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## Language in Contact

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Yesterday—Today—Tomorrow

Edited by

*Katharina Bader*  
*Teresa Barberio*  
*Elisabeth Huber*  
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**Herausgegeben von**

**Katharina Bader, Teresa Barberio, Elisabeth Huber, Sebastian Lasch,  
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## INTRODUCTION

### The 24th LIPP Symposium

# Language in Contact

## *Yesterday – Today – Tomorrow*

The symposium *Language in Contact; Yesterday–Today–Tomorrow* took place June 21–23, 2017 and was organized by *The Graduate School Language & Literature Munich - Class of Language*. Scholars using interdisciplinary approaches were invited to Munich and conveyed both traditional and innovative insights into the vast field of language contact. This included both diachronic (*Yesterday*) and synchronic contributions (*Today*) as well as papers discussing the future of contact linguistics (*Tomorrow*). At the symposium, *language contact* was defined in a broad sense as the language that emerges when speakers of different languages influence one another's speech; this brought together multiple areas of linguistic study ranging from language change and language policy to language acquisition and language processing. Key to the conference was connecting what we can learn from past instances of language contact that will help us understand language phenomena in present and future research.

### Contributions

This volume begins *Yesterday* with **Marta Capano's** contribution *Languages in Sicily between the Classical Age and Late Antiquity: a case of punctuated equilibrium?* In this paper, Capano links the biological and linguistic definitions of equilibrium in her investigation of language contact in Roman-ruled Sicily leading up to the 5th-century. Rather than analyzing the effect a superstratum has on a substratum (or vice-versa), as is common in contact linguistics, Capano investigates a period of time in which she argues Latin and Greek were of equal importance. She uses epigraphic evidence from Roman Sicily as a testing ground for furthering the discussion on linguistic equilibrium.

The journal continues with an entry on *Today* by **Martin Eberl** titled *Supply, demand and... what? Why some features are not borrowed*. In this paper, Eberl introduces the concept of language change being a process of supply and demand, meaning a certain linguistic feature is lacking and therefore needed in the contact language. However, he goes on to explain it is not so simple. Eberl stresses the importance of differentiating between categorial and formal supply and demand, the former being a grammatical category and the second a functional structure. Eberl uses evidence from Tok Pisin to highlight both language-internal and extralinguistic factors in language contact ultimately leading to structural suitability and timing also being an important factor.

The next article is from **Robert Mailhammer** and **Patrick Caudal**. In Mailhammer and Caudal's paper *Linear Lengthening Intonation in English on Croker Island: identifying substrate origins*, they hypothesize that the language transfer of a contour from the Aboriginal language Iwaidja is responsible for the Linear Lengthening Intonation, or LLI, in Croker English. Mailhammer and Caudal carry out a phonetic and semantic analysis and ultimately attribute the tune that is used in the LLI to signify quantification to the contact language.

We live *Today* in an age in which social media changes how we can interact with language, giving us new platforms from which to study language contact. **Teresa Barberio** and **Sara Ingrosso**'s paper „*Ora ho una super geiles neues Fahrrad ☺*“: *Sprachkontaktphänomene am Beispiel italienisch-deutscher Chats* makes use of such a platform to explore language contact phenomena in the bilingual setting of Italian-German WhatsApp and Facebook chats. Barberio and Ingrosso shed light on the in-group dynamics, functional code-switching, and the extent to which humor can be used in social media.

All entries contributed to the language contact studies of *Tomorrow* by furthering the discussion on how contact varieties develop, whether that be by examining a state of Latin-Greek equilibrium in Sicily, adding to the discussion of necessary factors when borrowing from a source language, using phonological evidence to argue for the LLI in Croker English, or using social media as a database for multilingual discourse.

### **Thank you**

We would like to extend a thank you to the conference's keynote speakers, namely Dr. Petar Kehayov (University of Regensburg), Prof. Dr. Yaron Matras (The University of Manchester), Prof. Dr. Barbara Sonnenhauser (University of Zurich), and Prof. Dr. Harald Thun (Kiel University). Special thanks also goes to our patronage from the University of Munich. Thank you Prof. Dr. Thomas Krefeld, Prof. Dr. Claudia M. Riehl, and Prof. Dr. Elena Skribnik for your guidance. Finally, none of this would have been possible without the help and support of our graduate school coordinators, Dr. Daniel Holl and Dr. des. Katharina Jakob, and graduate school assistants, Christiane Bayer and Claudia Hinrichs.

*The Editors: Katharina Bader, Teresa Barberio, Elisabeth Huber, Sebastian Lasch, Veton Matoshi, Ann-Marie Moser and Jenny Robins*

# Languages in Sicily between the Classical Age and Late Antiquity: a case of punctuated equilibrium?

Marta Capano (Università degli Studi di Napoli L'Orientale)

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## Abstract

*Although late Roman Sicily is clearly represented by the ancient authors as a multilingual environment, the 20th-century scientific debate has proposed two divergent descriptions of the Sicilian linguistic landscape. While some scholars denied a deep Latinization under the Roman Empire, the increasing evidence of Latin inscriptions led others to hypothesize the decline of Greek. In the last decades, new approaches to bilingualism and linguistic contact, applied to antiquity, have demonstrated that many languages frequently coexist for a long time. Multilingualism has always characterized Sicily, but, before the Roman conquest, all minority languages had gradually disappeared, and the diatopic and dialectal variation of Greek converged towards a slightly Doric koivá.*

*As we can see from the epigraphic evidence, Roman Sicily was fully Greek–Latin bilingual until the end of the 5th century, and the two languages influenced each other. Latin and Greek epigraphs show similar onomastic material and phonological and morphological features, as well as a number of shared set phrases (mostly from Latin). These data are consistent with the first phase of Dixon's theory of "punctuated equilibrium", namely the equilibrium, since the two populations had a similar population, lifestyle and religious beliefs and, although Romans ruled over Sicily, Greek language and culture never lost their prestige. Even though the quantity of Greek evidence is not stable over the course of the 5th century, Sicily ultimately displays a situation of equilibrium until the end of the 5th century. Thereafter we observe a drastic decrease of Greek evidence, and, at the same time, remarkable linguistic variation both in Greek and Latin epigraphs. The most visible product of this period of language change is the rise of the Romance languages. The paper will determine whether we can analyze the Sicilian linguistic situation through Dixon's model of punctuation and equilibrium.*

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## 1 Introduction

As is well known, historical linguistics owes many concepts and models to biology, such as the family tree and the metaphor of language as an organic and living being, e.g. "dead" and "alive" languages (see Kornai 2017). There are of course problems with the integrally "biological" model for linguistics, because, as Ramat (2009: 13) argues, languages and peoples are not precisely equatable. For instance, people have two branches of ancestors, while languages usually just one.<sup>1</sup> Therefore, biology cannot be a direct model for linguistics, but rather a useful source for metaphors and multidisciplinary comparison.<sup>2</sup>

With these caveats, my aim is to propose and test a linguistic theory which has been originally borrowed from biology, namely the punctuated equilibrium model. This theory, originally formulated by Eldredge/Gould (1972), proposes that gradualism is a chimera of evolutionary paleontology and "[...] the norm for a species or, by extension, a community is

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<sup>1</sup> *Contra* Thomason/Kaufman (1988).

<sup>2</sup> Among all the contributions, I recall here Cavalli Sforza (1993), the precursor of this branch of studies.

stability. Speciation<sup>3</sup> is a rare and difficult event that punctuates a system in homeostatic equilibrium” (Eldredge/Gould 1972: 115). In other words, the gradual differentiations assumed until then by the evolutionary biologists could be an illusion, due to over-reliance on the present time. The earliest linguistic implementations of punctuated equilibrium date back to Thurston (1987) and Goodenough (1992), but these contributions focused on the progression within linguistic change. Thurston, for instance, used evidence from Papua New Guinea to suggest that gradualism is not a reliable model in linguistic change.<sup>4</sup> However, the most important theoretical development of the linguistic punctuated equilibrium goes back to R.M.W. Dixon’s *The Rise and Fall of Languages* (1997). This model has been enhanced and modified in the last decades, not always with satisfying results. Amongst the most relevant modifications to the original theory, we can list here Heath (1998), which admits just monolingualism for the equilibrium phase. Dixon (2002: 32), on the other hand, acknowledges the intense exchange of linguistic features throughout equilibrium, intended as a period in which “[...] the languages can converge to a common prototype.” When two or more languages come into contact, they usually share some linguistic traits (phonetic and phonological traits, grammatical categories, and lexemes) and, if the shared elements are abundant, they can constitute what we define a linguistic area, or *Sprachbund*. The expression “linguistic area” is used here in the sense of Alexandra Aikhenvald (2002).

[...] linguistic areas as the result of equilibrium situations (in the sense of Dixon 1997) involve long-term language contact with multilateral diffusion and without any relationship of dominance. In contrast, areas which were formed as a result of sudden migrations or other punctuations tend to involve dominance of one group over other(s) (though not necessarily across the whole area), and the diffusion is often unilateral. (Aikhenvald 2002: 9)

In the last decades, several scholars have been trying to determine whether it is possible to develop a general model of linguistic contact and, specifically, if there is a tendency for some elements to be more likely borrowed by one language than from another. However, most scholars have little faith in the so-called hierarchy of borrowability. Although Thomason (2001) has devised a borrowing scale, arguing that this hierarchy depends on the depth of the contact, nevertheless she notes that “[...] scale is a matter of probabilities, not possibilities. The predictions it makes can be violated, in principle and sometimes in fact (Thomason 2001: 70).” Dixon (2002) takes an even more skeptical stance, arguing that core vocabulary is not necessarily more likely to be replaced by loanword than non-core vocabulary. Also, pronouns, which are prototypically part of the core vocabulary, are subject to be borrowed (Dixon 2002: 396). On the same note, Curnow (2002) convincingly argues that “[...] the attempt to develop any universal hierarchy of borrowing should perhaps be abandoned” Curnow (2002: 434). As for Thomason (2001)’s question: “What can be adopted by one language from another?” the short answer is, “anything” (Thomason 2001: 63). Keeping in mind these theoretical premises, I am going to describe Sicily as a linguistic area and to test punctuated equilibrium theory on it. According to Dixon (1997: 68), four conditions need to be met in order to have a situation of linguistic equilibrium:

1. the existence two or more groups of political identities, with their own languages, traditions etc.

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<sup>3</sup> Speciation is “[t]he formation of new and distinct species in the course of evolution” (OED). <http://www.oed.com/view/Entry/185992?redirectedFrom=SPECIATION#eid> [accessed 2018-10-8].

<sup>4</sup> For more counterarguments to gradualism in linguistic change, see Nettle (1999).

2. the extent of the populations should be comparable and constant during the whole period of equilibrium.
3. technological skills, cultural and religious beliefs should be homogeneous, so that no population can overwhelm the others.
4. the differences groups should have a comparable prestige at that time.

As Dixon (2002) points out, these assumptions do not imply that no change could happen during the equilibrium phase, since “language is always changing” (Dixon 2002: 33). Instead, language change will be less severe during the equilibrium than during the punctuation phase. I argue that changes during the equilibrium phase often affect more than one language. In this sense, they lead to stability and convergence, in such a way that we can describe the former phase as ‘homeostatic equilibrium’. In other words, these are system-preserving changes. Concerning the punctuation, as Aikhenvald (2002) states, “[t]here will be a punctuation whereby one ethnic group (and its language) expands and spreads and splits” (Aikhenvald/Dixon 2002: 9). The causes of punctuation are manifold, and they can be both natural and anthropic. Among the natural reasons, we can list famine and major hydrogeological instability. Among the anthropic, technological development, territorial acquisitions as well as massive migrations and rise of aggressive tendencies, particularly invasions.<sup>5</sup> As we can see, none of these causes are of a linguistic nature.

## 2 Linguistic equilibrium in Sicily between the Classical Age and Late Antiquity

Before the Roman age, Sicily (see fig. 1 in the appendix) was a multicultural and multilingual island, as peoples spoke Indo-European (Italic languages – *i.e.* Oscan, Elymian and Sicel – and Greek) and non-Indo-European (Punic, the so-called “Sicanian”) languages. We can see reciprocal influence between Greeks and indigenous people and we have a few examples of shared formulae and morphological contact. As Poccetti (2012) showed, we are aware of several examples for de-aspiration in Greek personal names (Ευρύμακες for Εὐρύμαχος, Σκύτας for Σκύθας) and for some cases of deletion of nasals before voiced dentals, as we can see in indigenous name Νέδαι (dat.), attested also in its ‘Sabellic’ variant Νενδαι (Poccetti 2012: 75). The deletion of nasal before voiced stop is a rather uncommon phenomenon in Greek, but it is attested in Pamphylian and in Delphic inscriptions (Schwyzer 1939: 214, and Brixhe 1976), while the outcome of /nd/ in the Italic languages is /nn/. Linguistic formulae attest to the reciprocal influence between Greek and indigenous people. For instance, the Greek formula “χαίρε καὶ πει εἶ” becomes “πιβε” (Wachter 2004: 302) in local inscriptions and, instead of the ‘genuine’ Greek construction for possession, with the owner in the genitive case, we find evidence of dative construction both in Greek and indigenous material.

Another possible areal feature is the –αῖος (also in the form –εῖος, both derived from –i(y)o) suffix, which occurs with personal names of non-Greek origin and expresses the patronymic<sup>6</sup>. This feature possibly originated in the Elymian language (cf. Meiser 2012: 157) and spread through the Italic languages (cf. Italic Ματυλαῖος is attested in Italic languages, but probably stems from the Etruscan gentilicium Matulna) and Greek (e. g. Ναννελῆιος, used in a *defixio*

<sup>5</sup> According Bellwood (2002), a probable trigger for punctuation in Australia, China, and the Americas was agriculture. He suggests that we can see the Indo-European family subgroups a result of agriculture dispersal.

<sup>6</sup> Watkins (2001: 58) suggested that the diffusion of the use of relational adjectives in –i(y)o– in Aeolic Greek might be due to linguistic contact with Luwian. If this theory is correct, in Sicily we would have an analogous case of areal diffusion of the same suffix, but *contra* see García Ramón (2011) and Hajnal (2018).



from Selinunte, see Calder (1963)). The suffix  $-\alpha\acute{\omicron}\varsigma$  is attested elsewhere throughout the Greek world, but it is used to derive adjectives and it is not confined to patronymics.

Further evidence of morphological contact is provided by the nominal suffixes  $-elo-$  and  $-\tilde{a}nu-$  and  $-\tilde{\iota}\nu\omicron\varsigma$  (Pocetti 2012: 54), which are fairly common throughout the Italic languages, and appear in Sicilian names, e.g. the ethnonyms  $\Sigma\kappa\epsilon\lambda\omicron\iota$  and  $\Sigma\kappa\alpha\nu\omicron\iota$ , and the anthroponyms  $\tilde{\Lambda}\pi\epsilon\lambda\omicron\varsigma$  and  $\tilde{\tau}\iota\tau\epsilon\lambda\omicron\varsigma$ . Furthermore, we have significant evidence for linguistic contact, namely some words for measurements,  $\lambda\acute{\iota}\tau\rho\alpha$  ('pound'),  $\omicron\tilde{\upsilon}\gamma\kappa\acute{\iota}\alpha$  ('ounce') and  $\nu\omicron\mu\omicron\varsigma$  ('coin', cf. Lat. *nummus*) attested both in Greek and in some glosses from Sicel. Some Sicel glosses derive from Italic languages (*litra*), others from Greek ( $\nu\omicron\mu\omicron\varsigma$ ). Sicilian inscriptions show the progressive acquisition of local features from the Greek texts, in which we find indigenous loanwords, such as measurements. This – at the very least – proves the existence of commercial exchanges and suggests that the populations had strong interactions. Nevertheless, indigenous linguistic evidence gradually disappears starting from the 5th century (Tribulato 2012), overwhelmed by the increasing popularity of the Greek language. It is important to highlight that even the Greek language in Sicily was not homogeneous before the Hellenistic period, because there was substantial diatopic and dialectal variation: Greek colonies were Ionic (some of which specifically Euboean) and Doric (Megarian, Rhodian–Cretan, Corinthian, see Domínguez (2006)). Therefore, at an earlier stage, we can see a clear dialectal partition in the configuration of the Sicilian area. Since we are dealing with uneven evidence, we must not overgeneralize. The Sicilian colonies were not always founded by colonists from the same region of Greece and the same dialectal group, so we have to keep in mind that in Sicily sometimes we see dialectal divergences in epigraphs from the very same place and period.

Between Doric and Ionic, there are some phonetic, morphological, and syntactic differences: the Doric varieties tend to be more conservative, while the Ionic dialects tend to innovate more. Ionic show characteristic peculiarities, both phonetically (with  $\eta < \bar{\alpha}$ ) and morphologically (with 3rd sg. and 1st pl. verbal endings) level; on the other hand, Doric has a typical future ending ( $-\sigma\epsilon\omega$ ). Moreover, although the two dialects share most of their lexicon, there are still some peculiarities (e.g. the numeral for hundreds is  $-\kappa\acute{\alpha}\tau\iota\omicron\iota$  in Doric versus  $-\kappa\acute{\omicron}\sigma\iota\omicron\iota$  in Ionic; 'to want' is expressed by  $\lambda\tilde{\omega}$  in Doric and  $\beta\omicron\tilde{\upsilon}\lambda\omicron\mu\alpha\iota$  in Ionic; the Doric name  $\tilde{\Lambda}\rho\tau\alpha\mu\iota\varsigma$  vs.  $\tilde{\Lambda}\rho\tau\epsilon\mu\iota\varsigma$ ). It is important to point out that political boundaries and linguistic boundaries do not overlap. During the 3rd century, many battles radically and rapidly changed the political borders between the Phoenicians and the Greeks, but this drastic reshaping did not necessarily cause linguistic changes. As far as we can see from the inscriptions, neither the Phoenician nor the Greek evidence shows remarkable changes in that period, so we have no reason to believe that political reshaping affected the structure of the languages.

Until the 4th century BCE, Sicily shows a clear dialectal partition (see fig. 2 in the appendix), which does not prevent a mutual understanding among Greek speakers. While epichoric features were being levelled out by the Ionic-based *Koinḗ* during the Hellenistic period<sup>7</sup>, in Sicily, the Greek language slowly converged into a slightly Doric *koiné*, called *Koinḗ*, which is also attested in originally ionic colonies.<sup>8</sup> Traditionally, scholars have divided the Doric speaking area into three subgroups, based on vocalism:

- *Doris Superior* (colonies from Crete: Akragas, Gela, Butera area, Monte Saraceno, Sabucina, Terravecchia di Cuti, Montagna di Marzo, Camarina)

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<sup>7</sup> There are a few other cases in which the ionic *koinḗ* did not overtake the other *koinai* after the Hellenistic age, namely in Anatolia (Bubenik 1988: 276–7), e.g. in Side and Seleukeia, Lycia and partially from the Phrygian area, as well as in some areas of Magna Graecia, e.g. Tarentum (Consani 1995: 74).

<sup>8</sup> As Mimbrera (2008: 218) points out, almost all of Sicily adopted the “red” Doric alphabet, similar to what happened with the Great Attic and the Ionic alphabet.

One pair  $\bar{e}/\bar{o}$

< $\eta$ > and < $\omega$ > for primary long vowels and secondary compensatory lengthenings, and isovocalic contractions.

- *Doris Mitior* (colonies from Corinth and Megara: Syracuse (therefore also its colonies: Acrae and Casmenae then Camarina)

Two pairs  $\bar{e}/\bar{o}$

< $\eta$ > / $\epsilon$ :/ and < $\omega$ > / $\omicron$ :/ for primary lengthenings

< $\epsilon$ > / $e$ :/ and < $\omicron$ > / $o$ :/ for secondary lengthenings and isovocalic contractions.

- *Doris Media* (colonies from Rhodes, Megara Hyblaea, Selinunte, probably influenced by Gela and Akragas, see Arena 1989)

Two pairs  $\bar{e}/\bar{o}$

< $\eta$ > / $\epsilon$ :/ and < $\omega$ > / $\omicron$ :/ for primary and a number of secondary lengthenings.

< $\epsilon$ > / $e$ :/ and < $\omicron$ > / $o$ :/ for part of secondary lengthenings and isovocalic contractions.

After the 4th century, we find evidence of Doric dialects also in Ionic colonies, as shown by the inscriptions with Dorisms all around Sicily (see fig. 3 in the appendix). These are generally characterized both by *Mitior* vocalism and the  $-\epsilon\sigma\sigma$  pl. dative ending, showing therefore not a generic “Doric” variation, but a peculiar Sicilian Greek variety. A famous example of this variety is IG XIV 316, a 2nd–3rd century CE inscription from Termini Imerese, originally an Ionic colony. This epitaph, written in verse, has both of the common Dorisms just mentioned, Sicilian features (such as the pronoun  $\alpha\upsilon\tau\omega\bar{\nu}\tau\alpha$ ) and a false Dorism ( $\pi\omicron\iota\eta\tau\acute{\alpha}\varsigma$ , never attested in Doric evidence).

### 3 Second phase of equilibrium in Sicily. Greek and Latin in contact during the Roman Empire

After the Roman conquest, Sicily gradually underwent a ‘fluid Romanization’ (Tribulato 2012), which became more patent at the beginning of the Imperial period and, as a result, we see a radical increase in Latin epigraphic evidence in Sicily from the 1st c. CE. This increase, however, should not be interpreted as evidence for a corresponding collapse of the Greek language. Instead, the absolute number of public and private Greek inscriptions remains roughly comparable to what we have for the 2nd c. BCE, which suggests a degree of consistency.

