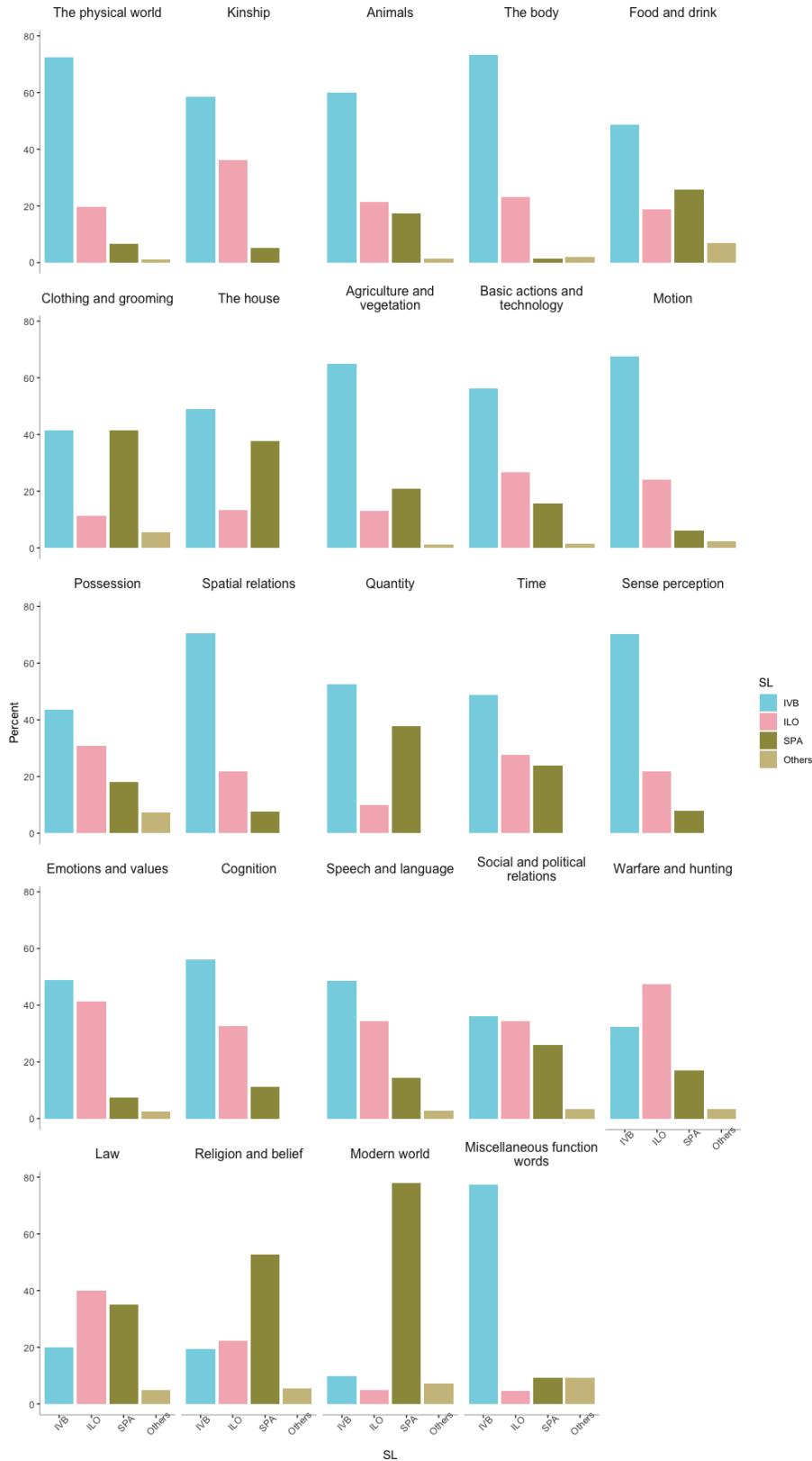
While the distribution of loanwords in Ibatan generally agrees with what has been found in other languages (Tadmor, 2009, pp. 64–65), it is interesting to observe LAW, WARFARE AND HUNTING, and SOCIAL AND POLITICAL RELATIONS are the most affected by contact, whereas RELIGION AND BELIEF and CLOTHING AND GROOMING are found to contain the highest number of loanwords cross-linguistically. In the specific case of Ibatan, why the domains of LAW, WARFARE AND HUNTING, and SOCIAL AND POLITICAL RELATIONS are found to have a significant portion of loanwords reflects the nature of influence of Ilokano and Spanish, introducing new concepts and technologies to the Babuyan Claro community, such as terms for animal traps (WARFARE AND HUNTING), and specific terms for administration, governance, and legal matters (LAW and SOCIAL AND POLITICAL RELATIONS). As for the domains of RELIGION AND BELIEF and CLOTHING AND GROOMING, these also reflect a high proportion of loanwords in Ibatan, particularly from Spanish, and this is driven by the colonial history of the Philippines which introduced Christianity as well as new material culture to different Philippine ethnolinguistic groups. Even for the fields which fall at the end of the distribution, there is still a significant proportion of loanwords in relation to native vocabulary, which goes as high as 22.73% for MISCELLANEOUS FUNCTION WORDS and 26% for THE BODY, compared to the cross-linguistic mean of 10-15% found in the LTP (Tadmor, 2009, pp. 64–65). Similarly, the fields which fall along the middle of the distribution are by no means unremarkable. For instance, the domain of KINSHIP, which according to the findings of the LTP is more resistant to transfer, shows a remarkable number of loanwords at 41.37%, compared to the average of 15% (Tadmor, 2009, p. 64). The same can be said for other domains, such as EMOTIONS AND VALUES (51.25% in Ibatan, versus the average of 19.9%) and SPEECH AND LANGUAGE (51.43% in Ibatan, versus the average of 22.3%). Essentially, such distribution is a clear reflection of how Ibatan is considered a high borrower according to the scale in the LTP, and this is observable even in the domains where the proportion of loanwords within the vocabulary is expected to be lower.

4.1.2   *Lexical sources for Ibatan*

Investigating the distribution of widespread loanwords, which are well-established, frequently and widely used by speakers, and have achieved a certain level of acceptance, if not normative approval, in the speech community (Poplack et al., 1988, p. 52), allows us to understand the specific nature of social contact in the community. For Ibatan, this is done through a survey of the loanwords in the Ibatan dictionary by J. Maree, et al. (2012).

A total of 2248 from more than 5000 entries in J. Maree, et al. (2012) are loanwords that are traced from different SLs namely Ilokano, Spanish, English, Filipino, Chinese, Japanese, and Ibanag,[46] along with several forms which are of uncertain etymology. The distribution of the loanwords according to these SLs is consistent with the findings in Section 4.1.1, where the huge majority come from Ilokano (1327 words or 59.03%), followed by Spanish (792 words or 35.23%). The influence of all the other SLs on Ibatan is only limited, with English at 2.09% and the others at less than 1% (Table 15). In the succeeding sub-sections, English, Filipino, Chinese, Japanese, and Ibanag are conflated under the category *others* given their limited influence in comparison with Ilokano and Spanish, which are the main SLs for the established loanwords in Ibatan.

Table 15: Distribution of loanwords in J. Maree et al. (2012) according to SLs

Source Language	Total	Percent
Ilokano	1327	59.03%
Spanish	792	35.23%
English	47	2.09%
Filipino	19	0.85%
Chinese	9	0.40%
Japanese	3	0.13%
Ibanag	1	0.04%
Uncertain	50	2.22%
TOTAL	**2248**	**100%**

4.1.2.1   *Distribution and patterning of loanwords*

The loanwords from the different SLs are analyzed in terms of their distribution according to word class and semantic field, and this is reflective of the nature of social contact shared between Ibatan and the respective SLs.

The loanword distribution according to word class supports the overall patterning claimed in language contact literature, where content words such as nouns and verbs are said to be transferred more easily than function words, and among content words, nouns appear more transferable than verbs. This can be observed in Ibatan regardless of the SL. That is, in Ilokano, 50.72% of the loanwords

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[46] Ibanag is a Cordilleran language mainly spoken in the province of Cagayan in northern Philippines.

are nouns while 37.30% are verbs, and in Spanish, 82.20% are nouns while only 10.98% are verbs. Overall, 1410 or 62.72% of the loanwords are nouns, whereas only 40 or 1.78% are function words (Table 16).

Table 16: Distribution of loanwords in J. Maree et al. (2012) according to word class

Word Class	Ilokano	Spanish	Others	Uncertain[47]	TOTAL
Nouns	673 (50.72%)	651 (82.20%)	64 (81.01%)	22 (44%)	1410 (62.72%)
Verbs	495 (37.30%)	87 (10.98%)	8 (10.13%)	28 (56%)	618 (27.49%)
Modifier	135 (10.17%)	40 (5.05%)	5 (6.33%)	-	180 (8.01%)
Function words	24 (1.81%)	14 (1.77%)	2 (2.53%)	-	40 (1.78%)
Total	**1327**	**792**	**79**	**50**	**2248**

Figure 12: Plotting the distribution of loanwords in J. Maree et al. (2012) according to word class
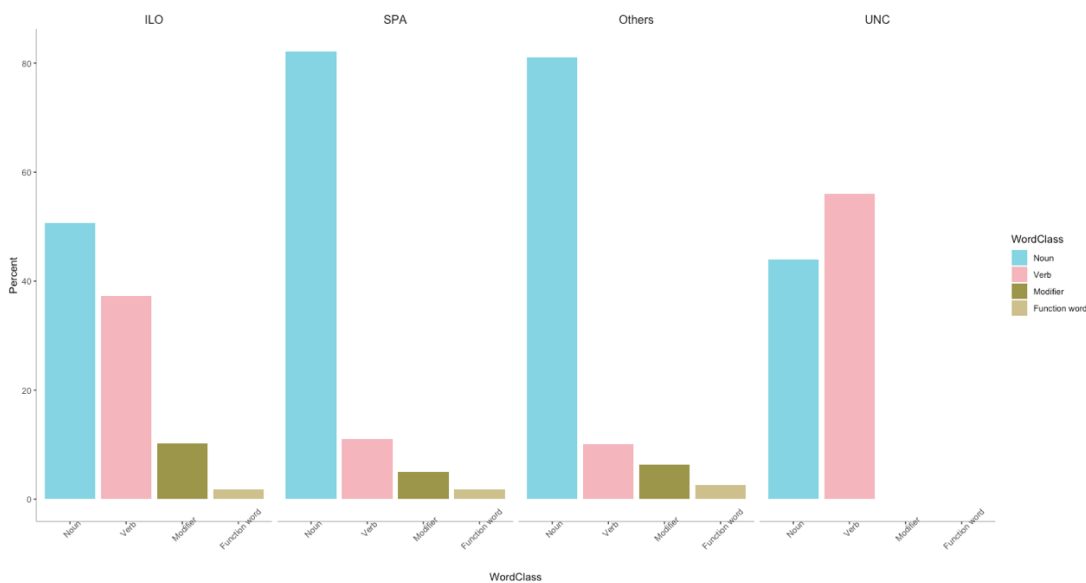
Looking at the specific SLs, Spanish clearly illustrates the general transferability of nouns over other word classes, as compared to Ilokano, where the figures found for nouns and verbs are not so far apart (Figure 12). Such patterning is not only because of the said transferability constraint according to word class, but also because of the relationship between Ibatan and Ilokano. As mentioned in Section

47 In the case of loanwords with uncertain etymology, the most probable SL for the words are Philippine languages, where the distinction between nouns and verbs is not so clear in underived forms.

4.1.1.1, typological similarity and genetic relationship under the Malayo-Polynesian language family, as well as community-wide bilingualism in both Ibatan and Ilokano are the main factors behind such distribution.

The influence of Ilokano and Spanish on Ibatan is also clearly reflected in the patterning of loanwords according to semantic fields. Table 17 and Figure 13 show that Ilokano loanwords typically concern everyday life and activities, such as AGRICULTURE AND VEGETATION (73.91%), EMOTIONS AND VALUES (73.04%), THE PHYSICAL WORLD (70.49%), KINSHIP (70.83%), and WARFARE AND HUNTING (61.67%). For instance, some technologies and techniques concerning agriculture and hunting (mainly fishing) such as different kinds of traps namely *balais* 'snare trap', *bobo* 'underwater trap', *koyayaw* 'kind of snare', and *saltok* 'cage trap' are mainly Ilokano loanwords. Moreover, the extent of culture contact between Ilokano and Ibatan can be observed in the core cultural domains of KINSHIP and EMOTIONS AND VALUES— terms for nuclear kin namely *potot* 'child (of a man)', *abagis* 'sibling' and *adi* 'younger sibling' are from Ilokano, and Ilokano abstract concepts such as *anos* 'patience', *ayat* 'love', *bileg* 'power', as well as *linteg/kalintegan* and *rombeng* that encode the concept of what is 'right and proper' are also used in Ibatan.

To compare, Spanish loanwords generally fall under domains such as THE MODERN WORLD (75.28%), THE HOUSE (66.67%), and RELIGION AND BELIEF (64.20%), introducing new concepts as well as replacements for traditional ones. To illustrate, Catholic festivities and religious events such as *Nabidad* 'Christmas' and *Simana* 'the holy week' were introduced by the Spanish into the Philippines. Moreover, the concept of an unseen supreme being believed to have power over humans and nature more generally, encoded in the word *Dios* 'God' in Spanish referring to the Christian monotheistic concept of the 'Creator', was introduced alongside the Ibatan indigenous concepts of spirits and unseen beings which similarly affect human affairs, such as *ogaw* 'grain spirit' (from Ilokano), *anyito* 'residential or wandering spirit', *isem* 'ghost', and *pahad* 'the departed soul of a dead person' (all of Batanic origin).

How Ilokano and Spanish loanwords respectively cluster into distinct semantic fields illustrates the contexts in which the SLs have influenced Ibatan. Ilokano loanwords in Ibatan mostly deal with everyday activities, reflecting the social relationship that has existed and continues to exist between the speakers of Ibatan and Ilokano on Babuyan Claro. In contrast, loanwords from Spanish reflect how the Spanish brought western influences into the socio-political system not only of Ibatan but also all other indigenous groups in the Philippines.

Table 17: Distribution of loanwords in J. Maree et al. (2012) according to semantic field

Semantic Field	Ilokano	Spanish	Others	Uncertain
Agriculture and vegetation	85 (73.91%)	23 (20%)	4 (3.48%)	3 (2.61%)
Animals	81 (72.97%)	27 (24.32%)	1 (0.90%)	2 (1.80%)
Basic actions and technology	81 (43.09%)	100 (53.19%)	6 (3.19%)	1 (0.53%)
Clothing and grooming	19 (27.94%)	41 (60.29%)	6 (8.82%)	2 (2.94%)
Cognition	14 (73.68%)	5 (26.32%)	-	-
Emotions and values	149 (73.04%)	48 (23.53%)	5 (2.45%)	2 (0.98%)
Food and drink	61 (54.46%)	40 (35.71%)	9 (8.04%)	2 (1.79%)
Kinship	34 (70.83%)	11 (22.92%)	3 (6.25%)	16 (61.54%)
Law	16 (61.54%)	10 (38.46%)	-	-
Miscellaneous function words	21 (58.33%)	14 (38.89%)	1 (2.78%)	-
Modern world	6 (6.74%)	67 (75.28%)	16 (17.98%)	-
Motion	160 (74.07%)	41 (18.98%)	3 (1.39%)	12 (5.56%)
Possession	24 (44.44%)	27 (50%)	2 (3.70%)	1 (1.85%)
Quantity	28 (37.33%)	45 (60%)	2 (2.67%)	-
Religion and belief	24 (29.63%)	52 (64.20%)	2 (2.47%)	3 (3.70%)
Sense perception	80 (78.43%)	20 (19.60%)	-	2 (1.96%)
Social and political relations	58 (46.03%)	60 (47.62%)	7 (5.56%)	1 (0.79%)
Spatial relations	116 (74.36%)	31 (19.87%)	1 (0.64%)	8 (5.13%)
Speech and language	36 (67.92%)	16 (30.19%)	1 (1.89%)	-
The body	98 (74.81%)	22 (16.79%)	4 (3.05%)	7 (5.34%)
The house	11 (30.56%)	24 (66.67%)	-	1 (2.78%)
The physical world	43 (70.49%)	15 (24.59%)	2 (3.28%)	1 (1.64%)
Time	45 (55.56%)	34 (41.98%)	2 (2.47%)	-
Warfare and hunting	37 (61.67%)	19 (31.67%)	2 (3.33%)	2 (3.33%)
TOTAL	**1327**	**792**	**79**	**50**

Figure 13: Plotting the distribution of loanwords in J. Maree et al. (2012) according to semantic field[48]

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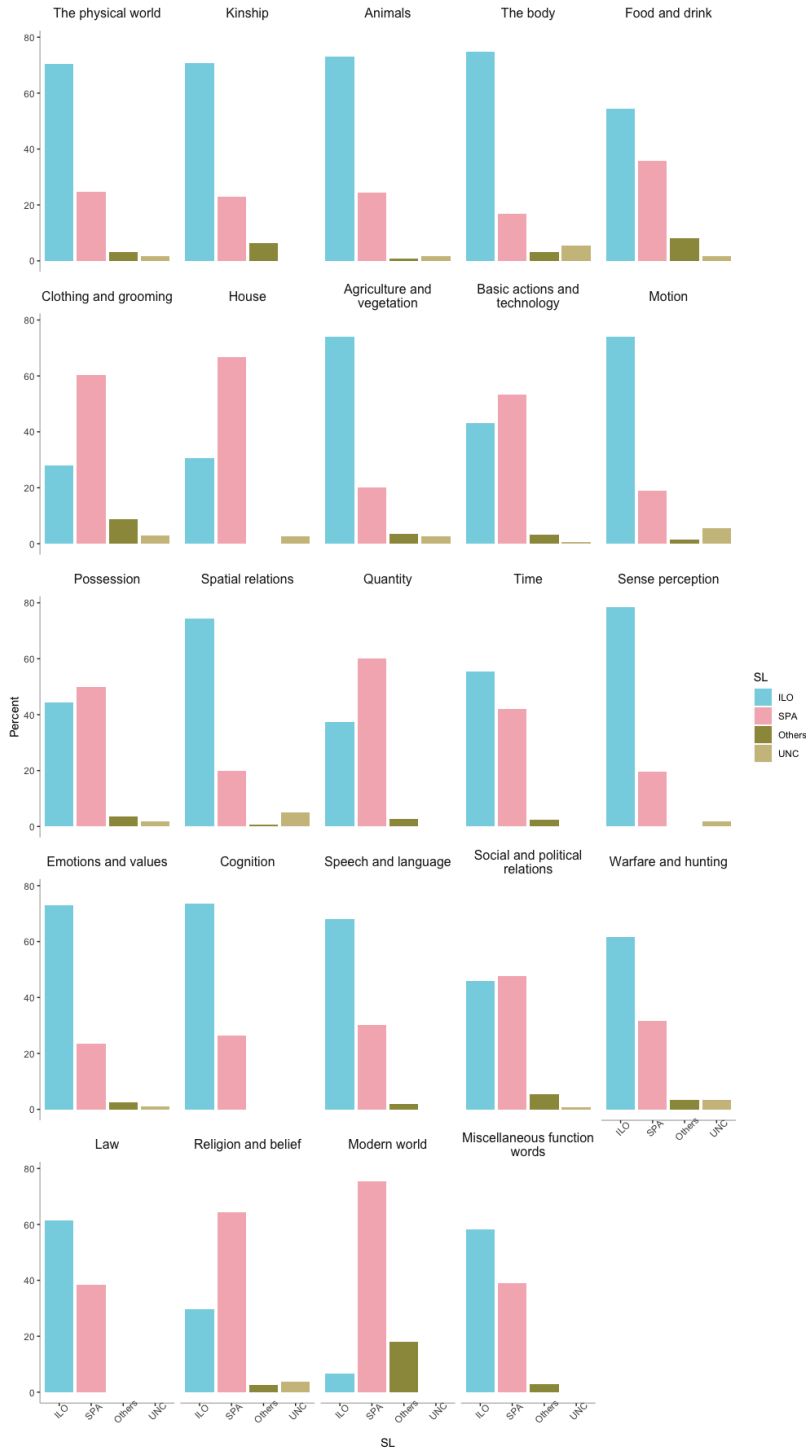
[48] This figure shows a comparison of all loanwords found in J. Maree et al. (2012) across different SLs namely Ilokano, Spanish, Others, and Uncertain. This differs from Figure 11 , which shows a comparison of loanwords and native vocabulary.

4.2   **Adaptation, integration, and change**

The structural differences between the SL and the RL often entail modification of the transferred elements to fit the RL system. The adaptation of these elements into the RL involves layers of change, in which the outermost layer reflects individual-level mechanisms underpinned by the bilingual's language dominance. A deeper layer of change is seen in community-level patterns, where wider social processes and mechanisms may inhibit or allow for the regularization of innovations. Thus, the extent of adaptation of loanwords within the larger level of the community is said to be dependent on the specific bilingual context (Poplack et al., 1988, p. 94).

Established, widespread loanwords are expected to show a great degree of integration within the RL. In some instances, these loanwords have become indistinguishable from native words, whereas in other instances, their etymology is still transparent as reflected in their phonological and morphological adaptation. These differences in adaptation and integration are indicative of how loanwords are transferred into the RL at different points in time, which also correspond to different patterns of agentivity and dominance across the community's history (Chapter 9).

Lexical transfer entails change in two ways: on the one hand, SL materials are adapted into the system of the RL (Section 4.2.1), but on the other, the RL system may also change as influenced by the SL (Section 4.2.2). Such is clearly observed in how loanwords are modified following the phonotactics and morphological system of Ibatan, but at the same time, we can also observe how the phonology and grammar of Ibatan have changed towards the direction of the SLs. This can also be observed in the domain of semantics. On the one hand, the original meaning of the word in the SL may change as the form gets transferred into Ibatan, but at the same time, this transfer has consequences in the meaning system of Ibatan through the restructuring of lexical relations.

4.2.1   *Adaptation and integration*

The adaptation and integration of a loanword can be observed in different domains of grammar. The degree in which a loanword is modified depends on how the SL and RL differ structurally. This section presents the ways in which a loanword is modified in terms of phonology, morphology, and semantics to fit the structure of Ibatan.

4.2.1.1   *Phonological adaptation*

As presented in Appendix A, Ibatan has 19 phonemic consonants /p, b, t, d, k, g, ʔ, s, h, t͡ʃ, d͡ʒ, l, r, w, j, m, n, ŋ, ɲ/ and 4 vowels /i, ɨ, u, a/ (R. Maree, 2007, p. 19), whereas Ilokano has 16 consonants (15

native and 1 loan consonant), /p, b, t, d, k, g, ʔ, s, h, l, r, w, j, m, n, ŋ/and 6 vowels /i, ɯ, u, ɛ, o, a/ (Rubino, 2000, pp. xxiii–xxviii). Not only do the two languages differ in terms of the number of phonemes, but there are also other differences that can be observed in terms of phonotactics. For instance, gemination is common in Ilokano (except for the glottal fricative *h*), and in many cases, the consonants are said to be underlyingly geminated (Rubino, 2000, p. xxxiv). In contrast, gemination is rare in Ibatan, and it is mainly observed in Ilokano loanwords. These phonological differences between the two languages underlie the ways Ilokano loanwords have been adapted into Ibatan. Some notable changes found in the data are given in Table 18.

Table 18: Some sound changes in Ilokano loanwords

Sound change	Ilokano	Ibatan	Meaning in Ibatan
degemination	*ban**n**ikes*	*ba**n**ikis*	to stand akimbo with one or both hands toward someone to show authority, importance, or wealth
	*bu**kk**ual*	*bo**k**wal*	to uproot a plant by digging it up with a shovel or a crowbar
	*ke**bb**et*	*ke**b**et*	dimple
	*u**pp**ok*	*o**p**ok*	to live with someone, especially a relative
vowel deletion	*ir**ii**d*	*ir**i**d*	to crush something hard
	*pal**ii**w*	*pal**i**w*	to observe, take note
	*k**aa**ruba*	*k**a**roba*	neighbor
metathesis	***bu**ssog*	***ab**sog*	a stomach is bloated
	***se**kkad*	***as**kad*	to resist
monophthongization	*balins**uek***	*balins**ok***	inverted, upside down
	*rit**uo**k*	*rit**o**k*	the cracking of bone joints, especially the fingers
palatalization	*a**n**ib*	*a**ny**ib*	an amulet, charm, talisman used to ward off menacing spirits
	*a**n**i**n**iwan*	*a**ny**i**ny**iwan*	shadow

It is important to note that these changes do not appear to be regular, as there are several other instances where the changes do not apply, such as those involving geminates: IVB *bennat* 'someone stretches something stretchy', *tekken* 'a bamboo pole used to propel a canoe or boat offshore', *gabbo* 'to wrestle', and *reppet* 'a tie for bundling up something', which are all identical to their original Ilokano forms. Similarly, the change from an alveolar nasal *n* to a palatal nasal *ny* before the high vowel *i*, which is a common sound change observed among the Batanic languages (Gallego, 2014, pp. 70–71), does not apply to other Ilokano loanwords: IVB *aninaw* 'someone goes spearfishing for fish, turtle, etc.', *banirong* 'a rhinoceros beetle', and *daniw* 'a poem, poetry', all transferred from Ilokano reflecting their original forms (also see Section 4.2.2.1).

As for metathesis, Ibatan *aldag* 'almost ripe', along with *absog* 'a stomach is bloated' and *askad* 'to resist' in Table 18 are traced to Ilokano *leddag, bussog,* and *sekkad* respectively. This systematic metathesis or change in the ordering of sounds is an old and unique sound change in the Batanic languages, which has occurred early on in their descent from Proto-Batanic. The change involves words with the combination of a consonant and a schwa (Ce). In the Batanic languages, PMP *e is reflected as *a* in the penultima, and following this metathesis, forms with *Ce reflect the sequence *aC* (Blust, 2017, pp. 494–495), as in (24) to (26):

(24) 'satiated'	(25) 'to stick, adhere'	(26) 'leftover, to remain'
PMP *besuR	PMP *deket	PMP *teda
Itbayat *absoy*	Itbayat *adket*	Itbayat *atda*
Ibatan *absoy*	Ibatan -	Ibatan *atda*

This same change applied for some Ilokano words transferred into Ibatan, concerning forms following the CVCC sequence, which were adapted as VCC following this Batanic metathesis. This sound change is not a productive process in Ibatan anymore, and to contrast with the previous examples, more recent Ilokano loanwords do not reflect this process, as in (27) to (29).[49]

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[49] Application of the sound change would yield the expected form *askeg* in (27) and *aska* in (28).

(27)'inside beam'	(28)'to harvest'	(29)'epileptic seizure'
Ilokano *sekkeg*	Ilokano *sekka*	Ilokano *kissiw*
Ibatan *sekeg*	Ibatan *sekka*	Ibatan *kissiw, aksiw*

Ibatan reflects two forms for 'epileptic seizure', *aksiw* and *kissiw* (29)*,* in which the latter is the preferred form of younger speakers. It is evident that these forms comprise different layers of change in Ibatan, where *aksiw* is the older form which exhibits a greater degree of adaptation and integration into Ibatan through the application of a sound change that does not apply anymore to newer forms, as seen in *kissiw*. Other pairs of words also form doublets in Ibatan because of the ways in which the forms were transferred and adapted into the language, as in IVB *akbet* 'something round becomes shriveled, deflated, or a container collapses' and *kebet* 'dimple' both from Ilokano *kebbet* 'poor harvest, season of scarcity, whithered, wrinkled, shriveled, parched, dry', and IVB *adpa* 'a span between one's outstretched arms' and *dedpa* 'stretch out both arms', both from ILO *deppa* 'armspan'. In addition to this, lexical transfer may also lead to the development of another type of doublet, in which the loanword bears resemblance to the native form, albeit with a slightly different meaning, as in IVB *absog* 'a stomach is bloated' from ILO *bussog* 'state of being full (from eating), inflated' vis-à-vis the native Batanic form *absoy* 'satiated'.

There are also other less common changes observed in the data, which apply only in few instances, such as vowel substitution: e > a in ILO *dennes* > IVB *denas* 'something as a branch or laundry on a drooping line nearly touches the ground', e > i in ILO *bannikes* > IVB *banikis* 'to stand akimbo with one or both hands toward someone to show authority, importance, or wealth', and i > e in ILO giddan > IVB geddan 'two people do something at the same time, simultaneously'.

In most cases, the Ilokano forms have been retained in Ibatan, as the two languages do not greatly differ in terms phonological structure. For instance, the two languages typically follow the CV(C) syllable structure. Thus, Ilokano loanwords are easily integrated into Ibatan phonology without much phonological adaptation.

Spanish loanwords, in contrast, reflect a greater degree of modification to fit into the sound system of Ibatan. Spanish[50] has 21 phonemic consonants /p, b, t, d, k, g, t͡ʃ, ɟ͡ʝ, f, θ, s, x, ɾ, r, l, ʎ, w, j, m, n, ɲ/

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[50] The variety described here is Castilian Spanish, but there are dialectal differences that can be observed among other varieties of Spanish, such as the realization of the velar fricative [x], which becomes glottal [h] in Andalusia, the Canary Islands, and Latin America (Martínez-Celdrán et al., 2003, p. 258).

and 5 vowels /i, u, e, o, a/ (Martínez-Celdrán et al., 2003, pp. 255–256). The set of phonemes in Spanish greatly differs with Ibatan, and such requires various adaptation strategies to be integrated into the phonological system of the language. Table 19 lists some common changes among Spanish loanwords.

Table 19: Some sound changes in Spanish loanwords

Sound change	Spanish	Ibatan	Meaning in Ibatan
substitution	*angel*	*anghil*	angel
	azufre	*asopri*	sulfur
	bronce	*bronsi*	bronze
	espejo	*ispiho*	mirror
	la olla	*laoya*	boiled tender meat and broth
assimilation	*desconfiado*	*diskompyado*	distrustful
palatalization	*anteojos*	*anchokos*	a pair of eyeglasses, goggles
	tiempo	*chimpo*	a season, time, weather
monophthongization	*aeroplano*	*iroplano*	airplane
	incienso	*insinso*	incense
	aceite	*asiti*	machine or motor oil
	muelle	*moli*	spring steel for making knives

A common sound change regularly observed among Spanish loanwords is the substitution of non-existent sounds with native counterparts. For instance, in Table 19, the mid vowel /e/ in Spanish is substituted with the high vowel /i/ in Ibatan, as in SPA *angel* > IVB *anghil* 'angel'. While Ibatan also has another vowel /ɨ/ (represented orthographically as <e>) which can be used to substitute for the vowel, it is only the high vowel /i/ that is seen to substitute for the mid vowel. This is because IVB /i/ can be argued to be closer in pronunciation to SPA /e/ than IVB /ɨ/.[51] To compare, /ɨ/ mainly occurs in native stems, and never in loanwords from non-Philippine languages such as Spanish and English. As for Ilokano loanwords, the IVB vowel /ɨ/ is used to substitute for the ILO vowel /ɯ/ (also represented as <e> in Ilokano orthography). This is likewise because of the close phonetic features of the two vowels.

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[51] However, it is difficult to categorically claim so, as it requires further acoustic analysis, such as measuring the average frequencies of each vowel.

The closeness of the two vowels is ultimately because IVB /ɨ/ and ILO /ɯ/ are cognates from PAN/PMP *e, only reflecting slight changes in pronunciation.[52]

Spanish consonants which do not exist in Ibatan, namely /f, θ, x, ʎ/, are regularly substituted with /p, s, h, y/ respectively. As seen in Table 19, SPA *azufre* is adapted as IVB *asopri* 'sulfur', where the two consonants are slightly similar in terms of place of articulation. The consonant /θ/, written in Spanish as <c>, is adapted as Ibatan /s/, such as in SPA *bronce* adapted as IVB *bronsi* 'bronze'. For the consonant /x/, which is represented in Spanish as either <j> and <g> depending on the environment, there are several variants that are observed in the adapted forms in Ibatan. Typically, the consonant /h/, reflecting similar manner of articulation, is used to substitute for the phoneme, as in SPA *espejo* > IVB *ispiho* 'mirror'. There are also a few instances where the consonant is adapted as IVB /k/, which is similar in terms of place of articulation, as in in SPA *justo* > IVB *kosto* 'correct, proper', and SPA *trabajo* > IVB *tarabako* 'work'. The differences in how SPA /x/ has been adapted in Ibatan illustrate how loanwords have entered Ibatan in different contexts and time periods. This is clearly seen in SPA *trabajo* 'work', where the adapted form *tarabako* in Ibatan is said to be the preferred form of the older generations, but a variant form *trabaho* has now come to be the preferred form among the younger generations. The form *trabaho,* in addition to the use of /h/ as a substitute for /x/, retains the initial consonant cluster, reflecting lesser adaptation in contrast with the other variant form. That *trabaho* also shows an initial consonant cluster, which is originally not observed in Ibatan phonotactics, entails further structural change in Ibatan phonology (Section 4.2.2.1), which then indicates that this form is a more recent loanword compared to the older form *tarabako.* This also suggests that the use of /h/ to substitute for SPA /x/ is more recent compared to the use of /k/. Variation among Spanish dialects also contributes to this irregularity, where Latin American dialects reflect /x/ as [h]. The Philippines' history of contact with Spanish speakers, both from the Iberian Peninsula as well as in Latin America, entails different ways in which Spanish loanwords have entered the lexicon of Philippine languages, where the loanwords are seen to carry over existing dialectal variation among these Spanish dialects. This is also seen in the adaptation of SPA /ʎ/, represented as <ll> in Spanish orthography. Typically, the

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[52] To compare, Filipino shows the merger of PAN/PMP *e and *i as /i/. These differences in the development of the vowel are illustrated in the following cognate sets: PMP *t**e**nz**e**k 'upright, erect' > IVB *ten**e**k* 'to stand up' (J. Maree et al., 2012), ILO *teddek* 'post, pillar', and FIL **t**irik 'build, erect, construct, put upright' (Blust & Trussel, 2020) and PMP *b**i**bi**R 'lower lip' > IVB *bibi* 'lips of the mouth of a person or an animal' (J. Maree et al., 2012), ILO *bibir* 'lip, more especially underlip' and FIL *bibig* 'mouth' (Blust & Trussel, 2020). See Conant (1912) for a discussion of PAN/PMP *e in Philippine languages.

consonant is substituted with IVB /j/, represented as <y>, which shares the palatal feature of the consonant. This is seen in SPA *la olla* > IVB *laoya* 'boiled tender meat and broth'. However, there are also some exceptions, such as SPA *caballo* > IVB *kabalyo* 'horse' and SPA *cebolla* > IVB *sibolyas/bolyas*. It can be argued that this variation in the adaptation of the words in Ibatan similarly reflects the existing variation among Spanish dialects, which offers a clue about the contexts and time periods these loanwords have been introduced into Philippine languages.

A type of change that is subsequent to the substitution of consonants is assimilation, illustrated in in SPA *desconfiado* > IVB *diskompyado* 'distrustful'. Nasal assimilation is argued to occur after the substitution of SPA /f/ to IVB /p/. That is, the nasal consonant /n/ assimilates to the place of articulation of the consonant /p/, resulting in the sequence /m/ + /p/ in Ibatan. Nasal assimilation is a common sound change in Ibatan, which applies as a synchronic morphophonological process (R. Maree, 2007, pp. 25–26). The regularity of this sound change in Ibatan has resulted in it extending to loanwords as well.

Palatalization is one type of assimilation that likewise applies regularly in Ibatan, both as a synchronic process, as well as a diachronic one. This is seen to apply in stops and fricatives that are contiguous with the high vowel /i/, as an assimilation to the palatal feature of the vowel. This is a historical process shared among the Batanic languages that led to the palatal consonants /t͡ʃ, d͡ʒ, ɲ/, represented orthographically as <ch, dy, ny> respectively in Ibatan (30).

(30) Palatalization rule

Proto-Batanic   **Ibatan**

$$
\begin{pmatrix} *t, *k \\ *d, *g \\ *n, *\eta \end{pmatrix} > \begin{pmatrix} \widehat{t\int} \\ \widehat{d\textrm{ʒ}} \\ \textrm{ɲ} \end{pmatrix} \quad / \quad \begin{array}{l} \_\_ i \\ i \_\_ \end{array}
$$

Some examples of this diachronic sound change are Proto-Batanic (PB) **tiluʔ* > IVB ***ch**ido* 'earwax', PB **si**k**uh* > IVB *si**ch**o* 'elbow', PB ****d**iya* > IVB ***dy**a* 'here', PB **sa**g**it* > IVB *sa**dy**it* 'to hang on', PB **papa**n**id* > IVB *pa**ny**id* 'wings', and PB ****ŋ**ipən* > IVB ***ny**ipen* 'teeth' (Gallego, 2014, pp. 118–120). This rule is also seen to apply among loanwords, not only from Ilokano (such as ILO *ani**n**iwan* > IVB *a**ny**i**ny**iwan* 'shadow' mentioned previously) but also from Spanish, as in SPA *t**iempo* > IVB *ch**impo* 'a season, time, weather'. Among loanwords from Spanish, the rule has been extended to include consonants adjacent

with the Spanish mid vowel *e*,[53] as illustrated in SPA *anteojos* > IVB *anchokos* 'a pair of eyeglasses, spectacles'.

Monophthongization is a common change seen among Spanish loanwords, as in SPA ***ae****roplano* > IVB ***i****roplano* 'airplane', SPA *ac****ei****te* > IVB *as****i****ti* 'machine or motor oil', and SPA *m****ue****lle* > IVB *m****o****li* 'spring steel for making knives'. However, this change does not apply regularly, and several counter-examples can be observed in the data, such as SPA *m****ae****stra/m****ae****stro* > IVB *m****ai****stra/m****ai****stro* 'female/male teacher', SPA *r****ei****na* > IVB *r****ey****na* 'queen', and SPA *j****ue****z* > IVB *hw****i****s* 'judge'.

One set of changes concerns the breaking of consonant clusters, as consonant clusters were not originally permitted in Ibatan phonotactics. One strategy is inserting a vowel in between the cluster, as in SPA ***br****uja* > IVB ***bor****oha* 'a folklore liver-eating creature'. Another strategy is the loss of one of the consonants in the clusters, as in SPA *pa****dr****e* > IVB *pa****d****i* 'priest of the Roman Catholic faith'.

Several loanwords reflect the loss of an entire syllable, such as SPA *****ta****baco* > IVB *bako* 'tobacco plant, a cigar of rolled tobacco leaves', SPA ***tar****jeta* > IVB *hita* 'a small box within a larger box of something as matches, cigarettes, pellets', and SPA ***her****mana/****her****mano* > IVB *manang/manong* 'older sister/brother' (with subsequent addition of the velar nasal at the end, which is a common ending for kinship terms in Ibatan). There are also some cases of reanalysis, in which two separate words in Spanish have been reinterpreted as a single word in Ibatan, and sometimes with succeeding sound change, such as SPA *hacer caso* > IVB *asikaso* 'attend to, go to take care of an immediate crisis or situation', SPA *mal asado* > IVB *lasado* 'half-cooked, trees are half-dried', and SPA *cruz de oro* > IVB *krosdioro* 'a kind of yellow striped spider that makes its zigzag web in the shape of a cross'.

Finally, several sound changes appear to be less regular, and seem to apply only in single or few instances. One set of such related changes is the alternation of the liquids *l* and *r,* as in SPA *a****l****quilar* > IVB *a****r****kila* 'someone charters a boat or a vehicle' and SPA *a****l****morzar* > IVB *a****r****mosal* 'breakfast'. Another set of changes concern changes in vowels, as in SPA *s****ei****s* > IVB *s****ai****s* 'six', SPA *bendic****i****r* > IVB *bindis****a****r* 'a priest gives blessing to someone or something', and SPA *pasm****o*** > IVB *pasm****a*** 'unexplained ailment'. In some words, a vowel may get deleted, such as SPA *cor****a****zonada* > IVB *korsonada* 'fascinated' and SPA *ventan****a*** > IVB *bintan* 'window'. There are also few instances where a consonant is reflected differently,

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[53] This vowel, along with [o], are not common in Ibatan, and are mainly observed in loanwords from non-Philippine languages such as English and Spanish (also see Section 4.2.2.1). Orthographically, the vowels are represented as <i> and <o> respectively, which overlap with the representation of the native vowels /i/ and /u/.

as in *l* > *d* in SPA co*l*chon > IVB ko*d*chon, kodson 'foam rubber used as a mattress', *f* > *k* in SPA **f**osforo > IVB **k**asporo 'a box of matches', and *p* to *k* in SPA Se**p**tiembre > IVB Si**k**chimri 'September'.

It is important to note that these adaptations may have applied prior to the transfer of the loanwords into Ibatan, through another SL such as Ilokano. One indication is the reduction of the affricate *ch* > *s*, as in SPA gan*ch*illo > IVB gan*s*ilyo 'crochet, knit' and SPA ran*ch*o > IVB ran*s*o 'go on an outing'. The affricate exists in the original phoneme system of Ibatan, whereas it did not exist originally in Ilokano, as seen in the adaptation of the Spanish loanwords as ILO gansilio and ranso respectively, resembling the Ibatan forms. The affricate could have been retained in Ibatan but the fact that the Ibatan forms resemble Ilokano suggests that these have been transferred indirectly into Ibatan through Ilokano. Along with this indirect transfer of Spanish loanwords in Ibatan through Ilokano, direct contact with the Spanish is likely to have happened on the relocation sites in Calayan and Cagayan prior to the arrival of the first families on Babuyan Claro (Section 3.2.1), but the impact of this contact on Ibatan has been most likely minimal.

4.2.1.2   *Morphological adaptation*

Poplack, Sankoff and Miller (1988, p. 75) distinguish loanwords from single-word code-switches through morphological and syntactic integration, where the former are argued to reflect RL structure, whereas the latter are said to retain the grammar of the SL (cf. Muysken, 1987; Poplack, 1993; Poplack & Meechan, 1995).[54] In situations of contact between closely related languages, determining the degree of morphological integration is complicated because of similar forms and structures. Ibatan shares a number of morphological formatives with Ilokano as well as Filipino, making it difficult to determine if a loanword follows SL or RL structure (see Appendix A). To illustrate, the derivation of the undergoer voice in the perfective aspect for the verb *takaw* 'steal' in Ibatan (31) is identical with its derivation in Ilokano (32), its SL, that is, by means of the infix *<in>*.

(31)   **(IVB)** *Tinakaw da iyaw mangga na.* (elicited)

<in>takaw	da	iyaw	mangga	na.
<UV.PFV>steal	3P.GEN	DEI	mango	1S.GEN

'They stole his mangoes.'

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[54] But also see Bentahila and Davies (1991) and Myers-Scotton (1993a) for counterarguments.

(32)   **(ILO)** *Tinakawda ti nuang.* (Rubino 2000: lxi)

\<in>takaw   =da   ti   nuang.

\<UV.PFV>steal   3P.GEN   DET   carabao

'They stole the carabao.'

However, as the two languages belong to separate Philippine subgroups, they also exhibit different formatives that can be used as a diagnostic tool to determine the kinds and degree of structural integration of the loanwords in Ibatan. Gardani (2020, pp. 99–104) identifies several kinds of morphological integration, where the degree of integration can be observed in how loanwords either fully or partially conform to the inflectional system of the RL. This is illustrated in how Ilokano loan verbs are inflected with mood and aspect in Ibatan. As an example, Table 20 shows the actor voice forms of the verb *gatang* 'to buy', inflected with mood (realis vs irrealis) and aspect (neutral, perfective, and imperfective). The form *gatang* is originally from Ilokano, but it is also used as a loan verb in Ibatan.

Table 20: Morphological integration of Ilokano loan verbs

Mood	Aspect	Ilokano	Ibatan
REALIS	NEUTRAL	\<um>X *g\<um>atang*	\<om>X *g\<om>atang*
	PERFECTIVE	\<im>\<m>X *g\<im>\<m>atang*	\<om>\<(i)n>X *g\<om>\<n>atang*
	IMPERFECTIVE	\<um>CVC~X *g\<um>at~gatang*	\<om>CVC~X *g\<om>at~gatang*
IRREALIS		\<um>X=((n)to) *g\<um>atang=to*	\<om>X=((a)nchi) *g\<om>atang=anchi*

The two languages show a similar derivation for actor voice, that is, ILO \<um> and IVB \<om>, with the vowels only differing in orthographic representation but with similar pronunciation, where ILO \<u> and IVB \<o> are pronounced as a high back unrounded vowel. Aspectual and mood distinctions are inflected using additional affixes combining with the actor voice infix. For realis perfective, Ilokano follows the structure \<im>\<m>, where \<im> is the aspectual infix and \<m> is the voice infix \<um> reflecting the loss of the initial vowel. Ibatan shows a different sequence of the affixes, that is,

<om><(i)n>, where the voice infix precedes the aspectual infix. Thus, inflecting realis perfective for *gatang* 'to buy' in Ilokano would result in the form *gimmatang,* but *gomnatang* in Ibatan*.* This clearly demonstrates how the verb is integrated into the aspectual system of Ibatan. However, morphological integration for loanwords can only be considered partial, as Ibatan has developed a non-native formative to inflect realis imperfective for loanwords, that is, via the CVC reduplication, modelled after Ilokano. Thus, the inflected form for the verb *gatang* is similar in the two languages, that is, ILO *gumatgatang* and IVB *gomatgatang*. In contrast, native stems are inflected using a parallel native structure, that is, either a CVCV or a CV(y) pattern depending on the stem. For example, the native Ibatan verb *sayap* 'to fly' is inflected as *somayasayap* for realis imperfective. Finally, inflecting irrealis is optional for both Ilokano and Ibatan, using the clitic *=(n)to* in Ilokano and *=(a)nchi* in Ibatan, resulting in the forms *gumatangto* and *gomatanganchi* respectively.[55]

In addition to inflection, integration can also be observed in derivation. For loan verbs in Ibatan, actor voice durative is derived with the prefix *mag-*, which is adapted from ILO *ag-*. For native verbs, however, the prefix *may-* is used, which is the inherited Proto-Batanic form. This illustrates what Kossmann (2010) describes as *Parallel System Borrowing*, where the RL reflects parallel native and non-native paradigms which distinguish native from loan stems. Gardani (2020, pp. 102–103) attributes such as a case of non-integration, but in Ibatan, the form *mag-* is not identical to the original Ilokano form *ag-*, and in fact, has been adapted to align with the native counterpart *may-.* Thus, this can be considered a kind of integration involving adaptation. In deriving actor voice durative, there are also cases of loan verbs occurring with the native prefix *may-*, resulting in hybrid formations (cf. Seifart, 2015a). For example, the Ilokano loan verb *bilag* 'to dry under the sun' is derived as *may-bilag* in Ibatan instead of the expected form *mag-bilag.* Thus, such forms exhibit greater adaptation and morphological integration into Ibatan through the use of native structures. The parallel durative paradigms in Ibatan are discussed in detail in Chapter 5.