In the last years, Lomas (2000) and Prag (2009) have argued that, when the Romans took control of the eastern part of Sicily after the Carthaginian defeat, part of the island actively resisted to the Roman conquest. In fact, many elements of the political, cultural and social life of the Greek cities maintained Greek even after the Roman conquest. When Romanization began, though, during the last centuries BCE, the Greek Sicilian élites seem to have been keen to assimilate to the Romans from a cultural point of view (*e.g.* the adoption of amphitheatres).<sup>9</sup> The Catacombs in Syracuse (3rd–6th c. CE) contain more than a thousand inscriptions. According to Korhonen (2012: 339), 87% of these are in Greek and 13% in Latin. Thanks to this evidence, we can argue that during the Late Empire in Syracuse Greek was spoken with no major social differences. Catania shows a comparable ratio of Christian epitaphs, with 79% in Greek and 21% in Latin. Instead, just 18% of the imperial inscriptions from Termini Imerese and 27% from Palermo are in Greek (Korhonen 2012: 339). As Jonathan Prag rightly observes, when a place offers more Latin than Greek inscriptions, almost by rule that place will be a Roman colony (Prag 2002: 27). Therefore, the absolute number of Latin and Greek inscriptions

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<sup>9</sup> The structures erected were typically Greek (such as bouleuteria, the council house, gymnasia and agorai, public spaces in the Greek society) and they continued to be so for some time (Tribulato 2012: 33).

should not be considered in absolute terms, but be put into the historical context. In Sicily, in fact, locations where we have more Latin than Greek inscriptions were less prominent in terms of their pre-Roman Greek epigraphic culture, whereas in the eastern part of the island the epigraphic culture was more pronounced and so we have fewer Latin inscriptions. The Romans did not remove the pre-existing Greek culture, and they did not force the local population into any form of linguistic policy, but instead Greek and Latin identities remained comparable in terms of prestige.

As Dixon (1997) states, for a condition of equilibrium it is crucial that every community has prestige (Dixon 1997: 69), and this observation is perfectly coherent in Sicilian Greek. In fact, Greek never lost its prestige for Greek peoples, but at the same time Latin became very popular and attested throughout Sicily, where bilingualism was widespread. It is hard to evaluate the extent of multilingualism in Sicily, both for the pre-Roman period and the later centuries, primarily because historical sources are contradictory. Plato (5th/4th c. BCE) seems concerned about the future of the Greek language<sup>10</sup> and his contemporary Euphorus of Cumae describes Sicily as ἐτερόγλωσσα ‘multilingual.’<sup>11</sup> A few centuries later, at the beginning of the Roman age, Cicero implies that Sicily is fully Greek and he even considers Sicilians a subgroup of Greeks.<sup>12</sup> In approximately the same time, Strabo (1st c. BCE–1st c. CE) complains about the “barbarization” going on in Magna Graecia and Sicily, but many scholars have shown that his statement is hyperbolic and not to be believed (e.g. Fanciullo 2001: 73).<sup>13</sup> Furthermore, onomastics is of little help. According to Lomas (2000),

[...] there is very little correlation between the language of a text and the ethnic/cultural origin and the legal status of the individual names” [...] but “it is clear from this eclectic mixture of names, languages and onomastic forms that there was little relation between perceived ethnic origin and cultural choice (Lomas 2000: 171).

Furthermore, even the presence of a Latin funerary inscription with Latin onomastics does not necessarily mean that the deceased person was a perfect bilingual. Still, as Wilson points out, a Latin tombstone should imply “at least a veneer of Romanization” (Wilson 1990: 313).

In the light of this evidence, we can say that, when Romanization took place in Sicily, the Greek identity was not eradicated.<sup>14</sup> We have to think in terms of two identities in contact,

<sup>10</sup> It is unlikely that the Plato referred to the endangerment of the Greek language, but instead “[w]hat it suggests is that Greek was being increasingly spoken by foreign people; and among these foreigners, nobody had an interest in learning or speaking the indigenous Sicilian languages, which had already been ousted from written usage” (Pocetti 2012: 60).

<sup>11</sup> Euphorus writes, “ἔξῃς Σικελία νῆσος εὐτυχεστάτη, ἦν τὸ πρότερον μὲν ἐτερόγλωσσα βάρβαρα λέγουσι πλήθι κατανέμεσθ' Ἰβηρικά [...]” (FGrH 70 F 137b).

<sup>12</sup> We know that, during the late Republican period, Romans used interpreters in Sicily, cf. e.g. Cicero, In Verr. III, 37. Furthermore, it is clear that Cicero considers Sicilians as Greeks in every aspect, as we read in In Verr. II, 2, 129 “Est consuetudo Sicularum ceterorumque Graecarum [...]” (“It is a custom of the Sicilians, and of the rest of the Greeks [...]”).

<sup>13</sup> Strabo, Geogr. 6, 1, 2 “[οἱ] πρότερον μὲν γε καὶ τῆς μεσογαίας πολλὴν ἀφῆρηντο, ἀπὸ τῶν Τρωικῶν χρόνων ἀρξάμενοι, καὶ δὴ ἐπὶ τοσοῦτον ἠϋξήντο ὥστε τὴν μεγάλην Ἑλλάδα ταύτην ἔλεγον καὶ τὴν Σικελίαν· νυνὶ δὲ πλήν Τάραντος καὶ Ῥηγίου καὶ Νεαπόλεως ἐκβεβαρβαρῶσθαι συμβέβηκεν [...] καὶ γὰρ αὐτοὶ Ῥωμαῖοι γεγόνασιν.” (“Later on, beginning from the time of the Trojan war, the Greeks had taken away from the earlier inhabitants much of the interior country also, and indeed had increased in power to such an extent that they called this part of Italy, together with Sicily, Magna Graecia. But today all parts of it, except Taras, Rhegium, and Neapolis, have become completely barbarized, [...] they have become Romans,” trans. Horace Leonard Jone, Loeb Classical Library).

<sup>14</sup> In the enormous debate which took place between Gerhard Rohlfs, who denied the Romanization of Sicily, and many Italian scholars (Alessio, Pagliaro, Parlàngeli and Pisani), who denied any continuity of Greek in Italy from

because Greek was probably continuously spoken until the Byzantine period. Even as a Roman Province, Sicily produced a copious body of Greek epigraphic texts, mainly private. We have hundreds of funerary inscriptions throughout the island, but also many examples of honorific decrees and curse tablets.<sup>15</sup> More significantly, we have a conspicuous amount of Greek official inscriptions even in the western part of Sicily (as in Lilybaeum, originally Punic). Lomas (2000: 169) remarks that some examples of official Greek inscriptions appear in the late Roman Empire (4th c. CE) also in Catania, Syracuse and Tauromenion, with explicit mentions of βουλή and δῆμος, the traditional political organs in the Greek πόλεις. While the Greek language and culture were receding everywhere under Roman Empire, in Sicily we have, instead, a revival of Greek identities. Furthermore, the Greek language in Sicily has preserved, at least partially, both genuine and hypercorrected forms of Dorisms. This phenomenon has been explained by Willi as a typical colonial feature (cf. Willi 2008), and we can argue also that Sicilian Greeks have possibly used Doric as a device for “nationalistic” pride and resistance under the Romans. In the first centuries of Roman domination, Doric spread across Sicily, but, starting from the first to second centuries CE, we also see that Sicilian Greek and Latin inscriptions show some common traits. This convergence has to be explained through a situation of Greek–Latin bilingualism, which must have involved the entire island. Of course, as we should not assume that in Sicily there was bilingualism everywhere in the same way, as some areas better maintained the Greek language; for instance, the southeastern corner of Sicily remained more deeply Hellenized. Greek and Latin, because of their common Indo–European origin, share many grammatical features and a part of the lexicon, and their similarities increased because of the important political and cultural relationships that existed between Greece and Rome.

I suggest that, within a greater context of linguistic exchange, Christianity also contributed to make Sicily linguistically more uniform. The diffusion of Christian cults, in addition to creating a common ground of shared beliefs, also favored linguistic exchanges. This situation came about because these exchanges established a new common religious lexicon. Also, one often finds shared Graeco–Latin formulae in Sicilian funerary inscriptions from the late antiquity. I mention here just a few of examples of this phenomenon, such as the Latin formula *sibi et suis*, which has a parallel in the Greek ἐαυτοῖς ἐποίησαν καὶ τοῖς ἰδίοις ‘for themselves and their family’, and ἡ μακαρίας μνήμης, calque on Latin *beatae memoriae* ‘(person) of blessed memory’. This scenario suggests that, in a situation of bilingualism, two or more populations closely genetically–related populations with similar cultures can become closer and more similar, sharing new sets of formulae and vocabulary. Dixon (1997) described a more extreme version of the equilibrium, according to which “[i]f two languages have a very similar set of grammatical morphemes and about 50% [of their] vocabulary in common, they might well merge” (Dixon 1997: 73). Of course, Greek and Latin never merged, but they surely show convergence, in a similar way as we see it happened between Greek and local languages in Sicily before the Roman period. To sum up some of the most interesting phenomena of interference between Latin and Greek, I list:

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the foundation of the Doric colonies until the Middle Ages, I think that a less extreme assumption – like those proposed by Kapsomenos 1958 – could be more reliable. On this contentious topic, I refer to Wilson (1990) “Romanization certainly made progresses in some parts of the island, especially on the north and east coasts [...] but Sicily never become a fully Romanized province” (Wilson 1990: 329). See also Lomas (2000) and Korhonen (2011).

<sup>15</sup> In favour of the authenticity of this renaissance, we can mention a group of magical texts edited by Bevilacqua/Giannobile (2000), dated to the 5th/6th c. CE, with many examples of a spoken Greek (late vocalism; suppression of the vocative; common substitution of the dative with a genitive case).

- a. graphic confusion due to the Greek writing, *e.g.* P instead of a R (cf. Nenci 1991: 811–3);<sup>16</sup>
- b. phonetic interference, as in Ἰεναρῖος, Greek form for the late Latin *Ienarius*;
- c. semantic interference, as the apposition υἰός to personal names, as a calque on Latin *filius*;
- d. formulae, such as πλῖον ἔλαττον, based on plus minus.

There is much evidence which suggests that Sicily, before the Middle Ages, went through a process of convergence between Greek and the indigenous languages, at an earlier stage, and between Greek and Latin later on. This scenario is comparable to Dixon’s phase of language equilibrium.

#### 4 Greek and Latin in Sicily at the end of the Roman Empire. A case of punctuation?

Unfortunately, the scanty epigraphic evidence from the first centuries of the Middle Age makes it difficult to claim that the Sicilian linguistic landscape after the 5th c. CE is to be interpreted as a case of punctuation, as in Dixon’s theory. Punctuation happens when a previous equilibrium ends and “new languages develop at a steady rate” (Dixon 1997: 73). This occurs for a number of different reasons (see above), most commonly invasions and major political change. In Sicily, at the end of the Roman Empire, the Goths invaded the island, but there is very little linguistic evidence of this domination (Varvaro 1981). Starting from the 5th c. CE, Latin and Greek inscriptions drastically decrease (Prag 2009: 22) and “the surviving lapidary epigraphic evidence from Sicily is less abundant than, *e.g.*, in Central Italy or in North Africa” (Korhonen 2010: 120). We cannot argue, *e silentio*, that the languages also disappeared, but we see that the Greek language after the 5th century – and even more after the 6th c. CE – is scarcely standardized, with many vulgarisms and Latinisms. Latin inscriptions from the same phase display comparable cases of vulgarisms. The most significant event in Sicily for this period was the Gothic conquest, at the end of the 5th c. CE.

However, although the Goths ruled Sicily for 50 years, the domination has left minimal evidence. In 535, Sicily was conquered by the Byzantines, who were Greek-speaking and significantly influenced by Latin inheritance with regards to government and culture. Nonetheless, their government did not assure the persistence of a linguistic equilibrium. Since Roman hegemony did not eradicate Greek language and culture, I suggest that the fall of the Roman Empire dismantled the Sicilian linguistic phase of equilibrium, because, from the 5<sup>th</sup> c. CE onwards, the epigraphic evidence (cf. the epitaph of Zoe, *infra*) suggests that there was remarkable diatopic and diachronic variation, both in Latin and in Greek. In Dixon’s theory, punctuation is triggered by traumatic events and we can surely list the fall of Roman Empire as such. The most relevant linguistic consequence has been the fragmentation of Late Latin into many different varieties of languages. Of course, the process must have started before the fall of the Empire, but the lack of a centralized power surely favored the diffusion of the Romance languages. Along with the collapse of Roman power, the linguistic unity was dismantled across the empire but this fragmentation alone is not sufficient enough to define this phase as punctuation. To determine whether we can conclusively describe the linguistic situation in Sicily at the end of the Roman Empire, we need major linguistic evidence, which for the 6th–7th c. CE is noticeably missing. Among the few extant documents, I will mention here the so–

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<sup>16</sup> Cf. the tombstones of *Cornelius Epaφruitus* (CIL X 7396) and of *Iulia Eutvχη* (CIL X 7072). CIL X 7396, which Bivona (1994: 265) considers Roman, has been correctly proved as Sicilian by Korhonen (2002: 17).

called ‘Epitaph of Zoe’, (De Vita 1961 = Manganaro 1963: 571, fig. 33 = AE 2004: 662 = ISic0815) a 5th– or 6th–century CE funerary inscription from Ragusa:

(1)  
*Super lo–*  
*cellu u–*  
*be iaceo e–*  
*go birgo*  
*nomi*  
*ne zoe*  
*anoru*  
*cique(n)ta me*  
*sa ζ`.*  
*aiura–*  
*ti per de–*  
*u e infero–*  
*s nemi–*  
*nui lice–*  
*at aperi a<r>*  
*ce ipa–*  
*tu.*  
*v(ivas) s(emper)*<sup>17</sup>

“On the tombstone, where I lie, as a virgin, with the name Zoe, fifty years and 6 months old, swear by God and the *inferi* that no one is permitted to open the coffin of my tomb. May you live forever.”

We see several vulgarisms, which we can classify into two groups. Firstly, the common ones, widespread in the entire romance world, such as loss of final *–m* (*deu* < *deum*), confusion between /b/ and /v/ and between unstressed /e/ and /i/, and degemination of the nasals (*anorum* for *annorum*). Interestingly enough, there is no consistency in the graphic conventions, as we can see from the treatment of the unstressed vowel in *ube* in comparison with what we have in *nomine*. The ending lines of this inscription have puzzled many editors, who have tried to read the final sequence as “*aperire ceipa*”, as a corruption of “*aperire cupa*” (Ferrua (1989: 137 no. 510), Manganaro (1993: 589–91) and Korhonen (2010: 132–133)), or “*aperire a<r>ce ipatu*” “*aperi arce hypaton*” (Varvaro 1981: 78–80), both meaning “to open the tomb”. The first reading would have a parallel (κοῦπα) in a Sicilian inscription from Catania (e.g. IG XIV 566), but this phonetic development is rather unparalleled. The latter, on the other hand, would be the Latin outcome of an unattested masculine noun \*ῥπατος. Both hypotheses show no parallel in the latter Sicilian varieties. As Varvaro (1981: 68–70) noticed, the language of this inscription is not congruent with the posterior characteristics of Romance languages in Sicily, because there is no common lexicon or significant morphological outcome exclusively shared from these two stages of Sicilian linguistic history. An apparent contradiction could be the development /dj/ > /j/, attested in this inscription and also in medieval and modern Sicilian. This feature, though, is widespread in other southern varieties, and therefore cannot prove continuity between Late Latin and the later Romance languages in Sicily. I am not implying that Greek or Latin suddenly disappeared from Sicily, or that the modern Romance varieties in Sicily were just the result of

<sup>17</sup> The text is from Varvaro (1981: 68–70), with some modifications.

the so-called ‘Norman colonization’ in the Middle Ages.<sup>18</sup> Modern Sicilian has to be considered the final outcome of the local Latin language, but it is undeniable that, by the end of the Roman Empire, the linguistic stability which I have tried to analyze in terms of Dixon’s equilibrium comes to an end. I am tempted to read this discontinuity as Dixon does with an analogous case between the so-called ‘proto-Australian’ and modern languages (Dixon 1997: 89–93), interpreting it as a case of punctuation, but I am aware that we are dealing with insufficient evidence.

I have tried to demonstrate that we should not be afraid of applying theories elaborated for remote linguistic areas to the “classical” languages, even if at times not all results are fully persuasive. I hope that Sicily has been a good laboratory for this linguistic experiment.

## Appendix



Figure 1: Languages in Sicily before the 5th c. BCE

<sup>18</sup> On this problem, I refer here to Fanciullo (2015). The “Norman colonization” of the 12th–13th (and maybe 14th) centuries, originated from northern Italy and the dialects imported to Southern Italy were actually varieties of Ligurian, Piedmontese, and sometimes also Provençal and Franco-Provençal (Fanciullo 2015: 134).



Figure 2: Doric and Ionic settlements in Greece in the Classical period

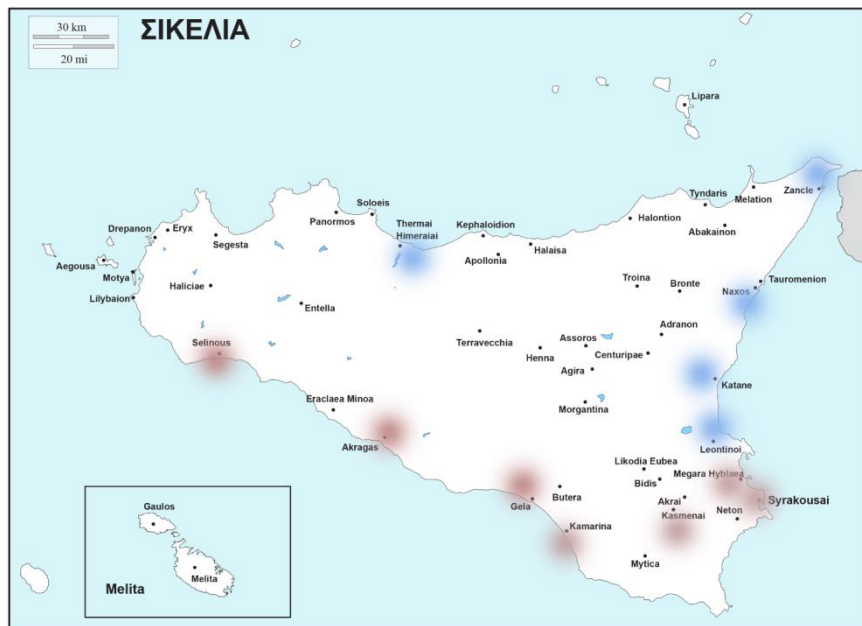


Figure 3: Dialectal distribution of the Greek colonies in Sicily before the 4th c. BCE



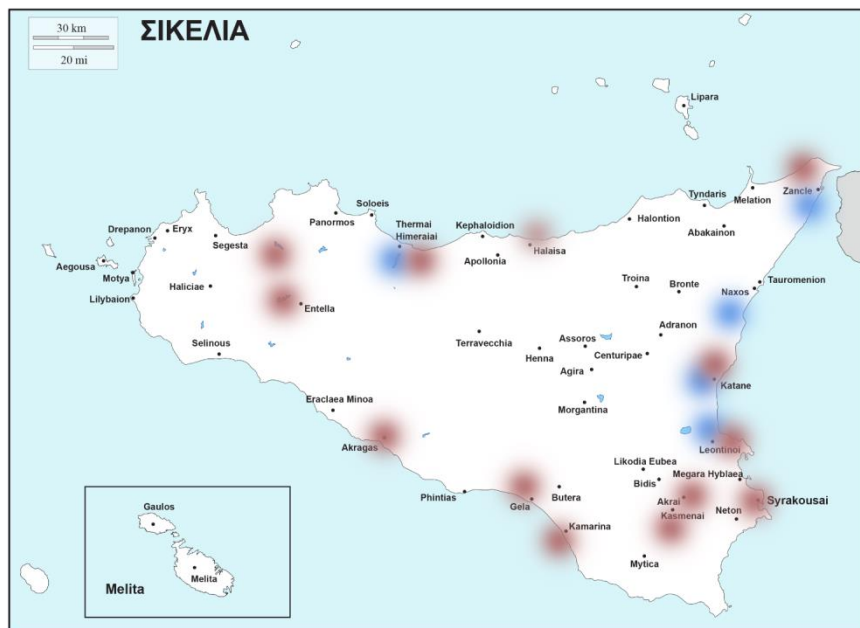


Figure 4: The spread of Doric features after the 4th c. BCE

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# Supply, demand and... what?

## Why some features are not borrowed

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### Abstract

*The canonical picture of how creoles emerge through language contact involves the source languages – superstrates, substrates and adstrates – providing the necessary grammatical and lexical input to shape emerging structures (Winford 2009: 22ff.). However, the lack of a certain grammatical feature in an emerging contact language does not automatically lead to its adoption from a source language, even though it might be available (Wurm and Mühlhäusler 1985: 114f.). Tok Pisin, the creole serving as Papua New Guinea's lingua franca, provides two examples.*

*I argue that there were language–internal and language–external influences impeding the adoption of these grammatical features in the forms present in the source languages. Showing how these impediments differed at various stages and how language–external and language–internal factors either worked in concert or against each other will help illustrate the complex origin of contact languages.*

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## 1 Introductory Remarks

The origin of this paper can be traced back to one of the "so what do linguists actually do all day" conversations that everyone in the field – and, I suspect, in many other scientific fields – is overly familiar with.<sup>1</sup> In this case, I was trying to explain how linguists working in language contact frequently will attempt to trace back elements of a contact language to their respective source languages, or how, vice versa, various source languages combine to contribute different features to an emerging contact language. This prompted my interlocutor to suggest that this phenomenon was "basically a supply and demand situation", with the emerging language having a need or demand for a feature, and the various contributing languages playing the role of supplier. This might seem like a reasonable assumption at first. However, just like in economics, breaking down complex processes into a simple equation bears the risk of glossing over important parts of said processes – such as why certain linguistic features do not get borrowed in spite of both supply being available and demand being present.