Aside from verbs, nouns and other word classes are also typically integrated into Ibatan using native morphology. However, as in verbs, there are various other non-native structures used with loanwords, such as in terms of pluralization for human nouns, described in Section 1.2. Therefore, like what has

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[55] As the other Batanic languages (which do not share the same kind of contact history with Ilokano as Ibatan) reflect the same structure *=(a)nchi* to optionally inflect for irrealis, this can be considered parallel development between Ilokano and the Batanic languages and not the result of contact-induced change.

been shown for phonological adaptation, loanwords are integrated into the morphology of Ibatan in different degrees, indicating different mechanisms that apply in the transfer process (Section 4.3).

4.2.1.3   *Semantic change*

Lexical transfer typically involves the transfer of both form and meaning.[56] However, it is rare for words to be transferred carrying exactly the same meaning from the SL, which includes "referential range, polysemy patterns, and entailments" (Epps & Law, 2019, p. 40). In terms of the transfer of meaning, the most concrete sense of the word is said to be the most easily transferable and is thus the one that tends to be transferred first (Gardani et al., 2015, p. 6; Matras, 2007; Seifart, 2019, p. 15). To illustrate, IVB *akbet* 'something round becomes shriveled, deflated, or a container collapses' is a loanword traced from ILO *kebbet,* with the senses (1) 'withered, wrinkled, shriveled, parched, dry', and (2) 'poor harvest, season of scarcity' (Rubino, 2000), and it is only the primary sense that has been transferred together with the form.

Furthermore, change in meaning happens because the contexts in which concepts are used and understood by SL and RL speakers can be quite different. Semantic change is thus a common outcome of language contact (Epps & Law, 2019, p. 38; Winford, 2003, p. 12), and this can be broadly categorised as *narrowing, broadening,* and *shift*.[57] Cases in which the meaning of the loanword is largely retained are treated as *retention*. Narrowing is the change from a general to a more specified meaning, as well as when only a part of the original meaning has been taken on in the RL, illustrated in *galis* in (33) and *gelgel* in (34). The opposite of narrowing is broadening or generalization, which involves the change from a specific meaning to a broader one, as in *ipag* in (35) and *kapon* in (36). Shift is a broad term to characterize different kinds of changes. One such example is metonymy, which involves a word denoting one specific concept shifting to refer to an attribute of that concept, illustrated in *taga daya,* where the meaning 'east wind' in Ibatan is a concrete reference that can be used to locate the direction 'east', the original meaning of *daya* in Ilokano (37). Another example of shift is the use of metaphors, wherein a word that denotes a particular concept is used to refer to

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[56] However, cases of transfer involving only form or meaning/pattern are also possible in language contact, but this is argued to be a different process. The distinction between form and meaning is widely recognized in the literature, and has been labeled as direct~indirect transfer/diffusion, borrowing~replication, transfer of fabric~pattern, and MAT~PAT borrowing (cf. Gardani, 2020, pp. 104–106; Grant, 2020, p. 20; Matras & Sakel, 2007).

[57] Categorization follows Stapert (2013). For a deeper discussion on semantic change, see Epps and Law (2019), Traugott and Dasher (2005), and Urban (2015).

something that can be associated with that concept, as in *sairo,* which is used to refer to the 'devil', from its original meaning 'temptation, evil, seduction' (38). An important thing to note about semantic change, be it internal (through internal processes of language change) or external (through language contact), is that the change in meaning is oftentimes specific to a language's particular socio-cultural contexts (Blank, 1999, p. 62; Traugott & Dasher, 2005; Urban, 2015, pp. 380–381). To illustrate, in *oli* (39), the original meaning in Ilokano 'to go up' has changed to 'premarital arrangements' in Ibatan. This shift in meaning follows the Ibatan tradition of the man and his family going up to the bride's house as part of marital arrangements and negotiations with the bride's family.

Narrowing	(33)	*galis*
	IVB 'the slime of fish or snails'	
	ILO 'slippery, to slip, slide, become slippery'	
	(34)	*gelgel*
	IVB 'scrub something between the hands'	
	ILO 'to crumple, rub between the hands, knead, squeeze'	
Broadening	(35)	*ipag*
	IVB 'brother- or sister-in-law'	
	ILO 'sister-in-law'	
	(36)	*kapon*
	IVB 'a castrated adult male animal, especially a pig'	
	SPA 'castrated rooster'	
Shift	(37)	*taga daya*
	IVB 'east winds'	
	ILO 'east'	
	(38)	*sairo*
	IVB 'the Devil, tempter'	
	ILO 'temptation, evil, seduction'	
	(39)	*oli*
	IVB 'premarital arrangements'	
	ILO uli 'to go up'	

The majority of the loanwords in Ibatan have kept their primary meaning in the SL (62.32%), while 16.86% are seen to have undergone *shift*, 16.19% underwent *narrowing*, and only 1.6% underwent *broadening.* For loanwords with uncertain etymology, it is impossible to identify the type of semantic change as the original source meaning cannot be traced, and these are all tagged as *uncertain*. This is summarised in Table 21, while Figure 14 details the types of semantic change according to SLs.

Table 21: Semantic change among Ibatan loanwords

Semantic Change	Ilokano	Spanish	Others	Uncertain	TOTAL
Broadening	28 (2.11%)	7 (0.88%)	1 (1.27%)	-	36 (1.60%)
Narrowing	277 (20.86%)	77 (9.72%)	10 (12.66%)	-	364 (16.19%)
Retention	818 (61.64%)	531 (67.05%)	52 (65.82%)	-	1401 (62.32%)
Shift	203 (15.30%)	166 (20.96%)	10 (12.65%)	-	379 (16.86%)
Uncertain	1 (0.08%)	11 (1.39%)	6 (7.59%)	50 (100%)	68 (3.02%)
TOTAL	1327	792	79	50	2248

Figure 14: Plotting semantic change according to SLs
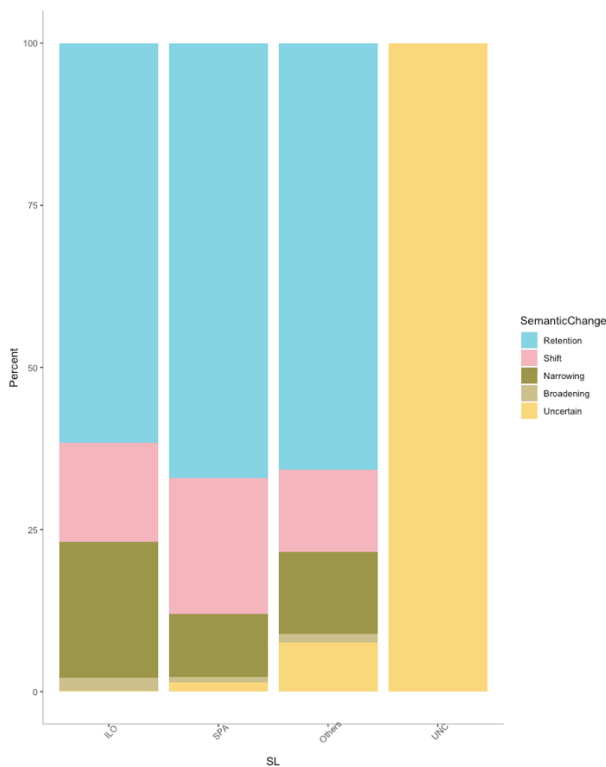
4.2.2   ***Structural and semantic consequences of lexical transfer***

While loanwords are typically adapted to fit the structure of the RL, lexical transfer may in turn yield structural change. For Ibatan, the domains of phonology and morphology reflect striking contact-induced changes mainly from Ilokano and Spanish. Lexical transfer also affects the semantics of the RL through the restructuring of lexical relations. This section presents some structural and semantic consequences of lexical transfer in Ibatan.

4.2.2.1   *Structural change*

There are various ways that loanwords have contributed to the restructuring of the grammatical system of Ibatan. In terms of phonology, contact-induced change has affected existing conditioned sound changes, phonotactics, as well as the overall phoneme inventory of Ibatan. One significant phonological change in Ibatan is how older conditioned sound changes do not apply in recent loanwords, thus affecting allophonic variation that existed in Ibatan in the past. For example, as discussed in Section 4.2.1.1, Ibatan reflects a historical palatalization rule, where the PB consonants /*t, *k, *d, *g, *n, *ŋ/ became palatalized before or after the high vowel *i*, resulting in the palatal consonants /t͡ʃ, d͡ʒ, ɲ/. In addition, the liquid *l becomes a *d* or the post-alveolar affricate *dy* in the same environment, such as PB *taliŋa > IVB *tadyinya* 'ear' and PB *liman > IVB *diman* 'fight, die' (Gallego, 2014, pp. 97–99). This rule resulted in an original phonological system in Ibatan where the consonants did not typically occur adjacent to the high vowel *i*.[58] As illustrated in Section 4.2.1.1, older Ilokano loanwords have also been adapted into Ibatan through this sound change, such as ILO *aniniwan* > IVB *anyinyiwan* 'shadow'. However, recent loanwords that keep their original SL form resulted in the expansion of the distribution of these consonants. Table 22 gives some Ilokano loanwords that do not follow the historical palatalization rule.

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[58] However, there are cases where the rule does not apply, particularly concerning the *d* + *i* sequence, and these are said to reflect dialectal variation (R. Maree, 2007, p. xxiv) (also see Section 7.2.1.2).

Table 22: Ilokano loanwords without Batanic palatalization

Combination	Ibatan	Gloss
t + i	*botit*	someone is big-bellied
k + i	*kibin*	to hold someone's hand to guide or support that person
d + i	*madi*	wrong
g + i	*rogi*	the beginning, start of something
n + i	*aninaw*	someone goes spearfishing for fish, turtle, etc.
ng + i	*ladingit*	sorrowful with a sense of regret
l + i	*liday*	sadness, sorrow

Another significant change in the phonology of Ibatan is concerning the bilabial stop *b. Historically, the stop weakened to a fricative in the Batanic languages word-initially and intervocalically, as in PB *taba > Itbayaten *tava* 'fat' and PB *bulek > Itbayaten *volek* 'abdomen, belly' (Gallego, 2014, pp. 83–85; Yamada, 2002). This change is observed across all the Batanic languages except Ibatan. While there are no relic forms in Ibatan reflecting *v* in the relevant environments, it is argued that the same change applied in Ibatan, but this has been neutralized because of the influence of Ilokano. The main basis for this is the history of Ibatan with the Batanic subgroup. Li (2001, p. 277) writes that the separation of Ibatan from the Batanic subgroup occurred one hundred years after speakers of Yami/Tao left Batanes and migrated into Taiwan, corroborating with ethnographic, genealogical, and historical data by R. Maree (1982) and J. Maree (2005). That the change is observable in Yami/Tao strongly indicates how the lenition of PB *b to *v* has been a conditioned sound change that applied on the level of PB. Moreover, Gallego (2014, pp. 145–149) writes about the close relationship between Ivatan and Ibatan, identifying several shared phonological and lexico-semantic innovations. These include the change of Proto-Batanic *l to *d* or *dy* when preceding the vowels *i* and *e*, and the lexical change from PB *kuyis 'pig' to *bagu/bago* in Ivatan and Ibatan.[59] With these shared innovations between Ivatan and Ibatan,

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[59] One other lexico-semantic innovation is described in detail by Moriguchi (2005) concerning the forms for 'urination'. Gallego (2014, pp. 148–149) reconstructs the form *upis for PB. Itbayaten reflects the form *upis*, while Ivatan reflects two forms, *peteg* to refer to male urination and *upis* to refer to female urination. Ibatan only reflects a single form *peteg* to refer to both male and female urination. Moriguchi (2005) attributes the innovation in Ivatan to the distinction between land register and fishermen's register, where *upis* has been used in the land register, while the form *peteg* has been used to refer specifically to male urination in the fishermen's register. Gallego (2014, pp. 148–149) treats the distinction between male and female urination as a shared innovation between Ivatan and Ibatan, where Ibatan reflects a subsequent innovation, in which this distinction was lost, leading to only one form used in the

it is likely that the conditioned lenition of PB *b to *v* also applied in Ibatan since Ivatan also reflects this sound change. The neutralization of this change in Ibatan occurred as a consequence of contact, driven by speakers with increased dominance in Ilokano. As Ilokano does not have the consonant *v* in its inventory, all instances of *v* in Ibatan changed to *b*, underpinned by imposition transfer via SL agentivity. Thus, we can observe the following development of the consonant in the examples mentioned previously: PB *taba > **tava > IVB *taba* 'fat' and Proto-Batanic *bulek > **vudek > IVB *bodek* 'stomach, abdomen, belly' (also see Section 9.2.3).

The phonotactics of Ibatan has also changed with the influence of Spanish and English. In the past, consonant clusters were not permitted in Ibatan phonological structure, as discussed in Section 4.2.1.1, but with the influence of foreign languages, certain combinations of consonants, particularly stops adjacent to liquids, have become common, as in ENG *crude oil* > IVB *krodo* 'crude oil', SPA *muestra* > IVB *mostra* 'appearance, shape of the face', and SPA *trancazo* > IVB *trangkaso* 'influenza, flu'. In some instances, variation exists, as in SPA *trabajo* > IVB *tarabako~trabaho*, as already discussed in Section 4.2.1.1. Aside from the variation between *k* and *h* in the realization of Spanish *j,* the two forms show difference in the adaptation of the initial cluster. The form *trabaho* is also the preferred form of the younger generation, and this suggests that this has been transferred more recently than the form *tarabako*, which is used by the older generation. Such variation illustrates layers of contact-induced change, wherein the same word or concept can be transferred more than once in a language, and this is reflected in the ways in which the word gets adapted into the RL. Haugen (1950, p. 222) describes such instances as *reborrowing*, in which loanwords are said to be "subject to continual interference," thereby resulting in variant forms of the same word.[60]

Finally, the phoneme inventory of Ibatan has been expanded to include loan vowels, namely the mid vowels [ɛ] and [o]. R. Maree (2007, p. 22) writes that [o] was originally an allophone of the high vowel /u/ in Ibatan, with no apparent pattern of distribution. With increased knowledge and exposure to English, Ibatan speakers have come to distinguish the two vowels, especially in loanwords. The same can be argued for the distribution of /i/ and [ɛ]. While the vowels [ɛ] and [o] only occur in restricted

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language, that is, *peteg,* referring to both male and female urination*.*

[60] Gardani (2020, p. 113) uses the same term *reborrowing*, but describes a different process, where a loanword transferred from a particular SL is adapted into the RL, and the adapted form is then transferred back or "reborrowed" into the original SL.

environments at present, it is likely that Ibatan will develop a phonemic distinction between the mid and high vowels through loanwords forming minimal pairs.

As for morphological change, lexical transfer in Ibatan also involves the transfer of structural materials, leading to non-native structures in the language. This can be observed in several derivational and inflectional forms in Ibatan, such as non-native *maika-* in variation with native *cha-* to derive ordinals, non-native CVC reduplication in variation with native CVCV reduplication to indicate plurality (Section 1.2), and the adapted verbal formatives for realis imperfective CVC reduplication as well as actor voice durative *mag-* which are both used for non-native stems (Section 4.2.1.2 and discussed further in Chapter 5). All these structures have developed via the transfer of complex loanwords from Ilokano. These structures, while modelled after Ilokano, have come to be extended to loanwords from other SLs as well, reflecting their further regularization and productivity in Ibatan.

4.2.2.2   *Semantic effect*

Lexical transfer has definite effects in the meaning system of the RL through the restructuring of lexical relations. Cultural borrowings, or those that have been transferred primarily because of lexical need, result in the growth of the RL lexicon or onomasiological change, and this is known as adlexification. Other kinds of loanwords may result in the addition or modification of meanings in the RL or semasiological change, known as supralexification (Geeraerts, 2010; Varella, 2019, p. 54). More specifically, semantic effect on the RL may involve the addition of a new word into the lexicon of the language where no earlier word of corresponding meaning existed (insertion, or onomasiological change), the coexistence of the loanword with an earlier synonymous word in the language (coexistence), or the replacement of an earlier word of the same meaning with a loanword (replacement) (Haspelmath and Tadmor, 2009, p. 16).

In Ibatan, many instances of insertion can be observed in the domain of technology, as in *dyip* 'jeep' (40) and *korinti* 'electricity' (41), as such concepts did not exist in Ibatan in the past. Lexical transfer may also result in the formation of synonyms in the RL, as in native *adaw* and ILO *ayat* 'love' (42) and native *kawanan* and ILO *kannawan* 'right (hand, side)' (43). At times, co-existence may further lead to replacement, in which native words come to be archaic or obsolete as they are replaced with loanwords. This can be seen in a few instances in Ibatan, illustrated in *nwang* 'carabao' (44) and *gatang* 'to buy' (45). Older speakers still know the terms *pagad* 'carabao' and *sadiw* 'to buy', but younger speakers have completely shifted to the use of the Ilokano counterparts *nwang* and *gatang* respectively.

Insertion	(40) 'jeep'	
	Ibatan *dyip*	English *jeep*
	(41) 'electricity'	
	Ibatan *korinti*	Spanish *corriente*
Coexistence	(42) 'love'	
	Ibatan *adaw*	Ivatan *adaw*
	Ibatan *ayat*	Ilokano *ayat*
	(43) 'right (hand, side)'	
	Ibatan *kawanan*	Ivatan *kawanan*
	Ibatan *kannawan*	Ilokano *kannawan*
Replacement	(44) 'carabao'	
	Ibatan *nwang*	Ilokano *nwang*
	(archaic) *pagad*	Ivatan *pagad*
	(45) 'to buy'	
	Ibatan *gatang*	Ilokano *gatang*
	(archaic) *sadiw*	Ivatan *sadiw*

A huge number of loanwords (58%) coexist with either native Ibatan words or with other loanwords. The relationship among such terms may not always be perfect synonymy, and in many cases, they merely share overlapping meanings. Insertions comprise 41.19% of the loanwords, and these concern terms for flora and fauna, technology, the modern world, among others. Very little replacement has been observed in the data (0.36%), and admittedly, this may not reflect the actual figure because of insufficient historical information. That is, loanwords treated as insertions may in fact be unrecognized replacements in the language, but accurately determining this requires further comparative work with other Batanic languages. Table 23 gives a summary of the various semantic effect of lexical transfer according to SLs, and Figure 15 shows a plot of how loanwords in the different SLs are distributed according to semantic effect.

Table 23: Semantic effect according to source languages

Source Language	Coexistence	Insertion	Replacement	Uncertain	TOTAL
Ilokano	897 (68.79%)	412 (44.9%)	8 (100%)	10 (100%)	1327
Spanish	350 (26.84%)	442 (47.73%)	-	-	792
Others	26 (1.99%)	53 (5.72%)	-	-	79
Uncertain	31 (2.38%)	19 (2.05%)	-	-	50
TOTAL	**1304 (58%)**	**926 (41.19%)**	**8 (0.36%)**	**10 (0.44%)**	**2248**

Figure 15: Plotting semantic effect by source language
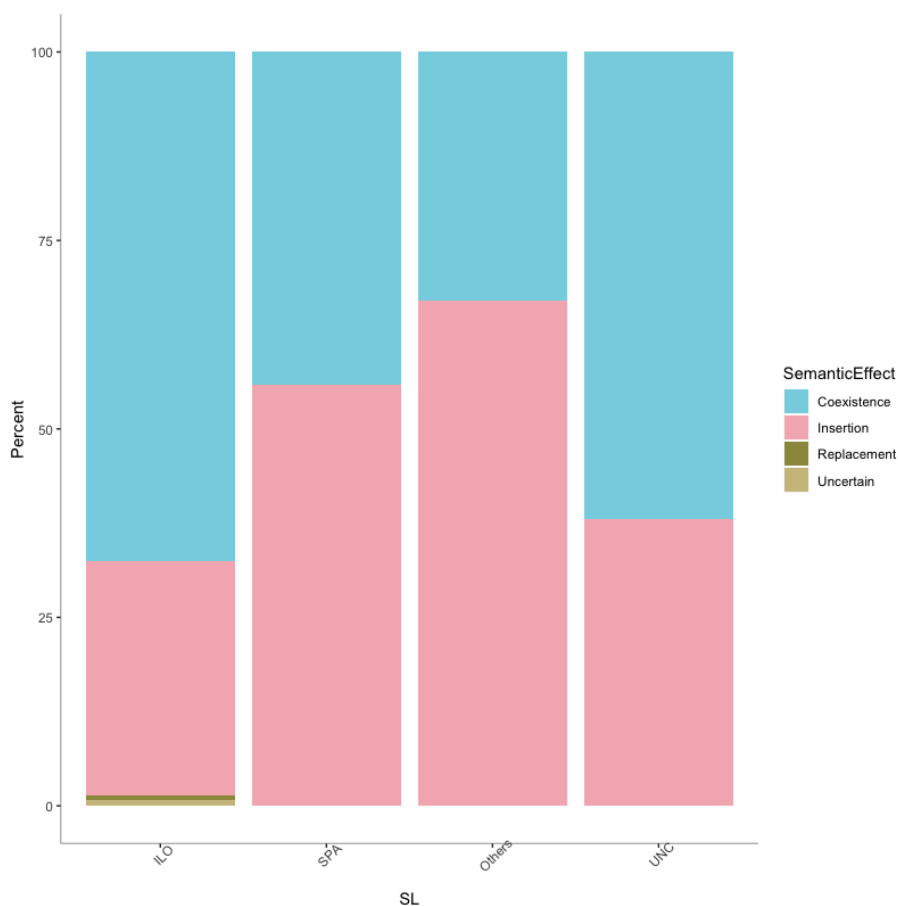
Tracing the overall semantic effect of each SL offers a clue about how the SLs have affected the lexicon of Ibatan, that is, through core and cultural borrowings (Myers-Scotton, 2002, p. 41), where insertions are taken to reflect cultural borrowings, while replacement and coexistence reflect core borrowings (Haspelmath, 2009, p. 49). Cultural borrowings are common outcomes of contact, which are also called "loanwords by necessity", in that they introduce new concepts that did not exist originally in the RL (Haspelmath, 2009, p. 46). In contrast, core borrowings are more difficult to explain,

as the concept is already encoded in the RL, and such are indicative of a different kind of social contact, which may involve prestige, cultural pressure, or a high degree of bilingualism among speakers (Haspelmath, 2009, p. 48). Given the limitations in the current analysis, primarily the uncertainties regarding whether a form is indeed a legitimate insertion or an unidentified replacement, it is difficult to make definite claims about semantic effect. However, based on the data, it appears that Spanish loanwords mostly comprise of cultural borrowings, whereas Ilokano loanwords mostly comprise of core borrowings. This also indicates the difference in the respective contexts of social contact, where the influence of Spanish is mainly seen in the introduction of foreign concepts and items into the community, such as concepts pertaining the modern world as well as the Catholic faith, whereas the longstanding social contact between speakers of Ibatan and Ilokano has led to core domains in everyday life being affected by contact.

4.3   Explanations for lexical transfer

It is often assumed that lexical transfer arises because of the need to fill the gaps in the vocabulary of the RL. This is used to explain how cross-linguistically, there is indeed a huge proportion of loanwords in semantic fields such as the modern world, religion and belief, and clothing and grooming, resulting from the expansion of the world's largest religions, as well as colonialism and globalization, which saw the spread of new concepts, ideas, and material culture across the world (Tadmor, 2009, pp. 64–65). However, merely saying that transfer is motivated by lexical need does not provide sufficient explanation for the many instances of core borrowings across languages, where loanwords coexist or replace existing terms. In looking for explanations for lexical transfer, it is important to recognize multiple motivations. Weinreich (1953, pp. 57–58) identifies linguistic and social factors that motivate lexical transfer, such as the relative frequency of words, homonymy, the loss of expressive voice of affective words, as well as the social value attached to the SL. Winford (2010, p. 177) also highlights the importance of socio-political aspects of language contact in explaining the degree of lexical transfer, such as prestige, language standardization, as well as patterns of social interaction, power relationships, and language ideologies of the community. Widespread bilingualism can also motivate lexical transfer. Haspelmath (2009, p. 48) cites the cases of Selice Romani in contact with Hungarian, as well as Tarifiyt Berber in contact with Moroccan Arabic, where speakers are proficient in the languages, and so it does not matter for them which word they use as they know they can be understood by their interlocutor. In exceptional cases, lexical transfer may be inhibited even in situations of intense contact, and this depends on the specific context of the community. Studies such

as Aikhenvald (2001a), Ross (2003, 2013), and Stanford (2009) show how lexical transfer is dispreferred in certain multilingual communities because of the value and loyalty attached to the local language. As lexicon is usually emblematic of a group's linguistic identity, lexical transfer is avoided in these communities. Thus, both linguistic and social factors are seen to promote or inhibit the transfer of lexical materials.

Following Muysken's (2010) approach, lexical transfer can be analyzed in terms of frequency, symmetry configuration of the languages, features involved, as well as constraints. Muysken (2010) writes that lexical transfer, which typically involves concrete features (or form, as opposed to pattern), is highly frequent and almost universal. This is usually observed in languages with an asymmetrical relationship, where the SL is the dominant language and the RL is the socially subordinate one. This agrees with the idea that lexical transfer, particularly involving core borrowings, is primarily motivated by prestige. However, several case studies on small-scale communities with a high degree of linguistic loyalty to their heritage language, such as Aikhenvald (2001a), Ross (2003, 2013), and Stanford (2009) mentioned above, provide counterexamples.

In terms of constraints, lexical transfer is argued to be subject to various structural constraints. These constraints manifest as asymmetries and hierarchies across word classes which are frequently cited in language contact literature, such as how nouns tend to be more easily transferable than verbs (cf. Curnow, 2001, pp. 417–419; Haugen, 1950, p. 224; Lass, 1997, p. 189; Muysken, 2010, p. 271; Seifart, 2019, pp. 15–18). Wohlgemuth (2009, pp. 246–264) cites various factors that underpin such asymmetries in word classes, such as varying degrees of structuredness and integration, the referential function of the morpheme, cognitive mechanisms involved in acquisition and processing, frequency differences, grammatical factors pertaining to the languages in contact, as well as extralinguistic factors such as the nature of contact and the speakers' attitude towards borrowing. Wohlgemuth (2009, p. 264) agrees with Curnow (2001, pp. 424, 434) that claims on borrowability and borrowing constraints tend to lack nuance as they are based on a single factor, that is, word class membership, and more robust generalizations can be made by accounting for a wider range of factors that covers more data that go beyond the domain of grammar.

Lexical transfer is also underpinned by mechanisms that operate on the bilingual individual, as well as on the level of the community. In terms of speaker-level mechanisms, van Coetsem (1988, 2000) argues that lexical transfer is a typical outcome of RL agentivity. In fact, lexical transfer can occur with or without a high degree of proficiency in the SL (Gardani, 2020, p. 99). How loanwords have been adapted into the RL is more indicative of speakers' degree of dominance in their languages (cf. Poplack

et al., 1988), where a greater degree of adaptation signals greater dominance in the RL, whereas lesser adaptation indicates a certain degree of dominance in the SL. To illustrate, Ilokano loanwords in Ibatan show varying degrees of adaptation. Certain loanwords are more fully adapted and integrated into the phonological and morphological system of Ibatan compared to other loanwords (Section 4.2.1). Such differences in adaptation suggest different agents of transfer, where fully adapted loanwords have been likely introduced by Ibatan-dominant speakers, and those that show influence of Ilokano structures such as in terms of phonological and morphological patterns indicate a period of increased dominance in Ilokano among a portion of the population. Spanish loanwords also show variation in adaptation, such as the case of the variant forms *may-tarabako* and *mag-trabaho* 'to work', derived with actor voice durative. *May-tarabako* reflects greater phonological and morphological adaptation, where the consonant cluster of the original Spanish form *trabajo* is broken through an epenthetic vowel *a,* and the verb is derived with the native durative prefix *may-*. This level of adaptation is indicative of RL agentivity, and this is further supported by the claim by J. Maree et al. (2012) that the form is preferred by the older generations who are linguistically dominant in Ibatan. The form *mag-trabaho*, in contrast, reflects lesser adaptation, in that it is closer to the phonological structure of the original SL form, and it is derived with the non-native prefix *mag-*. This indicates that the form has been introduced by speakers with increased dominance in the SL. However, this is not to say that the speakers are proficient in Spanish, given that the Ibatans had little direct contact with Spanish speakers, and that no speakers report knowledge of Spanish. What is more plausible is that the form has been indirectly introduced through another SL, possibly Ilokano or Filipino, which both reflect the same form *trabaho*.[61] J. Maree et al. (2012) claim that this is the preferred form of the younger generations, which also suggests changing patterns of agentivity across generations. Subsequent structural change arising from lexical transfer, reflecting evidence of imposition of Ilokano structures, is also indicative of a period of SL agentivity among a category of Ibatan speakers.

It is argued in dialect geography that every word has its own history. In the case of Ibatan, how different loanwords exhibit different degrees of adaptation and integration can be linked to different patterns of agentivity and transfer mechanism. This is most apparent in synchronic individual-speaker variation (Chapter 7), but this can also be observed diachronically, where widespread loanwords used by the community likewise reflect varying degrees of adaptation, as seen in Section 4.2.1.

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[61] In fact, Ilokano also reflects the two variant forms *tarabako* and *trabaho* (Rubino, 2000).

In terms of community-level language use, loanwords comprise a huge proportion of the Ibatan lexicon, which makes the language a high borrower according to Haspelmath and Tadmor's (2009) categorization. This is a clear reflection of the community's sociolinguistic history. The speakers' mixed Batanic and Ilokano ancestry, coupled with intense and ongoing social contact with Ilokano speakers, has led to a large-scale transfer of Ilokano vocabulary into Ibatan. In terms of overall distribution of loanwords, Ilokano loans mostly consist of core borrowings, such as terms for everyday life and activities, the physical world, kinship, agriculture and vegetation, and warfare and hunting. In terms of word classes, the close genetic relationship of Ibatan and Ilokano has played a role in promoting the transfer of more resistant categories such as verbs, in that Ibatan can readily integrate Ilokano verbs within its grammatical structure. The speakers' knowledge of Ilokano is also argued to play an important role in promoting such kind of transfer, where easier morphological analysis allows for the segmentability of less transparent structures, thereby facilitating transfer (cf. Curnow, 2001, p. 415). All in all, the long-standing contact between Ibatan and Ilokano, which involves community-wide bilingualism that goes as far back as the coming of the first Ibatan families to Babuyan Claro (Section 3.2), underlies the patterning and distribution of Ilokano loanwords in Ibatan. In contrast, while Spanish loanwords are also seen to significantly shape the Ibatan lexicon, this involves little to no proficiency in Spanish. This explains why Spanish loanwords mostly consist of cultural borrowings, particularly those that concern the modern world, as well as the Catholic faith.

Such differences in the contexts of contact are expected to result in different linguistic outcomes, where Spanish loanwords have been transferred via RL agentivity, whereas the transfer of Ilokano loanwords involves the application of both RL and SL agentivity within the complex contact setting of Babuyan Claro. The degree of lexical transfer in Ibatan has resulted in subsequent structural change in the language. This is seen in the restructuring of the phonological system of Ibatan, as well as the development of adapted morphological structures in the language. It is argued that these kinds of structural change have primarily developed as a consequence of lexical transfer, facilitated by bilingual mechanisms on the level of the individual, and social processes on the level of the community. That is, the large proportion of loanwords in the Ibatan lexicon is argued to be the outcome of different processes, ultimately reflecting a community mode that must have been the case since the early beginnings of the community. It can be argued that this mode of language use has essentially shaped the Ibatan lexicon to what it is at present, and at its very core, this is ideologically motivated (Section 3.4). That is, the Ibatans clearly acknowledge their mixed ancestry, and as lexicon tends to be

emblematic of a community's identity, the current shape of the lexicon of Ibatan clearly reflects the group's history.

CHAPTER 5

MORPHOLOGY

The parallel durative paradigms of Ibatan[62]

Introduction

Aside from the significant number of loanwords in the Ibatan lexicon discussed in the previous chapter, Ibatan also reflects contact-induced features in its morphology, a phenomenon that is argued to be dispreferred in situations of contact (cf. Gardani et al., 2015; Matras, 2007). That morphological contact-induced change happened in Ibatan is indicative of the nature and intensity of social contact that happened in the history of the community. This chapter focuses on the development of the non-native paradigm of the durative verbal prefix *pag-* in Ibatan, which exists alongside the native paradigm of *pay-*. The current usage and distribution of these parallel verbal paradigms with native and non-native stems are argued to be the outcome of layers of change driven by different agents with varying degrees of dominance in Ibatan.

Section 5.1 presents an overview of the verbal morphology of both Ilokano, the SL for the non-native durative paradigm, and Ibatan, the RL. Section 5.2 describes the parallel durative verbal paradigms in Ibatan by presenting their distribution with different stems and other affixes. This description is followed in Section 5.3 with an analysis of the development of the parallel paradigms, which are ultimately grounded on the sociolinguistic history of the Babuyan Claro community. Finally, Section 5.4 gives some concluding remarks.

5.1   The verbal morphology of Ilokano and Ibatan

In understanding the consequences of language contact, it is necessary to distinguish which features are non-native in a language, and consequently trace the source of such features. In the case of Ibatan and Ilokano, the two languages share several features, both form and pattern, because of shared Malayo-Polynesian ancestry, which makes teasing apart native from non-native features more challenging.

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[62] This chapter of the thesis will be published as a book chapter in Gallego (forthcoming).

In terms of morphosyntax, both languages have a Philippine-type system that is typically described in terms of focus (cf. Liao, 2004; Reid & Liao, 2004), or more recently, voice (cf. Riesberg, 2014; Ross, 2002). This voice system is realized as the affixes on the verb in relation to the role of voice-selected argument, either the actor or the undergoer, and in which the latter is further categorized into patient, locative, and circumstancial.[63] For actor voice, there are further sets of affixes that encode additional semantic features on the predicate, namely inchoative (INC) (or punctual), distributive (DIST) (which implies multiple activities), and durative (DUR) (which is also associated with reflexive and reciprocal senses). In addition to voice, verbal affixes encode mood and aspect. Mood can either be irrealis (events that are yet to happen, as in future events) or realis (events that are non-future, as in present, past, and habitual activities). Aspect can be perfective (completed events) or imperfective (events that are not yet completed, as in progressive or habitual events) (Reid & Liao, 2004, pp. 452–461). This section gives a brief description of the verbal morphology of Ilokano and Ibatan and sets out how the parallel durative paradigm seen in Ibatan can be traced back to Ilokano.

5.1.1   *Ilokano*

Verbs in Ilokano are marked with voice, aspectual, and mood distinctions by means of different sets of affixes (Table 24). For actor voice, the affixes may either be *<um>* 'INC', *mang-* 'DIST', or *ag-* 'DUR'. Undergoer voices are marked with the suffix *-en*[64] for patient, *-an* for locative, and *i-* for circumstancial. For aspect, perfective is marked by the infix *<in>*, and imperfective is typically marked by reduplicating the first CVC[65] sequence of the stem. For the irrealis mood, Ilokano shows the optional use of the enclitic *=(n)to*, which is a variant of the adverb *into* that indicates future time.

Grammatical specifications on the verb are marked by combining the verbal affixes. To illustrate, the verb stem *gatang* 'to buy' marked with *<um>* for actor voice (inchoative), in combination with the CVC reduplication for realis imperfective, yields the form *g<um>at~gatang* '<AV.INC>IPFV~buy'. As for marking realis perfective, the aspectual infix *<in>* comes first before the voice infix *<um>*, and this ordering of the verbal affixes in Ilokano has led to the syncopation of the vowel *u* in *<um>*, and the subsequent assimilation of *n* in *<in>*, leading to the form *<im><m>*. Thus, marking the same verb

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[63] Some grammars specify another category, that is, benefactive, typically derived with the circumfix *i-…-an* (Reid & Liao, 2004), while others subsume this category under circumstancial voice.

[64] Where *<e>* is pronounced as the high, back vowel [ɯ] (Rubino 2000: xiii).

[65] Sometimes CV, depending on the stem.

gatang 'to buy' with actor voice, realis perfective yields the form *g<im><m>atang* '<PFV><AV.INC>buy' (also discussed in Section 4.2.1.2).

For distributive and durative verbs, marking aspectual distinctions does not reflect the same level of agglutination as inchoative verbs. In particular, the affixes used to mark realis perfective are portmanteau forms that combine the infix *<n>* (a reduction of *<in>*) and the voice prefixes *mang-* for distributive and *ag-* for durative. This leads to the perfective forms *nang-* and *nag-* respectively. Realis imperfective and irrealis forms are more transparent, reflecting the expected combination of the voice and aspectual affixes. To illustrate these derivations, *takaw* 'to steal' is derived in the actor voice distributive form as *mang-takaw* 'AV.DIST.NTRL-steal', *nang-takaw* 'AV.DIST.PFV-steal', *mang-tak~takaw* 'AV.DIST-IPFV~steal', and *mang-takaw=to* 'AV.DIST-steal=IRR. *Surat* 'to write' is derived in the actor voice durative form as *ag-surat* 'AV.DUR.NTRL-write', *nag-surat* 'AV.DUR.PFV-write', *ag-sur~surat* 'AV.DUR-IPFV~write', and *ag-surat=to* 'AV.DUR-write=IRR' (Rubino, 2000, p. lxvii).

The forms *mang-* and *ag-* that mark actor voice distributive and durative respectively are historically derived from a combination of the actor voice affix *<m>* (a reduction of *<um>*) with the prefixes *pang-* and *pag-*. These latter prefixes carry the basic distributive and durative senses, and at present are also used to nominalize verb forms in Ilokano. These prefixes, moreover, are reflexes of Proto-Malayo-Polynesian (PMP) **paN-*[66] and **paR-* respectively, and the resulting portmanteau forms **maN-* and **maR-* are also reconstructed for PMP (Wolff, 1973, pp. 72–74). The realis neutral form *ag-* in Ilokano, shows a further reduction of PMP **maR-* to its current form *ag-*. The Ilokano verbal morphology is summarized in Table 24, with sample verbs to illustrate the various derivations discussed above.

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[66] The final nasal *N-* can be bilabial *m*, alveolar *n*, or velar *ng*, as it assimilates to the place of articulation of the following segment. In cases where the succeeding segment is a stop, the stop may be deleted as a consequence of this assimilation.

Table 24: Ilokano verbal morphology (Rubino, 2000, p. lxvii)

Ilokano		ACTOR		
		INCHOATIVE	DISTRIBUTIVE	DURATIVE
		gatang 'to buy'	*takaw* 'to steal'	*surat* 'to write'
REALIS	NEUTRAL	<um>X	mang-X	ag-X
		g<um>atang	*mang-takaw*	*ag-surat*
	PERFECTIVE	<im><m>X	nang-X	nag-X
		g<im><m>atang	*nang-takaw*	*nag-surat*
	IMPERFECTIVE	<um>CVC~X	mang-CVC~X	ag-CVC~X
		g<um>at~gatang	*mang-tak~takaw*	*ag-sur~surat*
IRREALIS		<um>X=((n)to)	mang-X=((n)to)	ag-X=((n)to)
		g<um>atang=to	*mang-takaw=to*	*ag-surat=to*
NOMINAL		/	pang-X	pag-X
		/	*pang-takaw*	*pag-surat*

Ilokano		UNDERGOER		
		PATIENT	LOCATIVE	CIRCUMSTANCIAL
		surat 'to write'	*punas* 'to wipe'	*kabil* 'to put'
REALIS	NEUTRAL	X-en	X-an	i-X
		surat-en	*punas-an*	*i-kabil*
	PERFECTIVE	<in>X	<in>X-an	in-X
		s<in>urat	*p<in>unas-an*	*in-kabil*
	IMPERFECTIVE	CVC~X-en	CVC~X-an	i-CVC~X
		sur~surat-en	*pun~punas-an*	*i-kab~kabil*
IRREALIS		X-en=((n)to)	X-an=((n)to)	i-X=((n)to)
		surat-en=to	*punas-an=to*	*i-kabil-to*
NOMINAL		/	/	/
		/	/	/

5.1.2   *Ibatan*

Verbs in Ibatan are marked with the same distinctions as those discussed for Ilokano, but by different sets of affixes (Table 26 and Table 27). Given their genetic relationship, a number of affixes are identical in the two languages, namely the undergoer voice affixes *-en*[67] 'PV', *-an* 'LV', and *i-* 'CV', as well as the actor voice distributive prefix *maN-*.[68] The actor voice infix *<om>* in Ibatan is also phonologically similar to Ilokano *<um>*, where *o* is pronounced as a high, back, rounded vowel, but it is represented orthographically with the vowel *o*. Ibatan also shows the use of the future adverb *anchi* as the enclitic *=(a)nchi* to optionally mark irrealis, parallel to the use of Ilokano *into,* which is analyzed as parallel development in the two languages (see Footnote 55 in Section 4.2.1.2).

Ibatan differs from Ilokano in terms of the ordering of the aspectual and voice affixes. Where Ilokano reflects the sequence *<im>* 'PFV' + *<m>* 'AV', Ibatan show the reverse order, that is, *<om>* 'AV' + *<in>* 'PFV'. This sequence is a retention of the ancestral system reconstructed for PMP and PAN (Ross, 2002), and the current ordering observed in Ilokano constitutes an innovation shared among many Northern Luzon languages (Reid, 1992).

What makes Ibatan unique, not only in comparison to Ilokano but also to its sister Batanic languages, is its two distinct but parallel paradigms of verbal affixes, where the use of a particular set typically depends on the etymology of the stem. This is observed in the paradigms for actor voice durative and realis imperfective. For deriving durative verbs, Ibatan reflects two sets of prefixes, namely *pay-* (along with *may-* 'AV.DUR.NTRL' and *nay-* 'AV.DUR.PFV') and *pag-* (along with *mag-* 'AV.DUR.NTRL' and *nag-* 'AV.DUR.PFV'). For inflecting realis imperfective, Ibatan shows different reduplication patterns, namely CV(y)/CVCV and CVC. Native Ibatan stems are marked with the paradigms *pay-* for 'DUR' and CV(y) or CVCV for 'IPFV' (Table 26). As an example, the native Ibatan verb *disna* 'sit' occurs as *may-disna* for 'AV.DUR.NTRL-sit' and *may-di~disna* for 'AV.DUR-IPFV~sit'. In contrast, loanwords, typically of Ilokano origin (but also stems from other SLs such as Filipino, English, and Spanish), are generally marked with *pag-* for 'DUR' and CVC for 'IPFV' (Table 27). To illustrate, the Ilokano loanword *kalap* 'to fish' is derived as *mag-kalap* for 'AV.DUR.NTRL-fish', and *mag-kal~kalap* for 'AV.DUR-IPFV~fish' (also discussed in Section

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[67] Where *<e>* is pronounced as a high, central vowel [ɨ] in Ibatan, slightly fronted compared to Ilokano [ɯ] (R. Maree, 2007, p. 19).

[68] As in Footnote 66 (Section 5.1.1), the final nasal *N-* assimilates to the place of articulation of the following segment. In cases where the initial consonant of the stem is a stop, the stop may be deleted, leading to forms such as *mamaso* 'to roast' from *maN-* + *paso* (Table 26).

4.2.1.2). The co-existence of these parallel paradigms in Ibatan is clearly an outcome of contact-induced change, where non-native stems are marked with non-native morphology. To further illustrate these parallel paradigms, (46) and (47) show the prefixes *nay-* and *nag-* marking native *abang* '(to ride on a) rowboat' and non-native *lampitaw* '(to ride on a) motorized boat' respectively.

(46)   **Native actor voice durative prefix *nay-*** (R. Maree, 2007, p. 174)

Nayabang si adi a nangay do Calayan.

Nay-abang	*si*	*adi*	*a*	*nangay*	*do*	*Calayan*
DUR.PFV.IVB-rowboat.IVB	DET	younger.sibling	LK	went	DET	Calayan

'Younger sibling rode on a rowboat going to Calayan.'

(47)   **Non-native actor voice durative prefix *nag-*** (R. Maree, 2007, p. 174)

Naglampitaw si adi a nangay do Calayan.

Nag-lampitaw	*si*	*adi*	*a*	*nangay*	*do*	*Calayan*
DUR.PFV.ILO-motor.boat.ILO	DET	younger.sibling	LK	went	DET	Calayan

'Younger sibling rode on a motorized boat going to Calayan.'