The simplified picture of how pidgins, creoles and other contact languages emerge through language contact involves the source languages – superstrates, substrates and adstrates – providing the necessary grammatical and lexical input to create and shape emerging structures (Winford 2009, 22ff.).<sup>2</sup> In other words, both sides of the form–function equation stem from items, patterns and structures that exist within the source languages before they are introduced to the emerging language. An example is provided by the parts of the pronominal system of Jamaican Creole. Most of its elements can be traced back quite easily to that of its superstrate English, given that they are either entirely identical or at least very similar in either form and function, or both, as shown in Table 1 below:

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<sup>1</sup> The current version of this paper, on the other hand, owes much to the extremely helpful feedback of two anonymous reviewers. I would like to thank them both for their input and suggestions.

<sup>2</sup> Or, to put it more accurately, for the speakers of the emerging contact language to create and shape these structures based on the structures of the languages they employ in the contact situation.

Table 1: Pronoun system of Jamaican Creole, adapted from Winford (2009, 323)

Number, person	Subject	Object
Sg, 1st person	mi	mi
Sg, 2nd person	yu	yu
Sg, 3rd person	im	im
Pl, 1st person	wi	wi
Pl, 2nd person	unu	unu
Pl, 3rd person	dem	dem

There is, however, no requirement for both form and function of a linguistic item or pattern to stem from the same source, nor is there one for the demand and/or supply to be introduced by the same source. A distinction has to be drawn between *categorial* supply and demand on the one side and *formal* supply and demand on the other. The former refers to the need of a language system to express a certain concept or category – such as past or future – (or the supply of such a concept or category by another language system). The latter refers to the demand for a structural means of expressing said function (or the supply of a form which expresses the function). While it is possible that a source language provides both categorial and formal supply, it is equally possible that contact with a source language only triggers categorial demand in the target language, but the structural means are provided by another language or the material already existent in the emerging contact language itself, as we will see below. In general, there are three common possible versions of a contact situation as described here<sup>3</sup>. First, for a source language to provide both formal and categorial supply for a concept or category not present in the target language, and for the target language to receive both from the source language. Second, a case in which the source language provides formal and categorial supply for a concept or category not present in the target language, triggering categorial and formal demand in the target language. However, formal supply in this case is sought elsewhere (e.g., a third language) or formal demand solved through innovation within the target language. Third, a case in which the target language already has formal supply for expressing a concept or category, which would mean that neither formal nor categorial demand exist. Borrowing formal material from the source language would, in this case, mostly happen due to language–external factors, since existing material would have to be replaced through the borrowing process.

The outcome of individual contact situations differ greatly as to how much material and which items, patterns or constructions each source language provides, with one distinction in outcomes being drawn between radical, basilectal and intermediate creoles (Winford 2000: 214f.). Said distinction depends on how much the structures of the contact language still resemble their superstrates. This factor is, in turn, dependent on how much of its grammatical and lexical structure the emerging contact language takes from each of its super-, sub- and adstrates, respectively. The less material is taken from the substrates, for instance, the more closely will the contact language resemble the superstrate and vice versa. The balance of these contributions is determined by a number of factors, including whether a grammatical function is available in none, one or more of the source languages. Even when multiple sources are available, however, the lack of a certain grammatical feature in an emerging contact language (i.e., the "demand") does not automatically lead to its direct adoption from a source language. Instead, such an emerging language may opt for one of three possible alternative strategies:

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<sup>3</sup> Additional permutations of the categorial/formal supply/demand equation do, of course, exist, but these three shall suffice for the present argument.

- Forego grammatical encoding of the function
- Encode the function grammatically by using different structural material (innovation by recombination)
- Create new grammatical structures to encode the function (complete innovation)

Referring back to the notion of categorial and formal supply/demand above, categorial demand in the emerging contact language is triggered either by contact with one or more of the source language(s) – which provides categorial supply – or by internal developments of the contact language itself. Once categorial demand is present, formal demand follows. It can either be discarded (option 1 above), filled by formal supply from the source language(s) (option 2 above) or by innovation in the emerging language (option 3 above).

The notion of formal supply and demand, does, of course, also appear in works on multilingualism. Riehl (2015: 108 ff.), citing Matras (2009), for instance, differentiates between *matter borrowing* and *pattern replication*. The first relates to the transfer of linguistic matter, i.e. morphological or lexical material, from one language into the other. Pattern replication, on the other hand, refers to the borrowing of more abstract structures from one language into the other, such as the use of pronouns in pro-drop-languages. In terms of the distinction made between formal and categorial supply and demand above, both matter borrowing and pattern replication occur on the formal level. Whether grammatical markers are borrowed directly in form, as in matter borrowing, or whether more abstract structures such as word order are borrowed, both are formal expressions of a categorial need. The distinction here is made on whether such borrowing happens on a paradigmatic level (matter borrowing) or a syntagmatic level (pattern replication).

Tok Pisin, the contact language now serving as lingua franca in Papua New Guinea, provides two examples of situations in which the forms of grammatical structures were not (directly) taken from either the super-, sub- or adstrates: the nominal plural marker *ol* and the preposition *wantaim*, which, in modern Tok Pisin, serves both a comitative and an instrumental function. Both are innovations by recombination within the emergent language system of Tok Pisin. In other words, forms which served different functions in the superstrate English have come to be used in innovative functions within Tok Pisin.

## 2 The insufficiency of supply and demand

Nominal plural marking will serve as the first example. As Mühlhäusler (1985: 114) notes, morphological plural marking was available to be borrowed both from English and later from German during the development of Tok Pisin. Despite this viable supply of both form and function, it was not adopted as a productive feature. In modern Tok Pisin, it is merely present in fossilized lexical forms such as *anis* (ant) or *binen* (bee). Neither did Tok Pisin adopt the reduplication strategy of plural marking present in its Melanesian substrate languages, such as Tolai. Instead, it eventually came to expand the function of *ol*, the third person plural pronoun, to serving as a nominal plural marker as well. As examples 1 and 2 below show, the aforementioned fossilized lexical forms are now used with the nominal plural marker *ol*, indicating that the plural suffixes did not become productive and the plural morphemes have become fully fossilized.<sup>4</sup>

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<sup>4</sup> For a table of abbreviations used to indicate grammatical categories in this paper, see the appendix.

- (1) *No, ol anis i kaikai.* (ZC 00190)  
 no PL ant PM eat  
 No, the ants ate.
- (2) *Orait ol binen i kamap.* (ZC 03600)  
 alright, PL bee PM appear  
 Alright, the bees appeared.

This observation has Mühlhäusler raise two important questions. First, why did Tok Pisin not borrow grammar from its contact languages when its speakers clearly had access to them, as evidenced by the fossilized forms? And second, why do grammatical rules such as –s pluralization not get borrowed until very late in the development of the language? Both of these questions will be explored below, after a brief examination of the issues with the emergence of *wantaim*.

As mentioned above, *wantaim* is the comitative and instrumental preposition in Tok Pisin. Examples 3 and 4 below show it being used in both of these functions:

- (3) *Mangi bebi boi, ol i go wantaim papa, na  
 young– baby boy 3PL PM go PREP–C father CONJ  
 people  
 liklik meri olsem ol i go wantaim ol mama.  
 small woman likewise 3PL PM go PREP–C 3PL mother  
 The young people, the baby boys, they went with the father, and the small girls  
 likewise went with the mothers.*
- (4) *Karim wantaim bet na ol wokobaut nau, wokobaut  
 carry PREP–I stretcher CONJ 3PL walk–around now, walk–  
 around  
 i go na ol singaut.  
 PM go CONJ 3PL call–out  
 They carried him with a stretcher and walked around now, they walked around and  
 they called out.*

As per these examples, modern Tok Pisin’s *wantaim* seems functionally (or categorially) identical to English *with*. Structurally (or formally), however, *wantaim* seems to be adapted from English *one time*. Thus, its functions in modern Tok Pisin are not immediately apparent from the perspective of an English speaker. To her, it might seem peculiar that what looks like a temporal expression is being used to serve a comitative or an instrumental function. One possible explanation for this phenomenon would be that the form *time* itself could have been borrowed into Tok Pisin with a wholly different meaning, or stem from a different source language that happens to have a similar form attached to a different meaning. However, this is not the case. As is made evident by the example below, aside from *wantaim*, *taim* is used exclusively with a temporal meaning across the language (Mühlhäusler 2003, 267 & 274).<sup>5</sup>

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<sup>5</sup> Glossing by source and adjusted for consistency within present paper, translation mine.



- (5) *Mi stori ia pastaim. Bai yumi go lo moningtam.*  
 1SG story FOC first FUT 1PL-INC go PREP-L morning  
 First, my story. We will go in the morning.<sup>6</sup>

Further indication that Tok Pisin's comitative/instrumental preposition is an unusual case is found by comparing the source of comitative and instrumental prepositions of the 25 English-lexified languages in the Atlas of Pidgin and Creole Structures (Michaelis et. al, 2013):

Table 2: Instrumental and comitative prepositions and their sources in selected English-lexified languages in the APICS data

Language	Comitative	Instrumental	Origin
Sranan	nanga	nanga	English (along)
Saramaccan	ku	ku	Portugese (com)
Jamaican	wid	wid	English (with)
Bahamian Creole	with	with	English (with)
African American English	with	with	English (with)
Chinese Pidgin English	long	with	English (along, with)
Tok Pisin	wantaim	long, wantaim	English (along, one time along)
Bislama	wid	wid	English (along, with)
Hawai'i Creole	wid	wid	English (with)

As can be gleaned from the abridged Table 2 above<sup>7</sup>, the common trend among English-lexified creoles is to adopt English *with* for the comitative and instrumental, with (*a*)*long* being the prime alternative choice. Even Bislama, which is so closely related to Tok Pisin that some have called it dialects of the same language, uses *wid*. In addition, to the best of the author's knowledge, there is no other case in which a temporal construction has been grammaticalized to serve as a comitative or instrumental preposition. As with the example of *ol*, the borrowing and grammaticalization process in the emergence of Tok Pisin seems to run counter to crosslinguistic tendencies and expectations. So how come these two grammatical items – *ol* and *wantaim* deviate in this regard?

### 3 The emergence of *ol*

In order to explain why Tok Pisin, or rather, its speakers, have opted for the path less travelled by, it is necessary to look at the diachronic development of both *ol* and *wantaim*. In varieties of the language dating back as early as the 1940s, the first already serves as both a plural marker and a third person plural pronoun. This is illustrated by example 6 below, which is taken from a September 1935 issue of *Frend bilong mi*, a Catholic Mission publication, and quoted from Mühlhäusler (2003: 71)<sup>8</sup>:

<sup>6</sup> In Tok Pisin, both *lo* and *long* are forms of the same preposition with an abstract spatial meaning roughly equivalent to English *at*. At various developmental stages of Tok Pisin, forms *long* can also be used with temporal expressions, equivalent to English *at night*.

<sup>7</sup> For the full table of all 25 data points, see the appendix.

<sup>8</sup> Glossing of original source adjusted for consistency within present paper, translation mine.

- (6) *Taim ol misinare i kamap long Bismarck, ol*  
 when PL missionary PM arrive PREP-L Bismarck PL  
*kanaka i no lukim waitman yet, nau ol*  
 native PM NEG see whiteman yet then 3PL  
*i kolim ol pikinini 'Father'.*  
 PM call PL children father

When the missionaries arrived at Bismarck, the natives had not seen white men yet, they then called the children 'Father'.

Mühlhäusler (2003: 9f.) identifies four stages in the development of Tok Pisin: the jargon stage, the stabilisation stage and the early and late expansion stage, respectively. In these, pluralization developed as follows<sup>9</sup>:

- Jargon stage: no formal plural marker exists, category of plurality expressed through lexical means

- (7) *Plenty little road along island.*  
 many small road PREP-L island  
 There are many small roads on this island.

- Stabilisation stage: *ol* is used as plural pronoun. Nominal plurality is implied by context (example 8, taken from Mühlhäusler 2003: 46) or indicated by lexical means (e.g., *plenty* in example 9)

- (8) *Yu no lukaitum kumul yu no sutim.*  
 2SG NEG see bird 2SG NEG shoot  
 You will not find birds of paradise, you won't shoot them.

- (9) *Planti liklik rot i stap long ailan hia.*  
 many little road PM exist PREP-L island here  
 There are many small roads on this island.

- Early expansion stage: Nominal plurality is expressed for animate nominals, especially in subject position, by preceding *ol*. Note that in example 10, the subject is inanimate and therefore lacks the pluraliser.<sup>10</sup>

- (10) *I gat planti liklik rot long despela ailan long go*  
 PM are plenty little road PREP- DT island PREP- go  
 L F  
*insait long en.*  
 inside PREP- 3SG  
 D

There are many small roads on this island to go further inland.

<sup>9</sup> For all four examples featuring roads on islands, glossing of original source adjusted for consistency within present paper, translation mine.

<sup>10</sup> An example that illustrates the difference even more clearly can be found in Verhaar (1995: 348): *Ol pik I save bagarapim garden*, which Verhaar translates as 'Pigs usually destroy gardens'. Note how the animate pigs in subject position exhibit plural marking, while the inanimate gardens in object position do not.

- Late expansion stage: Nominal plurality is expressed for animate as well as inanimate and abstract entities and in subject position as well as oblique case etc., by preceding *ol*.

(11) *Lo tesela ailan i gat planti ol liklik rot lo*  
 PREP-L DT island PM are plenty PL small road PREP-F  
*go insait lo en.*  
*go inside PREP-D 3SG*  
 There are many small roads on this island to go further inland.

In none of these stages, neither formal plural marking by suffixation or any other morphological means was productive. In theory, there are several possible explanations for Tok Pisin not adopting morphological plural marking in favour of expanding the functions of *ol*: the input could have been absent or insufficient. There could have been interfering input from other substrates, for instance the local Papuan languages. The input could have been incompatible with the emerging system. The first explanation we might discard in its strong form (input being entirely absent) by referring to the fossilized lexical plural forms such as *anis* and *binen* presented above. However, these two fossilized forms do not provide strong evidence for a widespread input of the plural *-s* suffix. After all, both ants and bees usually occur as not a single animal, but rather a whole group. It is therefore doubtful that the distinction between the English singular and plural forms would have been transparent.

Mühlhäusler and Wurm (1985: 114) do note, though, that "studies of the linguistic input in the formative years of Tok Pisin have shown that plural marking by means of the *-s* affix was a widespread feature of Pacific English Foreigner Talk." (Wurm and Mühlhäusler 1985: 114). But could the input have been insufficient instead? We will return to that idea below.

In terms of interfering input from Papuan languages, we have to consider that they exhibit two strategies<sup>11</sup>. Some have no nominal plural marking at all, and could have provided an absence for structural demand in the emerging Tok Pisin. In other words, they could have supplied the framework for a language system without *morphological* plural marking. The other set of Papuan languages has a very complex system of noun classes, with irregular marking of both dual and plural. Due to their complexity, they could not have been a model for Tok Pisin either, as their systems lack the criterion of transparency which we will return to below.

Next, let us examine what factors could have made morphological plural marking an unsuitable form in the emerging language structures of Tok Pisin. Mühlhäusler (Wurm and Mühlhäusler 1985: 115) makes two arguments as to this point:

Affixation to signal plurality of nouns, as in English or German, clearly conforms to the principle that plural forms should, from the point of view of the ease of perception, be longer than singular ones. However, affixes are less accessible than free forms. Since the optimisation of perception characterises the early development of a pidgin, one would not expect affixes to be borrowed until the pidgin is structurally and functionally comparable to a first language. It is for this reason that the free form *ol* [...] emerges in Tok Pisin, and that neither English *-s* nor German *-en* had a good chance of being borrowed.

A second important argument [...] is the following: if a pidgin develops plural marking, it will appear first in the most natural environment (animates in subject position) and then spread to less natural ones. We find that the lexical items containing English or

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<sup>11</sup> I would like to once more express my gratitude to an anonymous reviewer for pointing this crucial factor out in detail.

German plural affixes do not provide a favourable environment for the spread of a plural rule.

To add to these arguments, there was no systemic precedent for formal morphological marking of any kind. Neither verbal nor nominal or adjectival inflection was present,<sup>12</sup> with functions such as pluralization, comparison or possession either being absent or being expressed by syntactical means, such as the possessive preposition *bilong*. The introduction of inflectional plural marking would therefore have meant the introduction of inflectional morphology as a concept and process, making plural inflection highly marked. As, for instance, deGraff (2001: 509ff.) and Muysken (1981) have argued, it is the unmarked option which usually prevails in creole grammar. This is also in line with the second morphological constraint Winford (2009: 96) proposes for languages in contact:

The greater the degree of transparency of a morpheme, the greater the likelihood of its diffusion. By contrast, the more opaque (complex, bound, phonologically reduced) a morpheme is, the less likely it is to be borrowed.

An inflectional morpheme in a language that has no inflectional morphology certainly does not fulfill the criterion of transparency. This would put it at a disadvantage when competing with an isolated form, which is easier to parse. In addition, both *anis* and *binen* are likely to have entered Tok Pisin as plurals, since the entities they refer to are usually not encountered as single entities, and therefore far less likely to be referred to as such in language use. This relates back to the idea of insufficient input due to the lack of transparency Winford describes, as neither *-n* nor *-s* in either of these items are likely to have been recognized by speakers as pluralising morphemes.

It was, of course, not entirely impossible for the emerging Tok Pisin to become a fusional language, or to at least adopt some morphological marking. As Matras (2007: 40) notes, "a number of languages show signs of movement between morphological types". However, he also remarks that "none of these developments seem to follow any predictable structural path, and the only common denominator is an accommodation to the patterns of a socially dominant contact language". However, the borrowing of inflectional morphology is something that, while having been observed (see Meakins 2011: 87), rarely occurs in language contact. In Field's (2002: 38) borrowing hierarchy, fusional affixes form the very end, being borrowed only after content items, function words and agglutinating affixes. Heath (1978: 105ff.) suggests that factors such as morpheme syllabicity, the sharpness of boundaries between morphemes, unfunctionality or morphemes and the categorical clarity of morphemes could disfavour the borrowing of inflectional morphology. The first two of these factors, at the very least, would disfavour a borrowing of English plural *-s* in cases such as *anis*, where they are not perceived as individual morphemes, but as part of the lexical root.

Mühlhäusler further states that "[t]he question remains, why reduplication was not borrowed from Tolai as a plural-signalling device [...]" and concludes that "to this I do not have an answer" (Wurm and Mühlhäusler 1985: 115). I would suggest that a possible factor may have been the fact that reduplication was already in place as a means of lexical innovation. In the derivation of early Tok Pisin, it often expressed other functions than a grammatical plural, including continuous, reciprocal and repetitive actions in verbs such as *lukluk* 'look around' and *toktok* 'discuss', or variety in adjectives such as *kala-kala* 'many-coloured'. While these functions are related to plurality – *kala-kala*, as a variety of colours, for instance, by necessity

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<sup>12</sup> Compare also Landtman (1918), who notes that "As a rule only the simplest indicative form of the English verb is used" and that it is only "in exceptional cases [that] such a form as "I says" may occur".

indicates the presence of more than one colour – they operate on a lexical level instead of a grammatical level.<sup>13</sup> Reduplication served a derivational function, not an inflectional one.

Aside from the structural factors explored above, the point of emergence for the *ol* plural marking is also significant for several reasons. According to Mühlhäusler's four stage development model for Tok Pisin, the plural marker emerged during the early expansion stage, after stabilization. This early expansion stage can be roughly dated to 1880–1914. During this stage, input of English from L1 speakers was limited because in 1884, the north–eastern part of New Guinea was annexed by the German Empire. Contact with speakers of English on one hand and speakers of other Melanesian Pidgins on the other was cut off as the German colonial administration stopped the labour trade with other plantations and pulled native New Guineans back to the main islands (Romaine 1992: 37) While German never came to be widely used by the local population, heavy investment into infrastructure by the German colonial supervision led to the spread of Tok Pisin to rural areas. Being cut off from its main lexifier led to internal developments in Tok Pisin relying on existing structures, such as adopting a personal pronoun as plural marker. In other words, once the categorial demand for plural marking was pressing, formal supply of the source language(s) was either absent or unsuitable. So even if the stabilization stage had led to a system that was stable enough to accept morphological plural marking, the input change from L1 English to L2 English would have made such a borrowing more unlikely<sup>14</sup>. It is also noteworthy that, as Smith (2002: 65) reports, "recently the –s suffix has become increasingly used to signal plurality as Tok Pisin and English come into increasingly frequent contact". This lends credence to the argument that morphological plural marking is not entirely incompatible with Tok Pisin, but timing and the contact situation played an issue.

There is a further caveat, however, in that even in contemporary Tok Pisin, plural marking with *ol* is not obligatory. As Verhaar (1995: 346ff.) notes, rather than just providing a grammatical function of pluralization, *ol* can also be seen as marking the following noun as a collective. On the other hand, semantic plurality does not automatically require grammatical marking with *ol*. This may have been another factor that hindered complete adoption of English plural marking, which is obligatory. If the categorial demand was for a context–dependent collective marking rather than a context–independent plural marking based on semantic plurality, English obligatory plural marking would have been even less suitable.

#### 4 The emergence of *wantaim*

In modern Tok Pisin, there are three different simple prepositions – *bilong*, *long* and *wantaim* – whose functions overlap to a certain extent, as the table below shows:

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<sup>13</sup> Also note the argument in Hall (1943, 194) that reduplication served an onomatopoeic function.

<sup>14</sup> Note, however, that the fact that closely–related Bislama, which was not cut off from English entirely during that time, also adopted *ol* as plural marker going back at least as far as 1913, see Crowley (1998: 90) Therefore, the contact situation can not have been the only relevant factor.

Table 3: Prepositions and their functions in modern Tok Pisin

Prep.	Function(s)	Examples <sup>15</sup>
<i>bilong</i>	all purpose preposition; in modern Tok Pisin denotes possession, purpose, origin, characteristic trait	<i>Han bilong mi em i doti</i> 'My hand is dirty' Steinbauer 1969, 41
(a)long	mostly spatial relationships; used for English prepositions <i>in, on, at, to, from, by, about, because, for, during, with</i> (especially in instrumental function)	<i>Em i bengim ka long rot</i> 'He smashed the car on the road' (Steinbauer 1969, 23)
<i>wantaim</i>	corresponds to English <i>with</i> both in comitative and instrumental function	<i>Mi miksi muli wara wantaim ti</i> 'I mix lemon water with tea' (Steinbauer 1969, 119)

As has been mentioned above, there are several issues concerning the emergence and grammaticalization of *wantaim*. The first concerns its origin: how and why has what appears to be a form of English *one time* been adapted to serve as a comitative/instrumental function in Tok Pisin? The second is concerned with its status within the prepositional system. How and why has *wantaim* been able to assert itself as an independent preposition from the ubiquitous *long* while other complex prepositions such as *arere long* have not? A look at Bislama and Solomon Islands Pijin, which are the two most closely related languages to Tok Pisin, shows that the development itself – or at least its outcome – has been unique to Tok Pisin. As examples 12 (Bislama) and 13 (Solomon Islands Pijin) below show, their comitative construction is not related to *wantaim*.<sup>16</sup>

(12) *Hem i stap slip wetem tufela.* (Crowley 2004, 27)  
3SG PM HAB sleep PREP-C PRN  
He lives with the two of them.<sup>17</sup>

(13) *Mi nao mi faet wet-em olketa nomoa.* (Jourdan/Keesing 1997: 407)  
me TOP 1SG fight with-TR them just  
Me, I was just fighting with them.<sup>18</sup>

The answer to why Tok Pisin would use a seemingly outlandish construction such as *wantaim* lies in the very first of the functional stages in its grammaticalization, which was the adverbial construction *one time along*. To quote Mühlhäusler, "[w]antaim, originally an adverb meaning at the same time, is frequently used as a preposition translating the concepts of with, together with and with the use of" (Wurm/Mühlhäusler 1985: 367). However, while this tells us where it originally came from, it does not yet explain the further steps in its development, nor does it explain the motivation behind the reanalysis of a temporal adverbial as the comitative. For that,

<sup>15</sup> Translations for all three examples mine.

<sup>16</sup> As one anonymous reviewer remarks, Bislama *wetem* has been attested since 1914, being cited in an example *Me me go widim you* in Crowley (1998: 103). Later re-spelled *wetem*, the reviewer notes that it might be a fusion of English *with* and the transitivity marker *-im*. This sounds very plausible to me. One can only speculate about whether *wantaim* would have received an additional *-im* as well, had it not already possessed the ending.

<sup>17</sup> Glossing and emphasis mine, translation by original source.

<sup>18</sup> Glossing and translation by source cited. TOP = topical marker, TR = transitive marker.

we shall have to look at the further development. Its diachronic development through the emergence of Tok Pisin can be traced as follows:

- Stage 1: Temporal adverbial
- Stage 2: Temporal adverbial plus comitative preposition
- Stage 3: (Temporal adverbial plus) comitative preposition (plus instrumental preposition)
- Stage 4: Comitative preposition plus instrumental preposition

In regards to stage 2, early attested usage of prepositional *wantaim* and *one time along* is strictly comitative<sup>19</sup>, as the examples below from Mead (1931: 42) and Steinbauer (1969, 183ff.) show:

(14) *One time along taro.*  
 PREP-C taro  
 With taro.

(15) *Long nait mi wokabout wantaim sutlam.*  
 PREP-L night 1SG walk-around PREP-C flashlight  
 At night, I walk around with a flashlight.

(16) *Yu dring solmarasin wantaim wara.*  
 2SG drink epsom-salts PREP-C water  
 You drink epsom-salts with water.

Mihalic (1957: 159) still lists *long* as part of the construction, though it seems to have become optional by the time of his source data. The entry in his dictionary reads:

- with: *wantaim*, *wantaim long*; to work with him = *wok wantaim (long) em*

Meanwhile, the instrumental function was still being expressed almost exclusively by *long*:

(17) *Mi kisim rais long skel.* (Steinbauer 1969, 177)  
 1SG take rice PREP-I scale  
 I take rice with the scale.

(18) *Katim pepa long sisis.* (Steinbauer 1969, 175)  
 cut paper PREP-I scissors  
 F Cut the paper with the scissors.

At the same stage, the form *wantaim* served several functional uses, as the following excerpt of Mihalic's dictionary (1957: 159) shows:

**wantaim**

1. one time, once

*Mi mekim wantaim tasol.* = I did it only once

2. at the same time, with, together, and

*go wantaim* = to go along with, to accompany

*kisim pensil wantaim pepa* = to take pencil and paper

<sup>19</sup> For examples 14 through 16, glossing and translation mine.

*pasim wantaim* = to tie together

*tupela wantaim* = both together

*wok wantaim* = to work together, to work at the same time

3. to express similarity or equality *Tupela i-strong wantaim.* = The two are of equal strength.

This is an expression used to denote a tied score in a game, or of a battle evenly fought.

The third functional stage saw the expansion of *wantaim* to include the instrumental function, as in the examples below, taken from Wurm and Mühlhäusler (1985: 368) and Smith (2002), respectively<sup>20</sup>:

- (19) *Ol nes i ken samapim maus bilong yu wantaim string.*  
PL nurse PM can sew mouth PREP-P 2SG PREP-I string  
The nurses can sew up your mouth with string.

- (20) *Ol i sutim disla pig ia wantaim disla ol spia*  
3PL PM shoot DT pig EMPH PREP-I DT PL spear  
*bilong ol.*  
PREP-P 3PL  
They shot this pig with these spears of theirs.

Verhaar (1995: 251) notes that while instrumental *wantaim* is still rare, though Tok Pisin seems to mirror the development from comitative to instrumental that occurred in many languages. This development is further confirmed by Siegel/Smith (2013), who note that the usage of instrumental *wantaim* is increasing. They claim that "the general preposition long is most commonly used for instrumental and *wantaim* for comitative. But the use of *wantaim* for instrumental is increasing as a result of the effect of English." Meanwhile, the temporal adverbial *wantaim* has been increasingly replaced by *wanpela taim*, as in the example below<sup>21</sup>:

- (21) *Wanpela taim tuple brata tuple stap [...]* (Siegel/Smith 2013: 191)  
NUM time NUM brother NUM be [...]  
Once, there were two brothers [...]

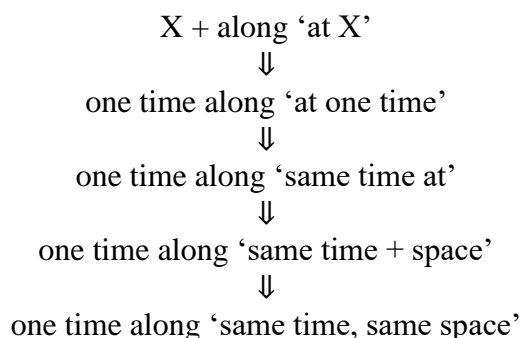
Having established that the comitative use of *wantaim* predates the instrumental use, it is evident that in order to determine the origins of prepositional *wantaim*, the focus needs to be placed on the comitative. At the time of *wantaim*'s origin, (*a*)long was already in use as a preposition in addition to the earlier all-purpose preposition *bilong*. *One time along* was modelled on a pattern in which *along* combined with (mostly spatial) adverbs to form complex prepositions. *Long* formed the basic prepositional element and X further specified its reading, as in *arere long X* 'alongside X' or *aninit long X* 'underneath X'. The question, then, is what exactly *one time* specified in the construction of *one time along*. Essentially, there was a spatial concept – *long* – being supplemented with a temporal concept *one time*. As an adverbial construction, this was meant to signify 'at one time'. From there, the step to the comitative is, cognitively, not that far-fetched. Under the assumption that the basic cognitive functions of the comitative is 'same time plus same space', it is easy to see how a reanalysed reading of *one*

<sup>20</sup> For example 19, glossing mine and translation from original source. For example 20, both from original source, with glossing adjusted.

<sup>21</sup> Glossing mine, translation by original source.



*time along* may have become not ‘at one time’, but ‘same time at’ or ‘same time space’. In addition, *one* may easily have been read and reanalysed as applying to both elements, and been understood as ‘one place, one time’, or ‘same time, same space’. The suggested development is summarized below:



The notion of *one* or *wan* expressing equality is strengthened by two observations from Mihalic’s (1957: 159) dictionary. The first is the third section of the entry under *wantaim*, which chronicles the following function<sup>22</sup>:

3. to express similarity or equality *Tupela i–strong wantaim*. = The two are of equal strength. This is an expression used to denote a tied score in a game, or of a battle evenly fought.

Secondly, there are a number of parallel constructions in the lexicon of Tok Pisin, all expressing an idea of being equal or identical (Mihalic 1957: 258):

**same, *wankain***

- at the same time = *wantaim*
- from the same village = *wanples*
- from the same country = *wantok*
- living in the same house = *wanhaus*
- of the same age, class = *wanlain*
- of the same kind = *wankain*
- of the same name = *wannem*
- of the same nationality = *wantok*
- of the same size = *wanmak*
- of the same tribe = *wanpisin*
- speaking the same language = *wantok*

The productivity of the pattern *wan* + X is also the first of several factors that contribute to answering the second question posed above: that of why *wantaim* was able to assert itself as an independent, simple preposition over other complex prepositions. Of the latter, quite a few exist. For these other complex prepositions, Verhaar (1995: 236) reports: "aninit long ‘below, under, underneath’; antap long ‘on, on top of, over, above’; arere long ‘alongside (of)’; ausait long ‘outside’; baksait long ‘behind’, at the back of; bihain long ‘after’; bipo long ‘before [of time]’; inap long ‘until, as far as’; insait long ‘inside’; klostu long ‘near, close to’; namel long ‘between’; paslain long ‘before [of place], in front of; and raun long ‘around’". In none of these,

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<sup>22</sup> While this function is absent from the samples drawn from the Z’graggen corpus, I am ensured by an anonymous reviewer that they witnessed this use ‘quite often during fieldwork in Papua New Guinea’.

*wan* + X or similarly frequent constructions occur. Therefore, if *wan* + X as an entrenched construction provided an advantage in the emergence of *wantaim* as a simple construction, these other prepositions would have lacked that advantage.

The major structural change from its early construction *one time along* to *wantaim* is the loss of the accompanying *long*, which is still obligatory for most of the other complex prepositions. In all of the constructions with *wan* cited in the dictionary excerpt above, however, *long* does not appear, for the simple reason that these are not prepositional constructions. Still, it seems possible that a process of analogization between these constructions and *wantaim* has contributed to the loss of *long* in the latter.

Another contributing factor may have been the frequency of *wantaim*, which is significantly higher than that of other constituents of complex prepositions, as this data from on a subcorpus of about 8.5 million tokens based on the recording of John Z'Graggen during the 1970s and 1980s (Z'graggen 2011) shows:<sup>23</sup>

Table 4: Number of occurrences of the first constituent of prepositional constructions

Preposition	Occurrences (total)	Occurrences (per million words)
antap	32136	3785
wantaim	29997	3533
insait	15655	1843
bipo	14012	1650
inap	12591	1483
bihain	9668	1139
klostu	8445	995
raun	3541	417
arere	2929	345
aninit	2222	262
baksait	1770	208

The third factor I would like to posit is the possibility that as its grammaticalization continued, the link between *wantaim* and the spatial dimension may have been weakened, which further encouraged the drop of *long*. Since the comitative has a spatial dimension alongside a temporal one, but is not exclusively spatial, the cognitive link between *long* and *wantaim* may have been weaker than, for instance, the link between *aninit* or *arere* and *long*. This is reflected in the fact that in the same subcorpus as above, *aninit* and *arere* are followed by *long* in 73.90 percent and 72.11 percent respectively, while *wantaim* is only followed by *long* in 2.06 percent of all cases. *Bipo*, which serves a primarily temporal function, is rarely followed by *long* in the data as well.

Table 5: Number and percentages of occurrence of complex prepositions

Preposition	Occurrences followed by long	Primary function
wantaim	619 (2.06%)	comitative
bipo	817 (5.83%)	temporal
aninit	1642 (73.90%)	spatial
arere	2112 (72.11%)	spatial

<sup>23</sup> Note, however, that due to the preliminary data and the fact that the corpus is not POS-tagged, these numbers include prepositional as well as adjectival and adverbial uses of these lexemes.

An additional issue which may have affected the development of other simple spatial prepositions might be competing serial verb constructions. For Tok Pisin, Verhaar (1990: 119) has reported the following, among others<sup>24</sup>:

- (22) *Yu wantaim ol soldia bilong yu i mas*  
 2SG PREP-C PL soldier PREP- 2PL PM must  
 P  
*wokobaut raunim dispela taun wanpela taim long olgeta de.*  
 walk- round DT town NUM time PREP DT day  
 around  
 You and your soldiers must march around this town once every day.

- (23) *Lea wantaim ol pikinini bilong en i mas*  
 Lea PREP-C PL child PREP- 3SG PM must  
 P  
*wokobaut bihainim tupela.*  
 walk- follow PRN  
 around  
 Lea and her children had to follow the two [girls].

In these examples, the second part of the serial verb construction serves a spatial or directive function which, in English, would have been fulfilled by a preposition. A similar competing serial verb construction that would function as comitative has, to my knowledge, not been attested. In addition, Sebba (1987: 214) notes that "most if not all of the serialising languages [...] have prepositions corresponding to 'with' and 'of' or 'for.'" This indicates that there may actually be a common tendency for the comitative to be expressed by preposition rather than serial verbs. This would mean that in the overall development of *wantaim*, *long* actually served as kind of a catalyst. Its presence allowed a temporal adverbial to be grammaticalized into a comitative preposition. Once that function was achieved, factors such as the productivity of *wan+X* and the frequency of the construction as a whole may have led to increasing independence from *long* and the spatial context it implies, effectively eliminating the need for *long* at some point. As with *ol*, the point of emergence for *wantaim* is once again significant in terms of language external factors as well. There are no attestations for comitative or instrumental *wantaim* during the jargon and stabilization stages. Once again, being cut off from its main lexifier – and therefore the formal supply – led to internal developments in Tok Pisin, such as reanalysing a temporal adverbial as a comitative preposition, being more likely. The input change from L1 English to L2 English would have made such a borrowing more unlikely.

## 5 Conclusion

In summary, we can claim that for both *ol* and *wantaim*, there were both language-internal structural factors as well as extralinguistic factors that worked against the direct adoption of the super- and substratal systems. Instead, structural material that was already present in the emerging language was reanalysed to serve a different, additional function. However, in these cases the material was not junk, but still in use for other functions. The structures present in superstrates and substrates however, were not adopted for either the same or another function: there is no structure or construction in modern Tok Pisin matching English *with*, for instance.

<sup>24</sup> For both examples 22 and 23, glossing mine and translation supplied by original source.

Or, in other words: categorial demand is necessary to create new linguistic structures in contact languages, but not sufficient. Categorial supply is likely neither necessary nor sufficient, as emerging systems may develop a need (or demand) through internal processes. Formal supply is neither necessary nor sufficient to create new linguistic structures in contact languages, though formal demand certainly is necessary. Timing/suitability is necessary for the innovation of grammatical structures in contact languages, but not sufficient either. In regard to the earlier question of whether supply and demand are useful notions in contact linguistics, therefore, this leaves us with three options. Either we have to redefine demand as not merely the absence of a grammatical function, but an actual pressing need for this function, which would be harder (or even impossible) to prove.<sup>25</sup> Alternatively, we introduce a third and fourth factor aside from supply and demand, namely: timing and structural suitability. Or, as a third option, we agree on the position that supply and demand are inadequate and far too simplistic notions in linguistics in the first place.

In any case, I believe that more research into structural innovation in contact languages is worthwhile. If, as Roberge (2008: 131) and others claim, pidgins can give us a possible window on language evolution, it stands to reason that those instances in which the emerging structures are, to some extent, innovated instead of drawn directly from the super- and substrates, would be the ones that are most informative into the process of language evolution.

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<sup>25</sup> Note also, once more, that languages as systems do not have a need to mark any linguistic category – it is their speakers who may feel the need to express concepts linked to that category.

## Appendix

Table 6: Abbreviations used for grammatical categories

Abbreviation	Grammatical category	Type
1SG	First person singular pronoun	Personal pronoun
SG	Second person singular pronoun	Personal pronoun
SG	Third person singular pronoun	Personal pronoun
PL-INC	First person plural pronoun, inclusive	Personal pronoun
PL-EXC	First person plural pronoun, exclusive	Personal pronoun
PL	Second person plural pronoun	Personal pronoun
PL	Third person plural pronoun	Personal pronoun
PRN	Pronoun	Pronoun
DT	Determiner	Determiner
PL	Nominal plural marker	Marker
PM	Predicate marker	Marker
FUM	Future marker	Marker
NEG	Negation marker	Marker
EMPH	Emphatic marker	Marker
FOC	Focalizer	Focalizer
CONJ	Conjunction	Conjunction
NUM	Numeral	Numeral
PREP-C	Preposition, comitative	Preposition
PREP-D	Preposition, directional	Preposition
PREP-F	Preposition, final	Preposition
PREP-I	Preposition, instrumental	Preposition
PREP-L	Preposition, locative	Preposition
PREP-P	Preposition, possessive	Preposition

Table 7: Instrumental and comitative prepositions and their sources in the 25 English-lexified languages in the APICS data

Language	Comitative	Instrumental	Origin
Early Sranan	langa / nanga	langa / nanga	English (along)
Sranan	nanga	nanga	English (along)
Saramaccan	ku	ku	Portuguese (com)
Nengee	anga	anga	English (along)
Creolese	wid	wid	English (with)
Vincentian Creole	wid	wid	English (with)
Jamaican	wid	wid	English (with)
Belizean	wid	wid	English (with)
San Andreas Creole English	wid	wid	English (with)
Nicaraguan Creole English	wid	wid	English (with)
Bahamian Creole	with	with	English (with)

Gullah	wid	wid	English (with)
African American English	with	with	English (with)
Krio	wit	wit	English (with)
Ghanaian Pidgin English	wit	wit	English (with)
Nigerian Pidgin	wit	wit	English (with)
Cameroon Pidgin English	wit	wit	English (with)
Pichi	wet	wet	English (with)
Chinese Pidgin English	long	with	English (along, with)
Singlish	with	with	English (with)
Tok Pisin	wantaim	long, wantaim	English (along, one time along)
Bislama	wid	wid	English (along, with)
Norfolk	lorng	???	English (along)
Kriol	wit	wit	English (with)
Hawai'i Creole	wid	wid	English (with)

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# Linear Lengthening Intonation in English on Croker Island: identifying substrate origins<sup>1</sup>

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## Abstract

*The topic of this paper is a striking intonation contour which is found in English on Croker Island, NT, Australia, which is labelled Linear Lengthening Intonation. This contour is formally characterized by a prolonged stretch of high pitch, either in a plateau or rise, concluded by a high boundary tone, typically with lengthening of the final syllable nucleus. The meaning attached to this tune is essentially quantificational, and appears to apply mostly to the run traces of events. While this contour is not found in other varieties of English in this form, it is common in many northern Australian Aboriginal languages, among them languages spoken on Croker Island which have been in contact with English for several generations. In this paper we compare the form and meaning of this tune in Iwaidja, one of the main languages in contact with English on Croker Island, and in local English. Due to substantial parallels and due to the contact situation that is characterized by prolonged bilingualism in a long-term shift scenario, we propose that Linear Lengthening Intonation in English on Croker Island is probably due to language contact with Australian Aboriginal languages that have this tune, most notably Iwaidja.*

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## 1 Introduction

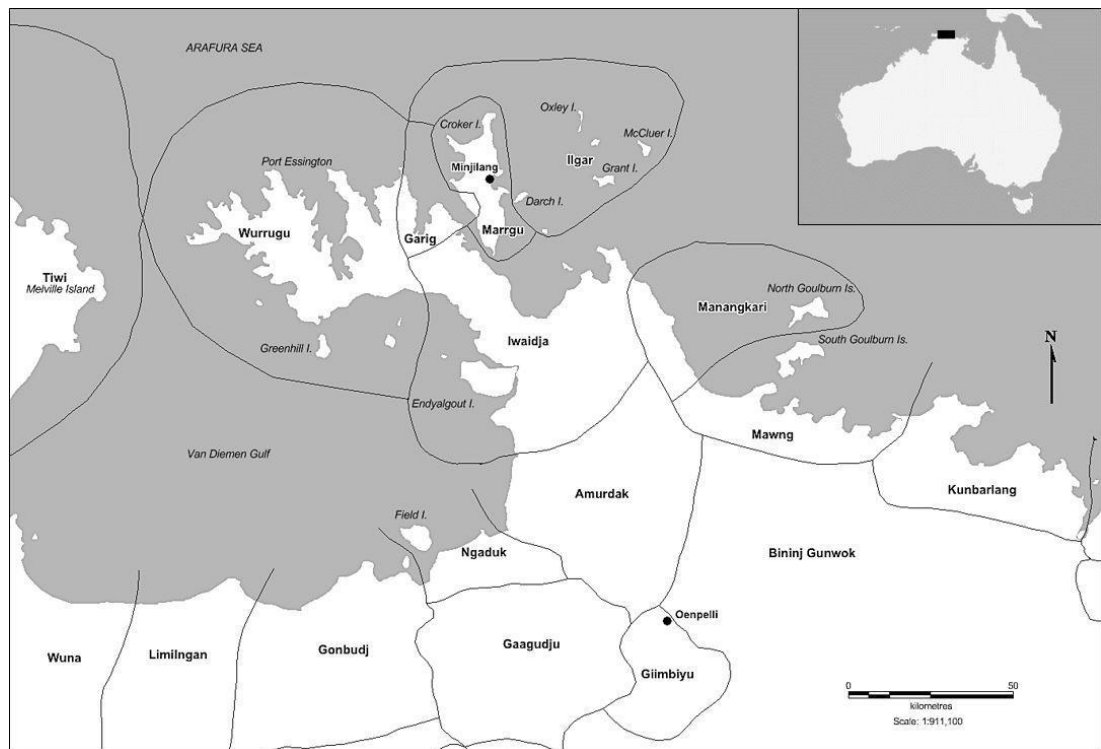
English spoken on Croker Island, Northern Territory, Australia (see Map 1), shows a striking intonation contour that has not been reported for other varieties of Australian English. In this paper we call this contour *Linear Lengthening Intonation* (LLI).