The two sets of durative prefixes in Ibatan can be traced from two sources, both descended from PMP *paR-*. The paradigm consisting of the forms *pay-* 'DUR', *may-* 'AV.DUR.NTRL', and *nay-* 'AV.DUR.PFV' are directly inherited, as evidenced by the final consonant *y,* which is the regular reflex of PAN and PMP *R in the Batanic languages. The non-native paradigm consisting of the counterpart forms *pag-*, *mag-*, and *nag-* respectively is argued to be transferred from Ilokano, albeit with subsequent adaptation into the Ibatan system. Not only do the forms reflect *g* as the reflex of PAN and PMP *R, a feature of Ilokano,[69] but the distribution of the prefixes with mostly Ilokano stems also clearly points to Ilokano as the source of this paradigm. This non-native durative paradigm has become regularized

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[69] Ilokano in fact has two reflexes for PAN/PMP *R, namely *r* and *g.* Blust (1991) characterizes this *g* in the language as the "stereotyped Philippine *g,*" where Ilokano, along with other Philippine languages, exhibit an irregular *g* reflex of *R alongside the regular reflex of the consonant. Blust (1991) proposes that this is an outcome of the historical expansion of the Greater Central Philippine languages, which are languages that show *g* as the regular reflex of *R. As an alternative explanation, Reid (personal communication) analyzes this irregular *g* reflex in Ilokano as an outcome of contact with Ibanag and other Cagayan Valley languages of the Northern Luzon subgroup which show *g* as the regular reflex of PAN/PMP *R.

in Ibatan, and has come to apply generally to loanwords, including those from English, Filipino, and Spanish (Table 25). Its usage and distribution are discussed in detail in Section 5.2.

Table 25: Loanwords from different SLs occurring with *mag-*

SL	Derivation	Definition
English	*mag-pichor*	to take a picture
Filipino	*mag-bak~bakla*	a man behaves like a woman
Ilokano	*mag-dayaw*	to honor, praise
Spanish	*mag-tokar*	to play music

As mentioned, these parallel durative paradigms are a unique feature in Ibatan, which is not observed in other Batanic languages such as Ivatan (IVV), a closely related language spoken on Batan Island, Batanes. Both native *vidi* 'return' and Spanish *eroplano* '(to ride an) airplane' take the native verbal prefix *nay-* (48).

(48) **Native *may-* with non-native stem in Ivatan**

Nay-eroplano si Maria ta nayvidi du Basco. (elicited)

Nay-eroplan*o*	*si*	*Maria*	*ta*	***nay-vidi***	*du*	*Basco*
DUR.PFV-airplane.SPA	DET	Maria	because	DUR.PFV-return.IVV	DET	Basco

'Maria took the airplane because she returned to Basco.'

Table 26: Ibatan verbal morphology for native stems

Ibatan: Native stems		ACTOR		
		INCHOATIVE	DISTRIBUTIVE	DURATIVE
		sayap 'to fly'	*paso* 'to roast'	*disna* 'to sit'
REALIS	NEUTRAL	\<om\>X	maN-X	may-X
		s\<om\>ayap	*mam-aso*	*may-disna*
	PERFECTIVE	\<om\>\<(i)n\>X	naN-X	nay-X
		s\<om\>\<n\>ayap	*nam-aso*	*nay-disna*
	IMPERFECTIVE	\<om\>CVCV~X	maN-CVCV~X	may-CV(y)~X
		s\<om\>aya~sayap	*mam-aso~paso*	*may-di~disna*
IRREALIS		\<om\>X=((a)nchi)	man-X=((a)nchi)	may-X=((a)nchi)
		s\<om\>ayap=anchi	*mam-aso=nchi*	*may-disna=nchi*
NOMINAL		/	paN-X	pay-X
		/	*pam-aso*	*pay-disna*

Ibatan: Native stems		UNDERGOER		
		PATIENT	LOCATIVE	CIRCUMSTANCIAL
		inom 'to drink'	*tolas* 'to write'	*pangay* 'to put'
REALIS	NEUTRAL	X-en	X-an	i-X
		inom-en	*tolas-an*	*i-pangay*
	PERFECTIVE	\<in\>X	\<in\>X-an	in-X
		\<in\>inom	*t\<in\>olas-an*	*in-pangay*
	IMPERFECTIVE	CVCV~X-en	CVCV~X-an	i-CVCV~X
		ino~inom-en	*tola~tolas-an*	*i-panga~pangay*
IRREALIS		X-en=((a)nchi)	X-an=((a)nchi)	i-X=((a)nchi)
		inom-en=anchi	*tolas-an=anchi*	*i-pangay=anchi*
NOMINAL		/	/	/
		/	/	/

Table 27: Ibatan verbal morphology for non-native stems

Ibatan: Non-native stems		ACTOR		
		INCHOATIVE	DISTRIBUTIVE	DURATIVE
		gatang 'to buy'	*kalod* 'to get coconuts'	*kalap* 'to fish'
REALIS	NEUTRAL	<om>X	maN-X	mag-X
		g<om>atang	*mang-alod*	*mag-kalap*
	PERFECTIVE	<om><(i)n>X	naN-X	nag-X
		g<om><n>atang	*nang-alod*	*nag-kalap*
	IMPERFECTIVE	<om>CVC~X	maN-CVC~X	mag-CVC~X
		g<om>at~gatang	*mang-al~kalod*	*mag-kal~kalap*
IRREALIS		<om>X=((a)nchi)	maN-X=((a)nchi)	mag-X=((a)nchi)
		g<om>atang=anchi	*mang-alod=anchi*	*mag-kalap=anchi*
NOMINAL		/	paN-X	pag-X
		/	*pang-alod*	*pag-kalap*

Ibatan: Non-native stems		UNDERGOER		
		PATIENT	LOCATIVE	CIRCUMSTANCIAL
		osar 'to use'	*dalos* 'to clean'	*lako* 'to sell'
REALIS	NEUTRAL	X-en	X-an	i-X
		osar-en	*dalos-an*	*i-lako*
	PERFECTIVE	<in>X	<in>X-an	in-X
		<in>osar	*d<in>alos-an*	*in-lako*
	IMPERFECTIVE	CVC~X-en	CVC~X-an	i-CVC~X
		os~osar-en	*dal~dalos-an*	*i-lak~lako*
IRREALIS		X-en=((a)nchi)	X-an=((a)nchi)	i-X=((a)nchi)
		osar-en=anchi	*dalos-an=anchi*	*i-lako=nchi*
NOMINAL		/	/	/
		/	/	/

5.2   **The parallel durative paradigms of Ibatan**

In their dictionary, J. Maree et al. (2012) indicate 1436 stems that can occur with the two sets of durative prefixes in Ibatan. The vast majority of these stems follow the expected distribution, that is, either as native formations, where native stems occur with native morphology (513 stems or 35.72%), or as complex loanwords, where non-native stems, regardless of their source, occur with non-native morphology (755 stems or 52.58%). Among complex loanwords, the majority are traced back to Ilokano (485 of 755 stems, or 64.24%), followed by Spanish (248 stems, or 32.85%). Other SLs include English, Filipino, Chinese, and Ibanag, but they have minimal lexical influence on Ibatan.[70] The remaining 168 stems reflect unexpected formations which mostly comprise of hybrid formations, or combinations of native and non-native elements. Table 28 gives a summary of this distribution.

Table 28: Distribution of durative formations indicated in the Ibatan dictionary by J. Maree et al. (2012)

Expected formations (88.3%)			
Distribution	**Description**	**Total**	**Percent**
Native formations	Native prefix + native stem	513	35.72%
Complex loanwords	Non-native prefix + non-native stem, with the following SLs:	755	52.58%
	Ilokano	*485*	*64.24%*
	Spanish	*248*	*32.85%*
	English	*16*	*2.12%*
	Filipino	*3*	*0.40%*
	Chinese	*2*	*0.26%*
	Ibanag	*1*	*0.13%*

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[70] The type of contact between Ibatan and the different SLs varies in terms of directness. Given the intense social contact between Ilokano and Ibatan, Ilokano has had more direct influence on Ibatan compared to other foreign SLs such as Spanish, English, and Chinese. That is, while one can expect that the Ibatan speakers are also proficient in Ilokano, they may not have such comparable proficiency in these other SLs. Their influence on Ibatan is thus minimal and is typically restricted within the lexicon, where, in fact, many of the loanwords have been transferred indirectly through another SL, typically Ilokano, and more recently, Filipino. This process also explains how the non-native durative paradigm has come to be extended to loanwords from these other foreign SLs.

Unexpected formations (11.7%)			
Distribution	**Description**	**Total**	**Percent**
Type 1 hybrid formations	Non-native prefix + native stem	14	0.97%
Type 2 hybrid formations	Native prefix + non-native stem	62	4.32%
Overlapping distribution	Both native and non-native prefixes are used in a stem, but with different functions	15	1.04%
Free variation	Both native and non-native prefixes are used in a stem interchangeably	9	0.63%
Uncertain	Uncertain etymology of the stem	68	4.74%
TOTAL		**1436**	**100%**

5.2.1   *General distribution and source*

The distribution of the affixes in terms of SL not only shows the relative influence of the different SLs on Ibatan in terms of the number of loanwords the languages have contributed, but also the central role of Ilokano in driving contact-induced structural change in Ibatan. Several lines of evidence point to Ilokano as the most likely source of the durative paradigm. First, while the forms of the non-native durative prefixes are identical among several Philippine languages, most notably Filipino, making any of these languages the possible source of the paradigm, this is highly unlikely because of the limited history of contact between the Ibatans and speakers of these languages. Second, the overall number of loanwords, including complex ones, across the different SLs, shows an overwhelming bias towards Ilokano as the SL. Finally, supported by known patterns of multilingualism, both past and ongoing, Ibatan speakers across generations generally use Ilokano as their second language, as compared to Filipino, which is only starting to be used as a second language among the younger generations of Ibatans (Section 3.3). In terms of form, while Ilokano reflects *ag-* for realis neutral whereas Ibatan reflects *mag-*, this can be analyzed as an outcome of analogy, where the adapted Ibatan form *mag-* has been analogized with the native counterpart *may-*, thus matching the rest of the prefixes, that is, the non-native paradigm *mag-, nag-, pag-,* with the native *may-, nay-, pay-*.

While the non-native paradigm is by and large restricted to non-native stems, this is not always the case. That is, there is also a small number of hybrid formations observable in the language, which are of two types: non-native prefixes occurring with native stems (Type 1), such as *bwang* 'to go bald' in

(49), and native prefixes occurring with non-native stems (Type 2), such as *bilag*[71] 'to dry under the sun' in (50).

(49)   **Non-native *mag-* with native stem (Type 1 hybrid formation)**

Magbwang si maraan. (elicited)

Mag-bwang		*si*	*maraan*
DUR.ILO-bald.IVB		DET	uncle

'Uncle is going bald.'

(50)   **Native *may-* with non-native stem (Type 2 hybrid formation)**

Maybilag so benyebeh (elicited)

May-bilag		*so*	*benyebeh*
DUR.IVB-dry.under.the.sun.ILO		DET	banana

'to dry the banana in the sun'

Other cases of unexpected formations involve overlapping distribution, where both native and non-native prefixes can be used with a stem, albeit with different functions. In a few instances, moreover, free variation can be observed, where both native and non-native prefixes are used interchangeably with a single stem. Finally, there are also cases where the etymology of the stem is uncertain, and so classifying the formations as complex loanwords or hybrid formations cannot be made with confidence. The following sub-section presents such patterns of distribution.

5.2.2   *Unexpected formations*

The first category among the small set of unexpected formations (11.7% of the overall data) involves hybrid forms, or combinations of native and non-native materials. Type 1 involves non-native morphology used with native stems (14 of 1436 stems, or merely 0.97%) and Type 2 involves native morphology used with non-native stems (62 of 1436 stems, or 4.32%). Table 29 gives some examples.

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[71] *Bilag* is clearly a loanword as evidenced by the final consonant *g*, which is the reflex of *j in Ilokano and a number of Northern Luzon languages, as in PMP *bilaj 'spread out in the sun to dry' > Ilokano *bilag*, Isneg *bilag*, Bontok *bilag*, and PAN *apejux 'gall, gallbladder, bile' > Ibanag *aggu*, Ifugaw *apgo*, Pangasinan *apgo* (Blust & Trussel, 2020). In the Batanic languages, the consonant is typically reflected as *d*, as in PAN *apejux > Itbayaten *apdo* (Blust & Trussel, 2020) and Ibatan *apdo* (J. Maree et al., 2012).

Table 29: Hybrid formations in Ibatan

Category	Source	Prefix	*Stem*	Definition
Type 1	Native	*mag-*	*inen*	to be thrifty; something is gradually consumed, especially food; to use sparingly
Type 1	Native	*mag-*	*ippet*	to have an intestinal roundworm
Type 1	Native	*mag-*	*payaw*	to be hoarse (voice)
Type 1	Native	*mag-*	*rongsoh*	to hammer
Type 1	Native	*mag-*	*sangpah*	to hold in mouth
Type 2	Ilokano	*may-*	*abagis*	a term expressing a close relationship between cousin and sibling
Type 2	Ilokano	*may-*	*bilag*	to sun dry clothes, grains, etc.
Type 2	Ilokano	*may-*	*ikit*	a term to express the relationship between aunt and nephew/niece
Type 2	Spanish	*may-*	*dasal*	to pray
Type 2	Spanish	*may-*	*tarabako*	to work

At only 0.97%, Type 1 hybrid formations constitute a very small fraction of all instances of durative formations indicated in J. Maree et al. (2012). Similarly, Type 2 hybrid formations comprise a very small portion, only about 3% more than Type 1 at 4.32%. While they are indeed a small percentage in the data, these two types of hybrid formations, along with other unexpected distribution, point to further complexity in Ibatan in terms of diversity of structures.

Aside from basic hybrid formations, one set of unexpected formations involve loanwords that are derived with the non-native paradigm as expected, but in more complex formations that also involve other affixes, the native morphology is used. Table 30 gives some examples, where *bosel* '(to develop) buds', *kamoras* '(to become sick with) measles', *darop* 'to attack', and *tiro* 'to shoot' are all loanwords that are marked with the non-native *mag-* for the basic durative form but take the native paradigm *may-* when combined with other native Ibatan affixes such as the distributive *cha-* and the reciprocal *sin-* along with reduplication to mark additional meanings on the verb.[72] These are likewise considered hybrid formations, but with more complex morphology.

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[72] Ilokano (or Ilokano-influenced) counterparts are not used in Ibatan in such formations.

Table 30: Restricted distribution of the non-native durative paradigm vis-à-vis the native paradigm

Source	Stem	Prefix	Function	Derived form	Definition
ILO	*bosel*	*mag-*	durative	*magbosel* mag-bosel	to develop buds of a fruit or vegetable
		may-cha-RDP-	durative, distributive	*maychabosbosel* may-cha-bos~bosel	to develop buds together
ILO	*kamoras*	*mag-*	durative	*magkamoras* mag-kamoras	to become sick with measles
		may-cha-RDP-	durative, distributive	*maychakamokamoras* may-cha-kamo~kamoras	to have measles at the same time
ILO	*darop*	*mag-*	durative	*magdarop* mag-darop	to attack
		may-sin-	durative, reciprocal	*maysindarop* may-sin-darop	two or more people or groups from different areas attack each other
SPA	*tiro*	*mag-*	durative	*magtiro* mag-tiro	to hit, shoot, throw
		may-sin-RDP-	durative, reciprocal	*maysintitiro* may-sin-ti~tiro	to hit, shoot, throw something at each other

Such cases suggest how morphology, even in agglutinative languages that have relatively transparent compositionality, such as Ibatan, encodes meanings on the basis of patterns of combination, irrespective of the discrete functions of the component elements. That is, more complex derivations in Ibatan function as combinations involving native morphology, and these apply even for loanwords that are known to take non-native morphology in basic derivations.[73] The sentences below

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[73] This hypothesis has strong implications regarding the cognitive processing of morphological structures, particularly the Word and Paradigm approach used in studies such as Hay and Baayen (2005) and Ackerman et al. (2009). A larger corpus of naturally occurring speech as well as experimental data would provide empirical support for this

illustrate this further. The Ilokano verb *labang* 'to be dappled' in (51) and Spanish *tiro* 'to shoot' in (53) occur with *mag-/nag-* in the basic durative form, but (52) shows *may-cha-laba~labang* 'to have irregular patches' involving the native prefix *may-* in combination with *cha-* and CVCV reduplication to further derive the distributive meaning, and (54) shows *may-sin-ti~tiro* 'to throw at each other', again involving the native *may-* with the affix *sin-* and CV reduplication to derive the reciprocal meaning to the verb.

(51)   **Non-native *mag-* with non-native stem (Complex loanword)**

Maglabang kodit kwaya, ta nadoplagan. (J. Maree et al. (2012): labang)

Mag-labang	*kodit*	*kw=aya*	*ta*	*nadoplagan.*
DUR.ILO-dappled.ILO	skin	1S.GEN=REF	because	scalded

'My skin becomes dappled because it was scalded.'

(52)   **Native *may-cha-RDP-* with non-native stem (Type 2 hybrid formation)**

Maychalabalabangayaw basket kwaya. (J. Maree et al. (2012): labang)

May-cha-laba~labang=aya=w	*basket*	*kw=aya.*
DUR.IVB-DIST-RDP~dappled.ILO=REF=DET	basket	1S.GEN=REF

'My basket has irregular patches of color.'

(53)   **Non-native *mag-* with non-native stem (Complex loanword)**

Nagtiro so amang so pirpiroka. (J. Maree et al. (2012): tiro)

Nag-tiro	*si*	*amang*	*so*	*pirpiroka*
DUR.ILO-shoot.SPA	DET	father	DET	pirpiroka.bird

'Father shot the pirpiroka bird.'

(54)   **Native *may-sin-RDP-* with non-native stem (Type 2 hybrid formation)**

Maysintitiro saw mangalkem so bwa. (J. Maree et al. (2012): tiro)

May-sin-ti~tiro	*sa=aw*	*mangalkem*	*so*	*bwa*
DUR.ILO-REC-.SPA RDP~throw	3P.NOM=REF	old.men	DET	betel.nut

'The old men threw betel nuts at each other.'

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hypothesis.

To illustrate further, Table 31 presents various derivations involving the durative paradigms found in J. Maree et al. (2012). The non-native paradigm is found to likewise occur in further complex derivations, but in terms of overall distribution, it is still clearly less productive than the native durative paradigm. This indicates that the non-native paradigm is not yet fully parallel with its native counterpart, especially with structures involving certain semantic specifications on the verb, such as associative, causative, and conditional functions.

Table 31: Further morphological derivations involving the durative paradigms

Derivations involving the non-native durative paradigm			
Form	Function	Example	Meaning
machi-pag-	Associative	*machipagragsak* machi-pag-ragsak	someone rejoices with someone
pag-X-en	Causative	*pagbolosen* pag-bolos-en	to allow water to flow freely
ma-pag-	Causative	*mapagbwenas* ma-pag-bwenas	someone or something causes someone luck
mag-pa-	Causative	*magpaborek* mag-pa-borek	someone boils something in a pot
maka-pag-	Conditional ability	*makapagpikar* maka-pag-pikar	someone is able to make an engine, machine, or motor go faster
pag-X-an	Locative	*pagmangamangaan* pag-mangamanga-an	someone doubts about someone or something
ka-pag-	Nominalization	*kapagtanggad* ka-pag-tanggad	a woman's confinement and recuperation after giving birth
ka-pag-RDP-	Nominalization	*kapagsosopyat* ka-pag-so~sopyat	a controversy, dispute
mag-ka-	Similarity	*magkapicha* mag-ka-picha	two events are on the same day

Derivations involving the native durative paradigm			
Form	**Function**	**Example**	**Meaning**
machi-pay-RDP-	Associative	*machipaypopohaw* machi-pay-po~pohaw	someone stays awake the whole night with someone
pay-X-en	Causative	*payamonyiten* pay-amonyit-en	someone closes up a cut or a wound
ma-pay-	Causative	*mapaychidong* ma-pay-chidong	make something corrugated
may-pa-	Causative	*maypadiman* may-pa-diman	someone is about to die
maka-pay-	Conditional ability	*makapaybangon* maka-pay-bangon	someone is able to wake up
may-cha-	Distributive	*maychaliproso* may-cha-liproso*	someone has leprosy
may-cha-RDP-	Distributive	*maychabosbosel* may-cha-bos~bosel	a plant develops buds
pay-cha-X-en	Distributive	*paychapidyen* pay-cha-pidi-en	someone chooses and separates something
may-cha-RDP-X-an	Durative	*maychararakan* may-cha-ra~arak-an*	someone or an animal does something the whole night
may-cha-X-an	Durative	*maychasaryan* may-cha-sari-an	someone or an animal does something from dawn to dusk
pay-RDP-	Intensive	*paysawasawat* pay-sawa~sawat	someone chatters about something
ka-pay-cha-X-en	Intensive, superlative	*kapaycharakmahen* ka-pay-cha-rakmah-en	the worst of an injury or sickness
pay-X-an	Locative	*payketketan* pay-ketket-an	to make a nest someplace
pay-pay-pa-X-an	Locative	*paypaypaktasan* pay-pay-pa-aktas-an	the place where someone roams around
ka-pay-	Nominalization	*kapayalit* ka-pay-alit	equality

Form	Function	Example	Meaning
ka-pay-RDP-	Nominalization	*kapaysisidong* ka-pay-si~sidong	cooperation
ka-pay-sin-RDP-	Pretense	*kapaysinsisingpet* ka-pay-sin-si~singpet	hypocrisy
may-RDP-	Process	*mayaalat* may-a~alat	someone weaves an *alat* basket
may-sin-	Reciprocal	*maysindarop* may-sin-darop*	two or more people or groups from different areas attack each other
may-sin-RDP-	Reciprocal	*maysintitiro* may-sin-ti~tiro*	two people hit, shoot, throw something at each other
may-pay-	Reciprocal	*maypaypalang* may-pay-palang	two or more people pull something back and forth from opposite ends
may-pi-	Repetition	*maypirwa* may-pi-dadwa	someone does or something happens twice
may-CVy-	Repetition	*mayrorongsoh* may-roy~rongsoh	to keep hammering

*stem is a loanword, constituting hybrid formation

There are also a few cases where both native and non-native durative prefixes can be used with the same verb, but appear to encode divergent meanings. An example is the Spanish word *kwarto* 'room', where *mag-kwarto* in (55) means 'to make a room', encoding dynamicity, while *nay-kwarto* in (56) means 'to have a room', encoding a stative sense.

(55)   **Non-native *mag-* with non-native stem (Complex loanword)**

Magkwarto ka so rakoh. (J. Maree et al. (2012): kwarto)

Mag-kwarto	*ka*	*so*	*rakoh*
DUR.ILO-room.SPA	2S.NOM	DET	big

'Make a big room.'

(56)   **Native *nay-* with non-native stem (Type 2 hybrid formation)**

Naykwarto so anem bahay ko, ki dedekey. (J. Maree et al. (2012): kwarto)

Nay-kwarto	*so*	*anem*	*bahay*	*ko*	*ki*	*de~dekey*
DUR.IVB-room.SPA	DET	six	house	1S.GEN	but	RDP~small

'My house has six rooms, but they are small.'

Another general rule is in expressing direction/goal. The sentences in (57) and (58) involve the native Batanic word *songet* 'forested area'. *Songet* also happens to be a place name in Babuyan Claro, which is etymologically based on the general meaning 'forested area'. When the proper noun *Songet* is derived to mean 'to go to Songet', it takes the non-native prefix *mag-* in combination with the directional *pa-*, as shown in (57). In contrast, when referring to its general sense as 'forested area', the stem takes the native prefix *may-pa-*, as shown in (58).[74]

(57)   **Non-native *mag-pa-* with a proper noun (Type 1 hybrid formation?)**

Magpa-Songet dana sa. (elicited)

Mag-pa-Songet	*dana*	*sa*
DUR.ILO-DIR-Songet.IVB	already	3P.NOM

'They are already going to Songet.'

(58)   **Native *may-pa-* with native stem (Native formation)**

Maypasonget si anang mabekas. (elicited)

May-pa-songet	*si*	*anang*	*mabekas*
DUR.IVB-DIR-forested.area.IVB	DET	mother	morning

'Mother is going to the forested area in the morning.'

Ibatan also has instances of doublets, where a particular form is descended from two different sources. An example is the verb *boya* 'to see, to meet, to watch', where the Batanic languages and

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[74] The same structure to mark direction/goal exists in Ivatan. However, there is no morphological distinction between general or specific locations as in Ibatan. Thus, in Ivatan, the form *may-pa-sunget* can either be interpreted as 'to go to Sunget (a place in Mahatao, Batanes)' or 'to go to the forested area'. However, the latter is the more common interpretation, as using the construction *may-pa-* to refer to proper nouns is not commonly used in Ivatan (based on personal communication with an Ivatan speaker).

Ilokano share cognate forms. Ivatan *vuya*, Itbayaten *vooya*, and Ibatan *boya* are all cognates carrying the meaning 'to see, to meet'. The Ibatan stem for such meanings takes *may-*, as illustrated in (59). The semantics of *boya* has also been expanded to include the meaning 'to watch', but in this particular sense, the form takes the non-native prefix *mag-*, as seen in (60). This particular meaning of the form is argued to have been transferred from Ilokano, where the Ilokano word *buya*[75] means 'to watch'.[76] It is only the difference in meaning that indicates that *mag-boya* is a complex loanword instead of a Type 1 hybrid formation.[77]

(59)   **Native *may-* with native stem (Native formation)**

Mayboya tanchi andelak. (elicited)

May-boya	*ta=anchi*	*andelak*
DUR.IVB-meet.IVB	1P.NOM=FUT	tomorrow

'Let's meet tomorrow.'

(60)   **Non-native *mag-* with non-native stem (Complex loanword)**

Magboya kami so sine do Sabado. (elicited)

Mag-boya	*kami*	*so*	*sine*	*do*	*Sabado*
DUR.ILO-watch.ILO	1P.NOM	DET	movie	DET	Saturday

'We will watch a movie on Saturday.'

This also relates to near-homophonous pairs of words that have arisen out of contact, where native Ibatan terms have come to share near-similar forms with Ilokano loanwords (only differing in terms of stress placement). Despite the similarity, however, the meanings and etymologies are kept distinct not

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[75] Ilokano *buya* and Ibatan *boya* are pronounced similarly, with both <u> and <o> pronounced as a high, back vowel. The only difference is orthography, where the vowel in Ibatan is represented as <o>.

[76] In Ivatan, the verb 'watch' is *talamad*, as in *May-talamad aku su sine andelak* 'I will watch a movie tomorrow' (compare Ibatan *mag-boya* in (60)). In Ibatan, however, *talamad* means 'to look down'. It is clear that the transfer of Ilokano *buya* 'to watch' has affected this particular semantic network, where Ibatan *boya* has been extended to include the Ilokano meaning 'to watch', and *talamad* has shifted to exclusively mean 'to look down'.

[77] From a theoretical perspective, it can be argued that the basic meaning of *boya* is 'to see', and that the durative prefixes add an additional semantic specification that involves agentivity in the action. Thus, it can be said that the resulting derivations *may-boya* 'to meet' and *mag-boya* 'to watch' constructionally form different senses of the verb. To compare, the basic sense 'to see' is derived with the stative prefix *ma-*. This is the central idea of Constructional Grammar, which can be applied for morphology as well (cf. Booij, 2010).

only by maintaining the difference in the placement of stress, but also by the use of native and non-native prefixes, as illustrated in Table 32. The forms *babang, barot, sagot*, and *talon* occur with both native and non-native morphology, keeping the meanings and etymologies separate.

Table 32: Pairs of near homophonous native and non-native forms in Ibatan

Source	Prefix	Stem	Definition
Native	*may-*	*babáng*	to carry on the back
Ilokano	*mag-*	*bábang*	to hesitate
Native	*may-*	*barót*	to develop a boil
Ilokano	*mag-*	*bárot*	to thread rattan strips
Native	*may-*	*sagót*	to wear a loincloth
Ilokano	*mag-*	*ságot*	to give a gift
Native	*may-*	*talón*	to mound up, swell
Ilokano	*mag-*	*tálon*	to make a rice paddy

As a final point, there are also instances where both the native and non-native durative prefixes appear to be used interchangeably (Table 33). It is not certain whether these are instances of stable variation in Ibatan, or if these constitute change in progress, where particular groups of speakers may tend to prefer the use of one particular paradigm over the other.

Table 33: Forms that involve native and non-native prefixes in free variation

Source	Prefix	Stem	Definition
SPA	*mag-, may-*	*apilyido*	to have the surname of
SPA	*mag-, may-*	*aritos*	to wear earrings
UNCERTAIN	*mag-, may-*	*gipit*	to wear a hairclip
ILO	*mag-, may-*	*gisgis*	to brush teeth
ILO	*mag-, may-*	*ibbong*	to become smelly
ILO	*mag-, may-*	*lobnak*	to wallow
ILO	*mag-, may-*	*pakopak*	to clap bamboo cymbals

The cases described above clearly illustrate how the distribution of the durative paradigms in Ibatan, while relatively straightforward in many cases (including doublets and near-homophonous terms that

have different etymologies), can still be unpredictable for a small set of stems that constitute hybrid formations. Thus, while the non-native durative paradigm has not yet been fully integrated into the morphological system of Ibatan given its limited distribution, not just in terms of the stems with which it can occur, but also in terms of possible structures that can combine with it, the paradigm has added to the morphological complexity of Ibatan through contact-induced change. Such kind of change cannot be treated as convergence towards the model of Ilokano, in that Ibatan has developed non-native structures that correspond to structures that already exist in the language. This has also led to incipient functional divergence, as seen in some examples mentioned above. Finally, in relation to both Ilokano as well as Ibatan's sister Batanic languages, Ibatan exhibits an apparent diversity of structures not seen in these other languages.

5.3   **Explaining the development of the non-native paradigm in Ibatan**

As seen in the case of Ibatan, contact-induced structural change is indeed not as uncommon as previously claimed (cf. Lass, 1997; Weinreich, 1953; Whitney, 1881). This is further evidenced by a growing body of literature that focuses not only on classification, but more importantly, on finding explanations for different kinds of structural change (cf. Gardani, 2008, 2020; Gardani et al., 2015; Matras, 2007, 2015; Matras & Sakel, 2007; Thomason, 2015). Various constraints, factors, and mechanisms are invoked to explain morphological change. Linguistic constraints are commonly cited as playing a role, and these pertain to the nature of the linguistic materials as well as the nature of the languages in contact (Section 2.1.1). In terms of specific linguistic elements, they are argued to have varying degrees of stability, which relates to notions such as structuredness, frequency of use, entrenchment, and cognitive processing mechanisms (van Coetsem, 2000, p. 106). This idea is central in explaining the hierarchies which have been proposed for both lexical and structural transfer, where elements which are considered more stable, such as content words, particularly nouns, are argued to be more easily transferred than function words, and in the same vein, within the domain of morphology, derivational materials over inflectional forms.[78] However, these constraints can be overridden if the languages in contact are structurally or typologically compatible (Field, 2002, p. 42; Meillet, 1921, pp. 84, 87; Weinreich, 1953, p. 44; Winford, 2005, p. 387).

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[78] However, it must be noted that the division between inflection and derivation is not always clear-cut. Some in fact argue that rather than constituting discrete categories, they instead form a continuum (cf. Bybee, 1985; Dressler, 1989; Haspelmath, 1996; Laca, 2008). This gradience therefore adds further complexities in accounting for such hierarchies.

In Ibatan, it is clear that derivational morphology has been shaped by language contact, as seen in the development of the parallel durative paradigms, but inflectional paradigms reflect contact-induced features to a certain degree as well, as in the non-native CVC pattern for aspectual marking introduced in Sections 4.2.1.2 and 5.1.2. Indeed, the development of such structures must have been facilitated by the structural similarity of Ibatan and Ilokano, the SL for these non-native forms. That is, because the two languages are genetically related, they share cognate forms and structures (Appendix A), therefore, it is relatively straightforward to integrate Ilokano structural elements into the grammar of Ibatan.

However, it is not simply typological compatibility that facilitated such kinds of transfer. Seifart (2014), through a cross-linguistic study of morphological transfer, claims that this factor only plays a minor role, and by implication, suggests that speakers are not strongly constrained by structural factors of the languages in their repertoire. More recent studies set up models for language contact that involve context-dependent explanations to account for the transfer of various linguistic materials. Focusing on morphology, Seifart (2015a) represents morphological transfer as a cline, where on one end, non-native structure is restricted to non-native stems (which can be taken to involve indirect transfer of structures via complex loanwords), and where the other theoretical extreme are cases of hybrid formations (coupled with the absence or rarity of complex loanwords, among other criteria, are taken to be indicative of direct borrowing). Most cases of language contact would fall somewhere in between these two ends, where contact-induced structural change involves both direct and indirect processes, and the differences in each situation would be the ways in which these processes took place in the RL. These mechanisms often involve factors beyond linguistic structure. Seifart (2015a) argues that direct transfer relies on the speakers' knowledge of the SL, whereas indirect transfer is governed by more complex processes, determined by schemas and local generalizations that revolve around the frequency of complex loanwords that carry the affix in question vis-à-vis corresponding simplex words.[79]

Evidently, the non-native durative paradigm in Ibatan has developed mainly through indirect transfer, that is, via the transfer of complex loanwords (Seifart, 2015a), as evidenced by the significant number of Ilokano stems that occur with the paradigm. This agrees with King (2000), who claims that the pathway towards structural change is through lexical change. Seifart (2015a, p. 513) proposes that

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[79] This derives from the concept of gradient morphology and the Word and Paradigm approach (cf. Bybee (1995), Hay and Baayen (2005), Baayen (2008), and Ackerman, et al. (2009)).

indirect transfer requires particular patterns in corpus frequencies involving pairs of complex and simplex loanwords, under the assumption that the speakers are analyzing non-native morphological structures on the basis of such patterns. However, this does not appear to be a central mechanism for Ibatan. Given what we know of the nature of multilingualism in Babuyan Claro (Section 3.3), the speakers are already clearly knowledgeable in Ilokano, and so, this must have played a crucial role in the development of non-native morphology in Ibatan. That is, good knowledge of Ilokano, along with the fact that the two languages are typologically similar, allows for easier morphological analysis on the part of the speaker, which can then promote morphological productivity for non-native structures. The existence of hybrid formations, moreover, suggests that other mechanisms likely operated in the development of this contact-induced change. As Seifart (2015a) suggests, psycholinguistic and cognitive processing mechanisms underpin the development and regularization of non-native morphology. In terms of bilingual mechanisms following van Coetsem's (2000) model, Type 2 hybrid formations indicate RL agentivity, where Ilokano loan verbs are integrated into Ibatan using native morphology. This is a common adaptation strategy among RL-dominant speakers. In contrast, Type 1 hybrid formations suggest SL agentivity. That is, the use of non-native morphology with native stems is indicative of an imposition of SL structure into the RL. Such kind of patterning is observable in synchronic language use among non-dominant Ibatan speakers (Section 7.2.2), but these are treated as "errors" in non-dominant speech, and they tend to be lost once dominance in Ibatan increases. However, at the level of the community, some Type 1 hybrid formations are found to be regularly used by all speakers, regardless of language dominance, and such can be argued to comprise a deeper layer of change in Ibatan (Section 5.2.2). We can argue for several explanations for their diffusion, such as the social value attached to the forms (cf. Labov, 1966, 2001 among other works on variationist sociolinguistics), and the frequency of interaction among speakers within and across social networks (cf. J. Milroy & Milroy, 1985; L. Milroy, 1980). In terms of social network theory (cf. J. Milroy, 1992; Rogers, 1962), Type 1 hybrid formations in Ibatan have been likely introduced by Ilokano-dominant speakers, and consequently adopted by Ibatan speakers who occupy a central position in the social network, resulting in the forms acquiring a social value. Alternatively, Thomason and Kaufman (1988) propose that such a change may arise if SL-dominant speakers are socio-demographically dominant. This suggests a period of SL agentivity among a significant portion of speakers on Babuyan Claro. This is discussed further in Section 9.2.3.

The contexts that underpin the contact situation, particularly the nature and intensity of social contact between the groups, determine the extent in which the SL affects RL structure (Thomason &

Kaufman, 1988). For morphological transfer, this may sometimes result in what Kossmann (2010) describes as Parallel System Borrowing (PSB), which involves co-existent native and non-native morphological forms in a language. In many cases, non-native morphology is restricted to loanwords, and are often unstable and irregular, but in other cases, these structures can achieve stability and even morphological productivity by becoming extended to native stems. Gardani (2008, 2020, pp. 102–104) treats most cases of PSB as a type of (non-)integration, particularly those that are exclusive to loanwords, and only when non-native forms are used with native stems can such be treated as structural transfer (which he labels borrowing). As clearly observed in the distribution of the native and non-native durative paradigms of Ibatan, this case of PSB is a "borderline phenomenon" between integration and structural transfer (Gardani, 2020, p. 103), with the presence of Type 1 hybrid formations and other unexpected patterns in widespread use by the community. Another related phenomenon in morphological contact-induced change is the transfer of sets of paradigmatically and syntagmatically related affixes. Seifart (2012, 2017) argues that this is in fact more frequent than the transfer of isolated forms, and this is known as the Principle of Morphosyntactic Subsystem Integrity. The morphological system of Ibatan indeed reflects the transfer of sets of related forms such as derivational and inflectional verbal morphology, as Seifart (2012, 2017) describes.

In sum, the various constraints and mechanisms that govern language contact involve not only linguistic factors, but also socio-historical, context-based explanations. Thus, in seeking explanations for contact-induced outcomes, it is therefore necessary to take into account the contexts that underpin the particular contact-induced change under investigation. The dynamic setting of the Babuyan Claro community entails various mechanisms that drive contact outcomes, and these are reflected as layers of contact-induced change in Ibatan involving distinct periods of RL and SL agentivity. In particular, the development of non-native morphology in the language is facilitated not only through typological fit and structural compatibility, but the dynamic nature of multilingualism both at the levels of the individual and the community is also argued to be central in driving this type of change (Chapter 9). That is, the pattern of distribution of the parallel durative paradigms in Ibatan suggests a chronology where initially, Ibatan-dominant speakers (RL agentivity) were borrowing Ilokano loanwords into Ibatan (borrowing transfer), which were integrated into the grammar of Ibatan through the use of native morphology, and this is clearly reflected in Type 2 hybrid formations. A succeeding period where speakers have shifted their dominance to Ilokano (SL agentivity) facilitated the emergence of non-native morphology in Ibatan (imposition transfer), resulting not only in complex loanwords, but also extending its distribution to native stems, forming Type 1 hybrid formations.

One thing that is apparent in the history of the Babuyan Claro community is that the speakers have continually kept Ilokano and Ibatan distinct. This etymological consciousness shows that the speakers are more or less aware of the differences between the languages in their repertoire, reflected most strikingly in how parallel morphological structures are used and maintained in Ibatan. It also indicates how this must have been an ideological process for the Ibatans, as a way of flagging their mixed identity (Gallego, 2020, p. 107) (also see Section 3.4). This essentially relates to the phenomenon of *morphological compartmentalization* described by Matras (2015, p. 48) for cases where (inflectional) morphology "is replicated along with lexical word forms from another language in situations in which speakers embrace and flag a bilingual identity." This also relates to Thomason's (2007, 2008) claims about the role of speakers in "consciously" facilitating contact-induced language change.[80]

The distribution of the non-native durative paradigm in Ibatan suggests that it has been introduced through complex loanwords, but how it has been regularized in the language, and now in the process of developing additional functions, indicate how this change is not simply a by-product of lexical transfer. For instance, not all derivations of loan verbs are seen to occur with the non-native durative paradigm, where more complex morphological combinations still involve the use of the native paradigm. The speakers' certain degree of consciousness to keep the etymologies of different elements of their language distinct likely contributed to the development of contact-induced structural change. This is seen in how the non-native paradigm has come to be extended to loanwords from other SLs. At the same time, however, there are a few cases where the boundary between what can be considered native elements and those that are not appears to be less clear. Hybrid formations are a clear indication of this. While these forms comprise only a small subset of the distribution, it is necessary to understand in more detail how such formations came to be in widespread use among speakers of Ibatan.[81] Future research that accounts for the variety of factors that drive this change, such as from the perspectives of language acquisition as well as variationist sociolinguistics, would provide stronger support for these arguments.

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[80] Van Coetsem (1995, p. 81) also writes about how balanced bilinguals are not strongly constrained by their languages, thus, contact-induced outcomes involving such kind of bilingualism mainly depend on the social function of language, such as for communicative purposes or as a marker of identity.

[81] Chapter 8 presents a preliminary discussion that explores the transition of change from individual-level language use to population-level one through an approach that considers the interrelationships of various linguistic and extra-linguistic factors and mechanisms in driving change.

5.4   **Conclusion**

Because of the history of intense social contact between speakers of Ibatan and Ilokano for the past 150 years, the Ibatan language exhibits contact-induced features not only the lexicon (Chapter 4), but also morphology, which is said to be dispreferred in language contact. This chapter focused on the structural consequences of lexical transfer in Ibatan, specifically the development of its non-native durative paradigm. While structural transfer has been primarily facilitated through complex loanwords, a small number of hybrid formations indicate that the processes that have driven this change are more complex, which are ultimately underpinned by overlapping mechanisms of agentivity that govern the bilingual individual and the community across various stages in the development of Ibatan (Chapter 9).

   Contact-induced structural change in Ibatan has resulted in non-native structures co-existing with their native counterparts (cf. Kossmann, 2010). The parallel structures in Ibatan led to further morphological complexity, where native and non-native morphology are starting to develop divergent functions. This aligns with the argument that certain kinds of complexity may also arise in contact-induced change (cf. Bakker et al., 2011; Meakins et al., 2019; Meakins & Wilmoth, 2020), as opposed to the usual claim in the literature that language contact typically results in the reduction of morphological complexity (cf. Elšík & Matras, 2006; Gardani et al., 2015; Matras, 2007; Matras & Sakel, 2007).

   Structural transfer in Ibatan also provides evidence for what Seifart (2012, 2017) has described as the Principle of Morphosyntactic Subsystem Integrity, where he claims that transferring sets of forms is arguably more common than transferring piecemeal. With the case of Ibatan, however, we cannot be certain about the full extent of such transfer, in that many of the forms for verbal morphology are shared between Ibatan and Ilokano, given that the two are closely related languages. This is only one of the several issues that concern contact between genetically related and typologically similar languages (Epps et al., 2013). Another related matter is understanding how much typological similarity plays a role in language contact (cf. Seifart, 2014). For the current study, the verbal morphology shared between Ibatan and Ilokano inherited from PMP indeed plays a role in the transfer of the durative paradigm, in that the Ibatan system can readily accept cognate structures from Ilokano. However, perhaps the more relevant question is why this transfer occurred in the first place. Given that the structure already exists natively in Ibatan, why is there a need to develop and maintain a non-native counterpart? It is evident that structuralist and constraints-based approaches to language contact, while useful in investigating the phenomenon, needs to be supplemented by information grounded on

the socio-historical contexts of the speakers. This compartmentalization of morphology, described by Matras (2015) for cases where native and non-native structures are kept distinct in a language, is said to reflect how the speakers flag their bilingual identity. For the Ibatans, they indeed acknowledge their mixed ancestry and history, and they clearly maintain the boundary between Ibatan and Ilokano, even in the early years of the community. This is one of the different factors that motivate the emergence and maintenance of a parallel non-native paradigm in the language.

3   *The individual*

The actuation of change lies on the innovations that happen in the language of the individual. In terms of contact-induced outcomes, therefore, the locus of change is said to be the bilingual individual. Bilinguals have varying degrees of dominance in their languages, and these differences in language dominance are argued to drive particular linguistic outcomes.

That is, language dominance is a construct that is used to explain various kinds of cross-linguistic influence in patterns of individual bilingual language use, as set out in van Coetsem's (2000) framework for language contact. However, the construct of language dominance is complex, and it is shaped by the interaction of both psycholinguistic and social factors. Therefore, if we hope to use it as an explanatory variable, it is something that needs to be operationalized more carefully (Chapter 6).

The assumption that language dominance correlates with distinct kinds of contact-induced outcomes is investigated through attested patterns of language use. Using a corpus of naturalistic speech from speakers with varying dominance in Ibatan, various linguistic domains are investigated, namely phonology, morphology, and the lexicon (Chapter 7).

It is the innovations that are observed among bilingual individuals that constitute the pool of variation which may eventually lead to community-level contact-induced change (Part 2). However, it is also known that not all innovations become widespread change. How various mechanisms and factors interact to drive the diffusion of change from the individual to the community is explored in Part 4.

DOMINANCE

The construct of language dominance

Introduction

The theoretical construct of language dominance is an essential aspect of bilingualism, and consequently, contact-induced language change. Beyond language contact, it is also a concept that is highly relevant in fields such as education, public policy, commerce, and clinical settings, particularly those that concern bilingual speakers (Gertken et al., 2014, pp. 208–209). Thus, it is a construct that has been widely invoked in the literature, but it has been defined and measured in different ways, yielding confusing and sometimes conflicting claims.

This chapter presents a review of the construct of language dominance, guided by the following questions:

- How do we operationalize language dominance?
- How is it used to explain contact-induced language change?
- How can it be approached to account for the specific context of the community under study?

Section 6.1 gives a discussion of the various issues surrounding language dominance, which include the different factors that are argued to shape it, as well as the ways scholars have measured the construct. Section 6.2 focuses on the field of language contact, particularly how language dominance is argued to drive contact-induced language change. Section 6.3 presents a measurement of language dominance that is specific to the context of the Babuyan Claro community. Section 6.4 concludes with the various ways we can extend our research on language dominance, not only its application in specific case studies, but also in building a stronger theoretical and empirical foundation for the construct.

6.1 Operationalizing language dominance

Broadly defined, language dominance pertains to the individual's relative proficiency and use of the different languages in their repertoire (Silva-Corvalán & Treffers-Daller, 2016, p. 4; Treffers-Daller, 2019, p. 376). Thus, while it is a psycholinguistic construct, which pertains to the individual's linguistic knowledge and proficiency, it is mediated by sociolinguistic parameters, which concern domains and

contexts of language use (Lanza, 2004, p. 234). The multidimensionality of language dominance resulted in the different ways studies have approached and measured the construct. A survey of the literature brings to light the complex nature of language dominance, summarized in the points below.

Language dominance derives from the bilingual experience. The construct, which is essentially the relationship between the languages of the individual, is a reflection of how bilingualism operates. Gertken et al. (2014, p. 211), Kootstra and Doedens (2016, p. 711), Montrul (2016, pp. 16–18), and Treffers-Daller (2016, p. 235) among other scholars, approach the multidimensionality of language dominance by relating it to the bilingual experience. Studies on bilingual individuals such as Fishman and Cooper (1969), Li (2000), and Luk and Bialystok (2013) quantify bilingualism through the components of proficiency and usage. Proficiency has to do with a person's competence in their different languages across linguistic domains, not only pronunciation, grammar, semantics, and vocabulary, but also other less-explored areas of language such as pragmatic, sociolinguistic, and other functional knowledge (Treffers-Daller, 2016, p. 241). An individual's linguistic competencies are said to develop on the basis of how they use their languages. Language use covers the quality and quantity of input an individual receives in their different languages, the contexts and domains in which they use the languages, and the mode of language learning and acquisition (Montrul, 2016, p. 17). Consequently, language use by individuals is argued to be underpinned by wider social processes, such as language ideology, in that the social value attached to the languages likely influence the extent the individual learns and uses their languages (Section 3.4). In sum, the multidimensional nature of bilingualism is measured through age/time, environmental/experiential, affective/attitudinal, and psycholinguistic variables (cf. Gertken et al., 2014; Jia et al., 2002; Luk & Bialystok, 2013; Marian et al., 2007; Unsworth, 2016).

The individual's linguistic experience, such as age of onset of bilingualism, form the basis for categorizing bilinguals into dichotomies such as early versus late, child versus adult, and simultaneous versus sequential bilinguals, which pertain to how language learning and use pattern differently across the different categories of bilinguals (cf. Blom et al., 2006, 2008; de Bot & Bülow, 2020, pp. 171–173; Kerswill, 1996; Nicoladis, 2016, pp. 219–221). For instance, Kerswill (1996, p. 200), in studying second dialect acquisition, outlines several linguistic features (such as phonological rules, grammatical patterns, sound changes, and lexical transfer) which tend to get more difficult to acquire after the "critical period of dialect acquisition."[82] In terms of language dominance, individuals are also

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[82] This pertains to the *critical period hypothesis*, discussed below.

categorized as either balanced[83] or dominant bilinguals, where a balanced bilingual is said to have equal competencies in their languages, whereas a dominant bilingual is said to have greater proficiency in one of their languages and use it more often than the others (Li, 2000, p. 6). It is now commonly accepted that balanced bilingualism is rare, and that bilinguals typically have varying competencies not only across their different languages, but also across different linguistic skills, such as reading, writing, listening, and speaking (Grosjean, 1997, p. 165; Romaine, 1989, p. 18).

Language dominance is not categorical. Because each individual has their own unique bilingual profile as they learn and use their languages differently from other individuals, the degree of language dominance varies from person to person. That is, even as individuals are characterized as having the same dominance patterns in their languages, their degree of dominance for each language may differ. Montrul (2016, p. 27), based on the study of Au et al. (2002), demonstrates how heritage speakers of Spanish differ from those who learned Spanish as their second language in terms of proficiency, even though both categories are characterized as non-dominant speakers of the language. In the same vein, language dominance can also vary within individuals in terms of linguistic skills (such as reading and writing), as well as domains (such as grammar and vocabulary) (Romaine, 1989, p. 13). Individuals differ in their linguistic competencies because of what Grosjean (1997, pp. 166) describes as the Complementarity Principle. "The needs and uses of the languages are usually quite different that bilinguals rarely develop equal and total fluency in their languages. . . . If a language is never used for a particular purpose, it will not develop the linguistic properties needed for that purpose (specialized vocabulary, stylistic variety, some linguistic rules, etc.)." Furthermore, Grosjean (2016, pp. 77–82) writes about how domain-specific language use can affect language perception, production, acquisition, and memory. He cites the work of Cooper (1971) as an example, where Spanish-English bilinguals have different word-naming scores depending on domains, namely the family, neighborhood, school, or religion. Another example is Carroll and Luna (2011), similarly on Spanish-English bilinguals, who claim that it is easier for individuals to recognize words from a particular language if the word belongs to the domain in which they use the language often. That language dominance is domain-dependent illustrates how the language ecology of the larger community plays a role in shaping individual-level patterns of dominance. That is, as different languages are typically relegated to various domains in the everyday life of the multilingual community, the individual's level of exposure and use of their different languages across these domains also vary, which can then affect

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[83] This is also known as neutral or symmetrical bilingualism in the literature.

their degree of language dominance in these domains. This also relates to how language dominance may change depending on the location of the individual. In Babuyan Claro, some Ilokano immigrants report greater proficiency in Ibatan while on Babuyan Claro and have come to use it even when they talk to fellow Ilokanos (Section 3.3.3). Consequently, they tend to "forget" their Ilokano while on the island (referring to vocabulary), but "remember" their first language when they go home to their hometowns. Treffers-Daller (2019, p. 377) explains this as the link between societal language dominance[84] and individual language dominance, where the individual's dominant language tends to be the language they are most exposed to, that is, the language of the community.[85]

Language dominance is dynamic. There is now a growing consensus among scholars that language dominance can change within a person's lifetime. For example, Pavlenko (2014, pp. 206–207) describes how Tzvetan Todorov, a Bulgarian-Russian bilingual, has shifted dominance to French after several years of residence in France. Grosjean (2010, pp. 85–90) cites his personal history, in which he experienced dominance shift five times across the span of 50 years, describing the dynamic nature of language dominance as "the wax and wane of languages." He attributes such shifts in dominance to his immigration history, which is also linked to changes in the languages most frequently used in the domains of education, work, and family.

While there has been sufficient documentation about dominance shift across the lifespan, there is still much to know about the degree to which dominance can change and how this affects linguistic behavior. Biology, primarily plasticity, plays an important role in bilingualism, wherein neuro-cognitive mechanisms are argued to constrain language acquisition and learning (Birdsong, 2018, p. 1). This forms the basis for the *critical period hypothesis* (CPH),[86] where it is argued that the brain loses its plasticity after maturation, which implies that there is an ideal window in language learning (de Bot & Bülow, 2020, p. 172; Pennfield & Roberts, 1959, p. 236). This is also argued to play a role in differences

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[84] Societal language dominance pertains to the language used by the majority of the community, which may also be the language which carries a higher social value. However, this is not always the case. For example, Ibatan is the language of the majority of Babuyan Claro, but it occupies a less privileged social position in relation to Ilokano (and Filipino) within the larger region of Calayan and mainland Luzon.

[85] Societal and individual language dominance are not necessarily identical, in that it is possible for an individual to have a different dominant language from what is used by the community. In the case of Babuyan Claro, some Ilokano immigrants still report greater dominance in Ilokano even after several years of residence on Babuyan Claro (Section 3.3.3).

[86] See Lenneberg (1967) for a more detailed discussion of CPH, and Bialystok and Kroll (2018) and Singleton and Pfenninger (2018) for the issues behind the hypothesis, such as how other confounding factors can interact with the maturational factor in language learning.

between child (or early) and adult (or late) bilinguals (cf. Birdsong, 2014). Relating this aspect of bilingualism to language dominance shift, de Houwer and Bornstein (2016) have shown how French-Dutch bilingual children tend to have changing dominance patterns at 13 months and at 20 months. In comparison, Kupisch and van de Weijer (2016), in their research on German-French adult speakers, have demonstrated that language dominance is less likely to shift in adulthood, as they argue that it is the childhood environment of the individual that primarily shapes dominance. In understanding variability in L2 attainment across individuals, Birdsong (2018, p. 14) argues that it is not simply biological and cognitive factors (relating to age) that constrain L2 learning, but social factors such as language experience and age-conditioned learning styles and motivation likely play a role as well. Similarly, Pliatsikas (2020, pp. 461–463) argues that the bilingual experience can reshape the brain, showing differences in structural adaptations in the brain among different categories of bilingual individuals, including adult bilinguals. Adamou (2021, pp. 3–7) makes the same argument, claiming that the environment and experience of the individual shapes the structure of the brain, both short-term and long-term, and highlights the need to extend research on human cognition and psycholinguistics outside the contexts of western, industrialized societies. For example, it is in pre-industrial populations that different contexts and patterns of language use can be observed, such as in terms of infant care, patterns of residence, and modes of linguistic interaction. Considering the language experience of the Ilokano immigrants of Babuyan Claro, it is indeed apparent how patterns of language use can change, which can likely affect dominance patterns (Section 3.3.3), and arguably, brain structure. However, it is still uncertain at this point to what extent these speakers shift their dominance to Ibatan (Sections 6.3 and 6.4).

There are different ways to measure language dominance. Language dominance can be measured directly or indirectly. Direct assessments test an individual's linguistic skills in particular domains, for example, picture naming tasks to test the speed and automaticity of lexical retrieval (Bedore et al., 2012; L. Dunn & Dunn, 2007; Mägiste, 1992), and measurements of utterance length (typically done for younger bilinguals) for testing production skills (cf. Deuchar & Muntz, 2003; Schmeiβer et al., 2016; Yip & Matthews, 2006). Treffers-Daller (2019, pp. 378–379) outlines several issues regarding such direct measurements of language dominance. First, as language dominance is domain-specific, a single measurement of the construct based on a particular domain or skill does not entail the same degree of dominance in others. Moreover, it is difficult to compare measurements across languages and across age groups, in that the mean length of utterance may vary across typologically different languages, as well as in terms of language use by younger and older speakers. Another important issue

is the cutoff point that distinguishes balanced from dominant bilinguals, where different studies using different measurements of dominance posit varying cutoff points, which then have direct impacts on analyses and assessments (cf. Treffers-Daller, 2016, p. 256).

Indirect measurements are able to account not only for skill- or domain-specific proficiency in the languages, but also for experiential and attitudinal variables, such as the individual's preference for using a particular language, the amount of exposure to and use of the various languages, age and rate of acquisition, and motivation for learning the languages, among others. These indirect measurements are usually in the form of questionnaires; see for example Dunn and Fox Tree (2009), Gertken et al. (2014), Lim et al. (2008), Marian et al. (2007), and Paradis and Nicoladis (2007). Self-reports are arguably more practical compared to direct measures of language dominance. For instance, participants may not be comfortable with taking tests that assess linguistic skills such as picture naming or translation tasks, and they tend to feel pressured in giving the "correct" answer. Self-reports, while indirect, induce less stress and anxiety for the participants compared to being tested directly. Using such questionnaires to measure language dominance, however, is not without problems. In addition to the issues on direct assessments outlined above, Gertken et al. (2014, pp. 213–216) identify several issues regarding existing self-assessment tools for language dominance. For instance, there is the difficulty in comparing responses across individuals, and there is also the question of how accurately self-reports assess actual language dominance. Determining the weight given to the different components of dominance is also a crucial consideration that may yield different results. That is, does proficiency constitute a more important component of dominance over attitudinal and experiential variables, or do all these components equally shape dominance? These questions can be addressed by conducting testing and validation with actual bilingual individuals. Gertken et al. (2014, pp. 216–218) perform various statistical analyses in order to assess whether their questionnaire accurately reflects their operationalization of language dominance, and they conclude that the questionnaire they developed sufficiently captures the variability within the English-French bilinguals they sampled in their study.

Our current understandings of language dominance remain limited. The various studies that investigate language dominance, as well as other concepts related to it, have greatly enriched our understanding of the construct, but our current knowledge of the nature of dominance remains limited in a number of ways. First, the biased view towards monolingualism has contributed to the myth of the balanced bilingual, that is, someone who has near-equal dominance in their different languages (Grosjean, 1997, p. 163; Romaine, 1989, p. 18). While it is now commonly accepted that this is in fact

rare for bilinguals, measurements of a bilingual's linguistic abilities are still typically assessed on the basis of monolingual standards. The mechanisms governing bilingualism are indeed different from those of monolingualism, and so, understanding bilingual competence should be in terms of the individual's total linguistic repertoire, which includes the various domains that contribute to the development of dominance in their different languages (Grosjean, 2016, p. 69).

Second, many of the studies that explore the operationalization and measurement of language dominance come from the perspective of large-scale, industrialized, and educated societies (Treffers-Daller, 2016, p. 264). For other types of societies, such as small-scale multilingual communities, linguistic norms may differ significantly, especially in cases of egalitarian multilingualism, where the languages exist in a more or less equal footing (François, 2012, p. 93). Evans (2018, pp. 18-22) discusses several features that make the language ecology of small-scale communities distinct, such as special types of social signalling as well as greater common ground shared by the community, leading to a different kind of linguistic variation. Dobrushina and Moroz (2021) claim that the degree of multilingualism in small communities is higher compared to larger ones. Moreover, while there are several factors that are seen to be common among small-scale communities, Pakendorf, Dobrushina, and Khanina (2021) emphasize the diversity found among the ecologies of such communities, making their contexts all the more important in providing a wider empirical foundation for our understandings of language and language use. For instance, Adamou (2021, pp. 17–22) stresses the importance of endangered language communities in enriching our knowledge of bilingualism and language dominance. That is, considering a wider range of social, cultural, and historical contexts, such as the multilingual experiences of small-scale communities, would shed a new light onto our understanding of the nature, components, and measurements of language dominance, as well as the constructs and phenomena related to it.

6.2   Language dominance and contact-induced outcomes

The construct of language dominance, as an essential aspect of the bilingualism, is argued to play a direct role in shaping contact-induced outcomes, both at the level of the individual and the community (Section 2.2). For the bilingual individual, different patterns of language dominance manifest as different kinds of cross-linguistic influence. Van Coetsem (2000) argues that language dominance determines the bilingual's agentivity in a language, that is, either RL agentivity which involves dominance in the RL, or SL agentivity, involving dominance in the SL. Agentivity means that the individual tends to be constrained by the resources of their dominant language, that is, they tend to rely on the structural elements of the language they know best in the process of communication. This

results in outcomes such as borrowing of vocabulary in RL agentivity, or the imposition of SL structural materials in SL agentivity (see Section 2.2.1 for further details). The strength of the framework is that it is able to link processes of bilingual language use with specific outcomes, grounded in the psycholinguistic notion of language dominance. Van Coetsem's (2000) model thus offers a principled way to account for the robust patterns of transfer that have been documented in the literature. However, a challenge of this model is how language dominance as an explanatory variable is not precisely defined or operationalized. That is, bilinguals are categorized as either dominant or non-dominant in a particular language, but such categorization is based on rather vague notions of greater fluency or proficiency in one language over another (van Coetsem, 2000, pp. 66–67). As we have seen in the previous section, language dominance goes beyond fluency or proficiency, and the model needs to account for the other variables that shape language dominance. Different individuals also have varying degrees of language dominance, and we have seen how it is possible for dominance to shift across the lifespan. This is acknowledged by van Coetsem (2000, p. 59), as he argues that the degree of cross-linguistic influence may change as one becomes dominant in a language. This emphasizes the need for a more precise measurement of language dominance in order to more deeply understand the correlation between the construct and cross-linguistic influence. Another issue that needs to be considered when studying contact outcomes at the level of the individual is how other factors interact with language dominance. For example, Schmeißer et al. (2016, pp. 64–65) write how language dominance does not play a decisive role in driving grammatical development and crosslinguistic influence among bilingual children. They further claim that it is the level of proficiency in the RL and the degree of complexity of the syntactic structure under investigation that can be predictive of crosslinguistic influence. Furthermore, in a series of publications, Grosjean (1985, 1997, 1998, 2016) writes about the language modes of a bilingual, which pertains to the activation of the bilingual's languages and language processing mechanisms. Whether or not the individual is in monolingual mode, which largely depends on the interactional setting (such as the language use of the interlocutor), is argued to influence linguistic outcomes on top of language dominance. In sum, such issues highlight how van Coetsem's (2000) speaker-based model for language contact needs to be further refined in terms of operationalizing the construct of language dominance and accounting for other possible factors that may influence contact-induced outcomes.

Beyond the individual, contact-induced change seen at the level of the community is also argued to be shaped by language dominance interacting with other factors. Thomason and Kaufman (1988) cite "level of bilingualism" as a factor in determining linguistic outcomes of contact. In scenarios involving

language maintenance, intense contact involves "much bilingualism among borrowing-language speakers over a long period of time", which may result not only in heavy lexical borrowing, but also possible structural borrowing, and in situations involving language shift, characterized by a "large shifting group and imperfect learning," this may result in substratum/superstratum/adstratum interference, especially in phonology and syntax (Thomason & Kaufman, 1988, p. 50). What the authors mean by "level of bilingualism" can be taken as population-level language dominance, where a significant proportion of speakers in a community has the same dominance pattern, and this likely influences the direction of widespread contact-induced change. In their framework, language dominance (or level of bilingualism) is one factor that determines intensity of contact, which they take as the primary determinant of contact-induced change (see Section 2.2.2 for a more detailed discussion). Other linguistic and social factors are argued to interact in driving the diffusion of change, and this is discussed in detail in Chapter 8.

6.3   Language dominance in Babuyan Claro

As demonstrated in Section 6.1, language dominance is not merely shaped by psycholinguistic processes, but it is also mediated by social parameters such as exposure and use. Thus, it is important to highlight how the social ecology of a community has a direct hand in shaping an individual's language dominance. It also follows that significant social change in the community may trigger a subsequent change in patterns of language dominance.

   Any measure of dominance should thus be tailored to the specific setting of the community under study, where locally meaningful categories and contexts may play an important role. Moreover, understanding patterns of language dominance should also be grounded in the history of the community. That is, there is a need to account for significant social and cultural change that may have affected language use. In developing an instrument for investigating language dominance, it is thus imperative to have a good understanding of the community in order to identify the various factors that contribute to the development of language dominance.

6.3.1   *A Multilingual Language Profile for Babuyan Claro*

One of the measurements for language dominance is the Bilingual Language Profile (BLP) developed by Gertken et al. (2014). The practical aspect of using self-reports such as the BLP (discussed in Section 6.1), compared to performing standardized assessments, makes it more applicable for the contexts of most communities.

A Multilingual Language Profile (Appendix B) is designed to measure language dominance specific to the context of the Babuyan Claro community. The questionnaire builds on the BLP by Gertken et al. (2014) and considers locally meaningful factors for the community. The instrument will be used to come up with a Language Dominance Index (LDI), which measures dominance on the basis of four general components, namely bilingual experience, language use, language proficiency, and attitudes. Depending on the personal history of the individual, their linguistic repertoire can include as many as four or five languages, with Ibatan, Ilokano, and Filipino being the common languages shared by all members of the community. A measurement of language dominance within the context of the Babuyan Claro community should account for all the languages of the individual, but the focus of the questionnaire is on these three common languages of the people as these are the languages relevant to the current study.

Bilingual experience concerns variables like age of acquisition of the languages, age of active bilingualism, mode of learning, and length of residence in places where the languages are spoken. For the component of language use, this concerns how much the individual uses the three languages in various domains, namely the family, the neighborhood (with friends and neighbors), at school or work, the church, the market, in social media, when watching television or listening to the radio, when traveling outside Babuyan Claro, as well as when praying and when talking to self. Proficiency is divided into four linguistic skills, namely speaking, listening/reading comprehension, reading, and writing. Finally, attitudinal factors involve the identificational value attached to the languages.

Aside from the general factors included in the BLP, there are several ones that are locally meaningful for the Babuyan Claro community, outlined in Chapter 3. Religion (and praying) is seen as a particularly salient category, in which membership in a particular religion (either Roman Catholic or Protestant) coincides with the use of either Ilokano or Ibatan. Social network, measured through interaction with family, neighbors, and friends, is also an important factor that can shape language dominance, and this coincides with residency in either the *daya* 'east' or *laod* 'west' regions, which then correspond to the more frequent use of either Ibatan or Ilokano. Other domains namely social media, the market, and travel are also added in the questionnaire. For language attitudes, mixing is a common theme in Babuyan Claro, and people identify themselves with particular language groups based on language dominance. And so, they sometimes describe themselves as mixed, and in percentages, depending on how well they use and know their different languages (Sections 3.3 and 3.4). Instead of categorically asking respondents if they identify as Ibatan, Ilokano, or Filipino (following the BLP), the question is then reformulated to asking the degree or percentage they identify with these ethnolinguistic groups.

Developing such context-specific questionnaire for language dominance requires a thorough understanding of the community under study. For Babuyan Claro, in-depth fieldwork in the community was necessary in order to know how speakers use their languages and what categories and domains are meaningful in shaping patterns of language dominance. For instance, patterns of interaction across clusters within the Babuyan Claro social network contribute to the speakers' exposure and use of their different languages. Moreover, how speakers describe themselves in terms of ethnicity is seen to directly affect language choice, which also motivates language learning, especially among Ilokano immigrants on Babuyan Claro (Section 3.4). Finally, periods of socio-political change can be linked to changes in the language ecology of the community (Section 3.2), which then shape past and ongoing patterns of language dominance among individuals.

Following the models for language contact discussed in Sections 2.2 and 6.2, it is expected that the individual's degree of dominance in Ibatan correlates with particular kinds of cross-linguistic influence. Anecdotally, speakers claim that certain linguistic features are commonly observed among the speech of new Ilokano immigrants who are still learning Ibatan, such as the absence of the consonant *h* in the coda position, as well as the variant use of particular affixes (discussed in Chapter 7). These are argued to be influenced by Ilokano, the dominant language of these individuals. Thus, lesser dominance in Ibatan is reflected in the use of Ilokano-influenced features, which also signals imposition transfer or SL agentivity. While the MLP has been tested on a few individuals with the help of a community-based research assistant, we have been unable to collect a larger sample that can be used for quantitative analysis because of the restrictions of the COVID-19 pandemic. In future studies, the MLP will be used to explore possible correlations between language dominance and such kinds of cross-linguistic influence among speakers.

6.4   **Further questions**

As discussed in the previous section, LDI can be used as a variable to explain specific contact outcomes. However, in order to use LDI as a variable to explain contact outcomes, there are several questions that need to be resolved. First and foremost, how do we specifically measure LDI? Gertken et al. (2014) propose an equal weighting of the different factors that shape language dominance. However, this needs to be tested empirically. For instance, direct measures that assess linguistic skills are taken to put more weight on proficiency and fluency as indicators of language dominance. Montrul (2016, p. 34) argues that while dominance and proficiency are related, they should not be equated, as individuals may have the same dominance patterns but exhibit different levels of proficiencies in their languages. Testing how experiential variables can be a proxy for proficiency in measuring language

dominance for Dutch-English bilingual children, Unsworth (2016, p. 173) writes that there is a strong correlation between the two, and that "when language dominance is narrowly defined as relative proficiency, the use of amount of exposure is a valid means of operationalizing language dominance, at least for the population under investigation here, and that children's language use may also have potential as a proxy for language dominance in future studies on bilingual language development." Moreover, in terms of correlations with specific contact-induced outcomes, different factors are argued to influence cross-linguistic outcomes in varying degrees. For instance, age of acquisition may carry more weight in shaping dominance compared to other variables, in that several studies argue for differences in early versus late bilingualism (cf. Kupisch & van den Weijer, 2016; Montrul, 2016). Finally, taking the specific contexts of the communities and the speakers, how much weight do locally meaningful factors carry in shaping language dominance in relation to more general, global factors?

Coming up with a measurement tool for language dominance is an iterative process. That is, language dominance is taken as a variable that correlates with different kinds of contact outcomes. Once we establish stronger links between the two, we can then approach the phenomenon the other way around, that is, taking specific contact outcomes as signals of varying degrees of dominance in a particular language. Only by understanding the connection between the two variables are we able to have a more accurate approach to measuring and operationalizing the construct of language dominance, and consequently, accounting for the respective weight of its components.

Another issue that needs to be addressed is categorizing bilingual individuals as either dominant or non-dominant in a language. We have seen in Section 6.1 how language dominance is not a categorical construct but rather a relative one, both within and across individuals. However, maintaining the distinction between the two broad categories serves practical purposes, particularly in initial explorations of contact outcomes (Chapter 7). This becomes problematic when the boundary between the two categories becomes less clear, that is, in cases of balanced bilingualism. How do we know if a bilingual is equally dominant in their languages? The difficulty in dealing with balanced bilingualism is that this is claimed to be a rare phenomenon, and so, there is still a lot that we don't know about it, particularly how it relates to contact-induced outcomes. What is clear is that contact outcomes arising from balanced bilingualism are not predictable, unlike those observed among dominant bilinguals. That is, because of (near-)equal dominance in the languages, the effects of the stability gradient of language are neutralized and the speakers can engage in the selection of both the transfer mechanisms of borrowing and imposition (van Coetsem, 1995, p. 81).

Finally, the dynamic nature of language dominance is something that needs to be properly accounted for, which involves understanding how dominance can shift in a person's lifetime, and how individual and community-level patterns of language dominance are linked. That is, changes in individual-level patterns can result in a shift in population-level dominance through socio-demographic change, which is then triggered by changes in the wider social ecology of the community. For instance, several studies demonstrate how changing patterns of language dominance among speakers are linked to distinct kinds of contact-induced outcomes, and how these are embedded within the socio-historical contexts of the communities. Arnal (2011) attributes a new kind of transfer involving structure to the sociolinguistic changes in Catalonia. Hendriks et al. (2018) argue that the acquisition of Dutch by children during the period of 1300-1800 was a product of a koineization process that resulted from the influx of immigrants to the urban centers of Holland, which drove linguistic change in Dutch. Solheim (2009) argues for a similar koineization process across four generations of dialect development in Høyanger, a small industrial town in Norway. Finally, McConvell and Meakins (2005) and Meakins (2012) describe the emergence of Gurindji Kriol, arising through codeswitching between Gurindji and English-based Aboriginal Kriol, but now developing as a mixed language with regular and stable structures.

In sum, LDI as a variable is indeed useful in investigating language contact, but before we can use it with confidence, the instrument to measure it needs to be carefully designed. The MLP is constructed based on a review of the language dominance literature and a thorough understanding of the Babuyan Claro community. In future studies, I hope to test the instrument, specifically how LDI correlates with patterns of individual-level language use. At a synchronic level, LDI can be used as an explanatory variable to explain different kinds of features in bilingual speech, following van Coetsem (2000). A quantitative approach also allows us to investigate how specific components of language dominance such as proficiency, exposure, and attitude, along with locally meaningful factors, strongly correlate with attested language use. At a diachronic level, I also hope to explore in more detail how community-level language dominance and language use are shaped, through social variables such as population size and structure (cf. Thomason & Kaufman, 1988), as well as by considering changes in the social history of the community (cf. McConvell & Meakins, 2005). Making stronger links among these variables allows us to take a more nuanced approach in reconstructing the social history of a community. These aspects are explored in Chapters 8 and 9.

INNOVATIONS

Patterns of cross-linguistic influence

Introduction

Van Coetsem's (2000) framework for language contact centers on language dominance as the primary mechanism driving contact-induced change. That is, dominance patterns linked to the speakers' agentivity in the SL or the RL are argued to yield distinct contact outcomes. In the Babuyan Claro community, bilinguals can be broadly categorized as dominant or non-dominant speakers of Ibatan. Anecdotally, the speakers themselves claim differences in language use in terms of dominance, where non-dominant speakers are described as exhibiting the use of Ilokano structures in their Ibatan, reflecting evidence of imposition transfer or SL agentivity. The extent to which the speakers show the effects of imposition transfer can be argued to reflect varying degrees of dominance in Ibatan, indicating how the construct of language dominance is more accurately measured as a gradient variable.

To test this assumption, this chapter explores samples of language use across the two broad categories of Ibatan speakers, and across different linguistic domains namely phonology, morphology, and the lexicon. Section 7.1 discusses the nature of the data and gives a background of the speaker categories under study. Section 7.2 presents the findings across the different linguistic domains. Section 7.3 gives some insights about the correlation between language dominance and ongoing cross-linguistic influence. Finally, Section 7.4 gives concluding remarks and lays out the direction for future research.

7.1   The data

The actuation of language change is argued to be found in the speech of the individual. Specifically, for contact-induced change, psycholinguistic mechanisms that underpin language dominance are said to drive patterns of cross-linguistic influence among bilingual individuals. It is then the variation in the speech of bilinguals that forms the pool of linguistic innovations which become available for adoption at the level of the population.

Thus, investigating contact-induced language change begins by investigating the mechanisms involved in individual-level language use. This chapter focuses on the correlation between language dominance and patterns of language use by analyzing a preliminary corpus of Ibatan texts from both dominant and non-dominant speakers. The speakers are categorized either as dominant or non-dominant speakers of Ibatan, and this is determined through in-depth language profile interviews based on Marian et al. (2007). Broadly speaking, individuals who have learned Ibatan in their childhood and use the language more frequently in their everyday life are considered dominant speakers, whereas those who have learned Ibatan in their adulthood and report lesser proficiency in Ibatan than their other language/s, typically Ilokano, are considered non-dominant speakers. Individuals who have learned both Ibatan and Ilokano in their childhood but prefer to use Ilokano in everyday conversation are likewise regarded as non-dominant speakers of Ibatan.

Non-dominant Ibatan speakers are typically Ilokano immigrants who come to Babuyan Claro to work, usually as teachers, farmers, or fishermen, or those who have married into the community. While they have all learned Ilokano as their first language, these speakers may not necessarily use the same Ilokano dialect. That is, some come from Calayan, Camiguin, or Dalupiri, which all belong to the Babuyan group of islands, while others come from provinces in mainland Luzon, such as Ilocos Norte and Cagayan. Dialectal differences include variation in intonation, vocabulary, and grammar (Rubino, 2000, p. xii). These non-dominant speakers also report differences in their degree of use of Ibatan. Some have already spent several years living on Babuyan Claro speaking Ibatan as their everyday language, while others are new immigrants who have only learned Ibatan recently, and thus only use the language occasionally.

The diverse personal histories of the speakers entail differences in the degree of dominance in Ibatan. In addition to one's social network (which ultimately determines language choice in Babuyan Claro, discussed in Section 3.3), geographic mobility also plays a role in shaping language dominance. There are speakers who are less mobile, while others frequently travel outside the community for work. Additionally, some speakers, mostly younger generations of Ibatan-dominant speakers, reside in mainland Luzon for most of the year because of work or study, and only visit Babuyan Claro occasionally for vacation. This then means that more mobile speakers receive more exposure in other languages, namely Ilokano and Filipino, compared to those who are mainly based in Babuyan Claro.

All in all, these differences in personal backgrounds lead to differences in language dominance, and ultimately, differences in patterns of language use. Speakers with lesser dominance in Ibatan (and greater dominance in Ilokano) are expected to show evidence of imposition transfer, with the apparent

use of Ilokano structures such as phonological and morphological patterns in their Ibatan speech. Those with greater dominance in Ibatan, in comparison, are not expected to show such effects of imposition transfer. Finally, individuals who have near-equal dominance in the two languages are likely to show inconsistent patterning in their speech, as predicted by what van Coetsem (2000) describes as neutralization of constraints in balanced bilingualism. The effects of language dominance are explored in this chapter based on two kinds of evidence. First and foremost, Ilokano structures (namely phonology and morphosyntax) imposed onto Ibatan speech are taken as evidence of imposition transfer. Such kinds of features are argued to show more consistent correlations with speaker agentivity, that is, SL agentivity or dominance in Ilokano. Lexical evidence is also examined as this is argued to correlate with RL agentivity or dominance in Ibatan. However, it is acknowledged that such kind of data may not show consistent patterning as compared to structural materials, as vocabulary can be transferred with or without a high degree of bilingualism (Arnal, 2011, p. 9; Gardani, 2020, p. 99). Taking structural transfer as the main evidence for understanding patterns of language dominance, the challenge of utilizing van Coetsem's (2000) framework in this study is that Ilokano and Ibatan are genetically related languages, reflecting several identical structures in phonology and morphosyntax, such as in terms of voice morphology detailed in Section 5.1. This then makes it difficult to directly assess the extent of imposition transfer in bilingual speech. However, the two languages, while indeed sharing several formatives, are not in any way mutually intelligible, and they belong to different subgroup of languages, that is, Ilokano to the Cordilleran subgroup, and Ibatan to the Batanic subgroup. They are thus still fundamentally different in terms of lexicon, phonology, and morphosyntax, with structures clearly exclusive to each language (Appendix A). These diagnostic structures thus serve as good indicators of imposition transfer.

This chapter explores the assumption that the degree and kinds of (imposition) transfer in patterns of individual-level language use correlates with the bilingual's degree of dominance in Ibatan. This is done by examining samples of Ibatan speech in a preliminary corpus of elicited and spontaneous texts. The corpus, with 4363 unique words, 28008 total word count (tokens), and 9295 total number of segments (utterance units), comprises five hours of recordings of elicited and spontaneous texts from a total of 38 speakers who have varying degrees of dominance in Ibatan (24 dominant and 14 non-dominant). The recordings and transcriptions are archived as part of the documentation by Gallego (ongoing). For the elicited texts, there are 3 instruments used, namely the Pear Story following Chafe (1980), the Frog Story following Berman and Slobin (1994), and the Family Problems Picture Task following San Roque et al. (2012). For the Pear and Frog Stories, I asked the speakers to retell the video

and the story book in Ibatan to the people who were also present in the recording session. For the Family Problems Picture Task, the speakers worked together to form a story based on the pictures given to them, and they were then asked to retell their story to others present in the session. For the spontaneous texts, the researcher typically let the speakers choose a particular topic they wanted to talk about, which was typically about particular events in their lives, and they would then talk about it either with an Ibatan-dominant research assistant, or with other speakers present during the session (cf. Labov, 1984).

As the main researcher, I typically facilitated the recording sessions, assisted by a dominant speaker of Ibatan. As the main aim of the thesis is to understand the development of Ibatan as it is used in the Babuyan Claro community, the recording sessions were designed to approximate typical patterns of social interaction among the speakers. Thus, the choice of being assisted with an Ibatan-dominant speaker throughout the recording sessions was deliberate, in that speakers, including non-dominant ones, frequently use Ibatan with dominant speakers in their everyday activities in the community. Admittedly, non-dominant speakers of Ibatan may vary in their use of the language depending on their interlocutor, that is, either a dominant or a non-dominant speaker of the language. However, their interactions with dominant speakers can be argued to be the locus of potential contact-induced language change, in which a particular linguistic feature from a pool of variants generated during bilingual language use can potentially be picked up by early adopters who are dominant in Ibatan (see Section 8.2.2). Being assisted by a dominant speaker who is trusted in the community, moreover, means that the conversations proceeded in a more natural way. However, naturalness of speech is potentially affected in recorded events, described as the observer's paradox or the experimenter effect (Labov, 1972, 1984). In addition to naturalness, there are also other confounding factors which are acknowledged to influence bilingual language use, such as the topic of the conversation and the specific interactional setting itself, particularly the people present in the conversation (cf. Grosjean, 1985, 2016). For instance, the speakers may have accommodated their language use based on how they perceived the interlocutor is proficient in either Ibatan or Ilokano.

Guided by these limitations and considerations in data collection, I tried to collect data from similar settings and recording events. This ensures that the recordings in the corpus are comparable to a certain extent, which then allows us to investigate language use across different categories of speakers with more confidence. Ideally, a larger corpus with more spontaneous texts in a wider variety of contexts, designed to control for influencing variables beyond the speaker's language dominance, such as accommodation to the linguistic repertoire of the interlocutor, would provide a more robust and

straightforward assessment of imposition transfer effects. Issues such as the observer's paradox would also be mitigated by more closely following the methodology laid out by Labov (1984), which is used in studies within the field of variationist sociolinguistics (cf. Hoffman & Walker, 2010; Kashima, 2020). Finally, a quantitative measurement of language dominance for each individual based on Gertken et al. (2014) (described in Section 6.3.1) rather than a categorical grouping of speakers as either dominant or non-dominant, would more accurately capture these hypothesized correlations. While these have all been taken into consideration for the second fieldwork planned in 2020, I was not able to return to Babuyan Claro because of the COVID-19 pandemic. This chapter of the thesis instead presents a preliminary survey and analysis of the current corpus, focusing on selected linguistic features that show clear evidence of cross-linguistic influence, which is a good starting point for quantitative testing in future research. These features are discussed in the succeeding section.

7.2   Cross-linguistic influence among bilingual individuals

Models for language contact argue for different factors that motivate contact-induced change, such as the psycholinguistic notion of language dominance (van Coetsem, 2000). To test whether the two main transfer types that van Coetsem's (2000) model identifies hold for the context of Babuyan Claro, the correlation between the extent to which individuals show evidence of (imposition) transfer and their degree of dominance in Ibatan is explored on the basis of clear cross-linguistic influence across the domains of phonology (Section 7.2.1.), morphology (Section 7.2.2), and the lexicon (Section 7.2.3).

7.2.1   *Cross-linguistic influence in phonology*

For the domain of phonology, two linguistic features that are argued to be contact-induced are investigated, namely the absence of the coda *h* (Section 7.2.1.1), and the variation between the alveolar stop *d* and its alveopalatal counterpart *dy* (Section 7.2.1.2)*.*

7.2.1.1   *Absence of the coda h*

The glottal fricative *h* exists in the coda position in Ibatan, as seen in such words as *rakoh* 'big', *kakteh* 'sibling', *rahmet* 'heavy', and *ohbot* 'to come out'. In comparison, the consonant does not occur in such an environment in Ilokano, and it is even reported as a loan consonant by Rubino (2000, p. xxiii). Anecdotally, Ibatan-dominant speakers point out that non-dominant speakers tend to exhibit the absence of the consonant in the coda position, and it can be argued that this is due to the influence of their dominant language Ilokano.

To illustrate this variation, Figure 16 and Figure 17 show the spectrograms for *rakoh~rako* 'big' in the context of the phrase *rako(h) a kayo* 'big tree'. The two spectrograms differ in terms of the occurrence of *h* in the coda position, where Figure 16 shows the consonant occurring before the Ibatan linker *a*, and Figure 17 illustrates the absence of the consonant, which also involves the insertion of the glide *w* before the linker *a*, leading to the form *wa*.

Figure 16: Spectogram of *rakoh* 'big'
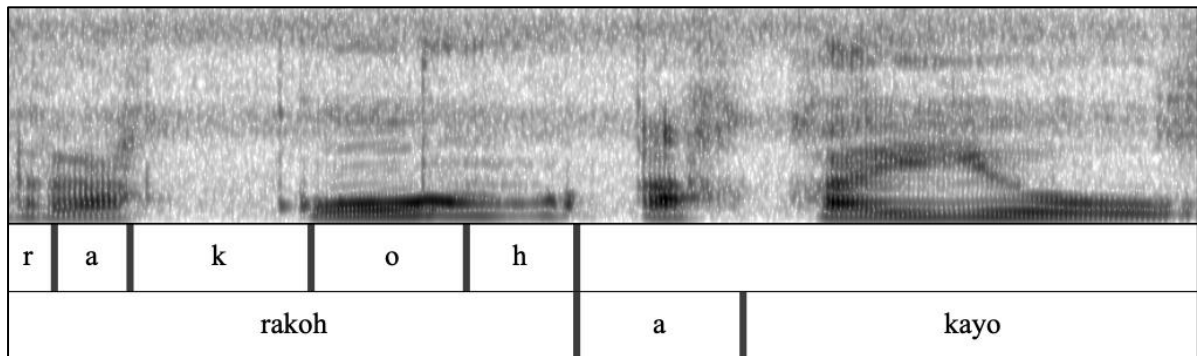
Figure 17: Spectogram of *rako* 'big'
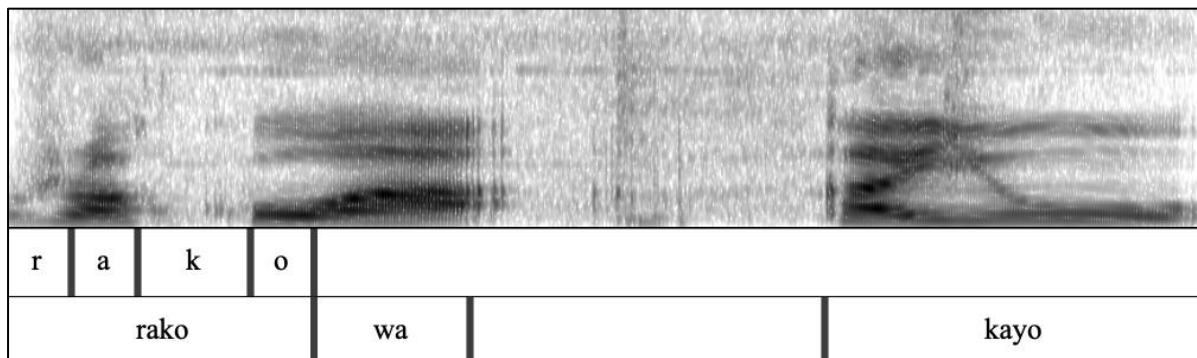
To investigate this variation, all native Ibatan words with coda *h* are filtered in the corpus, and these are tagged based on the language dominance of the bilingual speaker. A total of 160 tokens of 14 Ibatan words with coda *h* are found across the speech of 26 speakers (16 dominant and 10 non-dominant).[87] Variation in the realization of the coda *h* is primarily observed among non-dominant speakers, whereas majority of the dominant speakers categorically reflect the coda *h* in their speech. This is detailed in Table 34.

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[87] This count excludes tokens that occur only once in the corpus as well as those used by a single speaker as such instances cannot be taken to reflect potential variation. Including these in the count gives a total of 178 tokens from 38 speakers.

Table 34: Usage of words with coda *h* in terms of language dominance

Speaker	LD	Usage	Presence of coda *h*	Absence of coda *h*	Total
AT	DOM	Categorical	2	0	2
IT2	DOM	Categorical	2	0	2
JD	DOM	Categorical	2	0	2
MS	DOM	Categorical	2	0	2
MT3	DOM	Categorical	2	0	2
MD2	DOM	Categorical	3	0	3
MS2	DOM	Categorical	3	0	3
RE	DOM	Categorical	3	0	3
SR	DOM	Categorical	3	0	3
XX2	DOM	Categorical	3	0	3
MO	DOM	Categorical	5	0	5
OT	DOM	Categorical	13	0	13
XX8	DOM	Categorical	17	0	17
LR	DOM	Categorical	34	0	34
RN	DOM	Variant	1	1	2
BT3	DOM	Variant	2	1	3
VR	ND	Categorical	2	0	2
LS	ND	Categorical	4	0	4
RC	ND	Categorical	6	0	6
AT2	ND	Categorical	0	3	3
MF	ND	Variant	3	1	4
MT	ND	Variant	11	1	12
BG	ND	Variant	2	2	4
JD5	ND	Variant	4	2	6
JD3	ND	Variant	1	5	6
LT	ND	Variant	6	8	14
TOTAL			**136**	**24**	**160**

Among the words with coda *h*, *rakoh* 'big' is one of the most frequent, with 28 tokens from 12 speakers (5 dominant and 7 non-dominant). From this data set alone, it is apparent that language dominance plays a role in driving this innovation. That is, all instances of *rako* without the coda *h* (vs *rakoh*) are traced back to non-dominant speakers, where all 15 tokens of *rako* come from 4 non-

dominant speakers (Table 35). Sentences (61) and (62), which are also illustrated in Figure 16 and Figure 17 respectively, demonstrate this variation based on language dominance.

(61)   **RAKOH 'big': LR (dominant speaker)** (Gallego (ongoing): IVB1-20180923_07, 145)

*Nakarapit sa do yanan no asa a **rakoh** a kayo.*[88]

Nakarapit	sa	do	yanan	no	asa	a	**rakoh**	a	kayo.
naka-rapit	sa	do	yanan	no	asa	a	rakoh	a	kayo
PFV.AV-reach	3P.NOM	DET	place	DET	one	LK	big	LK	tree

'They were able to reach the location of the big tree.'

(62)   **RAKOH 'big': LT (non-dominant speaker)** (Gallego (ongoing): IVB1-20180930_08, 107-108)

*Naboya da iyaw no **rako** wa kayo.*

Naboya	da	iyaw	no	**rako**	wa	kayo.
na-boya	da	iyaw	no	rakoh	a	kayo
PFV.UV-see	3P.GEN	DEI	DET	big	LK	tree

'They saw the big tree.'

The occurrence of this variation differs across speakers. To illustrate, in the same data set for *rakoh~rako*, Table 35 shows the variation across dominant and non-dominant speakers.

Table 35: Variation between *rakoh~rako* 'big' in terms of language dominance

Speaker	LD	*rakoh*	*rako*	Total
MO	DOM	1	0	1
OT	DOM	1	0	1
RE	DOM	1	0	1
LR	DOM	2	0	2
XX8	DOM	2	0	2

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[88] The first two lines of the gloss represents the speaker's utterance, while the second line details segmentation into morphemes.

Speaker	LD	*rakoh*	*rako*	Total
MF	ND	2	0	2
MT	ND	3	0	3
RC	ND	1	0	1
BG	ND	0	1	1
AT2	ND	0	2	2
JD3	ND	0	5	5
LT	ND	0	7	7
Total				**28**

From the table, we can observe inter-speaker variation, where some non-dominant speakers categorically show the absence of coda *h* in the tokens for *rakoh* 'big', namely AT2, BG, JD3, and LT, whereas MF, MT, and RC do not. Going beyond this data set, we can also observe intra-speaker variation. To illustrate, BG, a non-dominant speaker, shows this variation in *rako* 'big' in (63), but reflects the coda *h* in *maykakateh* 'siblings' in (64).