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<sup>1</sup> We first of all would like to express our heartfelt gratitude to our Iwaidja consultants and teachers for sharing their insights and discussing these examples with us as well as sitting through the experiments. We also thank Bruce Birch for long discussions on Iwaidja from which many insights resulted, and for his support in the field. We would like to thank the audience of the workshop “Australia Languages in Contact Since Colonisation” (Canberra, 6–7 March 2014) for their valuable feedback, Jeff Siegel and Harold Koch and especially Felicity Meakins, Judith Bishop, Carmel O’Shannessy and two anonymous reviewers for helpful comments. Needless to say, none of the above bear any responsibility for any remaining errors.

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Map 1: Croker Island and Indigenous languages spoken historically in Northern Arnhem Land (Mailhammer & Harvey 2018)

LLI is formally characterised a prolonged stretch of high F0 or high pitch – either in a plateau or as a rise – concluded by a high boundary tone, typically with lengthening of the final syllable nucleus. The meaning attached to this tune is essential quantificational. For instance, in example (1), Linear Lengthening Intonation on *it* indicates that the looking event was prolonged or that it was a particularly close inspection.

- (1) *Baki, they bin look'it. Karlu, they bin throw'im away.*<sup>2</sup>  
 tobacco they looked at it no [Iwaidja] they threw it away  
 ‘They inspected the tobacco [code switch from Iwaidja] for a while. [Then they said:]  
 “No” [code switch from Iwaidja]. They threw it away.’  
 [AbE\_Narratives\_Eng\_CM\_140914\_01, 4:03]

Tunes that are similar to this are found in English and also in Australian English (see general overview on English intonation patterns in Wells (2006) and Adams (1969), Burgess (1973) on Australian English, and e.g. McGregor & Palethorpe (2008) specifically on High Rising Tunes in Australian English). Wells (2006) describes a couple of high plateau tunes, but his stylized high–mid pattern (p. 240) comes close to the tune discussed in this paper, although it does not include the lengthening that we found in our data. In addition, repeated high plateaus with a final downstep are also characteristic features of list intonations (see Steindel Burdin & Tyler 2018).

<sup>2</sup> When glossing Aboriginal English, we employ Standard English. When glossing Australian Aboriginal languages, we follow the Leipzig Glossing Rules with the following additions: ANT = anterior (generally past) aspectually underspecified past tense. We use the standard practical orthographies for Iwaidja and Anindhilyakwa that represent IPA as follows: <r|> = [ɺ], <rt> = [t], <rd> = [ɺ], <rn> = [n], <ng> = [ŋ], <ny> (Iwaidja) and <nj> (Anindhilyakwa) = [ɲ], <r> = [ɺ], <rr> = [ɺ], <ld> = [l̥], <rd> = [l̥], <h> = [ɥ], <j> = [c].

There are two principal differences between LLI and similar tunes in varieties of English. First, the quantificational meaning is applicable to more different types of words, including verbs and nouns. Second, the contour can be extended in length without limit, whereas similar tunes in English tend to be iterated. Closest in terms of form and meaning comes a pattern that has not been described in the literature but that is common in cases where the continuation of an event is encouraged until a stop point. Commonly, the continuation is indicated by a high plateau intonation, usually iterated with optional lengthening of the final word, whereas the stop indication is expressed with a downstep, see (2).

(2) *Keep going, going, going, stop.*

In contrast to English on Croker Island and in contrast to Iwaidja, this tune is usually iterated and limited to imperatives.

In this paper we present a hypothesis for why English on Croker Island possesses this particular contour. We suggest that it is the result of transfer from at least one local Aboriginal language, Iwaidja, which has a contour that is identical in form and meaning. Iwaidja is a major language on the island, historically spoken by most community members, and still spoken by around a fifth of the population.

Our paper enhances the description of English spoken by Aboriginal people in Australian remote areas. In particular, there is no description of English on Croker Island or an investigation of the intonation of Aboriginal English in general (Butcher 2008). We also advance the knowledge about the origins of English in remote Aboriginal communities in Australia by explaining the existence of a peculiar and unexplained feature through contact influence from local Aboriginal languages. Claims about substratum features in Australian English are frequent (see e.g. recently Malcolm 2018), but convincing accounts are rare. For example, the claim that a neutralisation of voicing in stops in Aboriginal English more generally is due to substratum influence (Malcolm 2008; Butcher 2008) has not been substantiated with evidence. By contrast, an instrumental case study shows that in the conditions that are described as being the reason for such a neutralisation – local Aboriginal languages with only one series of stops – the voicing distinction in Aboriginal varieties of English is maintained (Mailhammer/Sherwood/Stoakes 2016; Mailhammer/Sherwood/ Stoakes forthcoming). Finally, we contribute to the description of Iwaidja, an endangered and underdescribed Australian language, building on earlier work (Birch 1999 et passim).

This paper is structured as follows. In section 2 we give an overview of the language contact situation. Section 3 contains information about the data and the methods used in this paper. Section 4 gives the results of our investigation, which are discussed in section 5. In section 6 we draw some general conclusions.

## **2 Language contact situation and hypotheses**

English in various forms has been a contact language for Aboriginal languages in all of Northern Arnhem Land since the late 19<sup>th</sup> century (Harris 1986). Today, English is spoken on Croker Island in the community of Minjilang (population ca. 300) as one of several languages. Almost all community members speak a form of English regularly as one of their early or natively acquired languages. Practically everyone who is younger than 80 and grew up on Croker Island has been exposed to English at least from school age onwards. In fact, a significant number of Aboriginal and non-Aboriginal community members speak English only; it is the *de facto lingua franca* in the community even though most Aboriginal community members have at least a passive command in at least one of the main Aboriginal languages, and even though

many are functionally multilingual. There is no question that the diachronic trajectory is towards a long-term shift to English, and to a lesser degree also to more widely used Aboriginal languages, such as Mawng and Kunwinjku.

English on Croker Island cannot be described as one variety. In this sense it is quite unlike what has been labelled Aboriginal English in the literature for which a significant degree of homogeneity is claimed. In terms of Schneider's (2007) Dynamic Model, English on Croker Island, as far as its phenomenology is concerned, appears to be in a pre-nativisation stage (stage 3), except that it is an L1 for most speakers. For this reason, English on Croker Island is better described as partially overlapping repertoires, the sum of which form a community repertoire whose elements are often of disparate and unclear origin. For example, many speakers sometimes use past tense formed with *been* (<bin>) and an unmarked verb stem, e.g. *bin go* 'went', but the same speaker may produce a perfectly standard past tense in the same text. At the same time, there are features that appear to be part of most people's repertoires. One example is the use of *where* as a preposition in examples such as *we go where beach* 'we went to the beach'.

It is not clear what conditions this kind of variation. In a pilot study, Mailhammer et al. (2018) identified some standard linguistic factors, such as verb type, but the largest part of variation appeared to be individual variation. It is also likely that there are social factors, such as interlocutor, text type and context. For example, many speakers can use forms that are more standard if they speak to outsiders. In addition, there has been considerable fluctuation and mobility among the community, and certain features, such as the past tense constructed with *bin* + verb stem, which is the standard past tense of the most widely used creole in Northern Australia, *Kriol* (see e.g. Munro 2004), may be explicable through exposure to other forms or English or creole languages. A working hypothesis is that this degree of variation is due to a lack of stabilisation or focusing due to variable input and usage so that a community norm has not formed yet. It is not clear whether this variation is a more recent phenomenon (suggesting destabilisation) or whether this has been the situation for quite some time.

LLI is a feature that is pervasive in English on Croker Island more generally, but our investigation is confined to speakers of Iwaidja. It is, however, likely that speakers of other languages, and possibly English monolinguals, exhibit this phenomenon as well, as tunes that are similar to LLI have also been described for other local Aboriginal languages (see §4.1 below).

Iwaidja is one of several Australian Aboriginal languages spoken on Croker Island. Other major languages are Mawng, Kunwinjku and Kunbarlang, in addition to languages that are less well represented in terms of speaker numbers and usage, such as Amurdak and Burarra. However, the only Aboriginal languages with long-term viability on Croker Island are Mawng and Kunwinjku. Other languages may be viable elsewhere, e.g. Burarra, but they lack sufficient use on Croker, and a significant number of languages are endangered (e.g. Iwaidja, Kunbarlang), moribund (e.g. Amurdak) or practically extinct (e.g. Marrku, the traditional language of Croker Island). Though until fairly recently, Iwaidja was considered to be the main language of the island, deaths of key speakers in the last ten years have shaken the speaker base considerably, and it is currently unknown if or to what degree Iwaidja is transmitted to children. There are probably less than 50 proficient Iwaidja speakers on Croker Island.

The general linguistic situation is characterised by polyglossia. Most community members are at least passively multilingual, but everyone knows English well enough to make themselves understood. Although Iwaidja still occupies many official domains, for example community announcements, English must be seen as the H language. Any government business is generally conducted in English, as the main regional government personnel does not speak any Aboriginal language. Moreover, the School on the island is officially English-dominant and leaves little

space for Aboriginal languages. And English is of course the key to participation in the wider Australian society. Consequently, it is to be expected that the dominance of English will increase even more in the future.

To sum up, English on Croker Island is heterogenous and not describable as one or even several varieties but more as partially overlapping repertoires of speakers who are often multilingual. The English repertoires contain elements of different origins, but it is likely that at least some owe their existence to bilingual interference or substratum influence. The aim of this study is to ascertain the origin of LLI in the English of some community members. Our hypothesis is that LLI in the English of the speakers we investigated is a case in which bilingual speakers of Iwaidja transferred a tune and its meaning to English where a similar tune already existed (see (2) above).

### 3 Data and Method

The data for our investigation comes from two sources. First, we used a corpus of natural language data from over 40 sociolinguistic interviews and narratives in English collected from a variety of community members. In addition, there is a large corpus of Iwaidja collected by several researchers located in *The Language Archive* (<https://tla.mpi.nl>), which we accessed and supplemented with further naturalistic data collected on Croker Island. Second, in order to specifically investigate the distribution and interpretation of LLI in Iwaidja and English, we adopted two distinct elicitation procedures, an essentially experimental method, based on visual stimuli and a more classical questionnaire-based elicitation method. The second method was only used for Iwaidja.

The experiment involved eleven participants. Nine were native speakers of Iwaidja (5 male, 4 female ranging between 40 and 75 years old). Of these, seven completed the experiment in Iwaidja only, and two participants also completed it in English. The remaining two participants were proficient speakers of Iwaidja who acquired the language as teenagers or adults (late bilinguals). They completed the experiment in English only. The participants were shown a series of 34 video clips, specifically targeting different event types and aspectual configurations in general. Simplex event types comprised: (a) simple stative, positional stimuli (such as those expressed in English by the positional, stative meanings of ‘sit’ (as in ‘be sitting’), *stand* (as in ‘be standing’); (b) simple activities; (c) iterated events; (d) simple telic events (both achievements and accomplishments) and (e) various complex combinations of the above simplex events. Complex stimuli included iterated simplex events, sequences of one or several simplex events, temporal embedding of a simplex, telic event into a complex or simplex event, and even sequences of distinct iterated simplex (= complex) events.

In addition to these *Aktionsart* parameters, the clips also imposed *viewpoint* parameters, notably when temporal ordering vs. overlapping events were shown; indeed, strict temporal ordering is known to favour so-called *perfective viewpoint* interpretations, whereas temporal overlap favours *imperfective viewpoint* interpretation, cf. Smith (1991), Caudal (2012). It was important to control for viewpoint as a key condition of our experiments.<sup>3</sup>

After having been shown each individual clip, participants were asked to produce descriptions following the three following contextual patterns, with explicit contextual cues being provided, especially temporal adverbials both in English and Iwaidja (e.g. *nanguj* ‘yesterday’, *wularrud*

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<sup>3</sup> Iwaidja possesses two tense affixes marking aspectual differences: the first of these can be described as a general imperfective, with both single event background readings, and habitual/iterative readings (similar to e.g. Romance imperfectives); the second tense affix can be best described as a temporally and aspectually underspecified anterior tense (most commonly interpreted as a past tense), capable of both perfective and imperfective interpretations (similar to the German *Perfekt*).

‘a long time ago’ or ‘for a long time’) or explicit scenarios being set up to accommodate the desired event description:

1. simple, non-iterated descriptions of the events perceived (‘X did Y (once)’)
2. iterated past descriptions of the events perceived (‘X did Y for a long time’)
3. past habits (‘X used to do Y’)

From these data we created a formal profile of the intonation contour in English and Iwaidja (see §4), and subsequently described the range of meanings of LLI in both languages. We then focused on specific overlaps in form and function to determine whether there was any reason to assume a transfer from Iwaidja to English. We concentrated on a qualitative investigation as a first step.

## 4 Results

### 4.1 Linear Lengthening Intonation in Iwaidja

#### 4.1.1 Formal characteristics

This tune is characterised by a linear progression of F0 – either in a plateau or as a rise – concluded by a high boundary tone, with lengthening of the final syllable nucleus. This is illustrated in Figure 1.<sup>4</sup>

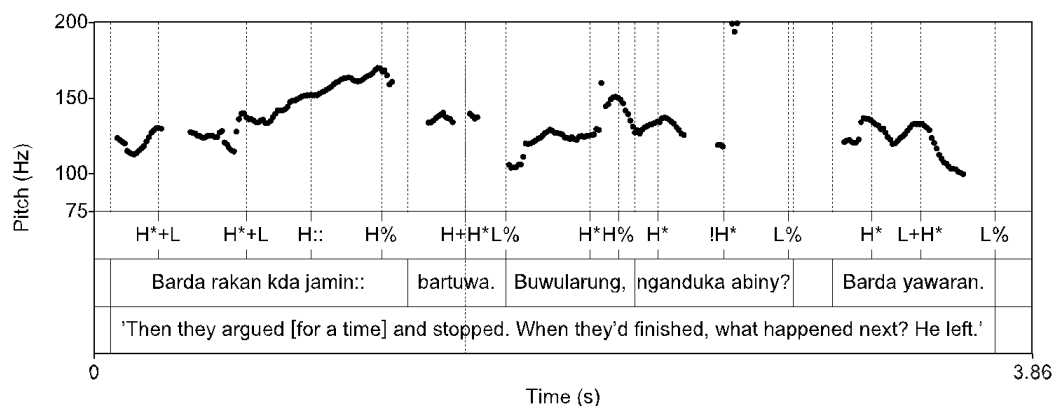


Figure 1: Linear Lengthening Intonation on the second syllable of *jamin* ‘3sg.contr.’

Linear lengthening occurs on the last syllable of the word *jamin* (ca. 340 ms, i.e. more than 3 times longer than a normal /i/, cf. averages in Shaw et al. ms), which is a contrastive pronoun used in reciprocal constructions. The lengthening is indicated by the symbol H(:): (lengthened high tone) and the final high tone at the end of the intonation phrase, which are the two core criteria for identifying this phenomenon in Iwaidja, by H% (high boundary tone). This example also shows that Linear Lengthening Intonation in Iwaidja need not show a plateau contour.

This tune exhibits interesting distributional, ‘syntactic’ features. First, in terms of context, as in other languages (see e.g. Simard 2013: 67 for Jaminjung), the following Intonation Phrase can show a falling contour (see e.g. Figure 1), but it is also possible that there is no immediately following Intonation Phrase or a pause of up to ten seconds. Second, Linear Lengthening is not

<sup>4</sup> We cannot provide a detailed explanation of the phonetic annotation system we use to describe Iwaidja intonation, but it is basically similar to existing description systems used for other Australian languages, i.e. a ToBi-style system (see e.g. Bishop & Fletcher 2005, Fletcher 2014).

distributed equally over the locus it occurs in. That is, while the linearity of F0 progression can precede the last nucleus by a considerably time, lengthening usually occurs only on the last vowel of the final word, which need not be the stressed vowel. Thus, it would appear that lengthening demarcates the end of a prosodic unit, possibly an intonational phrase. There are some examples in our corpus that appear to be exceptional in that they show lengthening of the verb-final vowel as well as the final vowel of the external argument NP without giving reasons for interpreting this as two separate intonational phrases, though they are clearly marginal.

Third, although in many cases the location of the lengthened vowel is the verb, there are good examples in which the verb is followed by a particle-like word, such as *kirrk* ‘all/completely’, or an external argument NP, such as *mayubarl* ‘potato’, whose (final) vowel is affected by the lengthening rather than the verb. In most of these instances, however, the linear intonation contour extends to the verb as well. We also found that isolated NPs, especially demonstratives or space/time/quantification expressions, could be the locus of LLI. This is, for instance, the case in the Iwaidja distal deictic *baki*, over there, which is realised with obligatory Linear Lengthening Intonation (speakers rejected made-up examples without LLI), approximating something like lexical tone (contrasts with *baki* ‘tobacco’), and then translates as ‘long way over there’.

It is still somewhat unclear, however, under which circumstances an element in the right periphery of the verb complex receives phonetic lengthening of the final nucleus. For the Gunwinyguan language Bininj Gun-Wok, Bishop (2002: 82) asserts that verb and the nominal in question must “form a tight semantic unit” (see Bishop 2002 for cases of lengthened post-verbal nominals in Bininj Gun-Wok). It is possible that this can be defined more rigorously as strong syntactic cohesion in the sense that the element must be an argument of the verb (i.e. a valent rather than an adjunct).

In Anindhilyakwa, which is also a Gunwinyguan language, LLI is most commonly borne by a special clitic =*wa*, possibly derived from the adverbial *ngawa* (‘still’), cf. (3), which generally attaches to the verb, and less commonly to a valent of the verb.

- (3) *nanga-luku-lukwa-mærrkaju-wa*      *d-adə-m-aləka-langwiyu...wa*  
 3m/3f-RDP-tracks-follow-PAST      3f-f-INALP-foot-ABL.PRG...XTD  
*yingə-ləkarrki-lyəmada*  
 3f-tracks-disappear-Ø  
 ‘he kept following her tracks until they disappeared’ [*Search* (Egmond 2012: 275)]

Interestingly, *ngawa* itself can bear LLI as an isolated word:

- (4) *Engka na-rndarrka.*                      *Na-lawurrada*      *ebina-langwiya,*  
 NEUT.other NEUT/NEUT-grab-Ø      NEUT-return-Ø      NEUT.that.same-ABL.PRG  
*nga...wa*  
 still...XTD  
 ‘It [the she cat] grabbed another one [another kitten], then it brought back, going along the same way (= all the way back)’. [*Bujikeda* (Egmond 2012: 220)]

This strongly suggests that LLI is a distinctly grammatical feature of languages, with elaborate morpho-phono-syntactic constraints governing its distribution.

### 4.1.2 Meaning of Linear Lengthening Intonation

Previous accounts of intonation patterns across Australian languages have so far generally focused on their role either as sentence-type markers (Nordlinger 1998: 213; 236), i.e. as declarative vs. interrogative sentence type markers, or as discourse-structuring items, (see e.g. McGregor 1986; Bishop 2002), relating the propositional content of an utterance to that of other utterances, and/or some model of speakers' beliefs, expectations and shared knowledge (including constructs such as 'Question Under Discussion', etc.). This embraces by and large the view that intonational phonology can have meaning, either 'compositionally', i.e. by ascribing separate meanings to single tonal events like pitch, an idea notably pioneered by (Pierrehumbert/Hirschberg 1990), or 'non-compositionally', i.e. meaning should rather associate with the nuclear stretch of an intonation phrase, cf. (Gussenhoven 1984).<sup>5</sup>

It should be noted that ascribing an inter-clausal/discursive/context-structuring role to some intonation does not preclude it having an intra-clausal, propositional-content level contribution as well; similarly, discourse connectives, evidentials or modals are known to be capable of contributing to both levels of linguistic interpretation (see e.g. Faller 2002; McCready 2008; Murray 2010; Murray 2014; Faller 2014).