(63)   **RAKOH 'big': BG (non-dominant speaker)** (Gallego (ongoing): IVB1-20180815_02, 96)

*… ariayaw **rako** wa, ango, olongaya daw*

ariayaw	**rako**	wa	ango	olongaya	daw
ari=aya=w	rakoh	a	ango	onlong=aya	daw
EXT=REF=DET	big	LK	what	horn=REF	DEI

'… (something) with a, whatsit, big horn over there.'

(64)   **KAKTEH 'sibling': BG (non-dominant speaker)** (Gallego (ongoing): IVB1-20180815_02, 149)

*Sira ara tokak daw ki maysisit, **maykakakteh**.*

Sira	ara	tokak	daw	ki	maysisit	**maykakakteh**
sira	ara	tokak	daw	ki	may-si~sit	may-ka~kakteh
DEI	probably	frog	DEI	INV	AV.DUR-RDP~friend	AV.DUR-RDP~sibling

'This frog and those over there are probably friends, siblings.'

The same can be said for other non-dominant speakers, such as JD5, who shows this variation in the word *sibah* 'to stop by', as illustrated in (65) and (66).

(65)   **SIBAH 'pass by': JD5 (non-dominant speaker)** (Gallego (ongoing): IVB1-20211006_01, 66)

Sinibah na yaken.

Sinibah	na	yaken.
<in>sibah	na	yaken
<UV.PFV>stop.by	3S.GEN	1S.NOM

'He came to fetch me.'

(66)   **SIBAH 'pass by': JD5 (non-dominant speaker)** (Gallego (ongoing): IVB1-20211006_01, 68)

Siniba na yaken do Camiguin.

siniba	na	yaken	do	Camiguin.
<in>sibah	na	yaken	do	Camiguin
<UV.PFV>stop.by	3S.GEN	1S.NOM	DET	Camiguin

He came to fetch me in Camiguin.

Non-dominant speakers who have lived longer in Babuyan Claro, and who have reported good proficiency in Ibatan, also occasionally exhibit this innovation. MT, a non-dominant speaker known in the community for her good Ibatan, shows the expected coda *h* in most instances, as in *nakaycheh* 'slept' in (67), but there are still cases where she exhibits the absence of the consonant, as in *toro* 'to give' in (68).

(67)   **ICHEH 'to sleep': MT (non-dominant speaker)** (Gallego (ongoing): IVB1-20180901_01, 416)

Ki do logan kono ki naw mo kona nakaycheh.

Ki	do	logan	kono	ki	naw	mo	kona	**nakaycheh.**
ki	do	logan	kono	ki	naw	mo	kono	naka-icheh
but	DET	vehicle	reportedly	INV	constantly	2S.GEN	reportedly	PFV.STAT-sleep

'But on the boat, reportedly, you were just sleeping, they said.'

(68)   **TOROH 'to give': MT (non-dominant speaker)** (Gallego (ongoing): IVB1-20180901_03, 165)

Intoro na met dyirad tatdo a rarahay.

Intoro	na	met	dyirad	tatdo	a	rarahay.
<in>toroh	na	met	dyira=d	tatdo	a	rarayay
<UV.PFV>give	3S.GEN	likewise	3P.DAT=DET	three	LK	companion

'He also gave (apples) to the three companions.'

Additionally, she also shows an instance of hypercorrection in her speech. *Akta* 'to bite, crunch' does not have coda *h*, but the consonant occurs in MT's speech in (69).

(69) **AKTA 'to bite, crunch': MT (non-dominant speaker)**

(Gallego (ongoing): IVB1-20180901_01, 172)

Maynamot ta naktahtah naw iyaw no rida naw.

Maynamot	ta	**naktahtah**	naw	iyaw	no	rida	naw.
maynamot	ta	na-akta~akta	na=aw	iyaw	no	rida	na=aw
about	because	PFV.UV-RDP~bite	3S.GEN=REF	DEI	DET	tongue	3S.GEN=REF

'Because she was biting her tongue.'

While language dominance appears to be an important factor in driving this particular innovation, there are two instances in the corpus in which dominant speakers reflect the absence of coda *h*. RN and BT3 are both categorized as dominant speakers of Ibatan, but they exhibit this variation in two tokens of *toroh* 'to give' in (70) and (71).

(70) **TOROH 'to give': RN (dominant speaker)** (Gallego (ongoing): IVB1-20180918_04, 67)

As pinirwa da intoro.

As	pinirwa	da	**intoro.**
as	\<in>pirwa	da	\<in>toroh
and	\<UV.PFV>repeat	3P.GEN	\<UV.PFV>give

'And they gave it again.'

(71) **TOROH 'to give': BT3 (dominant speaker)** (Gallego (ongoing): IVB1-20181007_03, 86)

May narana intoro.

May	narana	**intoro**
may	narana	\<in>toroh
come	already	\<UV.PFV>give

'(He) went and gave (it).'

These two instances indicate that this is possibly a change in progress in Ibatan, because some dominant speakers are seen to be picking up this innovation. However, it is important to stress the multi-causality of change. That is, while this variation is primarily motivated by language contact, that

is, the imposition of Ilokano phonology onto Ibatan speech, as seen in how non-dominant speakers almost exclusively show this innovation, the weak nature of the consonant makes it prone to such kind of variation, even without the influence of contact. Thus, in this particular case, both language-internal and external factors may be argued to drive change.

We also need to consider the speakers' knowledge of structures in investigating this innovation. That is, speakers may have a certain degree of awareness of the phonological and morphological structure of the word but are still influenced by the structure of their dominant language, Ilokano. To illustrate, tokens of the native Ibatan word *toroh* 'to give' in which *h* remains word-finally, show variation*,* but looking more widely into its derived forms, which mainly involve suffixation that result in *h* transferring to the onset of the following syllable, such tokens consistently reflect the consonant, even in the speech of non-dominant bilinguals. This is illustrated in instances of the verb derived with the undergoer voice (UV) affix *-an* (Table 36). In deriving UV, the position of the consonant *h* moves to the onset of the ultimate syllable, as in *ti.no.ro.han* 'gave'. This then makes the structure of the word conform with Ilokano phonotactics, with *h* occurring as an onset instead of a coda. That is, the morphophonological change resulting in the transfer of *h* to the onset position reflects phonological structure that is also permitted in Ilokano phonology. In addition, the speakers may be aware of the final *h* in the root word *toroh* to a certain degree, thus the consistent use of *h* in these derived forms. This degree of awareness of structures can also be argued to correlate with usage frequency. *Toroh* 'to give', including its derivations, is the most frequently occurring word with coda *h* in the corpus. Therefore, non-dominant speakers may be more or less aware of the coda *h* given how frequently they hear and use the word. Tadmor (2009, p. 74) writes that frequency correlates with stability, which can then likely inhibit the effect of imposition transfer to an extent.

Table 36: Variation between *toroh~toro* 'to give' in terms of environment and language dominance

Speaker	LD	h/_#		h/_-an		TOTAL
		toroh	*toro*	*toroh-an*	*toro-an*	
IT2	DOM	1	0	0	0	1
MD	DOM	0	0	2	0	2
MD2	DOM	1	0	1	0	2
MS	DOM	0	0	1	0	1
MT3	DOM	0	0	1	0	1
OT	DOM	7	0	2	0	9
SC	DOM	0	0	2	0	2
SR	DOM	2	0	2	0	4
TS	DOM	1	0	1	0	2
XX2	DOM	0	0	1	0	1
XX8	DOM	5	0	0	0	5
BT3	DOM	0	1	0	0	1
RN	DOM	0	1	2	0	3
JD5	ND	2	0	0	0	2
LS	ND	2	0	0	0	2
MF	ND	1	0	0	0	1
RC	ND	3	0	3	0	6
AT2	ND	0	1	1	0	2
MT	ND	2	1	2	0	5
TOTAL						**52**

As for speakers who categorically reflect coda *h* in their speech, these mainly comprise dominant speakers of Ibatan, agreeing with van Coetsem's (2000) description of SL agentivity and imposition transfer. A few non-dominant speakers also appear to consistently use the consonant in the expected environment, namely LS, RC, and VR (Table 34), but investigating their language use more widely, they are observed to exhibit other kinds of imposition transfer in their speech (Sections 7.2.1.2 and 7.2.2.2).[89]

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[89] AT2, who is also a non-dominant speaker, exhibits the direct opposite in terms of usage. That is, she consistently reflects the absence of coda *h* in the three tokens found in her speech. Given the small number of tokens in the corpus, not much can be said about the statistical significance of these figures at present.

All in all, data from the preliminary corpus of Ibatan speech strongly indicate a correlation between language dominance and the variation in the occurrence of coda *h*. We have also seen in this section that the degree of dominance in Ibatan likely varies across individuals. Among non-dominant speakers, some individuals tend to exhibit this variation more consistently than others, and this indicates lesser dominance in Ibatan. However, it is also acknowledged that other variables interact in driving this variation, such as accommodation, word frequency, and phonological environment. That is, the position of the consonant, either word-medially as in *ohbot* 'to come out' or word-finally as in *angsah* 'to miss', may influence the application of this innovation. At present, variation is exclusively observed in instances where *h* occurs word-finally, whereas all tokens of word-medial *h* in the corpus are retained by speakers, both dominant and non-dominant. Without a bigger corpus, it is uncertain to say that this variation is truly exclusive to word-final *h*, or if this can also be observed word medially. In addition to phonological environment, word frequency may also have an effect, that is, less frequent words are less familiar to non-dominant speakers, and it is likely that these are more prone to this kind of variation. Accommodation may also play a role, in that the speaker may be (unconsciously) accommodating their language use to the language profile of the interlocutor. However, given the nature and size of the current corpus, as well as the lack of quantitative information about language dominance among all the individuals in the study, the effects of these variables cannot be fully explored at present. A bigger corpus of naturalistic Ibatan speech, in tandem with experimental data, will shed further light into the patterning of this variation.

7.2.1.2   *Variation between d and dy*

Ibatan exhibits the palatalization of some consonants adjacent to the vowel *i*, which forms layers of historical change (Section 4.2.1.1), stable variation, and more recent synchronic processes of imposition transfer. To illustrate, the Proto-Batanic (PB) consonants *d and *g are reflected as *dy* in Ibatan, as in PB *sa**g**it > IVB *sa**dy**it* 'to hang on'. Another layer comprises variation which has been described by R. Maree (2007, p. xxiv) as a dialectal distinction between *daya* 'east' and *laod* 'west'. To illustrate, the variant forms *dyimo~dimo* '2S.DAT' and *dyira~dira* '3P.DAT' are used variably by speakers. This variation is illustrated in *dyimo~dimo* '2S.DAT' and *dyira~dira* '3P.DAT' in Table 37 and Table 38.

Table 37: Variation between *dyimo* and *dimo* '2S.DAT'

Speaker	LD	*dyimo*	*dimo*	TOTAL
MS	DOM	1	1	2
OT	DOM	1	1	2
JD5	ND	1	1	2
MT	ND	6	1	7
TOTAL		**9**	**4**	**13**

Table 38: Variation between *dyira* and *dira* '3P.DAT'

Speaker	LD	*dyira*	*dira*	TOTAL
AT	DOM	0	2	2
MT3	DOM	1	1	2
BT3	DOM	2	0	2
OT	DOM	5	0	5
MT	ND	2	0	2
RD2	ND	3	0	3
JD3	ND	4	0	4
TOTAL		**17**	**3**	**20**

This variation is also observed in the dialects of Ivatan, namely Ivasay and Isamorong, which are spoken on the islands of Batanes. Ivasay reflects the alveolar form *d,* whereas Isamorong reflects *dy* (Gallego, 2014, pp. 118–119). Following the known history of the Ibatan people, that is, how they descended from Ivatan-speaking families of Batanes, it is likely that this variation has been carried over in the development of Ibatan as a separate language. The stability of this variation also explains how there seems to be no apparent pattern in the usage of the consonants. That is, the dominant speakers who exhibit this variation all come from the *daya* region, and the non-dominant speakers who more frequently use the palatalized consonants most likely learned the forms from Ibatan speakers who prefer the use of these variants over their non-palatalized counterparts (Table 37 and Table 38).

Finally, the most recent layer of variation concerning palatalization, which is underpinned by language contact, can be observed between dominant and non-dominant speakers, particularly in the form of the negation marker in Ibatan. The variant forms *dyi* and *di* only differ in the realization of the first consonant. Their use appears to correlate with the language dominance of the speaker, with the

latter only observed among non-dominant speakers (11 tokens from 4 speakers), whereas the former is used both by dominant and non-dominant speakers (36 tokens from 8 dominant and 2 non-dominant speakers) (Table 39).[90]

Table 39: Variation between *dyi* and *di* 'not' in terms of language dominance

Speaker	LD	*dyi*	*di*	TOTAL
SR	DOM	2	0	2
BT3	DOM	3	0	3
MO	DOM	3	0	3
OT	DOM	3	0	3
XX2	DOM	3	0	3
XX8	DOM	3	0	3
MS	DOM	5	0	5
MT3	DOM	6	0	6
LT	ND	4	0	4
MT	ND	4	1	5
JD5	ND	0	2	2
MF	ND	0	4	4
RC	ND	0	4	4
TOTAL		36	11	47

In their description of the grammar of Ibatan, R. Maree (2007) and J. Maree et al. (2012) do not identify a variant form for the negation marker, and only indicate *dyi* as the marker for Ibatan. The exclusive use of the form *di* among non-dominant speakers,[91] categorically by some, but not all speakers, strongly indicates imposition transfer. This is evidenced by Ilokano reflecting the form *di* for the negation marker, a clear cognate of the Ibatan form *dyi*. Thus, the use of the variant form *di* by non-dominant speakers in their Ibatan speech is likely the result of imposition of Ilokano structure.

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[90] Similar to the previous section, instances of one-time use by a single speaker are excluded in the analysis.

[91] An exception is RE, a dominant speaker of Ibatan, who reflects one token of *di* in the corpus. However, this was excluded from the analysis as he only used the negation marker once. That is, little can be said about his language use with only a single token. Explaining this instance of Ilokano imposition in his speech, it is likely that RE is a balanced bilingual in that he lived away from Babuyan Claro for many years of his adult life, and during this time, has used Ilokano as his main language. At present, he resides in Babuyan Claro and uses Ibatan as his everyday language, but his personal background may have affected his use of Ibatan. More recordings of his speech, as well as other individuals with a similar history, would shed light on the language use of possible balanced bilinguals.

While this case can be analyzed as a phonological variation between the initial palatalized and the alveolar stops, related to the palatalization rule that historically applied in Ibatan, the variation between *dyi* and *di* is argued to have occurred initially through the imposition of the Ilokano form *di* in non-dominant speech.

In sum, we have seen that this particular linguistic feature actually reflects overlapping layers of change, that is, historical sound change that applied on the level of Proto-Batanic, stable variation that has been carried over in Ibatan from its separation from Ivatan, and finally, the synchronic effects of language dominance. It is only the latter that can be taken as evidence of language contact effects among speakers of Ibatan. Therefore, it is necessary to carefully tease apart such layers in the data in order to more accurately assess the effects of language dominance.

7.2.2   *Cross-linguistic influence in morphology*

Within the domain of morphology, there are several linguistic features mainly exhibited by non-dominant speakers that likely reflect imposition of Ilokano structures. This section focuses on two such features. The first one is the parallel durative paradigms of *pay-* and *pag-*, which, while already an established and regular feature of Ibatan as discussed in Chapter 5, shows an ongoing variation that is argued to be motivated by synchronic patterns of language dominance, and this comprises a distinct and more recent layer of innovation (Section 7.2.2.1). The second is the use of the Ilokano linker *nga* as a variant form for the native Ibatan linker *a,* where the corpus reveals the exclusive use of the Ilokano linker by non-dominant speakers (Section 7.2.2.2). Other Ilokano function words are also observed in the corpus, and this is discussed in terms of cross-linguistic influence on the lexicon in Section 7.2.3. [92]

7.2.2.1   *Variation in the use of the parallel durative paradigms*

In Chapter 5, we have seen the development and current distribution of the non-native durative paradigm of *pag-* that exists in parallel with the native paradigm of *pay-*. Generally, the non-native *pag-* paradigm is used for non-native stems, forming complex loanwords, whereas the native *pay-* paradigm is used for native stems. There are a few cases of unexpected formations, namely Type 1

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[92] Other morphological structures that show evidence of imposition transfer are the use of the Ilokano ordinal prefix *maika-* (see Section 1.2) and the reduplication pattern CVC- that occurs parallel to the native pattern CVCV- to derive realis imperfective for verbs (see Section 5.1.2). While accounting for such structures would provide further evidence of imposition transfer, it requires a similar teasing apart of deeper layers of change from those that comprise synchronic innovations, as demonstrated for the parallel durative paradigms in Chapter 5, which I am not able to do at this current stage in the research. These are however considered in future studies.

hybrid formations, or non-native structure occurring with native stems, as in *mag-bwang* 'to go bald', and Type 2 hybrid formations, which involve native structure occurring with non-native stems, as in *may-tarabako* 'to work' (Section 5.2). These hybrid formations that are more regularized and are thus being used by the community involve a deeper layer of change. There are, however, other unexpected formations that are variable and transient, and these are indicative of ongoing cross-linguistic influence motivated by patterns of language dominance among individuals.

In the corpus, there are a total of 711 tokens of the native and non-native durative affixes. The majority of tokens follow the expected distribution, that is, either as complex loanwords or as native formations. This section focuses particularly on the two types of unexpected hybrid formations as these are the ones that indicate ongoing cross-linguistic influence.

Of the 711 tokens, there are only 9 instances of potential cross-linguistic transfer among the speakers. While few in number, these tokens are taken as evidence of imposition transfer. Examples of Type 1 hybrid formations in the corpus are *mag-tarek* 'to differ' (72), *ka-pag-chirin* 'speech' (73), and *ka-pag-gogo(d)* 'haircut' (74), which are mainly used by non-dominant speakers. In standardized usage, these forms are expected to follow native structure, that is, *ma-tarek* 'different',[93] *ka-pay-chirin* 'speech', and *ka-pay-gogod* 'haircut' respectively. The words are presented in their specific contexts below.

(72)   **MT (non-dominant speaker)** (Gallego (ongoing): IVB1-20180917_01, 227)

Non-native *mag-* with native stem *tarek* 'differ' (Type 1 hybrid formation)

Maynamot ta may, magtarek.

Maynamot	ta	may	**magtarek.**
maynamot	ta	may-	mag-tarek
because	because	AV.DUR.IVB	AV.DUR.ILO-different.IVB

'Because (it is) different.'

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[93] The adjectival/stative prefix *ma-* is used in this construction.

(73)   **MF (non-dominant speaker)** (Gallego (ongoing): IVB1-20211006_02, 86)

       Non-native *pag-* with native stem *chirin* 'speak' (Type 1 hybrid formation)

Ki an icompa, icompare iyaw kapagchirin ko do kachwaw…

Ki	an	icompa	icompare	iyaw	**kapagchirin**	ko	do	kachwaw
ki	an	i-compare	i-compare	iyaw	ka-pag-chirin	ko	do	kachwaw
but	if	UV-compare	UV-compare	DEI	NML-DUR.ILO-speak.IVB	1S.GEN	DET	past

'But if I compare to how I spoke before…'

(74)   **RM (non-dominant speaker)** (Gallego (ongoing): IVB1-20211009, 19)

       Non-native *pag-* with native stem *gogod* 'to cut hair' (Type 1 hybrid formation)

…kapaggogo, kapaygogo ko ta aro koto ko.

Kapaggogo	**kapaygogo**	ko	ta	aro	koto	ko.
ka-pag-gogod	ka-pay-gogod	ko	ta	aro	koto	ko
NML-DUR.ILO-haircut.IVB	NML-DUR.IVB-haircut.IVB	1S.GEN	because	many	louse	1S.GEN

'…how I cut my hair, cut my hair, because I had lots of head lice.'

In some instances, the speaker becomes aware of their misuse of the prefix. This is observed in RM, who was cued by a dominant speaker present in the session, where she uses the expected *ka-pay-gogo(d)* 'haircut' immediately following the error in (74).[94]

The other two instances of Type 1 hybrid formations involve two apparent dominant speakers, MS and MS2. MS uses *nag-ka-pay-wakwak* 'dusted off' (75) and *mag-bidibidi* 'to wander around' (76) instead of *nay-wakwak* and *may-bidi~bidi* respectively. MS2 uses *nag-pa-abkoh* 'to dry off' (77) instead of *nay-pa-abkoh.*

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[94] RM was cued by her spouse, a dominant Ibatan speaker, who was also present in the recording session. Such instances of correction, while certainly exceptional, seem to be relatively accepted in the community. In interviews, many non-dominant speakers are willing to be corrected so that they learn how to speak Ibatan properly. I have also encountered many instances of non-dominant speakers repeatedly correcting their Ibatan pronunciation, as helped by dominant speakers. This is clearly significant in how non-dominant speakers learn Ibatan, and at the same time, how the degree of imposition of SL structures tends to decrease as one's dominance in Ibatan increases. A final thing to note about this recorded instance of correction is how the presence of the dominant speaker in the session, as well as being interviewed by another dominant speaker, is evidently affecting the language use of the non-dominant speaker. It is hypothesized that non-dominant speakers would exhibit a greater degree of imposition transfer when they interact with fellow non-dominant speakers, but this has not been controlled for in the current corpus, as discussed in Section 7.1.

(75)   **MS (dominant speaker)** (Gallego (ongoing): IVB1-20181007_01, 47)

       Non-native *nag-* with native stem *wakwak* 'to dust off' (Type 1 hybrid formation)

Nagkapaywakwak ako ata tan dya madlaw.

Nagkapaywakwak	*ko*	*ata*	*tan*	*dya*	*madlaw.*
nag-ka-pay-wakwak	ako	ata	tan	dyi=a	ma-adlaw
PFV.AV.ILO-DIST-DUR.IVB-dust.off.IVB	1S.NOM	because	so	not=LK	AV-notice

'I dusted myself off so that (she) wouldn't notice.'

(76)   **MS (dominant speaker)** (Gallego (ongoing): IVB1-20181007_01, 120)

       Non-native *mag-* with native stem *bidi* 'to return' (Type 1 hybrid formation)

May dana magbidibidi…

May	dana	**magbidibidi**
may	dana	mag-bidibidi
come	already	AV.ILO-wander.around.IVB

'(She) was already wandering around…'

(77)   **MS2 (dominant speaker)** (Gallego (ongoing): IVB1-20181010_01, 80)

       Non-native *nag-* with native stem *abkoh* 'to dry off' (Type 1 hybrid formation)

Nay sa nagpabkoh.

Nay	*sa*	***nagpabkoh.***
na-angay	sa	nag-pa-abkoh
PFV.AV-go	3P.NOM	PFV.AV.ILO-CAUS-dry.off.IVB

'They went and dried themselves off.'

   While MS and MS2 are categorized as dominant speakers of Ibatan, they have spent a significant time away from Babuyan Claro because of schooling. They are siblings, and come from the younger generation of Ibatan speakers. Having lived in mainland Luzon for several years, they have more exposure to both Ilokano and Filipino than those who are based in Babuyan Claro, but they still maintain the use of Ibatan when they talk with each other or with fellow Ibatans based on the mainland. With this background, they potentially reflect either balanced bilingualism, or a slight shift in dominance to Ilokano, thus explaining the imposition of Ilokano[95] structure onto their Ibatan speech.

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[95] Or Filipino, as the forms *nag-* and *mag-* are used in the language as well.

As proposed by van Coetsem (2000), a third transfer type which involves the neutralization of the transfer types among balancced bilinguals likely result in the inconsistent patterning of imposition and borrowing transfer, and this is exemplified in the speech of MS and MS2.

As for Type 2 hybrid formations, or combinations of native affix and non-native stems, there are only two tokens found in the corpus, namely *may-goyod* 'to pull' (78) and *pay-rogi-an* 'beginning' (79), which should be *mang-(g)oyod* and *pang-rogi-an* respectively. These two cases of unexpected formations are used by dominant speakers SC and AT4, detailed below.

(78)   **SC (dominant speaker)** (Gallego (ongoing): IVB1-20180823_06, 33)

         Native *may-* with non-native stem *goyod* 'to pull' (Type 2 hybrid formation)

Maygoyod, ah, so kalding.

Maygoyod	*ah*	*so*	*kalding.*
may-goyod	ah	so	kalding
AV.DUR.IVB-drag.ILO	uh	DET	goat

'Dragging, uh, a goat.'

(79)   **AT4 (dominant speaker)** (Gallego (ongoing): IVB1-20181008_03, 42)

         Native *pay-* with non-native stem *rogi* 'to begin' (Type 2 hybrid formation)

Chapatak kwabayaw payrogyan ko.

Chapatak	*kwabayaw*	***payrogyan***	*ko.*
cha-patak	ko=aba=iyaw	pay-rogi-an	ko
STAT-know	1S.GEN=not=DEI	DUR.IVB-begin.ILO-UV	1S.GEN

'I don't know where to start.'

These two cases show how non-native stems have been adapted into Ibatan using native morphology. In these instances, RL agentivity appears to motivate this innovation, as both speakers are dominant speakers, and they are clearly adapting the loanword into their dominant language, Ibatan. Additionally, language-internal factors may also be at play. That is, the durative paradigm of *pay-* may be less marked in comparison to the distributive paradigm of *pang-*, which should have been used for these stems. Markedness affects the productivity and usage of structure, which results in less frequent use in speech.[96]

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[96] See Baayen (2008) for a discussion of morphological productivity.

Other Type 2 hybrid formations in the corpus follow regularized usage described in Chapter 5, such as *may-tarabako* 'to work' from Spanish *trabajo* and *may-dasal* 'to pray' from Ilokano *dasal*. There are also instances of loanwords with more complex derivations involving native structures, namely *may-say~sarokod* 'to use a walking stick', *may-pay~pa-alisto* 'to hurry', and *nay-sin-ba~basa* 'to study' which all carry an additional distributive sense. Interestingly, non-dominant speakers have also used these constructions according to traditional expectations or linguistic norms, indicating that these irregular formations are frequently used, particularly the stems *tarabako* 'work' and *dasal* 'pray', and hence are being learned by the non-dominant speakers as a whole, that is, in their derived forms. A larger corpus of Ibatan speech which is able to account for frequency of use would offer support to the hypothesis that non-dominant speakers, are indeed learning such word forms as whole units.

From the data involving the parallel durative paradigms, a few observations can be made. The many instances of false starts involving the non-native prefix *mag-*, as well as *mag-* combining with the native Ibatan word *chwa* 'whatsit', which is mainly used as a filler, indicate that speakers are using this non-native prefix as a default formative, in comparison with the native prefix *may-*. There are also more tokens of the non-native prefixes (439) in contrast with the native ones (272), also because of the large number of loanwords in the Ibatan lexicon, in addition to nonce borrowings (Section 7.3) which are also commonly used by all speakers. It can be said that the high frequency of the durative paradigm contributes to its regularized usage in Ibatan, which also explains how the structure has become productive in the language. Not only did the paradigm become highly productive in Ibatan, but it appears that it is also becoming the default structure during online processing.

At present, the two parallel structures are still being maintained in Ibatan, as exemplified by speakers, regardless of language dominance, using the expected combinations in most cases. However, the examples of the variant use of the durative prefixes detailed in this section, while few in number, are clear indications of ongoing variation that is motivated by synchronic patterns of language dominance.

Finally, apparent instances of imposition transfer in the speech of some Ibatan-dominant speakers, namely MS and MS2, clearly show how language dominance is gradient and relative. That is, while MS and MS2 are both categorized as dominant speakers, their personal background, particularly their time away from Babuyan Claro, entails more exposure in other languages namely Ilokano and Filipino, making them either balanced bilinguals or speakers undergoing dominance shift. While they exhibit this particular kind of imposition transfer, they are not observed to exhibit other kinds of SL imposition,

namely the absence of coda *h* (Section 7.2.1.1), the use of the variant form *di* for the negation marker (Section 7.2.1.2), and the use of the form *nga* as a variant of the Ibatan linker *a* (Section 7.2.2.2). This suggests that they differ from non-dominant speakers, and that they are more likely characterized as balanced bilinguals exhibiting the neutralization of transfer types described by van Coetsem (2000).

7.2.2.2   The Ilokano linker nga

Another example of cross-linguistic influence is the variation between the forms *nga* and *a* as the linker in Ibatan. The form *nga* is an imposition of the Ilokano linker *nga*, whereas the form *a* is the native Ibatan linker. The former is exclusively used by non-dominant speakers, with 50 tokens of *nga* from seven non-dominant speakers attested in the corpus (Table 40). Some examples are given in (80) and (81) below.

Table 40: Variation between a and nga 'linker' among non-dominant speakers

Speaker	LD	*a*	*nga*	TOTAL
VR	ND	9	1	10
RC	ND	16	1	17
MF	ND	60	1	61
LS	ND	6	2	8
RM	ND	18	2	20
AT2	ND	27	19	46
JD5	ND	8	24	32
TOTAL		144	50	194

(80)   **AT2 (non-dominant speaker)** (Gallego (ongoing): IVB1-20180821_02, 82)

Naboya na iyaw no dadwa nga rako nga basket nga napno so protas.

Naboya	na	iyaw	no	dadwa	**nga**	rako	**nga**
na-boya	na	iyaw	no	dadwa	**nga**	rakoh	**nga**
PFV.UV-see	3S.GEN	DEI	DET	two	**ILO.LK**	big	**ILO.LK**

basket	**nga**	napno	so	protas.
basket	**nga**	na-apno	so	protas
basket	**ILO.LK**	PFV.UV-fill	DET	fruits

'He saw the two baskets filled with fruits.'

(81)   **JD5 (non-dominant speaker)** (Gallego (ongoing): IVB1-20211006_01, 1)

Maganay nga mahep mo Ma'am Tina.

Maganay	**nga**	mahep	mo	Ma'am	Tina.
ma-ganay	**nga**	mahep	mo	Ma'am	Tina
ADJ-good	**ILO.LK**	evening	POL	Ma'am	Tina

'Good evening, Ma'am Tina.'

Intra-speaker variation can be observed among these non-dominant speakers, where all of them are observed to use the Ilokano form *nga* alongside the Ibatan form *a.* JD5, particularly, uses the variant form *nga* more frequently compared to the native Ibatan *a*. She is observed to use the linker even for fixed expressions such as 'good evening' (81), which in Ibatan is *maganay a mahep*. This shows how this particular imposition tends to affect even relatively fixed expressions such as greetings and idioms. In comparison, other non-dominant speakers do not exhibit this usage to a great extent. This signals a difference in the degree of dominance in Ibatan among non-dominant speakers. That is, lesser dominance in Ibatan appears to correlate with the use of this feature. As one becomes more dominant in Ibatan, this particular imposition becomes less frequent.

7.2.3   *Cross-linguistic influence in the lexicon*

The lexicon is another domain in which we can clearly observe evidence of cross-linguistic influence. Transferring vocabulary is one of the most common outcomes of language contact, but detailed accounts of this kind of transfer reveals how within the domain of the lexicon, there are varying degrees of transferability across different word classes. This may refer to general categories, in which content words are said to be more transferable than function words, or specific ones, where nouns are argued to be more transferable than verbs and other categories (Seifart, 2019, pp. 15–16; Tadmor, 2009, pp. 59–63). The transfer of content words is argued to be linked to RL agentivity, involving agents of the transfer action who are linguistically dominant in the RL (van Coetsem, 2000). Since content words, particularly nouns, tend to be transferred more easily than other kinds of linguistic materials, a high degree of bilingualism is not a prerequisite for such transfer, and it can occur even without direct speaker to speaker contact (Arnal, 2011, p. 9; Gardani, 2020, p. 99). In contrast, the transfer of function words is linked to SL agentivity, involving agents linguistically dominant in the SL. The use of SL function words in the RL is taken as a clear indication of imposition transfer, in that function words are relatively stable, which tend to remain in the speech of SL-dominant speakers (van Coetsem, 1995, pp. 68–69).

To test these claims, the use of Ilokano forms (both content and function words) in Ibatan by dominant and non-dominant speakers are compared.

For content words, the analysis focuses on nonce borrowings, or non-native forms which are not in widespread use by the speakers, evidenced by their limited occurrence in the corpus (Poplack et al., 1988, p. 50). By contrast, established loanwords have already gained currency across the community, and are used regardless of a speaker's degree of dominance in the SL (Chapter 4).[97] It is the use of nonce borrowings which can offer clues about the speaker's linguistic repertoire and abilities, in that a speaker who is linguistically dominant in the SL likely uses SL forms over ones that already exist in the RL. Nonce borrowings are identified on the basis of their frequency in the corpus,[98] as well as their non-inclusion in the Ibatan dictionary by J. Maree et al. (2012) under the assumption that those included in the dictionary are widespread and established loanwords. Table 41 shows the use of nonce borrowings by each speaker in terms of tokens and unique types (or word). For example, BG, a non-dominant speaker, used one nonce borrowing in the corpus, ILO *teppang* 'cliff' (that is, one token of one unique type). Another example is DR, who used two nonce borrowings, ILO *bitbit* 'carry' and ILO *baga* 'tell' (reflecting one token for each type).

Table 41: Occurrences of nonce borrowings in terms of language dominance

Speaker	LD	Unique Types	Tokens
LR	DOM	1	1
MO	DOM	1	1
MT3	DOM	1	1
RE	DOM	1	1
XX8	DOM	1	1
DR	DOM	2	2
BT3	DOM	2	3
AT4	DOM	2	5
AT	DOM	3	7
MD2	DOM	4	4
SC	DOM	4	8
MS	DOM	5	6

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[97] See Haspelmath (2009, p. 41) for a discussion of nonce borrowings and established loanwords.

[98] Nonce borrowings can be used by more than a single speaker. In the corpus, a nonce borrowing may be recurrent (but not widespread) in that it is used by up to three speakers, and it can also be idiosyncratic, in which it is used several times but only by a single speaker (cf. Poplack et al., 1988, p. 55).

Speaker	LD	Unique Types	Tokens
BG	ND	1	1
BN	ND	1	1
LS	ND	1	1
VR	ND	1	1
RD2	ND	2	2
JD3	ND	3	4
LT	ND	3	5
RC	ND	5	5
MF	ND	5	8
JD5	ND	7	10
RM	ND	7	12
MT	ND	12	22

As predicted in van Coetsem's (2000) model, the lack of patterning in the data indicates that lexical transfer can happen regardless of one's degree of language dominance, wherein both dominant and non-dominant speakers appear to use nonce borrowings in their speech. There are other, more relevant explanations for the use of nonce borrowings, such as accommodation. That is, all members of the Babuyan Claro community are proficient in both Ibatan and Ilokano. Thus, Ilokano-dominant speakers may use Ilokano forms, not only driven by their dominance in Ilokano, but also because of their knowledge of their interlocutor's linguistic repertoire. They then have the option to use an Ilokano form knowing that their interlocutor would still understand the word. This has been described for the context of contact between dialects or closely similar varieties in Siegel (2010). Another possible explanation is language monitoring (in the sense of Grosjean's (1985, 1998) language mode), which affects the speaker's choice of word forms, particularly avoidance of doppels (or pairs of words that are similar in meaning and form, which may or may not have arisen out of a cognate relationship),[99] as reported by Ellison and Miceli (2017). In specific contexts of language monitoring, speakers may choose to use a distinct Ilokano form in order to avoid doppels shared between Ilokano

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[99] To illustrate, Ibatan *ranom* and Ilokano *danom* 'water' are doppels as they are very similar in form and meaning, and at the same time, are cognates, descending from PMP *danum 'fresh water' (Blust & Trussel, 2020). In contrast, Ibatan *iraya* 'seashore (in reference to someone or something offshore moving towards the shore)' (J. Maree et al., 2012; Rubino, 2000) and Ilokano *daya* 'east' (Rubino, 2000) are cognates from PAN/PMP *daya 'upriver, toward the interior' (Blust & Trussel, 2020) but are not considered doppels as speakers are not analyzing them as similar.

and Ibatan. Finally, Poplack, et al. (1988) claim that the use of nonce borrowings reflects a community mode rather than an outcome of bilingualism. All in all, our current findings on nonce borrowings do not reflect a straightforward assessment of the effects of language dominance, given the confounding influence of other factors and mechanisms discussed above.

   In contrast, the use of Ilokano function words in Ibatan speech offers more consistent insights into a bilingual's linguistic abilities. However, in order to account for the effects of language dominance, the specific functions of the forms need to be carefully considered. In the corpus, Ilokano function words are further categorized as either discourse particles (namely *gayam* 'so, implies sudden realization of something not previously known', *kasdiay* 'like that', *kasla* 'like', *ket* 'and', *man* 'even', *nangrona* 'especially', and *onay* 'really') or those that fulfill syntactic functions (namely *adda* 'existential', *babaen* 'through', *haan* 'negation', *nga* 'linker', and the verbal prefix *maki-* 'reciprocal', with its perfective counterpart *naki-*). Table 42 shows the use of function words, both syntactic and discourse particles, across dominant and non-dominant speakers. The two categories of speakers are observed to use discourse particles, whereas it is only non-dominant speakers who are seen to use syntactic ones. To illustrate, two non-dominant speakers show a significant use of Ilokano syntactic particles, namely AT2 (20 tokens of 2 unique types) and JD5 (24 tokens of 1 unique type). The huge number, compared to other speakers, reflects their heavy use of the Ilokano linker *nga*, with AT2 using 19 (of the 20) tokens and JD5 using 24 tokens (discussed in Section 7.2.2.2).

Table 42: Usage of function words in terms of language dominance

Speaker	LD	Syntactic		Discourse		Total Tokens
		Unique Types	Tokens	Unique Types	Tokens	
BT3	DOM	0	0	1	1	1
DR	DOM	0	0	1	1	1
MD2	DOM	0	0	1	1	1
MT3	DOM	0	0	2	3	3
RD2	ND	0	0	1	1	1
VR	ND	1	1	1	1	2
LS	ND	1	2	0	0	2
JD5	ND	1	24	2	2	26
MF	ND	2	2	1	1	3
AT2	ND	2	20	0	0	20
RC	ND	3	3	0	0	3
RM	ND	3	4	0	0	4

This apparent asymmetry between syntactic and discourse particles derives from the morphemes' differences in formal and semantic/pragmatic properties, which ultimately relates to the stability gradient of linguistic materials (cf. Gardani et al., 2015; Matras, 2007; Seifart, 2019). Discourse markers are more syntactically independent, hence less integrated within the grammatical system (Matras, 2007, p. 61; Muysken, 2010, p. 271). In contrast, morphemes that realize a syntactic function are argued to be more integrated and structured, and the use of such SL materials in the RL is indicative of imposition transfer. Therefore, language dominance is seen to correlate more strongly with the use of syntactic particles, which are more stable, as compared to discourse markers.

7.3   **Language dominance and cross-linguistic influence**

Patterns in the data show that bilingual speakers exhibit different degrees of cross-linguistic influence. The influence of Ilokano structures onto Ibatan speech, namely (1) the absence of coda *h,* (2) the use of the negative marker *di*, (3) unexpected instances of Type 1 hybrid formations involving the durative paradigm of *pag-*, (4) the use of the linker *nga*, and (5) the use of other functional morphemes, are taken to be indicative of imposition transfer, which in turn correlates with greater dominance in Ilokano following van Coetsem's (2000) model for language contact.

The occurrences of these features are compared across dominant and non-dominant speakers of Ibatan (Table 43). While the findings generally agree with the transfer effects proposed by van Coetsem (2000), explaining patterns of language use necessitates a more nuanced treatment of the construct of language dominance. That is, within the category of non-dominant speakers, there are speakers who have used most or all of the mentioned features in their speech (MF and JD5) whereas others reflect them in different degrees. Furthermore, that some individuals who have been categorized as dominant speakers of Ibatan use some of these features suggests that they are either balanced bilinguals (in which van Coetsem attributes a third transfer type that involves the neutralization of constraints) or individuals who are in the process of shifting their dominance to Ilokano. This is exemplified by MS and MS2, who are categorized in this study as dominant speakers, but as they have spent a significant time living away from the community, this may have affected their dominance profiles. Therefore, how individuals vary in the degree to which they show such features demonstrates that language dominance is best approached as a gradient construct. Van Coetsem (2000, p. 59) indeed acknowledges how language dominance can shift in a person's lifetime, and this can happen with corresponding changes in the individual's nature of social interaction, exposure, and use of their languages (see Chapter 6). Furthermore, van Coetsem (2000, p. 59) writes that as one's dominance in the RL increases, patterns of imposition transfer tend to lessen in their speech. In turn,

as an individual shifts dominance towards the SL, they would likely exhibit imposition transfer effects. The data captures this detail in the model, but it also raises important questions that need to be addressed empirically. For instance, among non-dominant speakers, is there a fundamental difference in the language use of those acquiring the RL as a second language (or adult language learning) and those who have experienced a shift in dominance (child or adult language shift)? Ross (2013) suggests that they do, in that specific contact outcomes such as simplification, transfer of specialist vocabulary, and syntactic restructuring correlate with the individual's life stage of bilingualism. Related to this issue is inferring the point in which individuals shift dominance in a language. We have seen in the data potential individuals who are in this transition stage, but is there a systematic way to base language dominance shift in terms of the kinds of imposition transfer observed in their language use? One of the ways to explore this question is quantitatively testing the correlations between language dominance, the degree of imposition transfer, as well as the specific kinds of observable linguistic outcomes, but this is yet to be done in future research.

Table 43: Imposition transfer effects in terms of individual speakers

Speaker	LD	Absence of coda *h*	*di* 'NEG'	Variable *pag-* 'DUR'	*nga* 'LK'	Syntactic morphemes
BT3	DOM	Attested	Unattested	Unattested	Unattested	Unattested
RN	DOM	Attested	No data	Unattested	Unattested	Unattested
RE	DOM	Unattested	* Attested	Unattested	Unattested	Unattested
MS	DOM	Unattested	Unattested	Attested	Unattested	Unattested
MS2	DOM	Unattested	No data	Attested	Unattested	Unattested
AT	DOM	Unattested	No data	Unattested	Unattested	Unattested
IT2	DOM	Unattested	No data	Unattested	Unattested	Unattested
JD	DOM	Unattested	No data	Unattested	Unattested	Unattested
LR	DOM	Unattested	No data	Unattested	Unattested	Unattested
MD2	DOM	Unattested	No data	Unattested	Unattested	Unattested
AT4	DOM	No data	No data	Unattested	Unattested	Unattested
DR	DOM	No data	No data	Unattested	Unattested	Unattested
ET2	DOM	No data	No data	Unattested	Unattested	Unattested
HN	DOM	No data	No data	Unattested	Unattested	Unattested
LR4	DOM	No data	No data	Unattested	Unattested	Unattested
MD	DOM	No data	No data	Unattested	Unattested	Unattested
SC	DOM	No data	No data	Unattested	Unattested	Unattested
TS	DOM	No data	No data	Unattested	Unattested	Unattested
MO	DOM	Unattested	Unattested	Unattested	Unattested	Unattested
MT3	DOM	Unattested	Unattested	Unattested	Unattested	Unattested
OT	DOM	Unattested	Unattested	Unattested	Unattested	Unattested
SR	DOM	Unattested	Unattested	Unattested	Unattested	Unattested
XX2	DOM	Unattested	Unattested	Unattested	Unattested	Unattested
XX8	DOM	Unattested	Unattested	Unattested	Unattested	Unattested
MF	ND	Attested	Attested	Attested	Attested	Attested
JD5	ND	Attested	Attested	Unattested	Attested	Attested
MT	ND	Attested	Attested	Attested	Unattested	Unattested
RC	ND	Unattested	Attested	Unattested	Attested	Attested
AT2	ND	Attested	No data	Unattested	Attested	Attested
RM	ND	No data	No data	Attested	Attested	Attested
LT	ND	Attested	Unattested	Attested	Unattested	Unattested
LS	ND	Unattested	No data	Unattested	Attested	Unattested
VR	ND	Unattested	No data	Unattested	Attested	Unattested
BG	ND	Attested	No data	Unattested	Unattested	Unattested
JD3	ND	Attested	No data	Unattested	Unattested	Unattested
LR3	ND	No data	No data	Unattested	Unattested	Unattested
RD2	ND	No data	No data	Unattested	Unattested	Unattested
BN	ND	No data	No data	Unattested	Unattested	Unattested

uncertain usage with only a single token (cf. Footnote 91 in Section 7.2.1.2)

Legend: ▨ Attested in the corpus ▨ Unattested in the corpus ▨ No data

7.4   **Conclusion**

Data on ongoing cross-linguistic influence among speakers of Ibatan generally support van Coetsem's (2000) model for language contact, in which evidence of imposition transfer through the use of Ilokano structures such as phonological and morphological forms and patterns can be observed among non-dominant speakers. As for the lexicon, both dominant and non-dominant speakers exhibit the use of nonce borrowings, supporting the claim that vocabulary tends to be more frequently transferred in situations of contact. However, we have also seen that it is not as simple as categorizing speakers as either dominant or non-dominant bilinguals. Some non-dominant speakers tend to show a greater degree of imposition transfer than others, and this clearly indicates that bilinguals have varying degrees of language dominance.