Thus, when Bishop (2002:76) describes non-stylised high-level contours (i.e. without vowel lengthening) as conveying incompleteness within a discourse sequence, corresponding e.g. to 'and' conjunctive multi-clause sequences – the meaning of said contour being highly dependent on the contours of the following discourse units – she effectively depicts a grammatical element whose contribution is both at the propositional content-level (adding referents to the discourse context by means of an assertion-like update) and at the context-structuring level, e.g., it must relate the listed elements to some at-issue content under the 'Question Under Discussion' (see e.g. Benz/Jasinskaja 2017).

According to existing accounts, LLI appears to play a clear sentence-internal semantic role (Bishop 2002; Simard 2010; Simard 2013; Fletcher 2014), and should therefore be seen as contributing to the at-issue, propositional content of a clause (or constituent, at least, depending on scope phenomena – see below) – in the spirit of e.g. Clifton et al. (2002). The most salient semantic content it is generally endowed with is that of a durational adverbial; its semantics is generally compared with that of a 'for + definite temporal duration' adverbial (as in *for some time*). However, there are some complexities in the actual data that need to be addressed before such a view can be definitely adopted.

Bishop (2002: 82) puts forth the first published survey of the semantics of LLI in Australian languages. She specifically claims that:

- when used with a verb, LLI conveys “durative aspect (ongoing or continuous action)”, and “iconically ‘dramatises’ the ongoing nature of the action”.
- when used with a nominal, the vowel lengthening associated with LLI “dramatises the ‘extent’ of the referent: for example, the amount of a material substance, or the extent of a geographical region”.

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<sup>5</sup> See (Ladd 2008: 41) for some general consideration (and further references) of what can be dubbed 'the linguist's theory of intonational meaning' (see also Bergmann 2007; Portes/Beyssade 2014) for more recent developments. However, unlike Ladd (2008), we do not endorse the view here that intonational meaning should be regarded as crucially 'morpheme-like'; from the semanticist's point of view, this comparison is not illuminating in that it obviates the need for distinguishing between several types or intonational interpretative role. We certainly believe that the kind of meaning exemplified by LLI in Australian languages can probably be compared to that of an affix, clitic or other word class, but we do not see that this particular propositional-content level kind of meaning should be the only interpretative function accessible to e.g. intonation contours in general ; see e.g. (Murray 2014) for a brief typology of sophisticated but common ways for linguistic expressions to contribute to various levels or 'layers' of interpretative content, both semantically and pragmatically.

Simard (2010; 2013) offers a similar review of meanings, obviously following Bishop (2002) in using the descriptor “dramatisation”.

These characterisations may need to be revised in several respects, especially in the light of the Iwaidja data. First, with regard to verbal uses of LLI, if one assumes a classic two-layered theory of aspectual meanings (see e.g. Smith 1991), it is unclear whether Bishop (2002) and Simard (2013) assume that the notion of ‘aspect’ here involved pertains to the realm of event structure aspect (so-called ‘Aktionsart’, typically associated with the contextual interpretation of a verb), that of viewpoint aspect (as typically conveyed by inflectional morphology; this is at least a plausible consequence of Bishop (2002) using the word ‘continuous’), or some kind of periphrastic, non-viewpoint aspect (which represents some kind of lexico-grammatical, intermediary aspect). Second, although existing works appear to assume that LLI can affect the interpretation of an NP, it rather seems to be the case that even when an NP is the phonological locus of LLI, the verbal head of the clause is the element really targeted. In other words, it appears that LLI can take wider scope than its locus might suggest. Thus, in (5), it is clear that the object *mayubarl*, though marked with linear lengthening, is not ‘dramatised’ – rather, it merely seems to offer an appropriate ‘anchoring spot’ for linear lengthening as the last element of the VP. (6) offers a similar setup, again with the object receiving LLI – without any quantificational effect being achieved. Note that *mayubarl* is an incremental theme argument in the sense of Dowty (1991), and could potentially be measured out by LLI, or at least interact with its scalar/quantificational content – but it is clearly not the case here, which seems inconsistent with suggestions made e.g. in Bishop (2002). Clearly *jurra* is not an incremental theme in (6), and yet is also the locus of LLI.<sup>6</sup>

(5) *A-r-ngan rajirra-n mayubarl:*  
 3SG-stand-ANT 3sg.M.A>3SGO-peel-ANT potato.  
 ‘He was standing there peeling a potato’. [TAIM20130712M-JC, 22:10]

(6) *A-ri-ng r-arnaka-ng jurra:*  
 3SG-stand-IPFV 3SG-M.A>3SGO-poke-IPFV paper.  
 ‘He poked the paper bag [context : over and over again until the sun went down]’  
 [TAIM141124JCRNKMededIw, 28 :40]

By and large, the following empirical generalisations appear to hold:

GENERALISATION (1): when stimuli involved multiple occurrences of an event description, perceptually durative states or activities (both with or without iteration – cf. e.g. *rimajbungkung* ‘lift (repeatedly)’ in (10), vs. *rimajbungkung::* ‘lift/hold high’ in (8), and within iterated elicitation contexts (‘for a long time’ context) even when simple telic event descriptions had been elicited in the prior the ‘once’ context, LLI was almost systematically triggered, often (though not always) in addition to the use of explicit reduplication verbs forms, full reduplication of the verb itself, or other pluractional/continuative marking (cf. English ‘keep on, continue’)

<sup>6</sup> It should also be noted that the Anindhilyakwa data discussed above offers strikingly converging comparative evidence, in the sense that LLI appears to systematically be related to some verbal head, regardless of its exact locus. However, it remains uncertain what triggers these positional variations. We must leave it as an open issue for future research.



- (7) *Nanguj a-ri-ngan:: k-artbirru-ny::*  
 yesterday 3SG-stand-ANT 3sg.M.A>3SGO-throw- ANT  
 ‘Yesterday he threw it [the stone] [context: until the sun went down]’  
 [TAIM141124JCRNKMededIw, 46 :14]
- (8) *Ri-majbungku-ng:: kartbirruny*  
 3SG.M.A>3SGO-lift- ANT 3SG.M.A>3SGO-throw- ANT  
 ‘He held it high [the stone] for a while... then he threw it.’  
 [TAIM141124JCRNKMededIw, 45:03]
- (9) *A-ri-ngan [wardyad] k-artbirru-ku-ny:: [until the sun went down]*  
 3SG-stand- ANT 3SG.M.A>3sgO-throw-ITR- ANT  
 ‘He threw [the stone] repeatedly.’  
 [TAIM141124JCRNKMededIw, 47:08]
- (10) *Nanguj aringan ri-majbungku-ku-ng::*  
 yesterday 3SG-stand- ANT 3SG.M.A>3SGO-lift-ITR- ANT  
 ‘He kept lifting it [the crate]’.  
 [TAIM141124JCRNKMededIw, 51:32]

GENERALISATION (2): by contrast, when stimuli had driven informants to produce telic predicates, LLI was rarely elicited in the ‘once’ context, irrespective of whether or not the stimuli had perceptual duration. With respect to LLI, no consistent difference was found between so-called ‘punctual’ vs. ‘non-punctual’ telic predicates (achievements vs. accomplishments).

When we tried to elicit LLI with telic event descriptions in single-event (‘once’), non-iterated / non-habitual contexts, most informants rejected LLI with achievements verbs, except (and only marginally) when clearly ‘coerced’ real-time stimuli were produced (e.g. by mimicking a slow-motion action of giving something to someone). They also tended to reject LLI with accomplishment descriptions; the use of imperfective morphology seemed to improve acceptability judgements; instead, informants generally insisted on using some lexical alternative with inherent pluractional meaning (e.g. with reduplication). Still with respect to *Aktionsarten*, it should be noted that LLI does not interact with scalarity as a verbal semantic parameter (cf e.g. (Kennedy/McNally 2005)): in spite of systematic attempts with inherently scalar verbs such as so-called ‘degree achievement verbs’, or change-of-state verbs with particles possessing a scalar meaning (e.g. *kirrk*), LLI was only ever found to cause an increase in temporal duration (not an increase in scalar intensity).

GENERALISATION (3): the use of LLI with imperfective aspect marking was biased towards telic event descriptions (it seemed to improve the acceptability of LLI with sentences denoting telic event predicates), and vice versa, the use of LLI with underspecified (but potentially perfective) aspect marking was biased towards atelic, stative.

These empirical generalisations strongly suggest that in the verbal domain, LLI is highly sensitive to aspectual parameters and not merely temporal parameters. In particular, LLI appears to require some kind of event mereological complexity (the event predicate conveyed by the utterance should either be inherently cumulative in the sense of Krifka (1992), i.e. atelic, or be associated with a gradual though telic change-of-state – for instance with a verb possessing a so-called incremental theme argument in the sense of Dowty (1991), or with a

predicate inherently associated with a gradual yet bounded development/ ‘change–of–state’ scale, cf. *cool down* in English).<sup>7</sup> In turn, this suggests that the semantics of LLI is not that of a *for* adverbial phrase, but rather that of some kind of subjective measurement function, involving a non–absolute standard of comparison (something along the lines of a quantifier like ‘some’).

This intuition is further supported by the fact that LLI is also found with some non–verbal categories (i.e. neither a verb nor a verb modifier), i.e. distal spatial deictic *baki* ‘over there, out of sight’ (an intrinsically scalar item, arguably), or with *mardan* ‘a little bit, a small quantity of’ or even *mardan mardan* – the latter being used with LLI to convey the idea that one would like to get a little bit more food than one’s expected share of food. The isolated nature of this clearly scalar item contrasts with the observation made above about degree achievement verbs, and other scalar change–of–state verbs; this suggests, we believe, that we are here facing an idiomatic case of lexification, the origin of which is a mystery to us.<sup>8</sup>

By itself, LLI thus appears to have a semantics akin to that of predicate modifier (i.e. of type  $\langle\langle e,t\rangle\langle e,t\rangle\rangle$  for a single–argument predicate); it does not appear to be a quantifier *stricto sensu* ; see for instance so–called “quantity adjectives”, such as *many* and *few* qua expressing predicate modifiers (cf. Solt 2014).

## 4.2 Linear Lengthening Intonation in English on Croker Island

The phonetic features of Linear Lengthening in the variety of English examined here are in principle identical with those found in Iwaidja. However, the phonetic lengthening is not always as extreme (see Figure 3). In the following example (Figure 2) the Linear Lengthening is on *bit* (333 ms compared to ca. 95 ms for the same word without LLI).

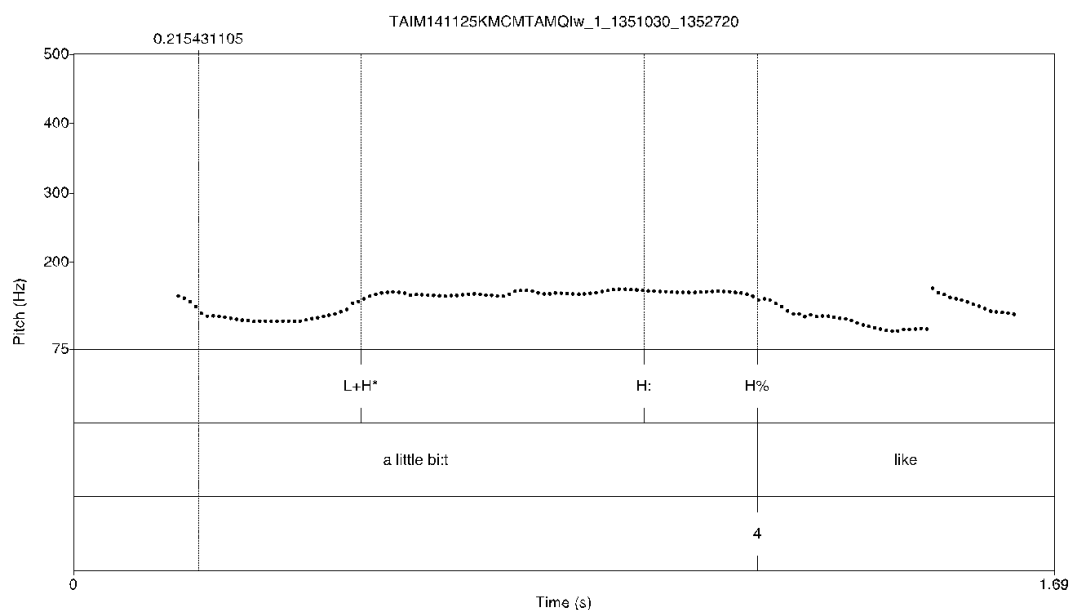


Figure 2: Phonetics of Linear Lengthening in Croker Island English

<sup>7</sup> See e.g. Kennedy/McNally (2005), Kennedy (2012) and Caudal/Nicolas (2005) for more on the importance of *scalarity* in the classification of event structures, going beyond the classical Vendler–style typologies of event structures.

<sup>8</sup> We have also recorded uses of LLI with stems meaning ‘call out’ and ‘throw’, which appeared to involve not an increased duration reading, but a distal/spatial reading (‘throw a long way away’, ‘call out at someone a long way away’) for which it was unclear to us whether these were entrenched uses, or reflected on a possible polysemy of LLI across the spatial and temporal domains. Further research is needed in order to clarify this point. See also our comments above about distal deictic *baki*, §4.1.1.

The meaning of Linear Lengthening Intonation shows some close parallels to that in Iwaidja (§ 4.1). Like in Iwaidja, it has quantificational effects, and is sensitive to scalarity parameters (in the sense of Caudal/Nicolas 2005; Kennedy/McNally 2005). One example is ‘bit’ in Figure 2, which incidentally was elicited as a translation for Iwaidja *mardan* ‘small, little’ with Linear Lengthening Intonation to mean ‘a really small quantity’. Also, like in Iwaidja, with stative verbs Linear Lengthening Intonation triggers markedly durative, perfective readings.

(11) *We bin camping there on top:: and getting down.*  
 [AbE\_narratives\_Eng\_CM\_140924\_01]

In addition, LLI also seems to attach to conjunctive adverbials, such as *then* in Figure 3.

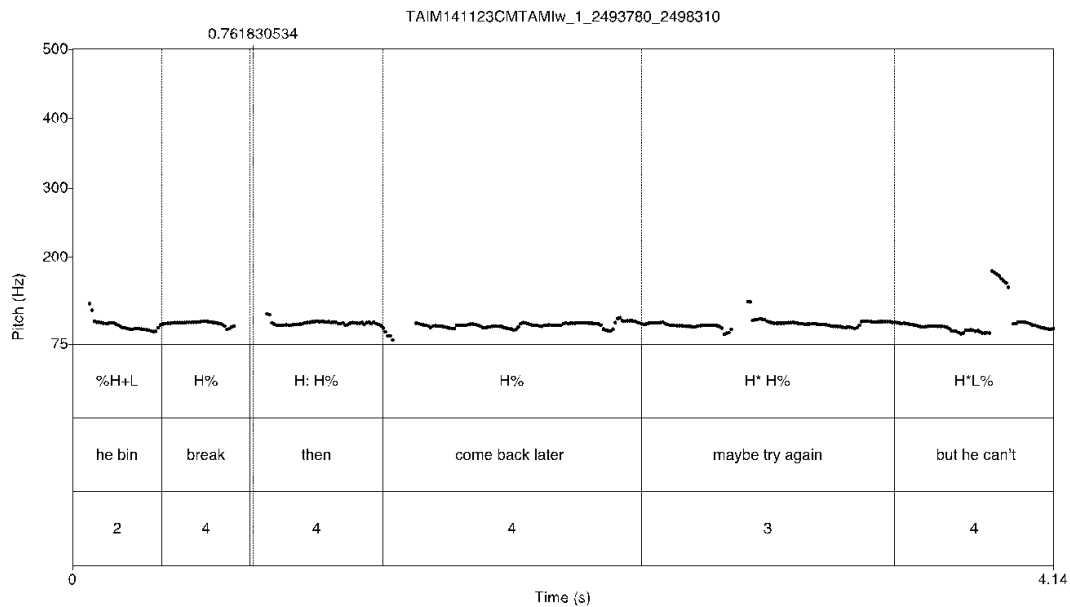


Figure 3: Linear Lengthening Intonation in Croker Island English on stative verbs and connectors

Although *break* in Figure 3 is not marked up as lengthened, it can be argued that the linear (i.e. plateau) intonation contour links it to the following intonation phrase, which exhibits Linear Lengthening Intonation, in the form of a sustained high plateau.<sup>9</sup> This pattern of a high sustained plateau stretching over several intonation units is common; it mars a sequence of event descriptions that are connected in a macro-, complex event description, stretching out over a longer period<sup>10</sup>.

<sup>9</sup> An anonymous reviewer asks what the “basis of the Break 4” on *break* is. It is the preceding downstep.

<sup>10</sup> It should be noted that many Australian languages excel at construing complex event structures through complex predicate/serial verb systems (cf. e.g. Schultze–Berndt 2000; Nordlinger/Caudal 2012, or complex spatial constructions (e.g. so-called ‘associated motion’ in Arandic, cf. Wilkins 1991). Iwaidja appears to offer related configurations, *qua* serial–verb construction, across which, unsurprisingly, LLI turned out to span. These constructions typically involve combinations of posture verbs and lexical verbs – regardless of the syntactic ordering, cf. e.g. (7) vs. (10) – and appear to offer a redundant, re–enforcing semantic signal that the event described by the lexical verb had a ‘long duration’. Cf. (Caudal/Mailhammer 2016) This sort of data point, we believe, reflects on a case of syntactic/semantic transfer from Iwaidja into English, where the kind of inherent complex structuring of event descriptions so characteristic of the substrate language, also surfaces.

(12) *Leaf falling down, makin' lots of mess, rake it again, do that.*  
[TAIM141123CMTAMIw\_1]

This is a kind of markedly durative<sup>11</sup> reading where an ongoing, iterative sequence of events are described. The leaves keep falling, making a mess and have to be raked up again repeatedly until the end of the activity, which in this case is the end of the day. Markedly durative readings are also found with activities, such as *go around, dance* and *pull*.

In some cases, intensity appears to be expressed at the same time. For instance, in the following example, in which Linear Lengthening occurs on the stressed vowel of *lookin'it*, it could denote an instance of closer looking, i.e. an inspection; however, this is a predictable side effect of a prolonged inspection event, cf. (1), repeated here. Given the general lack of connection between scalarity and LLI in Iwaidja (except with one lexical case, *mardan mardan*), cf. §4.1.2, we believe it preferable not to take such datapoints as indicative of an 'increased intensity' meaning *per se*.

(13) *Baki, they bin look'it. Karlu, they bin throw'im away.*  
tobacco they looked at it no [Iwaidja] they threw it away  
'They inspected the tobacco [code switch from Iwaidja] for a while. [Then they said:] "No" [code switch from Iwaidja]. They threw it away.'  
[AbE\_Narratives\_Eng\_CM\_140914\_01, 4:03]

## 5 Discussion

As §4 showed, both Iwaidja and English on Croker Island show an intonation tune that is both formally and semantically virtually identical. This tune has not been reported to exist in other varieties of English in Australia. We thus regard our hypothesis as confirmed, and suggest that Linear Lengthening Intonation in English has its origins in Iwaidja. The main argument for Iwaidja is the specifically quantificational meaning that appears to be absent from other Australian Aboriginal languages for which a similar tune has been discussed. We propose that bilingual speakers of Iwaidja and English transferred LLI from Iwaidja to English, as English has similar tunes available, even if the meaning is different. In particular we think of tunes typically found with utterances in which implicit measurements are performed, such as in (13) (see also (2) above).

(13) *Keep going, keep going, that's it!*

In contrast to similar tunes in English (see §1), however, LLI can be used much more generally in quantificational terms (see §5).

In spite of this, we do not at present want to rule out other potential sources and influences. That is, we cannot rule out that Iwaidja as a contact language has nothing to do with the occurrence of Linear Lengthening Intonation expressing quantificational effects. Other potential sources are

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<sup>11</sup> Said marked duration exceeds the normal, expected duration of a similar event description without LLI; it is of a (contextually determined) comparative nature, i.e. involves a standard of comparison, very much like scalar expressions – cf. (Kennedy 2007).

- non-Aboriginal dialects of English, although there are no published accounts of Linear Lengthening Intonation in varieties of English;<sup>12</sup>
- Aboriginal dialects of English and contact languages;
- other Indigenous languages either in direct contact (e.g. Kunwinjku) or in indirect contact.

As Meakins (2014: 389) points out, excluding other potential sources is crucial for a compelling case. At present we cannot do this, which is also due to the lack of comparable data. That is, although there are e.g. detailed descriptions of intonational patterns and tunes that are phonetically the same as Linear Lengthening Intonation discussed here (see e.g. Bishop 2002, Bishop/Fletcher 2005 for Bininj Gun-Wok), the meaning of these tunes is not described with the same semantic detail, so that it is difficult to compare Iwaidja to these languages. We hope to be able to provide such a comparison in future work. For the present time, our argument rests on the striking phonetic and semantic parallels between Iwaidja and our sample of English on Croker Island. We find it extremely likely that even if Linear Lengthening Intonation originated in Croker Island English independently from influence from Iwaidja bilingual speakers of Iwaidja and Croker Island English would have been supporting this tune in a process of structural convergence, and thus increased its frequency. Hence, this would at least be a case of multiple causation, but it is clear that this remains somewhat speculative.

## 6 Conclusion

This paper investigated an intonational pattern of Iwaidja in terms of its phonetics and detailed semantics and a close parallel of this tune in a sample of English from Croker Island. The main findings are:

- Linear Lengthening Intonation in Iwaidja appears to convey a subjective measurement-based, quantificational or quantification-related semantic content, mostly restricted to temporal duration in event descriptions (plus some connections with spatial measurement in a few expressions we have able to identify, the extent of which remains to be explored); by and large, it does not appear to interact directly with scalarity in event descriptions; it is possibly different from similar intonation patterns in other languages, although there is also significant overlap between languages.
- Linear Lengthening is also found in Croker Island English with the same meaning pattern.
- It is likely that the occurrence of Linear Lengthening Intonation in Croker Island English is at least partly motivated by the co-existence of Linear Lengthening Intonation with quantificational meaning in Iwaidja, as bilingual speakers would probably show structural convergence as predicted e.g. by Muysken (2013).