It is apparent that the psycholinguistic notion of language dominance is a central factor in driving ongoing cross-linguistic influence. However, it is also important to recognize various factors that interact in shaping language use. In the context of the data, mechanisms such as accommodation (Siegel, 2010) and language monitoring (Ellison & Miceli, 2017; Grosjean, 1985), as well as factors such as the speaker's knowledge of the interlocutor's linguistic repertoire, are also relevant. In the context of the languages and the community, moreover, layers of linguistic development need to be teased apart. Ongoing patterns of cross-linguistic influence are taken to correlate with present-day patterns of language dominance, whereas contact-induced change that happened at a deeper point in the history of the language can be regarded as established features which are used by speakers regardless of their dominance. As for further accounting for synchronic variation, other social factors also need to be considered, such as age,[100] gender,[101] and one's position and ties within the social network.[102] The interaction of these multitude of factors drives ongoing contact-induced innovations which may potentially become widespread language change. The limited data and the nature of the data collection cannot account for all these variables at present. Statistically comparing language use across and within speaker categories cannot also be done given the size of the current corpus. In future research, I hope to utilize experimental and field methods which control for these variables in order

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[100] This is especially relevant for those who leave Babuyan Claro for further schooling, thus receiving more exposure in other languages, primarily Ilokano and Filipino.

[101] Most of the non-dominant speakers in the current corpus are Ilokano women who have come to Babuyan Claro for work or for marriage. Ilokano men, in comparison, report lesser proficiency in Ibatan, and still prefer to use Ilokano as their everyday language.

[102] That is, one's affiliation with either the *daya* 'east' or *laod* 'west' clusters detailed in Section 3.3 may affect how a person learns and uses Ibatan.

to accurately understand the effects of language dominance in bilingual speech. A gradient measurement of language dominance through the Multilingual Language Profile discussed in Section 6.3.1 will also be used to further explore this correlation. More crucially, considering the individuals' use of Ilokano would provide further clarity around the notion of language dominance, as it is indeed a construct measured in terms of the bilingual's relative use of their languages. One other possible area to explore in future research is taking patterns and kinds of imposition transfer outcomes as another way to assess an individual's degree of language dominance, in addition to direct measures such mean length of utterance and lexical access used in studies on bilingualism (cf. Montrul, 2016; Treffers-Daller, 2019).

In terms of understanding language change, it can be argued that the current language use among Ibatan speakers can be extended to infer how Ibatan has historically developed as a distinct language. For instance, the apparent use of nonce borrowings by both dominant and non-dominant speakers likely reflects the same kind of linguistic behavior in the past, leading to a huge proportion of established loanwords in the Ibatan lexicon (Chapter 4). Moreover, kinds of structural imposition in phonology and morphology exhibited by non-dominant speakers provide evidence as to how non-native structures have developed in Ibatan (Chapter 5). At its core, these past and ongoing patterns of language use are not only driven by psycholinguistic mechanisms, but they are also ideologically motivated. That is, the persistence of certain contact-induced linguistic features across time is indicative of how the Ibatans acknowledge their mixed ancestry. In sum, the emergence, regularity, and stability of contact-induced features, both lexical and grammatical, are underpinned by linguistic and extra-linguistic factors. As a final point, it is evident that ongoing cross-linguistic influence among bilingual individuals is transient and may not necessarily translate into widespread language change. The question of how exactly these innovations get picked up by the whole bilingual community is explored in the following chapter.

4   *Connections*

The history of a community is reflected as layers of language change. The various contact-induced features in Ibatan are argued to correspond to different points in the history of the Babuyan Claro community, and fundamentally, to different agents of change. In order to understand how such changes take place, there is a need to make stronger links between outcomes, mechanisms, and agents of contact-induced language change.

Muysken's (2010) scenario approach to language contact distinguishes various levels of aggregation and time depth. This allows us to more systematically tease apart specific mechanisms that apply for each aggregate, and then link these mechanisms to the development of specific contact outcomes. However, the transition between these aggregates is something that is yet to be fully explored. How does change proceed from the individual to the community? Evolutionary frameworks for language change such as Croft (2000) argue for mechanisms that govern population-level selection of variants. In terms of language contact, certain linguistic innovations among bilingual individuals are selected and are diffused across the community, leading to change.

In order to investigate the diffusion of change, it is necessary to determine the various factors governing both the aggregates of the individual and the community. While the direct links between factors and outcomes have been identified in the literature, it is also equally important to investigate how the various factors relate to each other. It is through understanding these interrelationships and the interaction among these factors that we can have a more nuanced understanding of the diffusion of contact-induced change (Chapter 8).

Understanding the processes that underpin language contact at both the aggregates of the bilingual individual and the community then allows us to reconstruct prehistory (Chapter 9). While there is no one linguistic signal that corresponds to a particular social setting, case studies such as this thesis that link mechanisms, outcomes, and agents of change are a way to move forward in making more nuanced reconstructions.

This final part of the thesis explores the transition of change from the individual to the community, by linking insights on patterns of individual bilingual language use (Part 3) to widespread change (Part 2). These are used to reconstruct the social history of the Babuyan Claro community, supplemented by ethnographic and genealogical data. Ultimately, how the case study on Babuyan Claro contributes to ongoing debates in Austronesian prehistory, as well as general discussions on language contact and change are discussed in the concluding chapter (Chapter 10).

CHAPTER 8

TRANSITION

Linking individual- and community-level change[103]

Introduction

Language change proceeds from individual speaker innovations that propagate across the community. For contact-induced change, these innovations are argued to be primarily motivated by bilingual psycholinguistic mechanisms, but whether these innovations get picked up by the bilingual community depends on other interacting factors. While these different levels of aggregation for language contact (Muysken, 2010) have been widely recognized in the literature, how the mechanisms across these aggregates relate to each other, and consequently, how the different aggregates are linked are questions that remain to be answered.

   This chapter aims to explore the ways in which we can investigate the transition of contact outcomes from innovations at the level of the bilingual individual to widespread change at the level of the community through an approach called *path analysis*. The discussion presented here is preliminary in nature, presenting a review of previous literature which forms the foundation for a theoretical model for further statistical analysis. Section 8.1 discusses the important distinctions that need to be disentangled in modeling language contact. Guided by these distinctions, *path analysis* is introduced, which is a statistical technique that brings together the different factors and mechanisms argued to shape contact outcomes. Section 8.2 presents the descriptive part of the method, which will be further extended through statistical analysis in an ongoing collaborative project. The next steps for a path analysis approach to language contact are outlined in Section 8.3, including how the approach can be applied in the context of Babuyan Claro.

8.1   Distinctions in language contact and change

Many of the earlier studies on language contact have focused on classifying contact outcomes based on structural constraints, proposing transferability hierarchies and dependencies (cf. Moravcsik, 1978).

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[103] This chapter is based on an ongoing collaboration with Bethwyn Evans, Clare MacFadden, and Aditi Dubey at the Australian National University, that explores a statistical approach in modeling language contact.

However, it has been demonstrated how these structural constraints do not apply universally (cf. Campbell, 1993), and that sociolinguistic factors also need to be taken into consideration (Thomason & Kaufman, 1988, p. 35) (also discussed in Section 2.1). The conflicting claims in the literature derive from the ways in which important distinctions in the phenomenon of language contact are not made transparent. Most crucially, van Coetsem (2000, p. 37) and Winford (2005, pp. 374–375) write about the need for a clear delineation between processes and outcomes. To illustrate, the terms *borrowing* (cf. Field, 2002; Haugen, 1950; Thomason & Kaufman, 1988; van Hout & Muysken, 1994; Winford, 2010) and *code-switching* (cf. Bentahila & Davies, 1991; Myers-Scotton, 1993; Thomason, 2001) have been used to refer to both process and outcome. Related to this distinction, Curnow (2001, pp. 412–413) differentiates "paths of development" and "resulting situation," where Muysken (2010, p. 271) writes that the former is more transparent in terms of teasing apart the different factors that shape contact-induced language change.

More recently, frameworks for language contact have shifted their focus to the processes that underpin change (cf. Thomason & Kaufman, 1988; van Coetsem, 2000). However, as the phenomenon concerns different levels of aggregation, scales, and time depth, the same kinds of processes that apply on one level cannot be readily argued for the other levels. This disparity is reflected in how each level has been relegated almost exclusively to a particular sub-discipline of linguistics, namely psycholinguistics for the bilingual individual, sociolinguistics for the bilingual community, and historical linguistics and areal typology for larger geographical regions (Muysken, 2010, p. 268). To illustrate further, Muysken (2010, p. 267) writes that "[the] different levels of aggregation eventually need to be studied separately to see whether we apply insights gained on lower levels to higher levels of aggregation so that applicability of results between the different levels can be made the specific object of study".

How do we then begin to systematically link these levels of aggregation? An initial step towards developing a unified model for language contact is by recognizing important distinctions in the phenomenon, which allows for a more transparent account of the different factors and processes that lead to particular kinds of contact outcomes. The following are the key distinctions that guide our model:[104]

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[104] Muysken (2013, pp. 710–711) also makes a similar discussion on these distinctions in his proposed model for language contact.

The individual and the community. Muysken (2010, p. 272) highlights the important distinction between the bilingual individual and the community (also see Section 2.2). As bilingualism is essentially an aspect of the individual, it is the individual that is the ultimate locus of contact-induced change. At the same time, the individual exists within their larger community, and their speech habits are taken to be the result of community-level change. While the two aggregates are invariably linked, it is argued that they involve distinct mechanisms, where psycholinguistic mechanisms mainly drive contact outcomes on the level of the individual, whereas those of the community are primarily driven by sociolinguistic mechanisms. That is, while individuals exhibit innovative features in their speech, driven by psycholinguistic mechanisms concerning language dominance, these tend to be transient features which may not necessarily diffuse across the speech community (van Coetsem, 2000, p. 59). The diffusion of contact outcomes is said to be underpinned by social mechanisms concerning the nature of social interaction and interlocutor frequencies, which involve factors such as population size, and the length and nature of social contact (Thomason & Kaufman, 1988, p. 47).

Innovation and propagation. Recognizing the aggregates of the individual and the community also entails the distinction between the innovation and propagation stages of change. Evolutionary frameworks for language change such as Croft (2000) and Enfield (2008, 2014) argue for a model that consists of these two stages, and this can be extended to account specifically for contact-induced language change.

Croft (2000) distinguishes (1) normal replication, which refers to continuity,[105] (2) altered replication, which represent innovations, and (3) selection, which concerns the propagation of change. Continuity pertains to cases where no change happens, whereas innovation and propagation comprise the two stages of change. The innovation stage of language change concerns the creation of novel variants in the language. According to Croft (2000, p. 166), the mechanisms that apply at this stage are largely functional, in which the role of linguistic and structural factors come into play. The next stage of change is propagation, which concerns the population-level selection of a particular variant. The question of how innovative structures produced at the innovation stage proceed to widespread change

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[105] Continuity, or instances where no change occurs, is something that is underrecognized in the literature, as more studies have focused on understanding change. The work of L. Milroy (1980) is one of the major studies that focuses on investigating continuity or stability, with the main goal of understanding how stable sociolinguistic variation is maintained. She concludes that covert norms in particular types of social networks (that is, those that involve dense and multiplex social ties) enforce the stability of linguistic features.

is argued to be a social process, which relies on social structures and the nature of these conventions (Croft, 2000, p. 166).

Cross-linguistic influence and contact-induced language change. Related to the distinctions between the bilingual individual and the community as well as the innovation and propagation stages of change is the distinction between two kinds of contact outcomes, namely cross-linguistic influence and contact-induced language change. The former concerns variant features among bilingual individuals, which comprise the innovation stage. These are considered irregular and transient in that their use varies across and within individuals, and these are mainly driven by differences in patterns of individual-level language dominance (Chapters 6 and 7). Some of these innovative features come to be in widespread use by the community, mainly driven by social factors as discussed previously, hence comprising contact-induced language change (Chapters 4 and 5).

Factors, processes, and outcomes. Finally, modeling language contact necessitates a clear delineation of factors, processes, and outcomes. There are different factors that are argued to correlate with kinds of linguistic outcomes, but there is still much to say about their causal relationships, or the processes that underpin how exactly these factors shape outcomes. Factors that have been identified in the literature so far include linguistic factors such as typological or structural similarity, individual factors such as patterns of language dominance, and social factors such as population size. These factors are underpinned by distinct processes (alternatively, mechanisms or causal pathways, see Section 8.2) such as bilingual cognitive or processing mechanisms and social processes governing the nature of social interaction. Finally, the interaction of these factors and mechanisms are argued to shape particular kinds of contact outcomes, which can be broadly categorized as lexical or structural innovation/change.

8.2   Path analysis for language contact

Various linguistic, psycholinguistic/cognitive, and social factors, mediated by different interacting processes and mechanisms, are claimed to underpin the development of contact outcomes. As set out in the previous section (also see Section 2.1), how the phenomenon of contact-induced language change covers various sub-fields of linguistics means that there is still no consensus about how the different factors and mechanisms are linked together. Muysken (2013) proposes a model for language contact that attempts to link the findings across the sub-fields through several speaker optimization strategies, where different outcomes are argued to be the result of the interactions of these strategies.

These bilingual strategies are mediated by linguistic factors such as the perceived distance of the languages, processing constraints on the bilingual individual, and social factors that operate on the community.

This chapter presents a statistical perspective that builds on Muysken (2013), namely path analysis, which is a technique that encourages researchers to tease apart the interrelationships among the variables (or factors) and identify the causal processes that determine an outcome (Lleras, 2005, p. 25). As such, it is a good way to systematically bring together the different factors and processes invoked for language contact. While it has been widely demonstrated in the literature how particular factors correlate with language use,[106] the causal hypotheses that underpin these links need to be further integrated within a coherent model, as what Muysken (2013) has demonstrated. With path analysis, we are forced to be explicit about the relationships among the variables, which then necessitates the formulation of logical causal hypotheses. Path analysis has been applied in demographic research, such as Snopkowski et al. (2016), in which they explore the links between fertility decline and education through various related factors such as infant/child mortality, economic activities, social networks, among others. McFadden (personal communication) also explores reconstructing past population dynamics by bringing together multidisciplinary pieces of evidence through path analysis. For modelling language contact, this is currently being developed in a collaborative project with Bethwyn Evans, Clare McFadden, and Aditi Dubey, and this section presents the descriptive part of the method.

To briefly illustrate path analysis, van Coetsem's (2000) theoretical model for language contact can be represented via a path diagram. Different explanatory variables (factors) lead to the outcome variable (effect), represented via straight arrows. In Figure 18, variables such as cognitive factors, language use, ideologies, and community norms can indirectly shape individual-level contact-induced outcomes via language dominance (Chapter 6). Language dominance is said to interact with the stability gradient of linguistic materials, wherein a speaker tends to work within the resources of their agentive (dominant) language, which are said to constitute stable aspects of language (such as structure), which can then lead to specific kinds of contact outcomes, such as the transfer of vocabulary in RL agentivity or structural elements in SL agentivity (Section 2.2.1). In cases of balanced bilingualism, the constraints concerning the stability gradient of language can be neutralized through

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[106] Most commonly seen in variationist sociolinguistics, where social factors such as age, social class, and gender have been argued to correlate with the use of particular linguistic features (cf. Labov, 1966; Le Page & Tabouret-Keller, 1985 among many others).

the social function of language, that is, either for communication or as a marker of identity, where a speaker can "select" which linguistic elements are affected in the transfer process (van Coetsem, 1995, p. 83).

Figure 18: A simple path diagram for modeling individual-level contact-induced outcomes
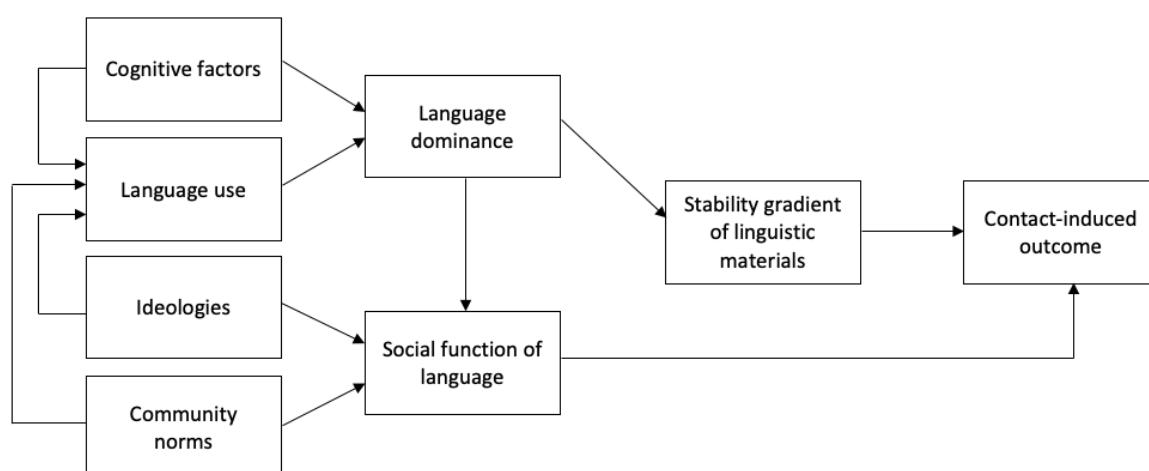
The distinctions outlined in Section 8.1 serve as the foundation for building a more comprehensive theoretical model for language contact that goes beyond the speaker-based framework proposed by van Coetsem (2000). As Muysken (2010, p. 267) proposes, the different stages of contact-induced language change, namely innovation and propagation, need to be treated separately because they concern different scales and time depth. Insights from the interrelationships and interaction of the different factors and processes for each stage generated through path analysis then serve as a guide towards building a narrative that links the stages together.

As an initial step, a path analysis approach for language contact necessitates a thorough survey of theoretical frameworks as well as highly contextualized case studies, which reveals a multitude of factors that have been argued to drive contact outcomes. The complexity of modelling language contact by accounting for these different factors makes path analysis appropriate, with the flexibility of the approach allowing the model to be modified to accommodate new information as the field grows (Lleras, 2005, p. 29). This chapter presents a preliminary review of the literature, where the factors and their underpinning processes can be integrated within hypothesized causal models for the innovation and propagation stages of contact-induced language change. Section 8.2.1 discusses these specific factors and processes, and Section 8.2.2 explores how to model the two stages of change, and the ways they can be linked together.

8.2.1   ***Factors and processes***

While it is hoped that a (theoretical and statistical[107]) model for language contact reflects language use that is close to reality, it is impossible to be able to account for all the factors that directly and indirectly shape contact outcomes. Similarly, the exact causal pathways or processes that underlie the factors have not always been made transparent across the studies, and so, these are considered uncertainties in the model. Despite these caveats, there are several factors that have been widely recognized in the literature (also discussed in Section 2.1), which can be used to build a strong empirical foundation for a theoretical model for language contact. These are classified under three general categories, namely:

- Linguistic factors, or those concerning the languages and the specific linguistic material/s;
- Individual factors, or those concerning the bilingual individual; and
- Community factors, or those concerning the bilingual community.

8.2.1.1   *Linguistic factors*

Linguistic factors pertain to language-internal variables concerning the nature of the languages in contact and the nature of the linguistic material itself (see Section 2.1.1 for a similar discussion). These factors are mainly underpinned by cognitive processing mechanisms in bilingual speakers. In terms of the relationship of the languages in contact, interlingual identification, in which speakers find a match between structures and forms across the languages, make materials readily transferable from SL to RL. This mechanism underlies a frequently cited factor in language contact, that is, typological or structural similarity between the languages in contact (Field, 2002, p. 42; Weinreich, 1953, p. 33; Winford, 2005, p. 387).[108] This is also argued to explain morphological transfer of Ilokano forms into Ibatan, given the structural similarities between the two languages (Section 5.3). Interlingual identification also applies in cases of superficial similarities between the SL and the RL. Aikhenvald (2007, p. 33) uses the term "lookalikes", and Gardani (2020, pp. 111–112) describes a similar scenario he labels reanalysis, illustrated in the case of Arvanítika (a variety of Tosk Albanian, spoken in Greece and Macedonia), in which the *-a* ending in Greek loanwords was reanalyzed and reintroduced as a definite marker on the model of the Albanian postposed definite feminine article.

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[107] See McElreath (2015, pp. 4–7) for a discussion on rethinking statistical models by operationalizing hypotheses through theoretical models.

[108] Seifart (2014, 2015a), in contrast, has shown through a quantitative study that this constraint only plays a minor role in facilitating structural transfer.

In terms of variables concerning the nature of the linguistic material itself, cognitive processing mechanisms are also a common pathway for the set of factors identified. One of the most cited factors is the stability of linguistic elements. Van Coetsem (2000, p. 106) proposes that this factor derives from notions such as the material's degree of structuredness, frequency of use, and in terms of processing, automaticity and consciousness. More stable materials are said to be more structured, more frequently used, and more automatic in terms of cognitive processing, such as articulatory habits and grammatical formatives. Less stable materials such as content words are said to be the opposite, that is, they are less structured, and involve less automatic, more conscious processing mechanisms. The notion of stability ultimately stems from the idea that particular categories of linguistic materials comprise the core of the grammatical system which are more deeply entrenched and stable compared to other materials (Seifart, 2015b, p. 93), making processing these elements more automatic. In terms of expected outcomes, highly stable materials are argued to be more resistant to transfer compared to less stable ones. Stability is also related to integration, where it is argued that materials have varying degrees of integration within the linguistic system. For instance, in some languages, verbs are said to be highly inflected compared to nouns, which makes them more integrated through the use of structures. Integration makes the material less transferable in that further adaptation strategies are required to make the material fit into the grammatical system of the RL (Haspelmath, 2009, pp. 35–36).

Another set of linguistic factors likewise governed by cognitive processing mechanisms involves meaning and function of the morpheme, such as word class membership, which are also invoked alongside notions of stability and integration (see Section 2.1.1 for a general discussion, and Section 4.1.1.1 for specific examples in Ibatan). Also related to word class membership is the semantic complexity and abstractness of function. That is, morphemes that carry more semantically complex functions, such as those that realize more than one function, as well as forms that carry more abstract meanings, are said to be less transferable than forms that are monofunctional, and have more concrete meanings (Gardani, 2020, p. 113; Matras, 2007). Thus, inflection, given its semantic complexity and abstractness compared to derivation, is said to be more resistant to transfer (Gardani, 2008; Gardani et al., 2015; Matras, 2015). Categorical clarity and semantic fullness, which pertain to how different morphemes realize their function either as dependent or independent of their broader morphosyntactic environment, is also another factor used to explain different degrees of transferability. For instance, inherent inflection is said to be more independent of the broader syntactic environment compared to contextual ones, making it easier to process (Gardani, 2008, 2020).

Factors concerning the form and structure of the linguistic element are also underpinned by cognitive processes. Words that have sharper boundaries and clearer morphological contours (or those that are agglutinative) are said to be more easily segmentable, easier to process, and hence transferable than those that are fuzzier and less transparent (or those that are highly inflectional) (Heath, 1978, p. 106). This is used to explain the asymmetry between nouns and verbs, where the latter are said to be more resistant to transfer because they tend to be highly inflected, making their structure less segmentable for speakers (Curnow, 2001, p. 415).

Finally, processing mechanisms are also argued to underpin usage. Morphemes which are more frequently used become more stable and productive in the language, also making their cognitive processing more automatic. Increased usage thus makes transfer less likely (Haspelmath & Tadmor, 2009, p. 15).

Aside from cognitive mechanisms, one other mechanism that has been cited in the literature is the therapeutic function of transfer, or transferring out of necessity (Seifart, 2015b, p. 93).[109] This explains the transferability of lexical items from particular semantic fields. Cultural or peripheral vocabulary, particularly those that concern the modern world, religion and belief, and clothing and grooming are the most transferable, as these involve concepts that may not exist in the RL, thus necessitating lexical transfer (Haspelmath, 2009, pp. 46–50; Myers-Scotton, 2002, 2006; Tadmor, 2009, p. 64) (see Section 4.1.1.2 for the specific case of Ibatan).[110] In contrast, transferring core vocabulary such as terms for kinship, basic actions, and the physical world, which involve concepts and terms that already exist in the RL, are argued to be motivated by social mechanisms such as prestige, in that speakers tend to use forms which carry a particular social value, for instance, as an act of identity or solidarity with a particular social group (Section 8.2.1.3).

What is apparent from the sets of linguistic factors identified here is that they are interrelated. That is, certain variables are often invoked alongside each other (and tend to be measured on the basis of each other), such as stability, frequency, and integration. Moreover, there are also certain variables that compete against each other, such as transferring out of necessity versus interlingual identification across linguistic structures. It is also important to note that a number of studies such as Campbell

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[109] For counter-arguments, see Gardani (2008, p. 88) and Thomason (2015, p. 42).

[110] Haspelmath (2009, pp. 46–48) critiques this view, arguing that speakers can opt to coin new words for new concepts. He cites the study of Brown (1999) on North American languages that make use of native terms to refer to foreign concepts such as 'clock', 'rice', and 'week'. Other examples of avoidance of lexical transfer are among small-scale communities reported by Stanford (2009) and Aikhenvald (2001b).

(1993) and Thomason and Kaufman (1988) have cited counter-examples to these explanations, demonstrating how they do not apply universally, and at best, could only be considered tendencies, and that other extra-linguistic factors such as those concerning the contexts of the bilingual individual and the community play equally important roles in motivating or inhibiting contact-induced change (Curnow, 2001, p. 419).

8.2.1.2   *Individual factors*

Bilingual cognitive/psycholinguistic mechanisms mainly underpin individual-level factors, such as language dominance. As discussed in Section 2.2.1, language dominance relates to speaker agentivity, where the individual's agentive (or dominant) language exerts influence on bilingual speech, either through imposition transfer in SL agentivity, or borrowing transfer in RL agentivity (Thomason, 2001, pp. 146–149; van Coetsem, 2000). In Chapter 6, we have seen several factors relating to language dominance, which mainly pertain to the individual's bilingual experience, such as the nature of language acquisition. For instance, childhood bilingualism is argued to be fundamentally different from adult bilingualism, and this difference is reflected in differences in contact-induced outcomes, where children are said to have the ability to acquire complex and irregular structures while adults tend towards simplification (cf. Kerswill, 1996; Lupyan & Dale, 2010; Ross, 2013; Wray & Grace, 2007).

Also related to bilingual psycholinguistic mechanisms is the individual's level of linguistic awareness or consciousness (see Section 5.3 for a discussion specific to Ibatan). In terms of structural and grammatical knowledge, how much the speaker is able to identify patterns in their language/s is argued to drive the direction of language change (Thomason, 2001, pp. 139–142, 149–152). If speakers are able to analyze and segment grammatical structures, these elements tend to become more regular and productive (Wray & Grace, 2007, p. 568). In terms of awareness of etymology, this can interact with social mechanisms such as ideological processes, which can also have profound effects on language choice and use. For instance, certain multilingual communities reported in various studies have an ideological motivation to keep languages distinct by avoiding loanwords or developing distinct vocabularies (cf. Aikhenvald, 2002; Epps, 2012; François, 2011; Stanford, 2009). These social mechanisms are also used to explain cases of deliberate language manipulation, where speakers are seen to change their language to fulfill particular functions (cf. Thomason, 2007). As an example, van Coetsem (2000, p. 273) describes the contact situation in Kupwar, India reported by Gumperz and Wilson (1971) as an instance of balanced bilingualism resulting in the neutralization of constraints in linguistic transfer, and contact outcomes arising from it are motivated by the need for communication and self-identification by the speakers.

The specific interactional setting can also affect contact outcomes through accommodation or negotiation mechanisms (Thomason, 2001, pp. 142–146). Depending on the context of interaction, such as the interlocutor and other people present in the speech event, the topic of the conversation, and the nature of the speech event itself, a speaker tends to adjust their speech style and language use, described by Grosjean (1985, 2016) as the Complementarity Principle (also see Section 6.1). For instance, a speaker may choose Ilokano words if they know that their interlocutor is likewise knowledgeable in Ilokano (Section 7.2.3).

As with linguistic factors, the factors and mechanisms that underpin individual-level language use are intimately linked to factors concerning the wider community. To illustrate, we have seen how language dominance, while essentially a psycholinguistic notion, is mediated by social parameters (also see Chapter 6). Awareness of structures is also shaped not just by cognitive mechanisms but also social ones such as the structure of the community and the development of literacy (cf. Thurston, 1989, 1994; Wray & Grace, 2007). It is therefore necessary to recognize the interrelationships within and across these categories of factors in order to adequately account for language contact.

8.2.1.3   *Community factors*

The language ecology and the specific context of the community plays an important role in shaping patterns of individual-level language use, as well as in the propagation of change (Aalberse & Muysken, 2018, p. 542). Some factors that pertain to the nature of the community include biographical variables concerning the individual, community norms, and inter- and intra-community relationships, which are all underpinned by social processes and mechanisms.

Biographical variables include a person's age group, gender, and socioeconomic status. Locally meaningful categories are also shown to be relevant in shaping language use (cf. Stanford, 2016; Stanford & Preston, 2009). While these factors are measured on the basis of individual speakers, the individual is taken as the product of their social history, and their language reflects the influence of prevailing social structures. That is, these factors are shown to correlate with language use, as mediated by notions of (covert) prestige, or as an act of identity or solidarity with a particular group (cf. Labov, 1966, 1972; Le Page & Tabouret-Keller, 1985; Sturtevant, 1947). It is crucial to note, however, that such sociolinguistic studies also emphasize that the individual's identification still depends on exposure and access to models, and this may fluctuate depending on the specific context.

Community norms are also argued to indirectly play a role in shaping contact outcomes. These include factors such as political organization, development of literacy, and patterns of subsistence, marriage, and residence. François (2011, 2012) discusses how ethnolinguistic communities of northern

Vanuatu, which are characterized as small-scale, egalitarian, and exogamous, have maintained divergent vocabulary (despite being genetically related) because of the ideological emphasis on local identity. At the same time, however, they exhibit convergent grammatical structures as an outcome of contact across the groups. In terms of subsistence patterns, Epps (2016) discusses how subsistence strategies relate to the nature of social interaction and the direction of language change, where agriculturists tend to exert more linguistic influence on foraging-focused peoples, as evidenced by ethnolinguistic groups in the Amazon. Literacy is also said to influence how much speakers become aware of the grammatical patterns of their language, thus contributing to the regularity and productivity of structures (Wray & Grace, 2007, pp. 557, 562–563) (Section 8.2.1.2). Finally, local ideologies interacting with these mentioned factors influence language use. In the case of the Sui people of rural southwestern China, village exogamy, patrilocal residence, but with a strong emphasis on ethnic loyalty are reflected in how Sui women are expected to keep their original village lect even as they reside in their husband's territory (Stanford, 2009). Local ideologies are also reflected in the anchoring of people, things, and language with social and geographic space, as in northern Vanuatu (François, 2011), northwest Amazonia (Aikhenvald, 2001b, 2002; Chernela, 2013; Epps, 2018), and many Indigenous communities across Australia (Merlan, 1981; Rumsey, 1993, 2018; Sutton, 1997; Vaughan, 2018). All these factors are argued to be ultimately underpinned by the nature of social interaction of the community, such as the degree to which speakers interact with other people within and outside the community, what language/s they use in which domains of community life, and how they view their language/s as emblematic of their identity.

The final set of factors concern intra- and inter-community relationships. One important factor is population size and structure, which pertain not only to the community as a whole, but also groupings within and beyond the community (as in clusters within the social network, or even different social networks within the larger community). One specific factor is demographic composition. Thomason and Kaufman (1988, p. 47) argue that in cases of language shift, the size of the shifting group, along with the degree of bilingualism (or language dominance) of the community, influences the extent of SL interference on the RL. In a similar vein, if SL-dominant speakers are greater in proportion to RL speakers, we would expect to find widespread evidence of imposition transfer in the RL. Social network structure is also an often-cited influencing factor in driving the direction of language change. Specifically, the multiplexity and density of a social network are argued to be important factors in driving the diffusion of innovations or the enforcement of linguistic norms. Networks with strong and dense ties tend to maintain linguistic features, whereas speakers who form weak ties across social

networks tend to show more innovative forms (J. Milroy & Milroy, 1985, pp. 380–381; L. Milroy, 2004, pp. 562–565).[111] This ultimately derives from the principle of density, where the speakers tend to adopt linguistic features depending on the density of communication within a speech community (cf. Trudgill, 2004). This means that exposure is central to shaping a speaker's linguistic habit—greater exposure means entrenchment and continuity, whereas less exposure or decay of entrenchment may result in innovation or change (Croft, 2000, p. 74; Langacker, 1987, p. 59).

Another factor that influences linguistic outcomes is the mobility of speakers, either through permanent migration into a new community, or short-term but regular travels to and from the community. This can lead to dominance shift if the sociolinguistic environment of the speaker changes drastically (Section 6.1). This has been reported in the context of migrant speakers (cf. Johnson & Newport, 1989; Matthews & Yip, 2009; Myers-Scotton, 2002, 2006; Yip & Matthews, 2006). In Babuyan Claro, frequent travels outside the community entails more exposure to Filipino and Ilokano, which may lead to a shift in language dominance for some speakers (Sections 6.3.1 and 7.3)

The function and use of the languages in various domains of community life also plays an important role in contact-induced language change. First, if the language is used for wider communication, it is hypothesized to develop towards simplification, as it is also used by non-dominant speakers, especially adult learners. In contrast, if the language is used in more restricted domains such as the home, the language will likely develop more opaque and complex structures, as it is used by early bilinguals who are dominant in the language (cf. Lupyan & Dale, 2010; Wray & Grace, 2007). This difference also relates to the hypothesized difference between large-scale and small-scale communities in terms of cognitive processing mechanisms. Shared knowledge and a high degree of speaker interaction in a small community allows for opaque structures in the language to persist, whereas large-scale communities, with less dense and multiplex networks, and with the language used for wider communication, necessitate structures that are more regular, transparent, and ultimately, easier to process (cf. Ross, 2002, 2007; Wray & Grace, 2007). Another factor that relates to the use and function of the languages is if there is an official recognition by the government, which may be in the form of recognizing the language as a distinct entity, and hence emblematic of the community, or through recognizing the administrative function of the language as the language of education, governance, and such. Recognition by the government likely affects the community's ideology towards their language/s, as exemplified in the history of Babuyan Claro (Section 3.2.4). This in turn shapes patterns of language

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[111] Also see Section 8.2.2 for a discussion of this hypothesis.

use and dominance among individuals and the community. Similarly, if the language is used in wider domains as mandated by the government, it is likely that more speakers would be using the language as their dominant language (Section 6.1).

Finally, it is argued that the nature and length of social contact influences the degree to which contact-induced outcomes become widespread in the community. Longer contact between the groups likely results in changes in patterns of language dominance. Time, coupled with the degree of community bilingualism, is used to measure the intensity of social contact in situations where the languages of the community are maintained, in which structural change is likely to occur in intense contact situations (Thomason & Kaufman, 1988, pp. 47–48).

It is indeed apparent how the different factors are all interrelated, and how they play an indirect role in driving the direction of contact-induced language change. That is, many of the social factors discussed here contribute to shaping individual- and community-level patterns of language dominance (Chapter 6) through processes that underpin the nature of social interaction. In addition, social structures are argued to influence language use, where speakers tend to use linguistic features that are socially meaningful to them (Labov, 1966, 1972). For instance, particular linguistic features are seen as markers of linguistic dominance in either Ilokano or Ibatan, such as those discussed in Chapter 7 which strongly correlate with non-dominant Ibatan speakers. Section 9.2.3 discusses similar kinds of features that are argued to have carried particular social value, and this motivated their diffusion across the Babuyan Claro community. In sum, it has been demonstrated that the factors across the three general categories interact and go through similar causal pathways such as cognitive and social mechanisms, leading to particular kinds of contact outcomes.

8.2.2   *Modeling language contact*

As discussed in Section 8.1, innovation among individual speakers and propagation across the community comprise the two stages of (contact-induced) language change. Croft (2000, p. 166) argues that functional or structural mechanisms mainly drive innovation, while social processes underpin propagation. However, we have seen in the previous section that these factors and processes are interrelated, where several factors share common causal pathways, and that some factors are seen to indirectly shape other factors. To illustrate, the psycholinguistic notion of language dominance, which is argued to drive innovations among bilingual individuals, is shaped by social factors such as the individual's bilingual experience (Section 6.1). Similarly, cognitive processing mechanisms that drive contact-induced change are seen to underpin not only linguistic factors such as the stability of linguistic materials (van Coetsem, 2000, p. 106), but also social factors such as political complexity and

population structure (cf. Thurston, 1989, 1992, 1994; Wray & Grace, 2007). Moreover, the individual and the community are also intimately linked, and language use observed on both levels reflects the interaction of these different factors and processes. That is, the individual is seen both as an agentive user of language and the product of an elaborate social history, reflecting the influence of social structures and norms in their language use.

In terms of building a theoretical model for language contact, a path analysis approach forces us to ask fundamental questions about our model. That is, causal hypotheses that link different factors to specific kinds of contact outcomes are made transparent. Crucially, path analysis allows us to investigate the interrelationships of various factors and mechanisms in shaping both cross-linguistic influence at the level of the individual and widespread contact-induced language change at the level of the community. While it is acknowledged that these two levels of aggregation are connected, they need to be studied separately in order to determine whether or not the same kinds of processes unfold the same way in different scales and contexts. Therefore, path analysis is a good start in investigating the transition problem of (contact-induced) language change, that is, how change crosses from the stage of innovation to propagation. Building a theoretical model for language contact, moreover, makes our analysis ready for further statistical modeling.

In modelling change, the propagation stage is characterized as an S-curve, described by Rogers (1962). Following Croft (2000), the initial stage pertains to innovation or the altered replication of a feature. At this stage, these innovative features have not yet acquired any social value (and are sometimes even treated as errors, particularly in the language use of non-dominant speakers). Thus, these features may not actually proceed to the succeeding stage of propagation. However, if the listener reanalyzes the innovation as an indicator of a particular social category, the innovative variant then becomes socially meaningful. The listener who gives the variant a social value via reanalysis is the introducer of the innovation. The early adopters who first pick up the innovative variant attached with a social meaning drive the early process of propagation. Once these early adopters use the variant, it spreads rapidly throughout the group, first among the early majority, and then among the late majority. There are also the laggards who are the most resistant to innovations.

From the perspective of social network theories, the main factor in driving change is argued to be the structure of the community or group, measured in terms of network strength, through variables namely density (the number of connections among individuals of a group) and multiplexity (the different ways individuals are related to each other). Network strength is correlated with degree of communicative interaction, where speakers talk more frequently to people they are strongly tied with,

and thus they tend to share similar linguistic habits (Croft, 2000, p. 169). J. Milroy and Milroy (1985) and J. Milroy (1992) argue that it is those weakly tied to the network that introduce innovative features into the language, as they are the ones who are exposed to external variants, and the early adopters are those occupying the central and prominent positions within a strong-tie network.[112] Alternatively, other scholars put primacy on the linguistic variant itself in determining the propagation of change. Notions such as (covert) prestige (Labov, 1966, 1972), acts of identity (Le Page & Tabouret-Keller, 1985), and speaker choices (Mufwene, 2008) are argued to correlate with population-level language use.[113]

Baxter et al. (2006, 2009) evaluate these assumptions by testing which of the two models, that is, interlocutor frequencies (the degree of communicative interaction within the social network) or the differential weighting of the linguistic variant (in which the variant is seen as socially meaningful), follows the S-curve of language change. They conclude that the latter model of selection works best for S-curves, but while this may be true from an evolutionary perspective, language change is multi-causal, and it is more accurate to say that it is the complex interaction of different factors and mechanisms that drive the propagation of change. Path analysis accounts for these interactions and interrelationships, which then allows the theoretical model for language contact to approximate real world language use. Moreover, the approach provides a systematic means to investigate the transition problem of language change, which can be taken further either through narratives or statistical modeling, such as structural equation models (cf. Bollen & Noble, 2011; Knoke, 2004) and agent-based ones (cf. Spike, 2017).

8.3   **Conclusion and future directions**

It is the interdisciplinarity of contact linguistics that defines and strengthens the field (Thomason, 2001, p. ix; Winford, 2003, p. 9). The challenge is to more systematically link the multitude of factors and mechanisms identified in the literature, and path analysis allows us to do this. While the findings presented in this chapter are largely preliminary, specific factors commonly cited in the literature have been identified in Section 8.2.1, and the underlying causal mechanisms they share have been set out. The next step in the research is assessing the weight and interaction of the variables using attested

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[112] The role of those weakly tied across social networks in the introduction of change draws on the research of Granovetter (1973) and other works on social and behavioral sciences (cf. Wasserman & Faust 1994).

[113] These sociolinguistic perspectives are yet to be applied in the context of Ibatan, but it is worthy to note how the Babuyan Claro social network comprise distinct clusters, which are argued to correlate with language choice and use (Sections 3.2.2 and 9.2.2).

language use from specific case studies across a wide variety of contexts, which leads to a path diagram that represents this hypothesized causal model, as exemplified in Figure 18.

Path analysis not only enables us to test competing models proposed for language contact and change through statistical testing such as goodness-of-fit (Lleras, 2005, p. 29), but it also provides a systematic way to link models concerning different aggregates and scales (such as van Coetsem (2000) for the aggregate of the individual and Thomason and Kaufman (1988) for the aggregate of the community).[114] The approach also provides a good foundation for further statistical modeling, which have been used to investigate the propagation of change. Finally, as path analysis necessitates a strong and clear articulation of causal hypotheses underlying the model, we are forced to tease apart factors from processes and outcomes, thus responding to the criticism about the opaque treatment of these concepts and constructs (van Coetsem, 2000, p. 37; Winford, 2005, pp. 374–375).

In terms of investigating the outcomes of contact in Babuyan Claro, insights from our theoretical model for language contact serve as a guide in understanding how factors specific to the case study interact to shape outcomes both at the levels of the individual and the community. To illustrate, we have seen in Chapter 5 how various factors have played a role in the development of the parallel durative paradigms of Ibatan, namely language-internal factors such as the close genetic relationship of Ibatan and Ilokano under the Malayo-Polynesian family, which is reflected in several shared forms and patterns, cognitive factors such as the speakers' knowledge of etymology and grammatical structures, and social factors such as an ideological emphasis in keeping the boundaries between Ibatan and Ilokano distinct. Similarly, in Chapter 4, the large proportion of loanwords in the Ibatan lexicon is argued to be the outcome of the interaction of these different factors. Finally, in Chapter 7, we have seen how ongoing patterns of language use among categories of bilingual individuals are underpinned by the same kinds of factors and processes. In terms of reconstructing prehistory, a theoretical model for language contact provides a good framework. The documented history of Babuyan Claro indicates periods of social change that correspond to changes in the language ecology and hence, patterns of language use of the community. Thus, investigating the pathways of contact-induced language change through path analysis enables us to understand if the same kinds of change proceed the same way throughout these distinct periods of social change (Chapter 9). All in all, the scalability of path analysis makes the approach applicable not only for large-scale studies, but also for

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[114] Tagliamonte (2012, p. 247) also discusses how change proceeds from the level of the individual to the level of the community from the perspective of variationist sociolinguistics.

small-scale, highly contextualized ones such as that of Babuyan Claro. Finally, in the opposite direction, insights from the specific case of language contact in Babuyan Claro also contributes to building a stronger empirical foundation for our theoretical model. The flexibility of path analysis allows for new information and data from specific case studies to be added into the model, thereby adapting to the growth of the field.

RECONSTRUCTION

The stratigraphy of the Babuyan Claro community

Introduction

The outcomes of language contact and change exist within the socio-historical context of the community that uses the languages, and so the sociolinguistic dynamics of a community are expected to be reflected in corresponding layers of language change. Babuyan Claro highlights the importance of this connection. The community's history, which involves the coming together of people from two different ethnolinguistic groups, coupled with the maintenance of bilingualism in Ilokano and Ibatan since the beginning of the community, has resulted in the development of Ibatan as a language distinct from its sister Batanic languages.

This chapter presents a reconstruction of the dynamic language ecology and sociolinguistic history of the Babuyan Claro community based on linguistic data, and supplemented by ethnographic and genealogical accounts by R. Maree (1982) and J. Maree (2005). Contact-induced features observable in Ibatan are linked to specific mechanisms and agents of change (Thomason & Kaufman, 1988; van Coetsem, 2000). All these reflect layers of language change which coincide with distinct phases of social change in the community.

The story of Babuyan Claro is one that involves 150 years of evolving patterns of bilingual agentivity and community-wide language dominance shaped by an extremely dynamic sociolinguistic landscape. Section 9.1 revisits the frameworks for language contact used in the thesis, and also discusses issues and challenges in reconstructing linguistic and social histories. Section 9.2 presents the reconstruction of distinct phases in the history of the community, with particular focus on the changing mechanisms and social correlates that underpin the various contact-induced features observable in Ibatan. Finally, Section 9.3 integrates these phases, and outlines the contributions of the case study in reconstructing prehistory.

9.1 On reconstructing contact histories

Language change is a reflection of social change (Labov, 2001; Meillet, 1921; Sturtevant, 1947). In understanding the pathways of language change, it is therefore important to link a linguistic feature

to a specific historical setting, involving specific people who act as the agents of change. Muysken (2010) argues for such a context-dependent approach for language contact, which teases apart contact outcomes at different levels of aggregation and time depth (Section 2.2). Each level involves the interaction of linguistic and extra-linguistic mechanisms, which ultimately drives contact-induced language change. The languages of a community, therefore, reflect layers of change embedded within the community's sociolinguistic landscape.

Babuyan Claro's dynamic landscape is reflected in the layers of change in Ibatan. Based on ethnographic and genealogical records (J. Maree, 2005; R. Maree, 1982), we know that the Ibatan people are of mixed ancestry, descending from families with Batanic- and Ilokano-speaking backgrounds. Since the beginning of the community, Ilokano has played a major role in the development of the Ibatan language. Evidence for this is that there have always been people bilingual in Ibatan and Ilokano. At present, Ilokano also remains socially dominant in the Babuyan group of islands. It is used as the regional lingua franca, and has been the main language in significant domains of community life in Babuyan Claro, including religion, politics, and education, which did lead to a period of language shift within many families on the island. However, recent changes in the socio-political structure of Babuyan Claro changed the language ecology of the community and increased the social role of Ibatan (see Chapter 3 and Gallego (2020)). Starting in the 1980s, the Babuyan Claro community witnessed:

- The transfer of the village center from a predominantly Ilokano-speaking region (*laod*) to an Ibatan-speaking one (*daya*);
- The shift from Catholicism (in which Ilokano is used as the language for religious activities) to Protestantism (in which Ibatan is the main language used) as the dominant religion of the community;
- The increased use of Ibatan as medium of instruction, through the implementation of the Mother Tongue-Based Multilingual Education Policy, as well as an increasing number of Ibatan-speaking teachers on the island; and
- The granting of the Certificate of Ancestral Domain Title to the Ibatans, which grants the Ibatan people exclusive rights to their land and surrounding seas.