However, we cannot at present rule out other influences, especially other Indigenous languages partly due to a lack of equally fine-grained semantic analyses, but also because it is clear that at least some meanings found in Iwaidja and Croker Island English are also found in other contact languages, such as Kunwinjku.

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<sup>12</sup> H-H% contours, which are somewhat similar to Linear Intonation, seem to be attested for Glasgow English, but apparently not in connection with a lengthened final nucleus, i.e. as Linear Lengthening Intonation (see Mayo 1996).

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# „Ora ho una super geiles neues Fahrrad ☺“: Sprachkontaktphänomene am Beispiel italienisch-deutscher Chats

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## Abstract

*Die Verwendung digitaler Medien (u.a. Facebook und WhatsApp) bedeutet nicht nur eine Veränderung der Kommunikation, sondern hat auch zu einer Erweiterung des Forschungsfelds hinsichtlich mehrsprachiger Sprachrepertoires geführt (vgl. Androutsopoulos 2013, Franko 2015). In diesem Zusammenhang haben sich die schon vorhandenen Studien einerseits mit den Eigenschaften des Mediums als solchem auseinandergesetzt (vgl. Dürscheid 2016, Jakob 2015, 2017), andererseits wurde das Konzept der sogenannten „vernetzten Mehrsprachigkeit“ geprägt (Androutsopoulos u.a. 2013). Die Art und Weise, wie die neuen Medien sich auf Sprachkontaktphänomene in mehrsprachigen Konstellationen auswirken, ist weiterhin ein Forschungsdesiderat.*

*In diesem Aufsatz werden Phänomene des Sprachkontaktes in italienisch–deutschen Chats vorgestellt und diskutiert, und ihre Rolle im Kontext mehrsprachiger Repertoires analysiert. Das Korpus besteht aus WhatsApp Nachrichten, die zwischen in Deutschland ansässigen Italienerinnen und Italienern und deutschen Einheimischen im Alter von 23 und 30 Jahren geschrieben wurden. Die Analyse der Wechselwirkungen migrationsbedingter Kommunikation und digitaler Medien bildet den Kern des Beitrags. Ferner soll diskutiert werden, ob im Migrationskontext von einer neuen Dimension kontaktlinguistischer Interaktionen zu sprechen ist. Die Ergebnisse erklären Art, Frequenz und situatives Auftreten des Code–Switchings bzw. der Transfererscheinungen (vgl. Matras 2009, Riehl 2014a, 2014b).*

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## 1 Einleitung

Die enorme Verbreitung der sozialen Medien in unserer alltäglichen Kommunikation zeigt den Stellenwert dieser Form der Kommunikation auf, welche auch aus sprachwissenschaftlicher Perspektive ein breites Analysefeld bietet.

In Deutschland haben im Jahr 2017 ca. 31 Millionen Menschen Facebook verwendet, wobei 9 Millionen den Chat Facebook–Messenger und 37 Millionen WhatsApp benutzen.<sup>1</sup> Trotz der stark verbreiteten Nutzung sozialer Medien gibt es jedoch wenige Studien, die sich aus linguistischer Sicht damit beschäftigt haben. Einige untersuchen multimodale Elemente wie Piktogramme, Bilder, Emoticons usw. in WhatsApp–Nachrichten (vgl. Arens 2014), andere, insbesondere im deutschen Kontext, setzen sich mit der Problematik von WhatsApp bzw. Facebook als Kommunikationsmedium und seiner Anordnung im konzeptionellen Mündlichkeit– bzw. Schriftlichkeitskontinuum von Koch/Oesterreicher (1985) auseinander (vgl. Dürscheid 2016, Jakob 2017, Franko 2015). An dieser Stelle ist auch das SFN–finanzierte

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<sup>1</sup> <https://www.agentur-gerhard.de/social-media-marketing/social-media-nutzerzahlen-in-deutschland-2017/>.

Sinergia–Forschungsprojekt „What’s up Switzerland“ zu nennen, das an der Universität Zürich in Kooperation mit den Universitäten Bern, Neuchâtel und Leipzig durchgeführt wird.<sup>2</sup> Insbesondere im Migrationskontext spielen soziale Medien eine sehr wichtige Rolle, da sie nicht nur einen häufigen Kontakt mit der Familie bzw. dem Freundeskreis aus den jeweiligen Herkunftsländern erlauben, sondern auch ein Kommunikationsmittel innerhalb des Ziellandes darstellen. Hierbei haben einige jüngere Studien die Kommunikation bilingualer Jugendlicher erforscht, allerdings konzentrieren sie sich auf Chat–Foren und Facebook (vgl. Androutsopoulos/Hinnenkamp 2001; Androutsopoulos 2013; Androutsopoulos u.a. 2013, Androutsopoulos 2015; Siebenhaar 2005).

In dem vorliegenden Beitrag wird eine Fallstudie zur Chat–Kommunikation anhand von Facebook– und WhatsApp–Nachrichten im Kontext der Migration vorgestellt. Hierzu werden auf der Grundlage einer Fragebogenerhebung und eines WhatsApp– und Facebook–Nachrichtenkorpus Sprachkontaktphänomene von insgesamt zwanzig in Deutschland ansässigen ItalienerInnen und Deutschen untersucht. Im Folgenden wird zunächst der theoretische Rahmen vorgestellt, im Anschluss daran werden die Fragestellungen dargelegt und schließlich wird auf Methodik und Ergebnisse eingegangen.

## 2 Technologische Veränderungen und begriffliche Herausforderungen

Mit der schnellen technischen Verbreitung und Weiterentwicklung der internetgestützten Medien geht eine terminologische Debatte in der Forschung einher (vgl. Crystal 2011; Herring 2007). Laut Boos u.a. (2000: 2) werden unter „computervermittelter Kommunikation [...] alle kommunikative[n], d.h. soziale[n] Austauschprozesse verstanden, die durch einen Computer als vermittelndes technisches Medium stattfinden“. In dieser Kommunikationsart verwenden der Sender und der Empfänger einen Computer „zur Ent– und Dekodierung der Nachricht“ (ebd.: 2). Diese Definition zeigt einerseits das Potential des Computers als Kommunikationsmittel auf, andererseits weist sie auf die schnellen Veränderungen der sozialen Medien hin, welche mittlerweile nicht (nur) mittels eines Computers zur Verfügung stehen. Trotz der Etablierung des Begriffes „computervermittelte Kommunikation“, der eine Übersetzung des englischen Pendantes *computer-mediated communication* (CMC) ist, verwenden einige Studien dennoch weitere Bezeichnungen wie „computergestützte Kommunikation“ als Synonym dazu, wobei eine terminologische Abgrenzung nicht vorgenommen wird (vgl. Baron/Ling 2013; Thurlow/Poff 2013; Wenzel 2002). Eine weitere Alternative schlägt Jakob vor (2017: 19), wonach die Datenübertragung nicht durch das materielle Übertragungsmittel (sei es das Handy, der Computer, das Tablet usw.) charakterisiert wird, sondern durch das Internet. Hierzu wird darüber hinaus der Begriff „internetbasierte Kommunikation“ diskutiert, welcher auch beispielsweise in den Arbeiten von Ziegler (2002) und Beißwenger (2013) verwendet wird. Nach Jucker/Dürscheid (2012) werden Mobilfunkgeräte nicht als Computer aufgefasst, deshalb sprechen sie von „keyboard-to-screen communication“, diese Bezeichnung wird wiederum von Herring/Stein/Virtanen (2013) als zu spezifisch abgelehnt. Laut Herring/Stein/Virtanen (2013) seien Handys als Computer und alle damit verschickten Nachrichten als „computer-mediated communication“ einzustufen. Angesichts der raschen Veränderung der internetgestützten Übermittlungsmedien, die keine leichte begriffliche Anordnung erlauben, wird in diesem Beitrag der Begriff *computer-mediated communication*/computervermittelte Kommunikation herangezogen, damit unter

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<sup>2</sup> Weitere Informationen zum Projekt sind auf der folgenden Internetseite zu finden: <https://www.whatsup-switzerland.ch/index.php/de/>.

anderem eine Kontinuität zu vorherigen Studien (Beißwenger/Storrer 2008; Romiszowski/Mason 2004; Syazwani Halim/ Maros 2014) gewährleistet wird.

### **3 Computer-mediated communication und Mehrsprachigkeit**

Die Relevanz digitaler Medien besteht darin, dass sie nicht nur zu kommunikativen Veränderungen, sondern vielmehr zu einer Erweiterung des Forschungsfeldes hinsichtlich mehrsprachiger Sprachrepertoires geführt haben (vgl. Androutsopoulos et al. 2013; Franko 2015).

Dank transnationaler Bewegungen und Beziehungen sowohl im akademischen als auch im berufstätigen Umfeld können Menschen für eine gewisse Zeit in einem anderen Land leben und studieren bzw. arbeiten. Dadurch können sie ihre sozialen Netzwerke ausbauen und sich somit auf eine kontinuierliche Entwicklung und Mobilisierung mehrsprachiger Repertoires stützen, die, in der Regel, drei Sprachen aufweisen: Eine Mehrheitssprache, eine Herkunfts- bzw. Minderheitssprache und Englisch als *lingua franca* (vgl. Androutsopoulos u. a. 2013: 163). In diesem Zusammenhang ist von „vernetzter Mehrsprachigkeit“ (ebd.: 163) die Rede, in dessen Fokus die drei Dimensionen der Schriftlichkeit, Öffentlichkeit und Hypertextualität im mehrsprachigen Kontext stehen. Keine dieser Dimensionen ist spezifisch in mehrsprachigen Kontexten, sie zeigen jedoch einen wechselseitigen Effekt, da „digital-schriftliche mehrsprachige Praktiken spezifische Züge aufweisen, die weder restlos auf technologische Rahmenbedingungen noch auf eine direkte Entsprechung zum mündlichen Sprachgebrauch zurückgeführt werden können“ (ebd.: 163). In dieser Hinsicht sei die mehrsprachige Kommunikation in digitaler Form weder auf die technologischen Rahmenbedingungen noch auf den mündlichen Sprachgebrauch zurückzuführen, sondern viel mehr als „ein eigenständiger Modus sprachlicher Produktion“ (ebd.: 164) zu interpretieren, wo z. B. kreative Wechsel und Sprachmischungen sowie spezifische Verwendungsmuster der englischen Sprache eine wichtige Rolle spielen. Auch Krefeld (2015: 268 ff.; 2016: 270 ff.) spricht von einer substandardsprachlichen Varietät (Entstandardisierung), einer Differenzierung sowie einer Individualisierung des sprachlichen Mittels in der CMC, die durch eine Variabilität im Kommunikationsraum gekennzeichnet sei. Die neuen Medien haben somit einen Wechsel der alltäglichen schriftlichen Praxis ermöglicht, welche unter anderem durch die breite Verwendung von Varietäten und Dialekten bezeichnet ist.<sup>3</sup> Der Gebrauch mehrerer Sprachen und deren Varietäten unter anderen in Form von Transfer bzw. Code-Switching in der CMC wird im Sinne einer „glokalen“ Praxis verstanden (vgl. Androutsopoulos 2013: 678). Der Begriff „glokal“ stammt aus der Zusammensetzung von „global“ und „local“ und darunter wird „the process by which globally circulating cultural resources are recontextualized in local settings“ (Androutsopoulos 2007: 222) verstanden. In diesem Sinn bezeichnet Bucher (2016: 206) als „glocal players“ die User der Handy-Kommunikation, da sie sich in einer „glocalized community“ bewegen, d.h. in einer Kommunikationsgemeinschaft, die nicht einsprachig ist, sondern „sich sowohl lokaler (Dialekt, Standarddeutsch, Italienisch) als auch globaler Ausdrucksmittel (z.B. Englisch) bedient“ (Huber/Schwarz 2017: 16).

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<sup>3</sup> Welcher Zusammenhang zwischen den Charakteristika des Chat-Mediums und des Sprachgebrauchs u.a. im mehrsprachigen Kontext entsteht, wird an dieser Stelle nicht angesprochen. Barberio/Ingrosso (in Vorbereitung) widmet sich einer ausführlichen Analyse dieses Aspektes.

#### 4 Sprachkontaktphänomene in Chat-Nachrichten. Eine Begriffserklärung

Im Vordergrund dieser Studie steht die Analyse der Sprachkontaktphänomene anhand von WhatsApp- und Facebook-Nachrichten. Dieser Kontakt umfasst sowohl den Prozess der Sprachberührung als auch das Resultat der Einflüsse einer Sprache auf eine andere und wird anhand verschiedener Arten des Lehnnguts greifbar (vgl. Oksaar 2004, Riehl 2014a, 2014b). Sprachkontakt erfolgt laut Matras (2009, 2013) zunächst durch das Verständnis von Sprache als Praxis kommunikativer Interaktion und von grammatikalischen Kategorien als Auslöser und Operatoren von Sprachverarbeitungsaufgaben im Kommunikationsprozess. Dieser Annahme folgend wird davon ausgegangen, dass mehrsprachige Menschen ihre Kommunikation nicht in Form von zwei „Sprachen“ oder zwei „sprachlichen Systemen“ organisieren. Vielmehr haben sie ein reiches, erweitertes Repertoire an Sprachstrukturen. Riehl (2001, 2014a, 2014b) spricht in diesem Zusammenhang von „Sprachkontaktphänomenen“. Dieser Terminus wird auch von Dirim (2007: 117) verwendet:

Die Kategorie der ‚Sprachkontaktphänomene‘ liegt quer zur Einteilung in ‚besondere sprachliche Fähigkeiten‘ und umfasst alle Arten der Sprachmischungen sowie von den Standardsprachen und der üblichen Form der weiteren Sprachvarietäten abweichende Formen, die auf den Einfluss von anderen Sprachen und Sprachvarietäten zurückgeführt werden können.

In der sprachwissenschaftlichen Forschung herrscht Unklarheit bezüglich der Terminologie der Phänomene, die aus dem Sprachkontakt resultieren. Allgemein wird im Fall einer Alternation von Sprachen innerhalb eines Diskurses von Code-Switching gesprochen (vgl. Matras 2009: 101). Andere Autoren sprechen im gleichen Fall von „codemixing“: „a cover term for various types of language mixing phenomena“ (ebd.: 101). Darunter werden „the structures that are the product of language mixing and do not occur in the speech of monolinguals“ verstanden (ebd.: 101). Bezüglich des Code-Switchings wird zwischen „funktionalem“ und „nicht-funktionalem“ (Riehl 2014b: 101) unterschieden. Das funktionale Code-Switching hat eine Kontextualisierungsfunktion und findet aus diskursstrategischen Gründen statt, z. B. wenn eine persönliche Einstellung oder Bewertung ausgedrückt wird, aber auch wenn bestimmte Ausdrucksschwierigkeiten zu Stande kommen. Das nicht-funktionale Code-Switching ist demgegenüber auf „interne Prozesse der Sprachproduktion zurückzuführen“ (Riehl 2014b: 103), wobei der Sprachwechsel nicht mit Absicht realisiert wird, sondern durch Auslösewörter (*trigger words*) hervorgerufen wird. Auer (2010: 64) weist darauf hin, dass im Fall von Sprechern, die das Prestige ihrer sprachlichen Kenntnisse aufzeigen möchten und aus diesem Grund von Sprache zur Sprache wechseln, von „*élite codeswitching*“ die Rede ist.

Riehl (2014a, 2014b) unterscheidet darüber hinaus zwischen Code-Switching, d.h. wenn ein Übergang von einer Sprache zur anderen stattfindet, und Transfer<sup>4</sup> im Fall eines Vorganges, bei dem ein bestimmtes sprachliches Element, eine sprachliche Struktur oder eine Regel von der einen Sprache in die andere übernommen und in deren System integriert wird. Hierbei handelt sich um eine Übernahme von Elementen sowohl auf der lexikalischen, semantischen, als auch auf der morphologischen und syntaktischen Ebene. Hierzu haben Thomas/Kaufmann (1988: 74 ff.) verschiedene Stufen des Einflusses von einer Zweitsprache auf die Erstsprache zusammengetragen, die auch vom jeweiligen Druck abhängig sind, den die Gemeinschaft, die die Zweitsprache verwendet, ausübt. Die erste Stufe weist vor allem lexikalische Entlehnungen auf, die sich insbesondere auf Inhaltswörter beschränken und in der Regel nicht den Grundwortschatz betreffen. Die zweite Stufe zeigt neben lexikalischen auch strukturelle

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<sup>4</sup> Der Begriff „Transferenz“ kommt hier von dem Terminus „*transference*“ (vgl. Clyne 1972: 33).

Einflüsse. Auf der dritten Stufe treten vor allem strukturelle Entlehnungen auf: Adpositionen, Affixe und Pronomina. Die vierte und fünfte Stufe weisen schließlich strukturelle Entlehnungen auf, insbesondere im Bereich der Morphosyntax. In eine ähnliche Richtung argumentiert das sogenannte Modell des *italiano in situazione di extraterritorialità* von Franceschini (2002: 104), in dem die linguistischen Systeme, die in Kontakt treten, über ein Zentrum und eine Peripherie verfügen. Während die Peripherie des Systems (die Lexik und die Morphologie) leicht beeinflussbar ist durch fremdstämmige Elemente, stellt die Syntax den harten Kern dar, der weniger veränderlich durch Kontakt ist.

Oft wird allerdings nur ein Wort aus einer anderen Sprache übernommen, welches jedoch nicht integriert wird. Poplack/Sankoff/Miller (1988: 50 ff.) unterscheiden zwei Gruppen lexikalischer Integration: „those that are structurally integrated from the onset, and those that are not“ (Matras 2009: 106) und definieren unter „nonce borrowing“ Lexeme die integriert werden, welche allerdings (noch) nicht fester Bestandteil des Lexikons der Varietät der Sprachgemeinschaft sind. Riehl (2001: 64, 2014b: 105) spricht hierbei von „Ad-hoc-Entlehnungen“ oder „Ad-hoc-Übernahmen“, „d.h. eine Form von Entlehnung und nicht von Code-Switching“.

Der Annahme folgend, dass zunächst eine gewisse Schwierigkeit in einer scharfen Trennung zwischen den oben genannten Phänomenen resultiert, verstehen wir diese als Kontinuum zwischen Code-Switching, (Ad-hoc-)Entlehnungen und Transfer.

## 5 Projektbeschreibung

Im Zentrum der vorliegenden Untersuchung steht die Chatkommunikation italienischer Neuankömmlinge<sup>5</sup> in Deutschland und die Analyse der damit verbundenen Sprachkontaktphänomene, welche sowohl in der Interaktion der Zielgruppe in einem In-Group-Kontext<sup>6</sup> als auch mit deutschen Einheimischen stattfinden. Die Auswirkung der neuen Medien auf den Sprachkontakt in mehrsprachigen Konstellationen sowie die Unterschiede zwischen sprachhomogenen (IT-IT) und sprachheterogenen Chats (DE-IT)<sup>7</sup> bilden die zentralen Fragestellungen der hierbei durchgeführten Studie. Diese Phänomene in Bezug auf Art, Frequenz und situatives Auftreten zu untersuchen, soll Ziel der Analyse sein.

Das Korpus besteht aus vier IT-IT-Gruppenchats und vier DE-IT-Single-Chats, die mittels der Nachrichten-Apps „WhatsApp“ und „Facebook Messenger“ ausgetauscht wurden. Insgesamt wurden 1544 Beiträge gesammelt: 669 IT-IT und 875 Chatbeiträge. An der Studie haben 20 Probanden teilgenommen, darunter 16 Personen mit Italienisch als L1 und vier mit Deutsch als L1. Beide Zielgruppen waren in der Zeit der Erhebung zwischen 23 und 30 Jahre alt, verfügten über einen Hochschulabschluss und waren in München ansässig. Die italienischen Probanden lebten seit weniger als sechs Jahren in Deutschland und verfügten über B1- bis C1-Kenntnisse<sup>8</sup> in der deutschen Sprache. Die Italienischkenntnisse der deutschen Probanden lagen hingegen im Bereich von A2 bis B2. Es ist dabei wichtig hervorzuheben, dass alle kommunikativen Interaktionen in einem informellen Kontext erfolgen, in dem sich alle Probanden gut untereinander kennen und ein enges und vertrautes Verhältnis zueinander haben.

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<sup>5</sup> Darunter versteht man Personen, die seit kurzer Zeit ihr Herkunftsland sowohl infolge der Wirtschaftskrise als auch wegen binneneuropäischer Austauschmöglichkeiten verlassen haben (vgl. Pichler 2015: 48f.; Ingrosso 2017: 120).

<sup>6</sup> Darunter wird die Kommunikation mit anderen seit jüngster Zeit Zugezogenen aus Italien verstanden.

<sup>7</sup> Unter sprachhomogene Chats werden Nachrichten verstanden, die zwischen Personen mit derselben L1 (in diesem Fall Italienisch) versendet werden. Dagegen sprachheterogene Chats finden zwischen Menschen statt, die unterschiedliche L1 haben (im diesem Fall Italienisch und Deutsch).

<sup>8</sup> Gemäß dem Gemeinsamen europäischen Referenzrahmen für Sprachen.