All of these changes led to the more vigorous use of the Ibatan language, which involves its use in a wider range of domains of community life. Finally, at present, improvements in geographic mobility and technology has allowed the Ibatans to maintain contacts not only with neighboring Ilokano-speaking islands, but also with mainland Luzon, which is more linguistically diverse. This therefore

means that the Ibatan people have expanded their social networks beyond Babuyan Claro, which also entails an expansion of their linguistic repertoire to include other languages such as Filipino, the national language of the Philippines. These phases in the history of the Babuyan Claro community are linked to changing individual- and population-level agentivity and language dominance, which are reflected in corresponding changes in the Ibatan language.

Reconstructing prehistory relies on the Uniformitarian Principle, which states that the principles and processes that operate in the present are likely to be the same as those that have operated in the past (Bergs, 2012, p. 80). This also means that insights about the mechanisms of contact-induced language change found in present-day contact situations form the basis for the kinds of mechanisms that likely operated in the past, and so allow us to reconstruct more distant contact histories.

While the Uniformitarian Principle occupies a central position in historical linguistics (Labov, 1972, p. 275, 1994, pp. 21–23; Lass, 1980, 1997), the social aspects of language make the application of the principle more complex. That is, many of the social concepts and models used to investigate linguistic phenomena, such as social class, age, gender, and social networks, and more importantly, norms, standards, and prestige, greatly differ across communities and across time, and so interpretations and reconstructions based on present-day data need to be done carefully (Bergs, 2012, p. 96; Labov, 1994, p. 23). Employing the Uniformitarian Principle as a working assumption in reconstructing the past needs to go hand in hand with understanding its limitations and knowing how to address these by means of approaching particular problems from different directions, and via different complementary methods (Labov, 1994, p. 25).

In reconstructing historical contact scenarios, speaker-based models such as van Coetsem's (2000) can rely on the Uniformitarian Principle because we can assume that the mechanisms governing human cognition have not changed. At the same time, however, cognitive processes only present one side of the picture. That is, speakers do not exist in a vacuum, and psycholinguistic mechanisms interact with extra-linguistic factors in shaping language change (Muysken, 2010, p. 267). There is thus the need to strengthen the current models and frameworks for language contact and change to better account for the limitations of the Uniformitarian Principle (Ross, 2013, p. 194).

One way of doing this is taking case studies such as that of Babuyan Claro to critically evaluate our current models of language contact. Investigating attested language use by bilingual individuals provides empirical basis for the assumptions proposed in these models. That is, grounded in the specific context of the bilingual individual or community, such case studies allow us to make stronger connections between linguistic outcomes, the mechanisms that underpin them, and their specific

agents of change. Moreover, much of what we know about the phenomena of language contact and change are based on large-scale and industrialized societies (Adamou, 2021, pp. 3–7; Stanford, 2016, pp. 525–526; Stanford & Preston, 2009, pp. 6–12). Small-scale multilingual communities like Babuyan Claro often involve different patterns of language use, which adds to our understanding of the nature of language contact. Teasing apart how the various mechanisms identified in the literature interact to drive change in such specific contexts and scenarios allows us to understand the pathways of language change more deeply, from actuation, transition, constraints, embedding, and evaluation (Weinreich et al., 1968), and therefore, to reconstruct prehistory with more nuance and confidence.

9.2   The sociolinguistic history of Babuyan Claro

Language contact typically involves change in two directions. The most common outcome would be the adaptation of SL materials to fit into the structure of the RL. However, depending on the nature of contact, the SL may in turn cause the restructuring of the RL. These two directions of change are driven by individual- and population-level agentivity and language dominance, and these are in turn shaped by the wider social ecology. Thus, the languages of a community reflect a stratigraphy, which involves changing patterns of agentivity, language dominance, and social structures.

The sociolinguistic history of the Babuyan Claro community (introduced in Sections 3.2 and 9.1 of this chapter) is divided into five phases, each of which is signaled by contact-induced outcomes across different linguistic domains, namely lexicon, phonology, and morphology. This is outlined in Table 44 and discussed in detail in the following sub-sections.

While the phases are distinguished from each other by different kinds of linguistic outcomes, there is a general ideology in Babuyan Claro to keep Ibatan and Ilokano distinct, and this is seen to prevail in each of the five phases of the community. This ideology is argued to underlie the development of contact-induced change in Ibatan. The reconstructions presented in this chapter are grounded in models for language contact which link linguistic outcomes with speaker agentivity and language dominance (Thomason & Kaufman, 1988; van Coetsem, 2000). Moreover, ethnographic and genealogical studies (J. Maree, 2005; R. Maree, 1982) provide the socio-historical context for the reconstructions.

Table 44: Social and linguistic change in Babuyan Claro

Time period	Historical events	Mechanism	Agents of change	Linguistic outcomes in Ibatan
1869-1920s	Arrival of founding families	RL Agentivity	Batanic families (Alcantara, Derecho, Nolasco)	Fully adapted loanwords (in terms of phonology and morphology), mostly from Ilokano
1920s-1950s	The formation of *laod* and *daya* clusters	RL Agentivity	Ibatan-speaking families of *daya*	Continued lexical transfer, with adaptation into Ibatan
1950s-1980s	The rise of Ilokano	SL Agentivity	Ethnic Ibatans shifting dominance to Ilokano (esp. younger speakers?)	Lexical transfer, but with lesser adaptation: - Keeping SL phonology - Adapted SL morphology (i.e. development of non-native durative paradigm)
1980s-2000s	The revitalization of Ibatan	RL Agentivity	Ibatan-dominant families	Regularization of innovative structures, such as the durative paradigm
Present-day	Further integration of Babuyan Claro within the Philippines	RL Agentivity	Ibatan-dominant families	Lexical transfer, including nonce borrowings (also from other SLs such as Filipino)
		SL Agentivity	Ilokano immigrants	Ongoing cross-linguistic influence: - Loss of coda *h* - Variation in the parallel durative paradigms

9.2.1   *1869 to 1920s: The first Ibatan families*

During the Spanish colonial period, indigenous populations in different islands of the Philippines were relocated to settlements modeled after Spanish towns following the policy of *reducción.* The emergence of the Babuyan Claro community was an indirect consequence of this policy. R. Maree (1982) and J. Maree (2005) write about the coming of the first Ibatan families to the island from 1869 to 1870. The first to settle Babuyan Claro were two small groups who came from two different ethnolinguistic backgrounds: Batanic and Ilokano. Alvaro Alcantara and Maria Sirako were originally from Sabtang and Itbayat islands of Batanes, and they were relocated to the Ilokano-speaking islands of Calayan and Camiguin. It was during this period of relocation that they were acquainted with Fidel Nolasco, Maurincio Lagata, Marcelino Lagata, as well as Giyang Dican and Maria Elvinia, who are of Ilokano ancestry. R. Maree (1982, p. 32) assumes that this small group, led by Alvaro Alcantara and Maria Sirako, was attempting to go to Batanes when they were shipwrecked on Babuyan Claro. In the succeeding years, other small groups of people arrived on Babuyan Claro under similar circumstances.

By 1918, 9 of the 10 major families of present-day Babuyan Claro have settled on the island. Of the 9 families, 3 were Batanic-speaking (Alcantara, Derecho, Nolasco), while the rest were from Ilokano-speaking backgrounds (Elvinia, Dican, Tomas, Togade, Simon, Rosales). What is important to highlight is that all families came from either Calayan or Camiguin, which are Ilokano-speaking communities. This includes the Batanic families Alcantara, Derecho, and Nolasco, who were relocated to these islands prior to their arrival on Babuyan Claro. This means that they already had sufficient contact with Ilokano speakers during their time of relocation.

As the initial group who came to Babuyan Claro were already a mixed party of Batanic and Ilokano speakers, it is likely that the people were already bilingual in Ibatan[115] and Ilokano, but with Ibatan-speaking families maintaining their dominance in Ibatan. This is signaled by attested loanwords which are fully adapted into Ibatan phonology and morphology. On the individual level, this kind of outcome is underpinned by RL agentivity, in which transferred materials, typically loanwords, become fully integrated into the RL by means of RL structures such as phonology and grammar (discussed in Section 4.2.1)*.* Table 45 gives some examples. IVB *absog* 'a stomach is bloated' and *askad* 'to resist' have been transferred from ILO *bussog* and *sekkad* respectively. The forms reflect metathesis, which was a common sound change among the Batanic languages. During this period of RL agentivity, Ilokano

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[115] As discussed in Section 1.3.2, the name Ibatan is used loosely to refer to the lect in transition. While it is certain that at this point, Ibatan had already begun its development as a separate Batanic language, it is difficult to say at which point in its history had it undergone sufficient change to be considered distinct from Ivatan.

loanwords with a CVCC structure were adapted as VCC, following the Batanic pattern described by Blust (2017). The last two examples concern palatalization, which is another common sound change in the Batanic subgroup (Gallego, 2014, pp. 70–71). IVB *anyinyiwan* 'shadow' and *anyib* 'an amulet, charm, talisman used to ward off menacing spirits' have been transferred from ILO *aniniwan* and *anib* respectively. These forms reflect the palatalization of the nasal consonant *n* as *ny* in environments contiguous with the high vowel *i.*

Table 45: Phonological adaptation of Ilokano loanwords

Adaptation	Ilokano	Ibatan	Meaning in Ibatan
metathesis	*bussog*	*absog*	a stomach is bloated
	sekkad	*askad*	to resist
palatalization	*aniniwan*	*anyinyiwan*	shadow
	anib	*anyib*	an amulet, charm, talisman used to ward off menacing spirits

As Ibatan and Ilokano have roughly similar phonological structures given their close genetic relationship (see Appendix A), the majority of Ilokano loanwords have undergone little change (ex. IVB and ILO *ayat* 'love' and IVB and ILO *ikit* 'aunt'), except for apparent cases of adaptation via common Batanic sound changes such as those discussed above.

One major difference between Batanic and Ilokano structures would be in the domain of voice morphology in verbs (discussed in Chapter 5 and Gallego (forthcoming)). The actor voice durative is derived with the paradigm of *pay-* in the Batanic languages (Tsuchida et al., 1989), and with the paradigm of *pag-* in Ilokano (Rubino, 2000, p. lxi). The forms are cognates under PMP *paR-, with different reflexes of PMP *R, that is, *y* in the Batanic languages and *g* (alongside *r*) in Ilokano. Early Ilokano loanwords have been adapted using the Batanic voice morphology involving the native set of *pay-*, leading to hybrid formations such as *may-bilag* 'to dry under the sun' and *may-abagis* 'a term expressing a close relationship between cousin and sibling' from ILO *bilag* and *abagis* respectively.

These examples of phonological and morphological adaptation are strongly indicative of RL agentivity, where Ibatan-dominant speakers have modified Ilokano loanwords not only using Ibatan structures such as voice morphology, but have also extended conditioned sound changes, namely

metathesis and palatalization, to include Ilokano loanwords reflecting the relevant phonological environment.

As for Ilokano-dominant speakers, it is uncertain how much they learned or used Ibatan. The social setting in Babuyan Claro during this period suggests the maintenance of linguistic boundaries, and likely one-sided bilingualism. Six of the nine families during this period were Ilokano speakers, and the three Batanic families (Alcantara, Derecho, and Nolasco) also came from Calayan prior to their arrival on Babuyan Claro. This suggests that the first families would have used Ilokano as their common language, and that Ibatan would have only been used among Batanic-speaking families. R. Maree (1982, pp. 51–52) also writes about the preference in the first few generations in Babuyan Claro to marry within one's own linguistic group: "Wherever possible, [Ibatan]-speaking men sought spouses among the other [Ibatan]-speaking families in whose area they had settled." The scattered settlements and the absence of a residential center on Babuyan Claro during these early years (R. Maree, 1982, pp. 51–52) also meant less frequent social contact across the groups. Thus, it is unlikely that the Ilokano-dominant families during this period used Ibatan to a great extent (such as in daily communication). What is certain is that the Ibatan-speaking families knew enough Ilokano to be able to communicate with Ilokano speakers during their time in the Ilokano-speaking islands of Calayan and Camiguin, and this has facilitated the transfer of Ilokano loanwords into Ibatan.[116]

This social setting is also what Thomason and Kaufman (1988) describe as borrowing interference in situations involving community-level language maintenance. In terms of intensity of contact, lexical transfer (without structural change) corresponds with light to moderate social contact. Instead of shifting to Ilokano, Ibatan families have kept their dominance in Ibatan despite being outnumbered by Ilokano-speaking families primarily because of the reported linguistic endogamy among the first generations. The dispersed settlements on the island also reflect how there was little to no hostility among the groups, as well as the wider region beyond Babuyan Claro, in that there was no need to establish residential or commercial centers to protect themselves (R. Maree, 1982, p. 103). This setting also strongly points to egalitarian multilingualism similarly described by François (2011, 2012) for northern Vanuatu, which contributed to the maintenance of bilingualism in the community.

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[116] Another thing to note about lexical transfer is that it has led to doublets in Ibatan, such as IVB *absog* 'a stomach is bloated' from ILO *bussog,* vis-à-vis the native Batanic form *absoy* 'someone or something fills or satiates someone's stomach'. The doublets are cognates descended from PMP *besuR, reflecting diagnostic reflexes of *R.

9.2.2   *1920s to 1950s: The laod and daya clusters*

After the arrival of Bernandino Rosales on Babuyan Claro in 1918, there was little contact between the community and mainland Luzon for the next 20 years (R. Maree, 1982, p. 41). This period of relative isolation allowed for the sociolinguistic ecology that arose in the early years of the community to persist. However, there were also a few known cases of migration within the Babuyan group of islands. It was during this period that the last of the 10 major families of Babuyan Claro came to Babuyan Claro. Anaceto and Reginaldo Ramos, who were of Ilokano ancestry, came to Babuyan Claro from Camiguin island in 1945 and married into the Dican family, who are likewise of Ilokano descent.

During this time, the population in the community was around 100 to 200 people (R. Maree, 1982, p. 20), all tracing their ancestry to the 10 major families introduced in Section 9.2.1. Local groups were dispersed across the island, forming small *sitios* or hamlets. During the first two generations of the community, there was a tendency for the local groups to maintain linguistic and cultural lines (R. Maree, 1982, p. 51). This was facilitated by the preference towards endogamy,[117] in which one marries within the local group. The Babuyan Claro community thus formed demes, in which people were bound by common residence as well as kinship relations (R. Maree, 1982, pp. 50–51; Murdock, 1949, p. 62).

The prevailing endogamy during these first two generations of families led to the geographic divide between the *daya* 'east' and *laod* 'west' regions. The three Batanic families, Alcantara, Derecho, and Nolasco, settled in the southern slopes of *Chinteb a Wasay*, comprising the *sitios* between Idi and Rakwaksong, and this region has come to be known as *daya* 'east'. R. Maree (1982, p. 52) writes that this continued to be predominantly Derecho and Nolasco territory, and at present, *daya* is still strongly associated with Ibatan-speaking families. Similarly, Ilokano groups settled close to each other. For instance, the Dican and Togade families settled the *sitios* of Barit, Kasakay, Idi, and other hamlets nearby (R. Maree, 1982, p. 55). This region is referred to as *laod* 'west', which is still associated with Ilokano-speaking families at present. Figure 3 (Chapter 3) presents the location of these *sitios*, repeated in Figure 19 below.

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[117] R. Maree (1982, p. 51) writes, however, that there was never a truly endogamous deme in Babuyan Claro, because of the chronic shortage of marriageable men and women, given incest taboos and the small population on the island.

Figure 19: Some sitios 'hamlets' of Babuyan Claro
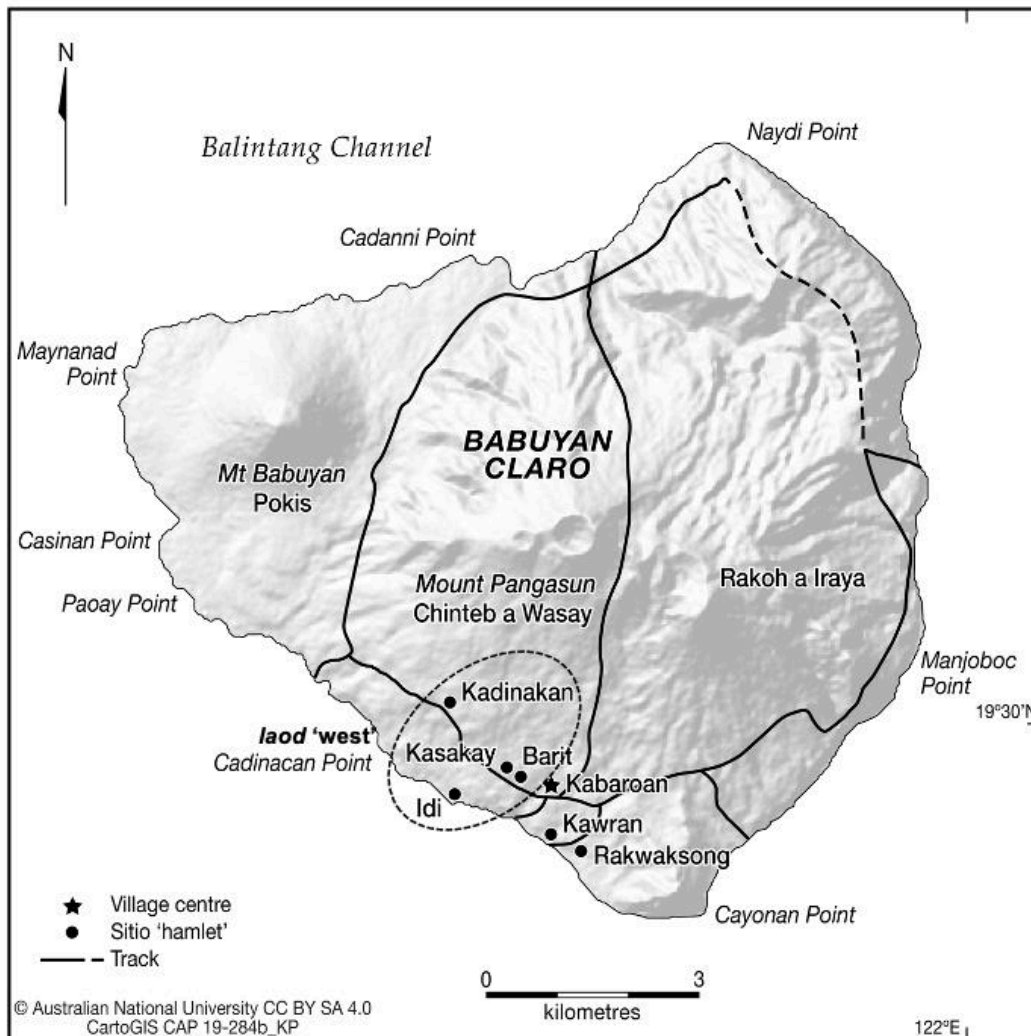
The divide between the *daya* and *laod* regions reflects two significant clusters within the Babuyan Claro social network that coincide with patterns of language use and language ideologies that are still observable in the community at present. This essentially involves keeping Ibatan and Ilokano distinct despite the intensity of social contact across the groups (see Section 3.3).

Despite the preference towards endogamy, there were also some cases of marriage across linguistic groups. Most notably, the immigrants Jose and Salvador Tomas, who arrived on Babuyan Claro in 1888, have married into the Alcantara family (Batanic). However, in the next two generations of the Tomas family, the Tomas men married into other Ilokano families, even as they continued to reside in Alcantara territory (R. Maree, 1982, p. 52). These instances of intermarriage leading to both linguistic groups residing in a common territory, as well as the tough conditions on the island which required the people to rely on each other, entailed social contact across the local groups on Babuyan Claro. This

setting favored bilingualism to persist, in which Ibatan and Ilokano existed in an egalitarian relationship, as described in Section 9.2.1. In addition to ethnographic evidence, in which the dispersed residential settlements are taken to reflect how the people existed in peace, with no need for a center to protect themselves from hostile groups (R. Maree, 1982, p. 103), the relative isolation of Babuyan Claro meant little contact with the founding family's heritage communities, and the social value attached to Ilokano in the larger region of northern Luzon likely did not affect the existing language ecology in Babuyan Claro.

The kind of social relationship that existed between Ibatan and Ilokano-speaking groups was one that was substantial enough to keep community-wide bilingualism, that is, not only for Ibatan-dominant families who knew Ilokano since before their arrival on Babuyan Claro, but also for Ilokano-dominant families to a certain extent.[118] Bilingualism also facilitated the continued transfer of lexical material into Ibatan, which would eventually include basic vocabulary such as those in the domains of kinship and the physical environment (domains which are argued to be less affected by contact following Haspelmath and Tadmor (2009)), and this ultimately led to the current Ibatan lexicon consisting of an above average proportion of loanwords (Chapter 4). As Ibatan-speaking families continued to use Ilokano to communicate with Ilokano-speaking families, it is likely that they have kept Ibatan as their everyday language, thus maintaining their dominance in Ibatan. It also follows that any loanwords during this period have been fully adapted into Ibatan, both in terms of phonology and morphology, as demonstrated in Section 9.2.1.

However, this ecology would soon change as Babuyan Claro became integrated within the municipal center, Calayan, and contact with mainland Luzon increased. Individual- and community-level patterns of language use, and consequently, language dominance, slowly changed as Ilokano had come to be used in more domains of community life than Ibatan.

9.2.3   *1950s to 1980s: The rise of Ilokano*

While the setting in the early years of Babuyan Claro fostered egalitarian multilingualism, where there was little gap in the social values attached to Ibatan and Ilokano, the increased participation and integration of Babuyan Claro within the larger region led to a significant change in the language ecology of the community. The expansion of the domains in which Ilokano was used led to a significant portion

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[118] To what extent they were bilingual in Ibatan is uncertain. It is likely that they have at least developed receptive skills in Ibatan, but it is likely that they kept the use of Ilokano as their everyday language given the general division between the two ethnolinguistic groups.

of the population shifting their dominance to Ilokano, which resulted in distinct contact-induced outcomes.

From a population of around 200 in the 1950s to 472 in 1975, and then to 612 in 1980, R. Maree attributes population growth in Babuyan Claro primarily to reproduction rather than immigration, as only 4.72% of the total 612 residents were recorded as immigrants (R. Maree, 1982, p. 20). However, R. Maree (1982, pp. 43–45) also writes that transient Ilokano entrepreneurs begun to arrive on the island in 1956, with some of them establishing families on the island, and they have come to make up the minor families of Babuyan Claro at present.[119] Given incest taboos, the preference towards (linguistic) endogamy within the deme only persisted during the first two generations, with the later generations preferring to marry newcomers or those who were not in any way related to them[120] (R. Maree, 1982, p. 99).

With this change in marriage patterns, a particular surname therefore can no longer be associated with the use of either Ibatan or Ilokano.[121] To illustrate, the youngest major family, Ramos, was of Ilokano ancestry, and while they have been bilingual in Ilokano and Ibatan and still maintain their connections with relatives on Calayan Island, "all of them have chosen to marry and raise their families as [Ibatan]" (R. Maree, 1982, p. 43). It is likely that one's ties within the social network[122] have begun to play a more central role in shaping language choice and use than one's family heritage.

Ilokano started to gain a more prominent role in Babuyan Claro. There are several indications of this based on the accounts of R. Maree (1982). First was the mentioned arrival of Ilokano entrepreneurs on the island, forming the minor families of Babuyan Claro, and this points to more frequent travels to and from Babuyan Claro after a period of relative isolation during the 1920s. Second was in terms of administration, in which government agents from the municipal center Calayan have begun to impose taxes on the residents, which required the people to travel more frequently to the Ilokano-speaking center. The provincial government also started to impose laws on land ownership, where unaccounted land was sold to non-resident Ilokanos (R. Maree, 1982, pp. 53–54). Third was the central role of the

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[119] Many of them however have returned to the mainland, leaving the Ibatan women to raise the children by themselves. Thus, they cannot be considered to contribute substantially to the Ibatan culture/language (R. Maree, 1982, p. 45).

[120] This entails marrying outside the deme.

[121] Unlike in the past, where Alcantara, Derecho, and Nolasco have been strongly associated with Batanic ancestry, and the others (Elvinia, Dican, Tomas, Togade, Simon, Ramos, and Rosales) with Ilokano ancestry.

[122] This is in turn linked to settlement location, that is, the *laod* or the *daya* regions, which more strongly correlate with patterns of language use.

sitio of Idi in community life. Idi is located in *laod* which has been the center of Ilokano-speaking families, and this is where the community meeting hall, the Catholic church, and the cemetery all built. During this time, the people of Babuyan Claro were mostly Catholics, with religious activities, including mass and festivities, done in Ilokano. A final piece of evidence that points to the increased role of Ilokano in the community is education, in which the teachers on Babuyan Claro were all exclusively Ilokano immigrants.[123] This implied the informal use of Ilokano as medium of instruction. Additionally, schooling on the island was only up to Grade 3, and so, the children, at a very young age, had to move to the island of Calayan in order to continue basic education. As travel between the islands was extremely difficult that time, the students had to stay in Calayan for several years and could only visit Babuyan Claro for brief periods at a time, thus receiving more exposure to Ilokano than they would have if they were in Babuyan Claro.

All in all, the increased participation of Babuyan Claro in the cash economy and higher-level administration, and the more frequent contacts with Ilokano speakers both within and outside the community, led to the expansion of domains in which the Ilokano language was used, and the corresponding reduction in the use of Ibatan resulted in individuals and families shifting away from Ibatan to Ilokano as their dominant language. This change in individual- and community-level dominance had a profound effect on the structure of the Ibatan language.

The change in the pattern of bilingualism can be argued to have driven a different kind of lexical transfer from that of the early stages of the community. That is, the degree of phonological and morphological adaptation of loanwords into Ibatan was lessened driven by speakers who have shifted their dominance to Ilokano. In van Coetsem's (2000) framework, the contact-induced outcomes reconstructed for this period reflect imposition transfer via SL agentivity. Increased dominance in Ilokano is clearly seen in how Ilokano loanwords maintained their original phonological shape, which consequently led to word forms not aligning with the original Ibatan phonological system discussed in Section 9.2.1 (also in Section 4.2.2.1). To illustrate, the Batanic languages exhibit the palatalization of consonants contiguous with the high vowel *i*. Table 46 shows this sound change reflected in Ibatan.

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[123] It was only in the 1990s that a few Ibatans were able to finish college degrees and were thus employed to teach at the local school. Of note were Ruben Dican and Orlando Tomas, who were the first Ibatan teachers on the island.

Table 46: Palatalization of consonants in Ibatan

Change	Proto-Batanic	Ibatan	Gloss
*n > ny	*pisŋi	*pisnyi*	Cheek
*k > ch	*paniki	*panyichi*	bat
*l > d, dy[124]	*taliŋa	*tadyinya*	ear

This sound change also applied as an adaptation of older Ilokano loanwords, such as IVB *anyinyiwan* 'shadow' from ILO *aniniwan*, as discussed in Section 9.2.1. However, the continued transfer of forms keeping their original SL shape has led to a modification of the Ibatan phonological system, in which Ilokano loanwords do not exhibit the conditioned sound change, as illustrated in Table 47 below.

Table 47: Non-application of palatalization in Ilokano loanwords

Change	Ilokano	Ibatan	Gloss
~~*n > ny~~	*aninaw*	*aninaw*	to go spearfishing
~~*k > ch~~	*kibin*	*kibin*	to hold hand to guide
~~*l > dy~~	*liday*	*liday*	sadness

In addition, the sound change concerning the mid vowel *e*, described by Blust (2017) as metathesis (see Section 4.2.1.1) did not apply to newer Ilokano loanwords, as compared to older ones which still exhibit this change. Table 48 illustrates this. Older loanwords such as IVB *absog* 'a stomach is bloated' and *askad* 'to resist' from ILO *bussog* and *sekkad* respectively reflect this historical metathesis. These are considered older loanwords on the basis of this sound change.[125] More recent loanwords from Ilokano, in contrast, do not reflect this change. To illustrate, IVB *dekket* 'to stick, adhere' is identical to the original source form ILO *dekket*. In comparison, the Itbayaten form *adket*, which shows the metathesis, is taken to be the original form for the Batanic languages. As a final example, there are two forms for 'epileptic seizure' in Ibatan, which are both traced from ILO *kissiw*. The older form *aksiw* reflects the Batanic metathesis, whereas the newer form *kissiw* is identical to the source form. This

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[124] Proto-Batanic *l is reflected as either *d* or *dy* in Ibatan when contiguous with the vowels *i* and *e* (Gallego, 2014, p. 98).

[125] While the forms show a great degree of adaptation and integration into Ibatan thus making it difficult to ascertain their etymological status, these are identified as loanwords and not inherited ones either evidenced by the diagnostic reflex of PMP *R as *g* in Ilokano (and *y* among the Batanic languages including Ibatan), or that they do not share cognate forms with other Batanic languages like Itbayaten.

illustrates how loanwords can be transferred at multiple points in time, reflecting different degrees of adaptation.

Table 48: Metathesis among Ilokano loanwords

Ilokano	Ibatan	Itbayaten	Gloss
bussog	*absog*	*absoy*	a stomach is bloated
sekkad	*askad*	-	to resist
dekket	*dekket*	*adket*	to stick, adhere
kissiw	*aksiw, kissiw*	-	epileptic seizure

The most significant contact-induced sound change driven by the speakers' increased dominance in Ilokano is concerning the development of Proto-Batanic *b, discussed in Section 4.2.2.1. At present, all the Batanic language, except Ibatan, reflect the weakening of the consonant to the fricative *v*. Ibatan is also argued to have reflected this process in the past, but the influence of Ilokano, which does not have the fricative in its phoneme inventory, has neutralized this sound change. That is, as speakers became more dominant in Ilokano, their Ibatan speech started to reflect evidence of imposition of Ilokano phonological structures, such as substituting *v* with *b,* the closest counterpart that exists in Ilokano*.*

In terms of morphology, loanwords from this stage of SL agentivity appear to keep their SL morphology instead of being fully adapted into the grammar of Ibatan. This led to the development of parallel structures in Ibatan, such as the non-native durative paradigm of *pag-* existing alongside the native paradigm of *pay-*. This involves a certain degree of awareness of morphological structures among the speakers. That is, the speakers must have analogized the original Ilokano form *ag-* on the basis of the native counterpart *may-*. Since Ilokano *ag-* forms a paradigmatic relationship with the prefixes *nag-* and *pag-*, it is not difficult to analogize the form to be parallel with the native paradigm *may-, nay-, and pay-*, thus leading to the current form *mag-* in Ibatan (Section 5.2 and Gallego (forthcoming)).

In sum, the linguistic outcomes of dominance shift to Ilokano among a significant portion of speakers include Ilokano loanwords which are less adapted and integrated into Ibatan. That is, these words have not only kept their original phonological shape, but also maintained Ilokano morphological structures such as the durative affixes in verbs. Furthermore, this shift in dominance has also affected the

phonological system of Ibatan, leading to the neutralization of a historical sound change concerning the bilabial stop *b*.

Thomason and Kaufman (1988) attribute this kind of contact-induced change (that is, structural change) as an indication of extensive bilingualism and intense contact in situations of language maintenance. As for the specific agents of change, it is unlikely that the Ilokano immigrants brought these impositions into Ibatan, given the low number of immigrants at that time (R. Maree, 1982, p. 20), as well as the status of Ilokano in Babuyan Claro and the wider region. That is, Ilokano immigrants did not have the need to learn and use Ibatan, as Ilokano was used in the major domains of community life at that time. We can instead trace the locus of contact-induced language change on originally Ibatan-dominant families who have shifted dominance to Ilokano. With the social setting described at the beginning of this section, there was an apparent motivation to shift to Ilokano for many members of the community. This was particularly true for younger Ibatans, who had to live in the Ilokano-speaking municipal center of Calayan for several years to complete their schooling. However, instead of completely shifting to Ilokano and abandoning Ibatan, the speakers maintained their bilingualism in the two languages. As hinted in interviews with Ibatan speakers during my fieldwork in 2018, they chose to keep using Ibatan as a secret code among themselves when they are outside Babuyan Claro, treating bilingualism as an advantage they can wield despite their experiences of marginalization (Section 3.4, and Gallego (2020, p. 105)). The ideology in Babuyan Claro to keep a distinct Ibatan identity separate from Ilokano was also still prevalent, even during this period of increased prominence of the Ilokanos. Thus, it was speakers with increased dominance in Ilokano who have introduced Ilokano structures as they continued to use their heritage language. At the community-level, their number must have been significant enough (Thomason & Kaufman, 1988), or at the very least, they occupied a prominent position in the social network (J. Milroy & Milroy, 1985) for the entire Ibatan-speaking community to adopt these changes.

9.2.4   *1980s to 2000s: The revitalization of Ibatan*

While the vitality of Ibatan was severely threatened with the expansion of Ilokano, the succeeding phase in the history of the Babuyan Claro community saw the revitalization of Ibatan. In this period of revitalization, several socio-political changes involving administration, religion, and education (discussed in Sections 3.2 and 9.1) have led to the increased use of Ibatan in these domains. This then means that Ibatan has now regained its function as the main language of Babuyan Claro, with Ilokano as the second language of the community and the lingua franca of the wider region.

The shift in the language ecology of Babuyan Claro during this time marks a major difference in the pattern of bilingualism of Ibatan speakers from the preceding period. As argued in Section 9.2.3, the rise of Ilokano in the 1950s led to many speakers shifting their dominance to Ilokano, even as they continued to keep Ibatan as their heritage language. This preceding period of SL agentivity has introduced innovative Ilokano structures onto Ibatan, which have eventually become widespread contact-induced language change. In contrast, the succeeding period of revitalization of Ibatan entails a significant portion of the community shifting their language dominance back to Ibatan.

Present-day language use and ideologies among Ibatan speakers can be projected back to this period when the socio-political changes that underpin the current landscape of the community have begun to develop. While Ilokano keeps its prominent role in the wider region, Ibatan is used as the dominant language of individuals and the community. This is motivated by the speakers' consciousness to keep a distinct Ibatan identity, which has started to take shape in the early years of Babuyan Claro, and has culminated in the official recognition of Ibatan as a distinct ethnolinguistic group in the Philippines through the awarding of their Certificate of Ancestral Domain Title in 2007 (Section 3.2.4 and Gallego (2020, pp. 100–102)).

The Ibatan identity is one that acknowledges mixed ancestry from Batanic and Ilokano. In terms of language, the speakers have a certain degree of etymological consciousness, in that they recognize which linguistic elements are traced to Batanic or Ilokano. This is reflected most strikingly in the use of the parallel durative paradigms discussed in Chapter 5, along with other parallel native and non-native structures in Ibatan. This is related to what Matras (2015, p. 248) describes as *morphological compartmentalization*, in which (inflectional) morphology is kept along with loanwords, particularly in situations where speakers embrace their bilingual identity.

This is essentially how the structures introduced by Ilokano-dominant speakers in the preceding period have come to be in widespread use by the community. These innovative structures, instead of being treated as 'errors' in non-dominant speech (which is typical of ongoing cross-linguistic influence, as seen in Chapter 7), have developed as a legitimate feature of Ibatan as these were adopted by Ibatan-dominant speakers.

We can argue for several social factors that have driven the community-level adoption of these innovations. First and foremost is the structure of the Babuyan Claro social network following Rogers (1962) and J. Milroy (1992). This involves the position of the agents of change (known as the *introducer* of the innovation), and these were the bilinguals who had shifted their dominance to Ilokano, as well as the *early adopters*, who must have been centrally positioned Ibatan-dominant bilinguals. The social

value attached to these innovative features is also important, and this derives from the social role and position of those who have first used these features, that is, the introducers and the early adopters (Labov, 1966, 2001). If we argue that the introducers or agents of change in Section 9.2.3 were the younger generation of Ibatans who have stayed in Calayan for schooling (thereby receiving more exposure to Ilokano), they are likely to have become socially prominent when they returned to Babuyan Claro. Similarly, the early adopters, who were closely connected to the introducers (that is, families in the same settlement), were likely influential enough for the innovations to become widespread in the community. Other relevant factors cited by Thomason and Kaufman (1988) are duration of social contact (which, in the case of Babuyan Claro, involves over a century of contact history) and extensive bilingualism (which has persisted in the community, both for dominant and non-dominant speakers of Ibatan). Language ideology is an important factor in the social and linguistic embedding of the innovations. As mentioned above, the Ibatans' acknowledgement of their mixed ancestry can be argued to contribute to how the use of non-native structures have come to be treated as legitimate feature of Ibatan, and not just as a marker of non-dominant speech.

What is interesting is that this kind of ideology also reflects the speakers' layered perception of a mixed identity. When asked about mixing languages (that is, ongoing code-switching between Ibatan and Ilokano among a particular category of speakers), Ibatan-dominant speakers regard such kind of language use as *dyido* 'crooked', and that Ibatan and Ilokano should be kept separate. "You show you are from the island if you speak proper [unmixed] Ibatan" (Section 3.4). That the use of non-native structures such as voice morphology (Chapter 5) is now regarded by speakers as an intrinsic aspect of the Ibatan language, but other cross-linguistic influence such as code-switching (Section 3.3.2) and those detailed in Chapter 7 are still treated as 'errors' that need to be corrected, precisely demonstrates this layered view of mixing.

9.2.5 *Present-day: Further integration of Babuyan Claro*

As Babuyan Claro is becoming more integrated within the Philippines, the language ecology of the community is further changing, with the linguistic repertoires of individuals expanding to include other languages, most notably Filipino, the national language of the Philippines. Several significant changes that happened in the past two decades include:

- Improved geographic mobility, which allowed for more frequent trips to and from mainland Luzon, as well as the Batanes islands north of Babuyan Claro;
- Educational reforms, with the use of the mother tongue as the medium of instruction from Kindergarten up to Grade 3 as mandated by the Mother Tongue- Based Multilingual

Education Policy in the Philippines, which was institutionalized in 2009 under the Department of Education Order No. 74, and officially implemented in public schools in the country in 2012 (Williams et al., 2014), and locally, the expansion of the school to include high school in 2004, and then, senior high school in 2016; and

- Additional technological infrastructure, with the establishment of a satellite internet in 2018, and better access to satellite television over the years.

This has led to the Filipino language occupying a more prominent role for some speakers. Based on interviews with Ibatan speakers from different age groups, the younger speakers report greater proficiency in Filipino as compared to the older generations. Moreover, some younger speakers now report that Filipino, rather than Ilokano, is their dominant second language, and that they prefer to use it over Ilokano when communicating with non-Ibatans.[126]

While the influence of Filipino on Ibatan has not been fully explored in this thesis, there are several pieces of evidence that support the increasing role of Filipino among members of the community. In the domain of lexicon, Filipino loanwords occur as nonce borrowings in the speech of both dominant and non-dominant Ibatan speakers. This use of nonce borrowings is also related to the further regularization and productivity of the non-native durative paradigm in Ibatan. As described in Section 5.1.2, loanwords, regardless of the SL, and also regardless of whether they are established or nonce, are derived using this set of prefixes, forming complex loanwords in Ibatan. Thus, with the use of nonce borrowings from Filipino which are derived with the non-native paradigm, the prefixes continue to be regularized in Ibatan. As it happens, Filipino also shares identical forms with the non-native durative prefixes, namely *pag-* 'DUR', *mag-* 'AV.DUR.NTRL', and *nag-* 'AV.DUR.PFV'. Thus, it can be argued that the speakers' knowledge of Filipino contributes to how the non-native paradigm has come to be extended to loanwords beyond Ilokano.[127] Finally, in terms of patterns of language use, the younger generations' language choice in social media is indicative of a further change in their linguistic repertoire. As social media caters to a wider audience beyond the local community, many young Ibatans more frequently use Filipino when they post online (and even when they engage in posts by fellow Ibatans), and only

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[126] As noted in Footnote 30 in Section 3.2.5, the preference towards Filipino is ideological, in that some speakers consider it as a neutral language, as compared to Ilokano, which is attached with additional socio-political value in the community.

[127] Alternatively, one can argue that the non-native paradigm that developed in Ibatan has been repurposed to accommodate loanwords from other SLs. However, it is more accurate to say that Filipino has reinforced the use of the paradigm, as it shares identical forms with the non-native durative prefixes.

in very limited contexts would they use Ibatan or Ilokano.[128] It is evident in our current data that Filipino is starting to reshape the language ecology of the community, but to what extent has Filipino influenced Ibatan, and how this correlates with age and other social factors, is a subject for future research.

As for Ilokano, a small but significant portion of the community still use it as their main language, even as they learned both Ibatan and Ilokano in their childhood. In Babuyan Claro, the *laod* region continues to be strongly associated with the use of Ilokano (Section 3.3.2). The region is associated with the label *Ibakano*, referring to mixed Ibatan–Ilokano families who are outcomes of Ilokano immigrants marrying into the community, or to ethnic Ibatan families who have shifted to Ilokano in the past. *Ibakano* is a blend of Ibatan and Ilokano, which is also descriptive of how the speakers code-switch between the two languages. Ibatan-dominant speakers, particularly those from the *daya* region, regard this linguistic behavior as improper use of Ibatan, which reflects the layered perception of mixing described in Sections 3.4 and 9.2.4. However, for the *laod* families, they consider this as their natural use of their languages which need not be corrected. The difference in the language attitude between the *daya* and the *laod* speakers demonstrates the boundary between Ibatan and Ilokano, which has been maintained in Babuyan Claro since its early years.

Understanding patterns of language use in the community means teasing apart the construction of the Ibatan identity, which is argued to be a layered one that is closely tied to the history of Babuyan Claro. The mixed Batanic and Ilokano ancestry tracing back to the first families of Babuyan Claro comprises a deeper layer in the history of the community, which crystallized as the Ibatan identity with which a portion of the population identify. This is also intrinsically tied to what speakers now regard as the ancestral code, or the 'pure' Ibatan language, which likewise involves a deeper layer of mixing of Batanic and Ilokano features, as laid out in Part 2 of this thesis. This Ibatan identity and language is most strongly felt among the *daya* families, who see themselves as 'pure' Ibatans. More recent contacts with Ilokano, primarily through intermarriage leading to mixed Ibatan–Ilokano families, form another layer in the history of Babuyan Claro. Such is characteristic of *laod*, and they are treated as mixed families instead of being considered 'pure' Ibatans. Even among themselves, the *laod* families see themselves as 'mixed' even if they have lived in Babuyan Claro for several generations (Section

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[128] For example, when the speakers talk about affairs concerning (members of) the Babuyan Claro community, they would typically use Ibatan. As for Ilokano, they sometimes deliberately use it for humor.

3.3.2). This is also true for how they use their languages, which is a synchronic mix of Ibatan and Ilokano (that is, code-switching with Ilokano as the matrix language).

The divide between *daya* and *laod* is so salient in the Babuyan Claro community, as it has a direct role in shaping the language use of new Ilokano immigrants who arrive on the island in their adulthood (Section 3.3.3). Those who are closely affiliated with the *laod* cluster keep Ilokano as their main language, and only report receptive skills in Ibatan. In contrast, those who are closely affiliated with the *daya* cluster have come to use Ibatan more frequently than Ilokano, even as they communicate with fellow Ilokano immigrants. This group of speakers have learned Ibatan as part of their integration into Babuyan Claro, and while they do not regard themselves as 'pure' Ibatan, they consider themselves being part of the Ibatan community by speaking the Ibatan language.[129]

As presented in Chapter 7, evidence of imposition transfer in the speech of the Ilokano-dominant speakers constitutes the outermost layer of contact-induced features observable in Ibatan.[130] We have seen this morphologically in the variant use of the parallel durative paradigms of *pay-* and *pag-*, as well as phonologically in the realization of the coda *h*, among other examples of cross-linguistic influence. These features reflect a great deal of variation not only across individuals, but also within individual speakers. Synchronically, since these features correlate with the speaker's (changing) language dominance, they can be transient and tend to be lost as the speaker's proficiency in Ibatan increases.

At this point, it is uncertain how much this group of speakers will contribute to shaping the Ibatan language. In the past, it was ethnic Ibatans who have shifted their dominance to Ilokano that likely introduced contact-induced change in the language (Section 9.2.3). At present, however, Ilokano immigrants may play an important role as agents of language change. Some of these speakers are teachers in the local school, thus holding an influential position in the community. These Ilokano immigrants, as they marry into the community, are also the main caregivers to their children. How much they influence the speech of the wider community, and how this would potentially differ from that of the earlier phase, requires further investigation.

As demonstrated in the different phases of Babuyan Claro's history, its language ecology is extremely dynamic as it is linked with the changing socio-political landscape of the community and the

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[129] As they become more proficient in Ibatan, these Ilokano immigrants consider themselves mixed in terms of ethnicity. They also consciously use Ibatan to their children so that the children would learn it as their first language, in which they are then considered 'pure' Ibatans. This is in contrast to the speakers of *laod*, who consider themselves as mixed even after several generations of being part of the community.

[130] That is, those exhibited by non-dominant speakers who have learned Ibatan in their adulthood.

wider region. Childs, et al. (2014, p. 172) write about the fragility of the sociolinguistic contexts of small-scale communities such as Babuyan Claro. "It is these contexts that will disappear first as smaller communities become transformed by contact with larger ones." For Babuyan Claro, we see this fragility in terms of patterns of language use among speakers, which includes a period of shift in dominance to Ilokano for some speakers, but also a subsequent period in which Ibatan was revitalized and has become the main language of the community once again. At present, the further integration of Babuyan Claro within the Philippines involves people keeping a sense of Ibatan identity vis-à-vis wider settings and contexts, such as with Ilokano at the regional level, and Filipino at the national level. For some younger Ibatans, keeping their Ibatan identity, and consequently maintaining Ibatan as their heritage language, is a way to distinguish themselves from other groups (especially from Ilokano), especially when they are outside Babuyan Claro. They are more active in participating at events such as national conferences or even private ones which involve portrayal of their Ibatan identity (through clothes and language for example). For Ilokano immigrants in Babuyan Claro, they learn and actively use Ibatan as their way of becoming part of the Ibatan community. This strong sense of Ibatan identity particularly holds true for those affiliated with the *daya* cluster, who see themselves as 'pure' Ibatans speaking 'pure' Ibatan language, but with the acknowledgement that being Ibatan means having a mix of Batanic and Ilokano ancestry.

9.3   Conclusion

It is apparent that the language ecology of Babuyan Claro is by and large dependent on the socio-political landscape of the community. Linguistic outcomes of contact are underpinned by mechanisms that relate to individual- and community-level patterns of agentivity and language dominance, and in turn, these are shaped by the social context of the community. Thus, it is argued that phases of social change in Babuyan Claro are reflected as layers of contact-induced change in Ibatan (summarized in Table 44 in Section 9.2).

It is important to highlight that these apparent stages in the history of the community are not discrete. That is, the phases (except the initial phase in Section 9.2.1) gradually merge into each other, and the same kinds of mechanisms and factors that were reconstructed for each phase are still observable at present as they continue to interact to drive contact-induced outcomes. Therefore, community-level patterns are not a reflection of all individuals in the community. At present, different mechanisms of agentivity apply among different groups of speakers, yielding different outcomes:

- For Ibatan-dominant speakers, especially of *daya*, RL agentivity, which largely result in lexical transfer;

- For Ilokano-dominant speakers who have learned both Ibatan and Ilokano in their childhood, that is, those from *laod*, SL agentivity or perhaps balanced bilingualism,[131] which is reflected as code-switching between Ibatan and Ilokano, with Ilokano as the matrix language;

- For Ilokano-dominant speakers who have migrated into the community in their adulthood, SL agentivity resulting in imposition of Ilokano structures in Ibatan speech, reflected in the variant use of structures (Chapter 7)

Such synchronic patterns can be projected back to the earlier phases of Babuyan Claro history, in which we reconstruct the same kinds of mechanisms that have likely driven distinct kinds of contact-induced change in Ibatan. To further illustrate, the dynamic nature of multilingualism can be seen in items that have been transferred multiple times into Ibatan. One clear example is the complex loanword *may-tarabako*, from Spanish *trabajo* 'work' (Section 4.3). The degree of adaptation that applied to this loanword indicates that it is an early loan in the language. J. Maree et al. (2012), however, note that the younger generation now prefers to use the form *mag-trabaho*. This form is likely transferred indirectly from Filipino, which reflects the same form.[132] In addition to the use of the non-native prefix *mag-*, the form exhibits identical phonetic shape to the original SL form (Filipino *mag-trabaho*). Such differences in how the word has been adapted into Ibatan show agentivity at play; speakers with greater dominance in Ibatan are more likely to adapt a form to their dominant Ibatan phonological structure, while those with greater proficiency in the SL tend to show less modification.

One thing that is apparent in the history of the Babuyan Claro community is that the speakers have continually kept Ilokano and Ibatan distinct. This etymological consciousness shows that the speakers are aware of the differences between the languages in their repertoire, and this is reflected in how parallel morphological structures are used and maintained in Ibatan. It also indicates how this must have been an ideological process for the Ibatans as a way of flagging their mixed identity (Matras, 2015, p. 48).

Reconstructing prehistory follows the idea that the kinds of processes observable at present are the similar kinds of processes that have operated in the past. For multilingual communities, reconstructing their social past requires a nuanced understanding of the nature of language contact based on present-day language use. Context-based frameworks such as van Coetsem (2000) and Thomason and Kaufman

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[131] Contact outcomes of balanced bilingualism is still under-explored both in terms of theoretical literature and empirical case studies, and this also lies beyond the scope of the thesis.

[132] It is unlikely that it has been transferred directly from Spanish as it is a relatively recent loanword in Ibatan.

(1988) argue for distinct mechanisms that drive specific kinds of contact-induced linguistic outcomes. Such an approach allows us to identify likely agents of language change, which can then inform reconstructions of contact histories.

Ross (1997, 2003, 2013) demonstrates this, and argues for connections between kinds of contact-induced outcomes and specific scenarios. In terms of social factors, he argues that the structure of social networks results in changes such as complexification, metatypy, structural change, or simplification (Ross, 1997, 2003). As for cognitive/psycholinguistic mechanisms, he claims that there are distinct outcomes for patterns of bilingualism (either language shift or maintained bilingualism) that apply at specific life stages (either in childhood or adulthood). That is, changes that happen in childhood bilingualism are said to be different from those that happen in adulthood (Ross, 2013).

These tendencies for contact-induced language change are used as a guide in reconstructing the social history of Babuyan Claro, centering on changing patterns of agentivity, language dominance, and population structure. The advantage of our reconstruction is that Babuyan Claro is a young community with a documented history (J. Maree, 2005; R. Maree, 1982), and so, we are able to provide the specific social contexts for our reconstructions. The different layers of language change signal changing population/network structure, as well as changing patterns of bilingualism. It can be argued that the early years of the community involved a tightly knit and relatively closed network because of the preference towards linguistic endogamy, but as Babuyan Claro became more integrated within the municipality of Calayan and the wider region of the Philippines, the network became more open, which led to the development of new structures on the model of Ilokano. Bilingualism has been maintained in the community since its early years, but different patterns of dominance at different points in time have likewise resulted to different linguistic outcomes.

In the opposite direction, the case study on Babuyan Claro also allows us to critically evaluate and re-examine the assumptions in the literature. For instance, Labov (2007, p. 349) and Ross (2013), among other scholars, argue that childhood bilingualism underpins complexification in languages, in that adults typically don't learn irregular features. However, can this also be said for contact between genetically related languages, in which the languages share similar structures, making language learning relatively easier regardless of when speakers learn them? More widely, in terms of theoretical models for language contact, the contact situation in Babuyan Claro also demonstrates how it is necessary to have a more nuanced treatment of the phenomenon. That is, the distinction between outcomes of language maintenance and shift laid out by Thomason and Kaufman (1988) needs to be further teased apart, as we have seen how for each scenario, there may be different agents who bring

different kinds of language change. Finally, in terms of language change, the detailed social reconstruction for Babuyan Claro highlights an important thing that has not been so far made explicit, that is, how language change is comprised of layers, which reflect the stratigraphy of the community.

CONCLUSION

Contact-induced change in Babuyan Claro and beyond

Introduction

The field of contact linguistics has seen significant developments since the publication of the landmark studies of Haugen (1950) and Weinreich (1953). While there are many aspects to the phenomenon of language contact that are still left unresolved, recent frameworks have brought in more nuanced analyses. We have seen in the literature how purely structural explanations are insufficient in accounting for contact outcomes (cf. Campbell, 1993; Curnow, 2001), and how (contact-induced) language change is always grounded in the specific context of the individual or the community (Muysken, 2010; Thomason & Kaufman, 1988; van Coetsem, 2000) (Chapter 2).

Context-based explanations that consider both structural and social factors and processes recognize the complexity of the phenomenon, and therefore "introduce some subtlety into discussions of contact-induced language change, as an antidote to the reductionism that is prevalent in many writings on the topic" (Thomason & Kaufman, 1988, p. 47). Muysken (2010) proposes a scenario approach to language contact which distinguishes different aggregates namely the individual, the community, and wider geographic regions, corresponding to different scales, time depth, and sub-fields of linguistics. By disentangling these levels, stronger connections are made between linguistic outcomes and the mechanisms that underpin them. Moreover, approaching each level separately allows us to see how the processes in one level can scale up to other levels.

Case studies on language contact provide empirical foundation for existing frameworks, but many of them have so far focused on the contexts of large-scale, industrialized societies. While these studies have contributed greatly to our current understanding of language contact, it is important to consider a wider range of contexts from different kinds of societies to build a stronger foundation for our models. Optimistically, we have a growing body of literature that deals with language contact in small-scale societies, which involve different patterns of language use, such as egalitarian multilingualism (François, 2012) and receptive multilingualism (Singer, 2018). It is in such kinds of language ecology that we see distinct kinds of (contact-induced) linguistic outcomes, such as metatypy (Ross, 1996, 2001) and structural change without lexical transfer (Aikhenvald, 2001a, 2002), and these potentially

lead to further structural complexity in the language (cf. Meakins et al., 2019; Thurston, 1994; Wray & Grace, 2007).

This thesis contributes to the discussion of language contact and change through a case study on the contact situation of the small-scale community of Babuyan Claro. Spanning 150 years of social contact between speakers of Ibatan and Ilokano, the two main languages of the community, the thesis focuses on the linguistic consequences of contact in the community, with the following research questions:

- What are the mechanisms and linguistic outcomes of contact between speakers of Ibatan and Ilokano?
- How are individual-level bilingual innovations linked to community-level contact-induced language change?
- What do insights on contact-induced outcomes observable in Babuyan Claro at present tell us about the social history of the community?

Babuyan Claro presents a good case study for language contact in that it is a relatively young community with a documented history. Given what we know of the history of the community, we are able to investigate the development of contact-induced features in Ibatan, the local language of Babuyan Claro, within the socio-historical context of the community. That is, we can make stronger connections between contact outcomes and the mechanisms that have shaped them. This concluding chapter, shaped around the three main research aims outlined above, presents the major findings of the thesis and their contributions to wider discussions, and outlines new directions for future research.

10.1   Mechanisms and outcomes of language contact

Following the scenario approach to language contact outlined by Muysken (2010), the aggregates of the bilingual individual and the community are the relevant levels for studying the 150 years of contact history of Babuyan Claro. It is within these aggregates that contact-induced language change has developed in Ibatan.

At the individual level (Part 3), it is argued that psycholinguistic mechanisms are the main drivers of contact outcomes. Van Coetsem's (1988, 2000) speaker-based model centers on the notion of language dominance, which determines the speaker's agentivity that underpins the transfer of linguistic elements. In Babuyan Claro, evidence of cross-linguistic influence can be observed among both dominant and non-dominant speakers (Chapter 7). Ibatan-dominant speakers who are governed by RL agentivity mainly show lexical transfer, which includes the use of both widespread loanwords and nonce borrowings. However, this is not exclusive to dominant speakers, as this patterning can also

be seen among non-dominant ones. That nonce borrowings are used regardless of language dominance supports studies such as Poplack, et al. (1988) that argue for a community-level mode that influences individual-level language use. In contrast, patterns of language use are more predictable in cases of SL agentivity. This involves ongoing imposition transfer such as the absence of coda *h* (argued to be influenced by Ilokano which does not reflect the consonant in this environment) in the domain of phonology and the variant use of the parallel durative paradigms of *pay-* and *pag-* (towards the model of Ilokano, which only reflects a single paradigm, that is, *pag-*) in the domain of morphology. Such patterning is mainly observed among Ilokano immigrants who have learned Ibatan in their adulthood. However, we have also seen from attested language use that evidence of imposition transfer is not restricted to this group of speakers. Younger speakers of Ibatan who have lived away from the community for several years exhibit the same kinds of patterning in their speech. A categorical approach to language dominance would group these speakers as dominant in Ibatan. However, their language use suggests balanced bilingualism, or a shifting dominance to Ilokano (or more recently, Filipino, given the growing influence of the language among the Ibatans).

Our current findings lead us to two directions for future research. First is a gradient approach to measuring language dominance, which more accurately accounts for patterns of cross-linguistic influence. This is done by teasing apart the different components of the construct, such as language proficiency, language function and use, and language attitudes, as well as locally meaningful factors that are seen to be important influencing variables (Chapter 6). Second, there are certain kinds of structural imposition that are seen to be exclusive to Ilokano immigrants, while others are also observed among younger Ibatans. This suggests other influencing factors in cross-linguistic influence, such as the nature of the linguistic material itself (connected to notions of stability, markedness, and frequency of use), as well as social factors such as age and geographic mobility. This also indicates that there are possible differences in contact outcomes between adult learners and those who have experienced dominance shift. Thus, it is by carefully investigating how individual experiences and contexts shape language dominance, and consequently, contact-induced outcomes, that we are able to bring more nuance into van Coetsem's (1988, 2000) model for language contact.

At the level of the community (Part 2), social factors are argued to be the main drivers of contact-induced language change. Thomason and Kaufman (1988) claim that the intensity of social contact determines two distinct mechanisms, borrowing interference in situations of language maintenance, and interference through shift in situations of language shift. Depending on the intensity of contact, the two situations can lead from simple lexical transfer on one end of the scale, to structural change

on the other. The contact history of Babuyan Claro involves language maintenance, characterized by extensive bilingualism over a prolonged period. This has led to a large-scale lexical transfer (Chapter 4), which reflects two further directions of change: one that involves the adaptation of loanwords to fit into the structure of the RL, and another in which loanwords are seen to drive subsequent structural change, such as the restructuring of the RL phonology, as well as the use of (adapted) SL morphology in the RL. This latter change is demonstrated in the development of the non-native durative paradigm of *pag-* that is used alongside the native counterpart *pay-* in Ibatan (Chapter 5). In most instances, the paradigm *pag-* occurs with non-native stems, comprising complex loanwords, whereas the paradigm *pay-* occurs with native stems. The findings present a complex patterning that indicates layers of change in Ibatan. That is, different loanwords are seen to reflect different degrees of adaptation, which means that they have been transferred into Ibatan at different points in time. This is also taken to be indicative of different degrees of community-level bilingualism. In the case of morphology, hybrid formations, or combinations of native and non-native materials (either non-native affix with native stem or native affix with non-native stem) likewise reflect change driven by varying degrees of bilingualism, which are likely to have applied asynchronously.

Starting from the aggregate of the bilingual individual allows us to understand how the psycholinguistic mechanisms of agentivity and language dominance shape contact outcomes, but how this can be linked to the aggregate of the community is made complex by the added layer of social processes that prevail in the community-level diffusion and embedding of change. Muysken (2010) emphasizes the distinction between the different levels of contact, and he explores the links across these levels in Muysken (2013). This transition problem (in addition to other questions such as linguistic and social embedding) of language change, as outlined by Weinreich et al. (1968), remains a relevant issue in (socio-)historical linguistics, and investigating the connections between individual- and community-level language use in Babuyan Claro provides a good contribution to the discussion (also see Section 10.2).

A deeper understanding of the mechanisms that drive contact-induced language change allows us to make predictions about the likely direction of language change. Babuyan Claro's dynamic sociolinguistic landscape will lead to further changes in Ibatan. To illustrate, younger speakers who are more mobile, living away from the community for several years as they pursue higher education, are in more frequent contact with Filipino speakers on the mainland. It is thus expected that the influence of Filipino on Ibatan will become more pronounced as Babuyan Claro becomes further integrated into mainland Philippines. The speakers' language choice on social media such as Facebook, for example,

indicates a strong preference towards using Filipino over Ilokano. This is primarily because the people they engage with in the platform come from diverse backgrounds, where Filipino is the common language of all. Interviews among some younger speakers also reveal how Filipino is becoming their preferred second language over Ilokano, with them using the language when they talk to Ilokanos on Babuyan Claro (Section 3.3.1). Some families have also reported raising their children bilingual in Ibatan and Filipino, believing that Filipino offers more opportunities outside Babuyan Claro than Ilokano. Therefore, the growing influence of Filipino among the speakers is expected to have linguistic effects on Ibatan, primarily as lexical borrowings (which is now observed as nonce borrowings among speakers). However, if dominance shifts to Filipino among a significant portion of Ibatan speakers, it is also likely that Ibatan would reflect evidence of structural imposition from Filipino. As for the influence of Ilokano, it is likely that it will maintain a strong presence in the Babuyan Claro community, given the position of Babuyan Claro within the larger region of Calayan. Ilokano immigrants reflect varying degrees of dominance in Ibatan, but many of them[133] show evidence of imposition transfer in their speech (Section 7.4). Whether or not these features will gain a particular social value, which may drive their population-level adoption, is uncertain, but the position of these non-dominant speakers within the social network offers some clues. Some of these speakers occupy an influential position in the community, as teachers and community leaders, and within the family, the primary caregivers of their children. Thus, it is likely that they are in the position to drive further language change in Ibatan, towards the direction of their dominant language Ilokano.

All in all, this case study of language contact on the island community of Babuyan Claro contributes to our understandings of language contact and change by offering further empirical evidence for various claims in the literature. First, in terms of general structural constraints, Ibatan indeed shows how certain linguistic elements are more transferable compared to others, such as nouns over verbs (Section 4.1.1.1), and in terms of function words, discourse markers over other syntactic particles (Section 7.2.3). Morphological transfer is also not as uncommon as previously claimed in the literature, where Ibatan shows various evidence of structural transfer, not only concerning derivation, such as the durative prefixes for verbs (Chapter 5), but also those concerning inflection, such as pluralization (Section 1.2) and aspectual formatives (Sections 4.2.1.2 and 5.1.2). Moreover, structural transfer in Ibatan offers support for what Seifart (2012, 2017) argues as the Principle of Morphosyntactic

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[133] It is likely that all non-dominant speakers who have learned Ibatan in adulthood exhibit imposition transfer, but it is difficult to say this conclusively given the limited data.

Subsystem Integrity, where it is more common to transfer sets of related formatives than transferring isolated forms, as well as what Kossmann (2010) describes as Parallel System Borrowing, where language contact results in the existence of parallel native and non-native structures in the language. This kind of development also results in the further complexification of the grammatical system of Ibatan, where the parallel structures are starting to develop distinct functions. Thus, language contact may also result in complexity, adding to studies such as Bakker et al. (2011), Meakins et al. (2019), and Meakins & Wilmoth (2020).

Highly contextualized case studies such as this thesis also offers more nuanced explanations for observable contact outcomes that go beyond structural constraints. For example, structural transfer in Ibatan is indeed facilitated through the large-scale transfer of complex loanwords, as King (2000) and Seifart (2015a) claim. However, other interacting factors also played a role in driving this kind of change, such as the speakers' high degree of bilingualism in both Ibatan and Ilokano, as well as the community's ideological motivation to keep their languages distinct (Section 5.3). In terms of lexical transfer, moreover, it is not enough to say that Ibatan is a high borrower based on Haspelmath and Tadmor's (2009) cross-linguistic study, but also, a nuanced analysis of the data shows layers of language change, which signal different agents of transfer.

Moreover, this study also demonstrates an analysis of language contact between closely related languages, showing how the current methods of historical linguistics, in tandem with context-based frameworks for language contact, are sufficient to tease apart linguistic features arising from contact from those that have arisen out of inheritance (cf. Bowern, 2013; Noonan, 2010; Pat-El, 2013). That is, while Ibatan and Ilokano share several features from their ancestry under the Malayo-Polynesian branch of Austronesian, they likewise differ in many structural features, which can be used as diagnostic tools to identify native and non-native elements in the languages. In terms of finding explanations for contact outcomes, moreover, the close typological similarities between Ibatan and Ilokano can also be argued to contribute to easier processing mechanisms, such as the speakers' ease of learning the languages (especially for adult learners) as well as easier analysis of grammatical forms and patterns, and in terms of linguistic constraints, easier transfer of structural materials (Section 8.2.1). How these factors and mechanisms weigh in driving contact-induced change is a subject for future research, but one way to test this is through a path analysis approach introduced in Chapter 8.

Finally, small-scale communities such as Babuyan Claro also offer different perspectives in studying linguistic phenomena, as it is in these kinds of communities that different linguistic norms apply. Stanford and Preston (2009, pp. 6-12) identify some concepts which may differ between small-scale

and large-scale societies, namely social class, clan, communities of practice, gender and sex, marriage patterns, and the notion of a standard language. The changing landscape of Babuyan Claro shows how the community is transitioning from a small-scale society to being incorporated within the larger nation state of the Philippines. That is, the 150 years of the community reflect changing relationships between Ibatan and Ilokano (from egalitarian to hierarchical), evolving local categories (for example, heritage to Batanic- or Ilokano-speaking first families, to settlement patterns in *daya* 'east' and *laod* 'west' regions), and layered ideologies (primarily the layered views on Ibatan identity, which relate to layered perceptions on mixed ethnicities and languages) (Chapters 3 and 9). All these entail changes in patterns of language dominance and use among the people of Babuyan Claro, leading to distinct kinds of contact-induced outcomes.

10.2   The propagation of change

In Part 2 and Part 3 of the thesis, we have seen that not all individual-level innovations proceed to community-level language change. That is, instances of cross-linguistic influence in the speech of bilingual individuals are transient, and they tend to decrease as dominance in Ibatan increases. These innovative features constitute the pool of variation, from which some could potentially become widespread change in the community. The features presented in Part 2, namely the huge proportion of loanwords in the lexicon (Chapter 4) and the development of the parallel durative paradigms of *pay-* and *pag-* in voice morphology (Chapter 5) are taken to constitute a deeper layer of change in Ibatan, which began as similar kinds of innovations among categories of bilingual individuals (Chapter 7).

The transition of contact-induced outcomes from individual-level innovations to community-level change is argued to be underpinned by the same kinds of processes that underpin general language change (cf. Croft, 2000; Enfield, 2005, 2014). That is, language change is taken to be the population-level selection of a particular variant from a pool of innovations. There are different proposals for how language change proceeds, but there is a consensus in the literature that social factors such as (covert) prestige, frequency of interaction with interlocutors, and acts of identity (Croft, 2000, p. 180-181) are important factors in the diffusion of change. For contact-induced change, specifically, other social factors such as the relationship between the languages/groups in contact and speakers' attitude towards the languages are also seen to be influencing variables.

Studies such as Baxter et al. (2006, 2009) explore the weight of these different social factors in modeling the propagation of language change. The complexity of the phenomenon lies on the interaction of the multitude of factors in shaping the direction of change, and some scholars argue against predictive approaches to language contact and change (Thomason & Kaufman, 1988, pp. 46–

47). However, once we have a better understanding of the nature of the phenomena by critically evaluating existing frameworks and models through empirical data from a wider range of contexts and communities, we are able to test correlations between the different factors and the diffusion of change. An ongoing collaboration with Bethwyn Evans, Clare MacFadden, and Aditi Dubey models the propagation of contact-induced language change through path analysis, which is a statistical technique that takes the various individual- and community-level factors identified in the literature and teases apart their relationship and possible interaction to determine the pathway towards a contact-induced outcome (Chapter 8). To add further empirical support in such studies that model the transition and propagation of change, the thesis contributes to the discussion through its detailed approach to language contact that puts an equal focus on individual-level innovations and community-level change. By investigating the specific mechanisms that govern each aggregate, as well as exploring how these mechanisms likewise relate to each other, we are thus able to link the first two levels of aggregation of contact identified by Muysken (2010) more systematically.

10.3   Reconstructing linguistic history

Understanding the transition of language change ultimately informs our reconstruction of prehistory. The mechanisms of language contact that are observable at present are argued to be the same kinds of mechanisms that have operated in the past (cf. Bergs, 2012; Labov, 1994). Therefore, a detailed approach towards contact-induced language change, from its actuation in individual speech to its transition to widespread, community-level use, allows for a nuanced reconstruction of the bilingual community's social past, and this involves identifying the agents of language change, as well as the sociolinguistic contexts that underpin particular periods of change. In the case of Babuyan Claro, the linguistic features observable in Ibatan today are argued to reflect layers of language change that have been driven by changing patterns of individual- and community-level agentivity and language dominance, which are in turn shaped by the dynamic socio-political landscape of the community (Chapter 9). Distinct points in the history of the community are identified, and these correlate with speaker agentivity yielding specific contact-induced outcomes. The advantage of the current case study is that Babuyan Claro is a young community that only began over 150 years ago, and this history has been documented in previous studies (J. Maree, 2005; R. Maree, 1982). Thus, the reconstructions are grounded in the known socio-historical context of the community.

   In reconstructing distant contact histories, Ross (1997, 2003, 2013) proposes different scenarios involving population structure and nature of bilingualism that underpin distinct contact outcomes. The reconstruction of Babuyan Claro history contributes further details into these scenarios,

demonstrating how language change reflects the stratigraphy of the community, that is, distinct periods of social change.

Finally, this kind of reconstruction that highlights the ties between language and social change also contributes to how we reconstruct deeper histories, such as that of the Philippines and the wider Austronesian region (Section 1.4). The relationship of the Philippine languages remains debated at present. That is, there is still a lack of agreement whether the similarities among the languages are attributed to inheritance via a single, discrete proto-language, that is, Proto-Philippines, or as an outcome of a linkage history, coupled with continued social contact among groups (Blust, 2005, 2019; Liao, 2020; Reid, 2020; Ross, 2020; Zorc, 2020). The latter explanation argues for gradual dialect divergence and a pattern of overlapping innovations that arose out of changing social relationships among members of the dialect network (cf. François, 2011; Ross, 1988). The shared similarities among the Philippine languages are also attributed to subsequent histories of contact and a high degree of multilingualism among the speakers (Reid, 2020, pp. 384–389).

Ross (2020, p. 370) comments about how the reconstructed history of a linkage is less certain than that of a proper subgroup. Another challenge that linkages pose is disentangling its linguistic signals from those of language contact. That is, the two explanations, while sometimes invoked alongside each other, are still distinct scenarios governed by different processes, but it is oftentimes difficult to distinguish their corresponding linguistic signals, especially as they deal with contact between genetically related languages.[134] However, as mentioned in Section 10.1, it is indeed possible to do so, guided by the methods of historical and contact linguistics. This case study, while dealing with a much smaller scale and shallower time depth, is relevant in exploring such kind of linguistic diversification, in that it brings in more nuanced analyses of language contact and change. Moreover, it also highlights the important place of language contact in reconstructing linguistic histories.

Through this thesis that investigates the outcomes of language and social contact in the small island community of Babuyan Claro over its 150 years of history, we are able to witness the interplay of the different mechanisms that drive the direction of language change. It is hoped that this project contributes to wider discussions concerning language contact and change, not only as a case study concerning a small-scale multilingual community, but also one that critically evaluates existing assumptions about these phenomena. Finally, on a personal level, I hope that this study has captured

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[134] That is, certain forms are sometimes treated as apparent innovations shared by the languages but they are in fact results of language contact. Without diagnostic reflexes that indicate etymology, it is thus difficult to distinguish inherited forms from loans.

and given justice to the complex history of the Babuyan Claro community, and that it has also been able to highlight the value and position of such small-scale multilingual communities in understanding the nature of language.

Appendix A

Ibatan, Ilokano, and Filipino (based on Tagalog) are three languages belonging to the Malayo-Polynesian subgroup of the Austronesian language family. While they share general typological structures, particularly in terms of voice morphology, the languages belong to different lower-order subgroups of Philippine languages. The tables below present some features of the three languages across the domains of phonology and morphosyntax.

A. Phonology

The three languages differ in the number of phonemic consonants and vowels. Generally, the phonemes are similar to their orthographic representations, except for the conventions detailed in angle brackets <>.

Ibatan (R. Maree, 2007, p. 19): 19 consonants, 4 vowels

Consonants	Bilabial	Alveolar	Palatal	Velar	Glottal
Stop	p b	t d		k g	ʔ <->
Nasal	m	n	ɲ <ny>	ŋ <ng>	
Trill		r			
Fricative		s			h
Affricate		t͡ʃ d͡ʒ <ch> <dy>			
Lateral approximant		l			
Glide	w		y		

Vowels	Front	Central	Back
High	i	ɨ <e>	u <o>
Low		a	

Ilokano (Rubino, 2000, pp. xxiii–xxviii): 16 consonants, 6 vowels

Consonants	Bilabial		Alveolar		Palatal	Velar		Glottal
Stop	p	b	t	d		k	g	ʔ <->
Nasal		m		n			ŋ <ng>	
Trill				r				
Fricative			s					(h)*
Lateral approximant				l				
Glide		w			y			

    *a loan consonant

Vowels	Front	Central	Back	
			Unround	**Round**
High	i		ɯ <e>	u
Mid	ɛ <e>			o
Low		a		

Filipino (Schachter & Otanes, 1972, pp. 5–26): 18 consonants, 5 vowels

Consonants	Bilabial	Labiodental	Alveolar	Palatal	Velar	Glottal
Stop	p b		t d		k g	ʔ <->
Nasal	m		n		ŋ <ng>	
Trill			r			
Fricative		(f)*	s			h
Affricate			(t͡ʃ)** <ch>			
Lateral approximant			l			
Glide	w			y		

*a loan consonant

**a loan consonant, or an outcome of a phonological change involving the sequence *t + y*

Vowels	Front	Central	Back
High	i		u
Mid	ε <e>		o
Low		a	

B. Personal pronouns

The main differences across the three languages are in terms of encoding case and number.

Ibatan (R. Maree, 2007, p. 49)

	Nominative 1	Nominative 2	Genitive	Dative	Emphatic Possession
1S	yaken	ako	ko	dyaken	dyaken
1P.inclusive	yaten	ta	ta	dyaten	dyaten
1P.exclusive	yamen	kami	namen	dyamen	dyamen
2S	imo	ka	mo	dimo/dyimo	dyira mo
2P	inyo	kamo	nyo	dyinyo	dyira nyo
3S	iya	sya	na	dya	dyira na
3P	sira/sa	sa/sira	da	dyira/dira	dyira da

Ilokano (Rubino, 2000, pp. xli–xlv)

	Nominative 1	Nominative 2	Genitive	Dative	Independent Possessive
1S	siak	ak	ko, =k	kaniak	bagik, kukuak
1D.inclusive	data/sita	ta	ta	kaniata, kadata	bagita, kukuata
1P.inclusive	datayo/sitayo	tayo	tayo	kaniatayo, kadatayo	bagitayo, kukuatayo
1P.exclusive	dakami/sikami	kami	mi	kaniami, kadakami	bagimi, kukuami
2S	sika	ka	mo, =m	kaniam, kenka	bagim, kukuam
2P	dakayo/sikayo	kayo	yo	kaniayo, kadakayo	bagiyo, kukuayo
3S	isu(na)	Ø, isu	na	kaniana, kenkuana	bagina, kukuana
3P	isuda	da	da	kaniada, kadakuada	bagida, kukuada

Filipino (Schachter & Otanes, 1972, p. 88)

	Nominative	Genitive	Dative
1S	ako	ko	akin
1D.inclusive	kata	nita	kanita
1P.inclusive	tayo	natin	atin
1P.exclusive	kami	namin	amin
2S	ikaw	mo	iyo
2P	kayo	ninyo	inyo
3S	siya	niya	kaniya
3P	sila	nila	kanila

C. Nominal markers

Similar to personal pronouns, the three languages differ in encoding cases on nominals.

Ibatan (R. Maree, 2007, p. 103)

	Common	Personal
Nominative	Ø, =w	si
Genitive	no	ni
Accusative	so	
Dative	do	di

Ilokano (Rubino, 2000, p. lii)

	Common	Personal
Core	ti, dagiti	ni, da
Oblique	iti, kadagiti	kenni, kada

Filipino (Schachter & Otanes, 1972, pp. 87–95)

	Common	Personal
Nominative	ang	si
Genitive	ng	ni
Dative	sa	kay

D. Verbal morphology

While the languages generally follow the actor–undergoer voice distinction in verbal morphology, they differ in terms of the form and combinations of the verbal affixes.

		Ibatan	Ilokano	Filipino
		(R. Maree, 2007, p. 182)	(Rubino, 2000, p. lxi)	(Schachter & Otanes, 1972, pp. 283–334)
Actor		*-om-, may-/mag-, mang-*	*-um-, ag-, mang-*	*-um-, mag-, mang-*
Undergoer	Patient	*-en*	*-en*	*-in*
	Locative	*-an*	*-an*	*-an*
	Referent, Beneficiary, Theme	*i-, i-…-an, paN-, paN-…-an*	*i-, i-…-an*	*i-, i-pag-, i-pang-*
	Instrumental	*pang-, pay-*	*pag-*	*i-pang-*

Appendix B

The Multilingual Language Profile for Babuyan Claro is an instrument developed to measure the speakers' dominance in Ibatan, Ilokano, and Tagalog (Filipino), based on the Bilingual Language Profile by Gertken et al. (2014). The questionnaire is written in different languages, namely English, Filipino, Ibatan, and Ilokano. Below is the English version of the questionnaire.

MULTILINGUAL LANGUAGE PROFILE: IBATAN-ILOKANO-TAGALOG

We would like to ask you to help us by answering the following questions concerning your language history, use, attitudes, and proficiency. The survey consists of 28 questions and will take about 20-60 minutes to complete. This is not a test, so there are no right or wrong answers. Please answer every question and give your answers sincerely. Thank you very much for your help.

A. BIOGRAPHICAL INFORMATION					
Name:				Date:	
Birthday:		Occupation		Sex:	☐ Male ☐ Female
Education:	☐ Less than elementary	☐ Elementary graduate		☐ Less than HS	
	☐ HS graduate	☐ Some years in college		☐ College graduate	
	☐ Other:				

B. BILINGUAL EXPERIENCE (INPUT)
In this section, we would like you to answer some factual questions about your language history by ticking the appropriate box.

1. At what age did you **start learning** the following languages?

	☐	☐	☐	☐	☐	☐
IBATAN	Since birth	Before I started school	During elementary	During HS	During college	In my adulthood (Age: ___)
	☐	☐	☐	☐	☐	☐
ILOKANO	Since birth	Before I started school	During elementary	During HS	During college	In my adulthood (Age: ___)
	☐	☐	☐	☐	☐	☐
TAGALOG	Since birth	Before I started school	During elementary	During HS	During college	In my adulthood (Age: ___)

2. At what age did you **start to feel comfortable** speaking the following languages?

	☐	☐	☐	☐	☐	☐	☐
IBATAN	Since birth	Before I started school	During elementary	During HS	During college	In my adulthood (Age: ___)	Not yet
	☐	☐	☐	☐	☐	☐	☐
ILOKANO	Since birth	Before I started school	During elementary	During HS	During college	In my adulthood (Age: ___)	Not yet
	☐	☐	☐	☐	☐	☐	☐
TAGALOG	Since birth	Before I started school	During elementary	During HS	During college	In my adulthood (Age: ___)	Not yet

3. In **school**, what percentage of the time are/were you taught in the following languages: (use props)										
IBATAN ☐ 0%	☐ 10%	☐ 20%	☐ 30%	☐ 40%	☐ 50%	☐ 60%	☐ 70%	☐ 80%	☐ 90%	☐ 100%
ILOKANO ☐ 0%	☐ 10%	☐ 20%	☐ 30%	☐ 40%	☐ 50%	☐ 60%	☐ 70%	☐ 80%	☐ 90%	☐ 100%
TAGALOG ☐ 0%	☐ 10%	☐ 20%	☐ 30%	☐ 40%	☐ 50%	☐ 60%	☐ 70%	☐ 80%	☐ 90%	☐ 100%

4. How often do you go to church?

☐ Always	☐ Often	☐ Sometimes	☐ Rarely	☐ Never

5. How many years in total have you spent going to a church where the following languages are mainly spoken?

IBATAN	☐ I have never heard/used Ibatan in church. ☐ I have heard/used Ibatan in church for _____ years.
ILOKANO	☐ I have never heard/used Ilokano in church. ☐ I have heard/used Ilokano in church for _____ years.
TAGALOG	☐ I have never heard/used Tagalog in church. ☐ I have heard/used Tagalog in church for _____ years.

6. How many years in total have you spent in a place where the following languages are mainly spoken?

IBATAN	Babuyan Claro	☐ I was born here, and I have never left, except for brief periods of travel (ex. for vacation). ☐ I was born/I grew up here, but I don't stay here anymore. I lived here for a total of _____ years. ☐ I am not from here and I don't stay here anymore. I lived here for a total of _____ years. ☐ I am not from here but I currently live here. I have been living here for a total of _____ years.
ILOKANO	Place/s:	☐ I was born here, and I have never left, except for brief periods of travel (ex. for vacation). ☐ I was born/I grew up here, but I don't stay here anymore. I lived here for a total of _____ years. ☐ I am not from here and I don't stay here anymore. I lived here for a total of _____ years. ☐ I am not from here but I currently live here. I have been living here for a total of _____ years.
TAGALOG	Place/s:	☐ I was born here, and I have never left, except for brief periods of travel (ex. for vacation). ☐ I was born/I grew up here, but I don't stay here anymore. I lived here for a total of _____ years. ☐ I am not from here and I don't stay here anymore. I lived here for a total of _____ years. ☐ I am not from here but I currently live here. I have been living here for a total of _____ years.

7. How many years have you spent in a family where the following languages are mainly spoken? (Can tick more than one box per language)

| **IBATAN**	☐ My own family (parents/siblings/extended family). I lived/have been living with them for _____ years. ☐ I married into the family. I lived/have been living with them for _____ years. ☐ I am not related to them, but I live/d with them (ex. work, school, etc.). I lived/have been living with them for _____ years.

ILOKANO	☐ My own family (parents/siblings/extended family). I lived/have been living with them for _____ years. ☐ I married into the family. I lived/have been living with them for _____ years. ☐ I am not related to them, but I live/d with them (ex. work, school, etc.). I lived/have been living with them for _____ years.
TAGALOG	☐ My own family (parents/siblings/extended family). I lived/have been living with them for _____ years. ☐ I married into the family. I lived/have been living with them for _____ years. ☐ I am not related to them, but I live/d with them (ex. work, school, etc.). I lived/have been living with them for _____ years.

8. How many years have you spent in a work environment where the following languages are mainly spoken?

IBATAN	☐ I have never used Ibatan in my work place. ☐ I have used Ibatan in my work place for _____ years.
ILOKANO	☐ I have never used Ilokano in my work place. ☐ I have used Ilokano in my work place for _____ years.
TAGALOG	☐ I have never used Tagalog in my work place. ☐ I have used Tagalog in my work place for _____ years.

C. CURRENT LANGUAGE USE (FUNCTION)
In this section, we would like you to answer some questions about your current language use in an average week. (Use props like coloured blocks for this section.)

9. In an average week, what percentage of the time do you hear and speak the following languages with family?

IBATAN	☐ 0%	☐ 10%	☐ 20%	☐ 30%	☐ 40%	☐ 50%	☐ 60%	☐ 70%	☐ 80%	☐ 90%	☐ 100%
ILOKANO	☐ 0%	☐ 10%	☐ 20%	☐ 30%	☐ 40%	☐ 50%	☐ 60%	☐ 70%	☐ 80%	☐ 90%	☐ 100%
TAGALOG	☐ 0%	☐ 10%	☐ 20%	☐ 30%	☐ 40%	☐ 50%	☐ 60%	☐ 70%	☐ 80%	☐ 90%	☐ 100%

10. In an average week, what percentage of the time do you hear and speak the following languages with friends and neighbours?

IBATAN	☐ 0%	☐ 10%	☐ 20%	☐ 30%	☐ 40%	☐ 50%	☐ 60%	☐ 70%	☐ 80%	☐ 90%	☐ 100%
ILOKANO	☐ 0%	☐ 10%	☐ 20%	☐ 30%	☐ 40%	☐ 50%	☐ 60%	☐ 70%	☐ 80%	☐ 90%	☐ 100%
TAGALOG	☐ 0%	☐ 10%	☐ 20%	☐ 30%	☐ 40%	☐ 50%	☐ 60%	☐ 70%	☐ 80%	☐ 90%	☐ 100%

11. In an average week, what percentage of the time do you hear and speak the following languages at school/work (if applicable).

IBATAN	☐ 0%	☐ 10%	☐ 20%	☐ 30%	☐ 40%	☐ 50%	☐ 60%	☐ 70%	☐ 80%	☐ 90%	☐ 100%
ILOKANO	☐ 0%	☐ 10%	☐ 20%	☐ 30%	☐ 40%	☐ 50%	☐ 60%	☐ 70%	☐ 80%	☐ 90%	☐ 100%
TAGALOG	☐ 0%	☐ 10%	☐ 20%	☐ 30%	☐ 40%	☐ 50%	☐ 60%	☐ 70%	☐ 80%	☐ 90%	☐ 100%

12. In an average week, what percentage of the time do you hear and speak the following languages at church?

IBATAN	☐ 0%	☐ 10%	☐ 20%	☐ 30%	☐ 40%	☐ 50%	☐ 60%	☐ 70%	☐ 80%	☐ 90%	☐ 100%
ILOKANO	☐ 0%	☐ 10%	☐ 20%	☐ 30%	☐ 40%	☐ 50%	☐ 60%	☐ 70%	☐ 80%	☐ 90%	☐ 100%
TAGALOG	☐ 0%	☐ 10%	☐ 20%	☐ 30%	☐ 40%	☐ 50%	☐ 60%	☐ 70%	☐ 80%	☐ 90%	☐ 100%

13. When you buy something, how often do you hear and speak the following languages?

IBATAN	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
ILOKANO	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
TAGALOG	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

14. When you pray (by yourself or with family), how often do you use the following languages?

IBATAN	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
ILOKANO	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
TAGALOG	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

15. When you talk to yourself, how often do you use the following languages?

IBATAN	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
ILOKANO	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
TAGALOG	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

16. In an average week, how often do you use social media?

☐	☐	☐	☐	☐
Always	Often	Sometimes	Rarely	Never

17. When you use social media (ex. Facebook), how often do you read/write in the following languages?

IBATAN	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
ILOKANO	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
TAGALOG	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

18. When you watch TV/listen to the radio, how often do you hear the following languages?

IBATAN	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
ILOKANO	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
TAGALOG	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

19. In an average year, how often do you travel outside Babuyan Claro?

☐	☐	☐	☐	☐
Always	Often	Sometimes	Rarely	Never

20. When you travel, how often do you hear and speak the following languages?

IBATAN	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
ILOKANO	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
TAGALOG	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

D. LANGUAGE PROFICIENCY

In this section, we would like you to rate your language proficiency by checking the appropriate box.

21. How well do you speak the following languages?

IBATAN	☐	☐	☐	☐	☐	☐
	Not at all	Only very little	A little	Average	Good	Really good

ILOKANO	☐ Not at all	☐ Only very little	☐ A little	☐ Average	☐ Good	☐ Really good
TAGALOG	☐ Not at all	☐ Only very little	☐ A little	☐ Average	☐ Good	☐ Really good
22. How well do you understand the following languages?						
IBATAN	☐ Not at all	☐ Only very little	☐ A little	☐ Average	☐ Good	☐ Really good
ILOKANO	☐ Not at all	☐ Only very little	☐ A little	☐ Average	☐ Good	☐ Really good
TAGALOG	☐ Not at all	☐ Only very little	☐ A little	☐ Average	☐ Good	☐ Really good
23. How well do you read in the following languages?						
IBATAN	☐ Not at all	☐ Only very little	☐ A little	☐ Average	☐ Good	☐ Really good
ILOKANO	☐ Not at all	☐ Only very little	☐ A little	☐ Average	☐ Good	☐ Really good
TAGALOG	☐ Not at all	☐ Only very little	☐ A little	☐ Average	☐ Good	☐ Really good
24. How well do you write in the following languages?						
IBATAN	☐ Not at all	☐ Only very little	☐ A little	☐ Average	☐ Good	☐ Really good
ILOKANO	☐ Not at all	☐ Only very little	☐ A little	☐ Average	☐ Good	☐ Really good
TAGALOG	☐ Not at all	☐ Only very little	☐ A little	☐ Average	☐ Good	☐ Really good

E. LANGUAGE ATTITUDES

In this section, we would like you to respond to statements about language attitudes by giving marks from 0 (completely disagree) to 6 (completely agree).

		Completely disagree						Completely agree
25.	I feel like myself when I speak **Ibatan.**	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
	I feel like myself when I speak **Ilokano.**	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
	I feel like myself when I speak **Tagalog.**	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
26.	It is important for me to use (or eventually use) **Ibatan** like a native speaker.	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
	It is important for me to use (or eventually use) **Ilokano** like a native speaker.	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
	It is important for me to use (or eventually use) **Tagalog** like a native speaker.	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6

27.	I want others to think that I am a native speaker of **Ibatan.**	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
	I want others to think that I am a native speaker of **Ilokano.**	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
	I want others to think that I am a native speaker of **Tagalog.**	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6

28. How much Ibatan/Ilokano/Tagalog are you?
Colour the person with RED for Ibatan, BLUE for Ilokano, YELLOW for Tagalog.
(If mixed, ask percentage of each language/group.)
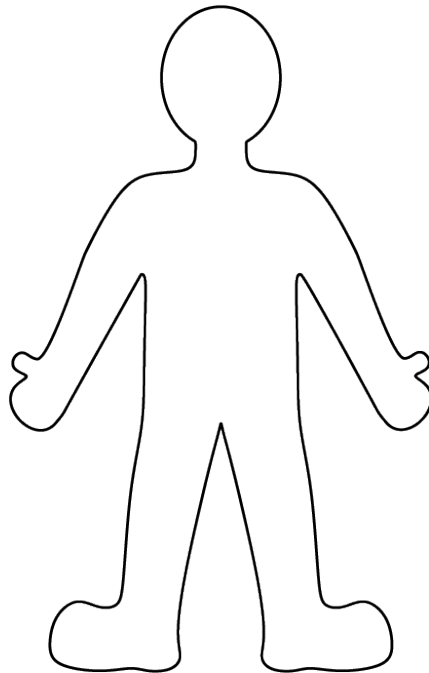
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