Eine große Herausforderung der linguistischen Forschung, u.a. der Sprachkontaktforschung, liegt in der Erhebung sprachlicher Daten in einer authentischen Alltagskommunikation. Auf der einen Seite muss sie sich an ethischen Standards orientieren: Das heißt, die Daten dürfen nicht heimlich erhoben werden, sondern mit dem Einverständnis der zu untersuchenden Personen. Auf der anderen Seite kann durch solch gesteuerte Erhebung ein Beobachterparadoxon entstehen, denn diese Umstände distanzieren sich von einer „natürlichen“ Alltagssituation und die Daten verlieren infolgedessen ihren spontanen Charakter. Durch die Untersuchung der Chatkommunikation wurde diese Problematik umgangen, da die Probanden nach schon existierenden Nachrichten gefragt wurden.

Die Erhebung erfolgte zwischen Dezember 2016 und Januar 2017, indem die Probanden gebeten wurden, ihre Chat-Verläufe zur Verfügung zu stellen. Mit der Funktion „Chat per E-Mail senden“ wird dies von WhatsApp ermöglicht. Beim Verschicken sollten sie die Option „ohne Medien“ auswählen, damit die Datensätze rein textbasiert ausgewertet werden können. Zum Schutz der Privatsphäre der Studienteilnehmerinnen und -teilnehmer durften sie zwar ihre Texte kürzen und die vertraulichsten Details aus ihren Chats löschen, aber der Text musste in unveränderter Form übermittelt werden. Zur Anonymisierung der Daten wurde jedem Probanden ein Code zugeordnet, in dem die wesentlichen Profilinformatoren enthalten sind: Geschlecht (F oder M), Alter, Nationalität (IT oder DE) und erster Buchstabe der Herkunftsregion. Eine dreißigjährige Probandin aus Italien, die aus den Abruzzen stammt wurde zum Beispiel folgendermaßen anonymisiert: F30IT\_A. Nach der Erhebung wurden die Chats mithilfe der Software MAXQDA ausgewertet. Das Programm basiert auf der Kodierung benutzerdefinierter Kategorien, die im Korpus markiert und gespeichert werden.

## 6 Beispiele

### 6.1 In-Group Chatkommunikation

In der In-Group Chatkommunikation zwischen den italienischen Probanden lassen sich zahlreiche Sprachkontaktphänomene erkennen, die überwiegend alltagssprachliche Lexeme aus der Umgebungssprache Deutsch aufweisen. Wie Beispiel (1) zeigt, lassen sich lexikalische Transferenzen (*finita ora Übergabe*, mit Beibehaltung des Femininums des deutschen Lexems *Übergabe* in der italienischen Sprache) und nicht-integrierte Entlehnungen (*tutto tiptop*) im Korpus erkennen. Der Sprachkontakt erfolgt hierbei insbesondere auf lexikalischer Ebene, während morphosyntaktische Strukturen nicht übertragen werden.

- (1) 15/12/16, 11:10 – F30IT\_A: *Ragazze ho reso casa, finita ora Übergabe*  
[Mädels ich habe die Wohnung abgegeben, die Übergabe ist geschafft]  
15/12/16, 11:10 – F30IT\_A: *Tutto tiptop*  
[Alles tiptop]

Allerdings lassen sich nicht nur Interaktionen zwischen dem Italienischen und der Umgebungssprache Deutsch feststellen, sondern auch weiteren Sprachen, insbesondere der englischen, wie Beispiel (2) aufzeigt:

- (2) 17/11/16, 15:00 – M26IT\_P: *Birra domenica sera?*  
[Treffen wir uns für ein Bier am Sonntagabend?]  
17/11/16, 15:27 – F27IT\_P: *Idk domenica è troppo lontana*  
[I don't know Sonntag ist noch weit]  
17/11/16, 15:27 – F27IT\_P: *Es tut mir leid!!!*

Ohne auf die Verwendung von Akronymen in Chatgesprächen als Resultat der Eigenschaften des Mediums genauer einzugehen, bezieht sich das Akronym „*Idk*“ auf die englische Äußerung „*I don't know*“. Dieser Ausdruck kann nicht als Entlehnung im engeren Sinne verstanden werden, da es keine monolexikalische Einheit darstellt, sondern eher einen vollständigen Ausdruck, der in Form eines Akronyms verwendet wird. Dies wird infolgedessen als funktionales Code–Switching eingeordnet, das aus diskursstrategischen Gründen stattfindet. In diesem Beispiel zeigt sich auch die Vielfältigkeit des Sprachrepertoires innerhalb der Äußerungen in schnell wechselnden kommunikativen Passagen. Die Bedeutsamkeit dieser Abschnitt liegt in der Fähigkeit der Probandin, aus ihrem mehrsprachigen Repertoire „sprachliche Verwendungsweisen“ (Pütz 2008: 227) zu schöpfen und sie innerhalb einer sehr kurzen Passage zusammensetzen. Die Mehrsprachigkeit spiegelt somit die Vielfältigkeit des Sprachrepertoires der Probanden in den Chats wider, die die Studienteilnehmerinnen und –teilnehmer sich als „glocal player[s]“ (Bucher 2006: 206) ausweisen, da sie bewusst mit ihren sprachlichen Kenntnissen „spielen“. Auf dieser Basis lässt sich erkennen, dass dabei eine Art „sprachliche Profilierung“ stattfindet, teilweise als Ausdruck des migrationsbedingten Sprachrepertoires. Da die Kommunikation in einem informellen In–Group–Bezugsrahmen erfolgt und es sich um eine Interaktion mit *peers*<sup>9</sup> (vgl. Krefeld 2004: 25) in gleichem Alter und mit demselben Bildungsniveau handelt, lässt sich ebenso die Hypothese aufstellen, dass solche sprachlichen Profilierungen gehäuft auftreten und dabei eine soziale Funktion spielen. Die Kommunikationsteilnehmerinnen und –teilnehmer verfügen über ähnliche sprachliche Kompetenzen und sind infolgedessen in der Lage, sich gegenseitig zu verstehen. Auer (2011) beschreibt diese Art von Code–Switching als Folge eines sprachlichen Prestiges, in diesem Fall des Deutschen und des Englischen, welches zu einem bewussten Gebrauch dieser Sprachen führt.

## 6.2 Deutsch–italienische Chatkommunikation

In der deutsch–italienischen Chatkommunikation ist dagegen ein hoch frequenter Gebrauch von funktionalem Code–Switching vorzufinden. Das Resultat ist eine Kommunikationsart, in der sich Elemente aus dem gesamten Sprachrepertoire der Probanden vermischen und komplementär nebeneinander eingesetzt werden.

(3) 28/03/11, 17:36 – F29IT\_L: *Ora ho anche una super geiles neues fahrrad magari fino da te è un po lontanino ma con il bell wetter possiamo organizzare una tour che ne pensi?*

[Ich habe jetzt auch ein super geiles neues Fahrrad. Zu dir ist es vielleicht ein bisschen zu weit, aber bei dem schönen Wetter können wir eine Tour organisieren, was hältst du davon?]

30/03/11, 16:27 – F29DE\_N: [...] *la prox settimana sono in svizzera auf exkursion. hoffe dass ich mir auch presto una bici compraren kann.*

[...] Nächste Woche bin ich auf Exkursion in der Schweiz. Ich hoffe, dass ich mir auch bald ein Fahrrad kaufen kann.]

Die dabei auftretenden Phänomene sind das funktionale (*sono in svizzera auf exkursion*) und das nicht–funktionale Code–Switching (*super geiles neues Fahrrad*, hierbei dient das Lexem *super* als *trigger word*, da dies im Italienischen und im Deutsch existiert) sowie lexikalische Transferenzen (*il bell wetter, una tour*), da die Lexeme *wetter* und *tour* in die italienische Syntax

<sup>9</sup> Unter „peer–groups“ versteht Krefeld (2004: 25) Kommunikationspartnern, die eine soziale Nähe aufweisen.

integriert werden. Das Beispiel zeigt außerdem einen kontinuierlichen Wechsel zwischen der deutschen und der italienischen Sprache, die daraus resultierenden Sprachkontaktphänomene entstehen allerdings nicht als Folge von defizitären Sprachkenntnissen, sondern stellen eine kommunikative Funktion dar. Aus den erfassten Metadaten<sup>10</sup> der Sprecherin F29DE\_N ergibt sich, dass sie deutsche Muttersprachlerin ist, allerdings über sehr gute Kompetenzen im Italienischen verfügt, d.h. das Code-Switching (*sono in svizzera auf exkursion; hoffe dass ich mir auch presto una bici*) wird bewusst eingesetzt und weist eine kreative Verwendung der eigenen sprachlichen Kompetenzen auf. Der schnelle und häufige Codewechsel in dem obengenannten Beispiel lässt somit die Hypothese einer Entwicklung neuer Formen des Sprachkontakts aufstellen, die möglicherweise im Rahmen der computervermittelten Kommunikation, insbesondere im Fall eines vertrauten Gesprächspartners, häufiger auftreten. Weiterhin ist an dieser Stelle zu merken, wie innerhalb der Äußerung *hoffe dass ich mir auch presto una bici comprare kann* die Infinitivendung und die Klammerstruktur des Deutschen auf das italienische Verb *comprare* („kaufen“) übertragen werden. Die Anwendung solcher hybriden Ausdrücke deutet in erster Linie eine spielerische und kreative Funktion des Sprachkontaktes an. Die schnelle Kommunikation, die durch das Medium erreicht wird, sowie das nahe Verhältnis zwischen den Gesprächspartnern spielen dabei eine besonders wichtige Rolle.

Eine weitere zentrale Eigenschaft der computervermittelten Kommunikation ist, wie Beispiel (4) zeigt, dass bestimmte Muster regelmäßig wiederkehren. Der Sprachkontakt erfolgt vor allem in gewissen Phasengliederungen der Interaktion, wie in der Eröffnungs- oder in der Endphase, wo vorwiegend Begrüßungsinteraktionen wie *Morgen* oder *Buongiorno* und affektive Ausdrücke zu finden sind.

- (4) 19/01/17, 07:53 – F28IT\_C: *Morgen ;)* news für Freitag?  
19/01/17, 08:08 – M26DE\_B: *Buongiorno*  
19/01/17, 08:09 – M26DE\_B: *Ne, hatte noch nicht den Kopf dafür. Ich überlege mir was nach der Präsi*  
19/01/17, 08:09 – F28IT\_C: *in bocca al lupo*  
[Viel Erfolg! (Ins Maul des Wolfes)]

Besonders an diesem Beispiel ist außerdem zu merken, dass jeder Proband die Erstsprache des anderen als Begrüßungsformel verwendet (*Morgen* bei F28IT\_C und *Buongiorno* bei M26DE\_B). Außerdem lässt sich beobachten, dass idiomatische Ausdrücke wie *in bocca al lupo* nicht übersetzt werden.

## 7 Sprachkontaktphänomene im Vergleich

Die Tabelle (1) zeigt aus welchen Sprachen und Varietäten die Sprachkontaktphänomene in den jeweiligen Chats (IT–IT, DE–IT) kommen:

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<sup>10</sup> Im Rahmen der Datenerhebung wurden anhand eines Fragebogens Informationen zum Sprachgebrauch und zu den selbsteingeschätzten Sprachkompetenzen in der deutschen und italienischen Sprache der Studienteilnehmerinnen und –teilnehmer erhoben (s. hierzu Kap. 5. Solche Angaben gelten als Metadaten der vorliegenden Untersuchung.).



Tabelle 1: Sprachen und Varietäten in der italienischen und deutsch-italienischen Chatkommunikation (absolute Häufigkeit).

<b>Sprache</b>	<b>IT-IT</b>	<b>DE-IT</b>	<b>Summe</b>
<b>Deutsch</b>	85	123	208
<b>Englisch</b>	41	20	61
<b>Italienisch</b>	1	98	99
<b>Italienische Dialekte</b>	13	2	15
<b>Bairisch</b>	0	2	2
<b>Sonstiges/Andere Sprachen</b>	3	2	5

Aus der Analyse ergibt sich, dass beide Gruppen (IT-IT und DE-IT) eine Sprachkontaktsituation aufweisen, die insbesondere mit der Umgebungssprache Deutsch verbunden ist. Ebenso lassen sich Anglizismen sowie regionale Varietäten des Italienischen und des Deutschen im Nachrichtenaustausch beider Gruppen erkennen. Dies bestätigt die Hypothese, dass das Sprachrepertoire der Probanden sich als mehrsprachig erweist. Bezüglich der Verwendung weiterer Sprachen lässt sich feststellen, dass insbesondere die englische Sprache am häufigsten in den Chatnachrichten verwendet wird, da sie oft auch am Arbeitsplatz und allgemein als Verkehrssprache benutzt wird (vgl. Ingrosso 2017: 125). Die Dialekte spielen hingegen eine marginale Rolle und kommen insbesondere im Fall italienischer Dialekte in den IT-IT Chats vor. Das liegt vor allem an dem sprachlichen Repertoire der Probanden, das überwiegend durch das Italienische gekennzeichnet ist. Darüber hinaus verfügen die untersuchten Probanden mit Deutsch als L1 über keine Kenntnisse der italienischen Dialekte.

In Bezug auf die Art der Sprachkontaktphänomene in den jeweiligen Chats lässt sich beobachten, dass in der DE-IT Kommunikation insbesondere funktionales Code-Switching zu finden ist (204), während in den IT-IT Nachrichten vor allem lexikalische Transferenzen wiederkehren (50). Dies kann durch die Häufigkeit der Verwendung bestimmter Ausdrücke und Ritualisierungsprozesse erklärt werden. Während in den DE-IT Begrüßungsinteraktionen als feste ritualisierte Formeln eingesetzt werden, die eine diskursive Funktion entfalten und in Form von funktionalem Code-Switching auftreten (*Morgen, buongiorno, in bocca al lupo*), sind hingegen die lexikalischen Transferenzen in den IT-IT Nachrichten mit der Häufigkeit der Ausdrucksverwendung in alltäglichen, meist bürokratischen Situationen (*finita ora Übergabe*) verbunden. Funktionales Code-Switching in den Nachrichten der italienischen Probanden weist meist eine diskursstrategische Funktion auf, die mit einer Art Profilierung der eigenen sprachlichen Kenntnisse verbunden ist (*Idk, es tut mir Leid*). (Ad-Hoc-)Entlehnungen lassen sich dagegen in beiden Gruppen gleichermaßen beobachten (34 in IT-IT-Chats und 31 in DE-IT-Chats), unter anderem im Fall einer spielerischen Situation (*tutto tiptop*).

Tabelle 2: Sprachkontaktphänomene in der italienischen und deutsch-italienischen Chatkommunikation (absolute Häufigkeit).

<b>Sprachkontaktphänomene</b>	<b>IT-IT</b>	<b>DE-IT</b>	<b>Summe</b>
<b>Funktionales Code-Switching</b>	35	204	239
<b>Nicht-funktionales Code-Switching</b>	10	7	17
<b>Lexikalische Transferenzen</b>	50	17	67
<b>Semantische Transferenzen</b>	5	1	6
<b>Syntaktische Transferenzen</b>	7	8	15
<b>(Ad-Hoc) Entlehnungen</b>	34	31	65

Darüber hinaus wurde ein z-Test der Anteilswerte (*Two Sample Proportion Test*) herangezogen, dessen signifikante Ergebnisse zusätzlich in Abbildung (1) dargestellt werden

(vgl. Diaz–Bone 2018: 165). Wie die vorliegende Grafik verdeutlicht, treten lexikalische Transferenzen und Entlehnungen am häufigsten in den IT–IT Chats auf, während das funktionale Code–Switching überwiegend in der DE–IT Kommunikation verwendet wird. Lexikalische Transferenzen und funktionales Code–Switching weisen hierbei eine höhere Signifikanz auf ( $Z=10,1091$ ,  $p < 0,001$  für das funktionale Code–Switching;  $Z=6,7241$ ,  $p < 0,001$  für lexikalische Transferenzen). Im Vergleich dazu haben Entlehnungen, also monolexikalische, nicht integrierte sprachliche Elemente eine mittlere Signifikanz ( $Z=3,0065$ ,  $p=0,0026$ ) und lassen sich überwiegend in der Kommunikation zwischen italienischen Probanden erkennen.

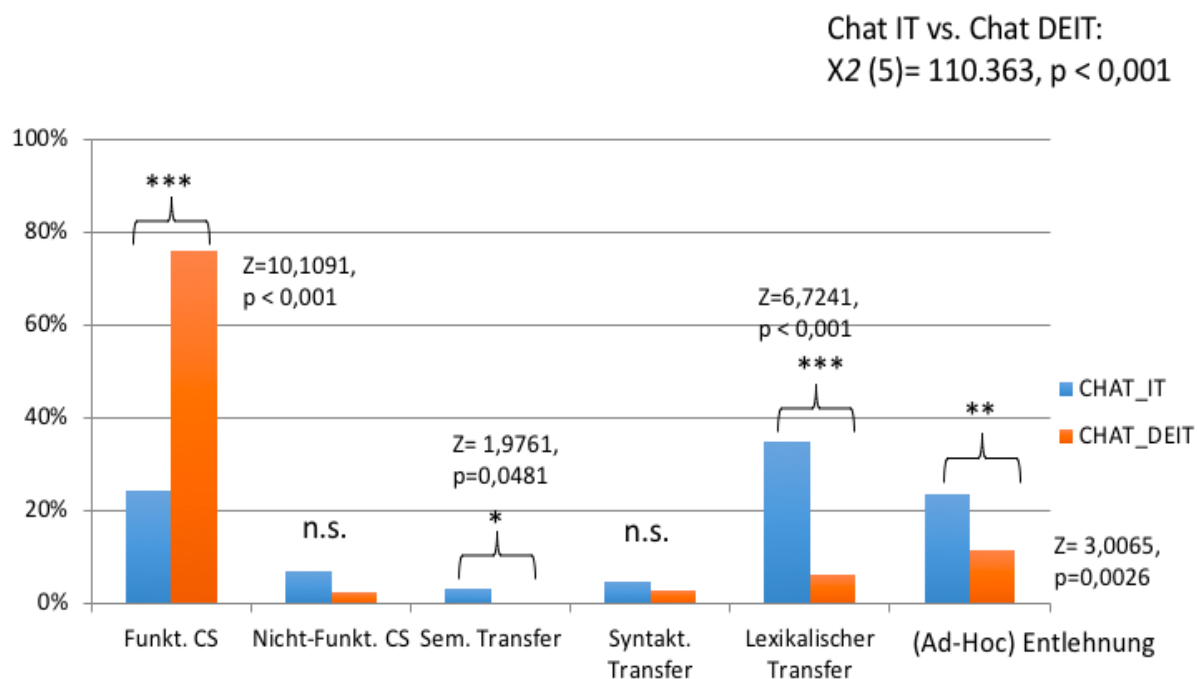


Abbildung 1: Sprachkontaktphänomene in der italienischen (CHAT\_IT) und deutsch–italienischen (CHAT\_DEIT) Chatkommunikation.

## 8 Fazit

Im Fokus der durchgeführten Studie stand die Frage nach den entstandenen Sprachkontaktphänomenen in WhatsApp– und Facebook–Nachrichten zwischen italienischen (IT–IT) sowie italienischen und deutschen (DE–IT) Probanden und wie sich neue Medien in mehrsprachigen Konstellation auswirken. Die Ergebnisse zeigen, dass sowohl in der In–Group Kommunikation als auch in den deutschen–italienischen Chats insbesondere lexikalische Transferenzen, funktionales Code–Switching und (Ad–Hoc)Entlehnungen auftreten. Diese weisen jedoch eine gruppenspezifische Dynamik auf und spielen dabei unterschiedliche Rollen: Während in den italienischen Chats insbesondere lexikalische Transferenzen auftreten, die mit der Häufigkeit der Ausdrucksverwendung im alltäglichen und bürokratischen Situationen des deutschen Lebens zu tun haben, ist in den deutschen–italienischen Chats vor allem funktionales Code–Switching in Form fester ritualisierter Formeln zu finden. Das Code–Switching tritt in den Begrüßungssequenzen auf und zeigt eine diskursive Funktion. Das funktionale Code–Switching in den IT–IT Chats weist hingegen eine diskursstrategische Funktion auf, die mit einer Art Profilierung der sprachlichen Kenntnisse der eigenen Probanden verbunden ist. (Ad–

Hoc-)Entlehnungen lassen sich in beiden Gruppen oft im Fall einer spielerischen Situation beobachten.

Bezüglich der Sprachen lässt sich zeigen, dass in der In-Group Chatkommunikation insbesondere Sprachkontaktphänomene aus dem Deutschen zu finden sind. Anglizismen werden häufig auch verwendet, während die italienischen und deutschen Dialekte eine marginale Rolle spielen. In der deutsch-italienischen Kommunikation kommen Sprachkontaktphänomene aus dem Italienischen häufiger vor. Es zeigt sich darüber hinaus, dass sich aus dieser informellen Kommunikationsart und dem vertrauten Verhältnis zwischen Probanden eine hybride Kommunikationsform ergibt, die eine spielerische und kreative Funktion des Sprachkontaktes zeigt. In diesem Zusammenhang entstehen Sprachkontaktphänomene nicht (nur) aus defizitären Sprachkenntnissen, sondern sie weisen einen kommunikativen Effekt auf. Aus dieser Sicht kann man daraus schließen, dass die computervermittelte Kommunikation eine Erweiterung des mehrsprachigen Repertoires der Probanden ermöglicht.

Abschließend lässt sich feststellen, dass die sozialen Medien eine vielversprechende Möglichkeit darstellen, um Sprachkontaktphänomene in der Alltagskommunikation umfassend zu untersuchen. Zur Erweiterung des Forschungshorizontes werden daher weitere Studien zur Verbindung der Medienlinguistik und Sprachkontaktforschung beabsichtigt.

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