

Encoding Prefixation in Southern Min

Yishan Huang

The University of Sydney

yishan.huang@sydney.edu.au

Abstract

This study adopts an inter-disciplinary approach to explore how the prefixation is encoded and contributes to the word formation in Zhangzhou Southern Min, an under-described Sinitic dialect spoken in the southern Fujian of mainland China. It reveals the semantic function, morpho-syntactic characteristics, prosodic effect, pragmatic significance of prefixation in this dialect, along with their occurrence constraints. The exploration directly fills in the research gap in the study of Zhangzhou grammar, and substantially advance our knowledge of the encoding of prefixation in southern Chinese dialects. It contributes well-attested linguistic data to the typology of prefixation as an important phenomenon in the world's natural languages, while enlightening the discussion on how Sinitic languages should be better defined from the morpho-syntactic perspective.

Keywords: refixation, semantics, morpho-syntax, phonology, constraint, Zhangzhou, Southern Min

1 Introduction

Affixation broadly refers to a morphological process whereby lexical or grammatical information is added to an existing lexical base and a new lexeme, or a new form of the same lexeme is derived (Hall, 2008; Hawkins & Gilligan, 1998; McCarthy, 2002). Natural languages vary in what morphological processes are available in their grammar, how frequently the processes are used, and what types of information are encoded. For example, English expresses the plurality of nouns

using suffixation (e.g., table/tables, friend/friends) (McCarthy, 2002). Zapotec, a language spoken in Oaxaca, Mexican, expresses the plurality through prefixing ka-morpheme to nominal bases (Marlett, 1985). Yoruba, a language of south-western Nigeria, uses a separate word to encode the plurality, such as the word okunrin means ‘the man’ and its corresponding plural form is awon ‘the men’ (Ajiboye, 2005). As seen, morphology is not equally prominent in spoken languages, as the same information can be encoded differently. Languages are thus classified into different types, such as analytic and synthetic, depending on the complexity of morphology and the method they employ to construct words (e.g., Banfi & Arcodia, 2007; Bybee et al., 1990; Basciano, 2017).

Sinitic languages, along with Yoruba and Vietnamese, are often cited to be isolating because of their exhibiting an extreme degree of analyticity with little affixation (Lin, 2001; Liao, 2014). However, this convention has been challenged because both inflectional and derivational affixes are continually discovered in the synchronic speech of those so-called isolating languages (Lin, 2001; Liao, 2014; Arcodia & Basciano, 2012; 2022). For example, in Zhangzhou Southern Min, a Sinitic dialect spoken in southern Fujian province of southeast China, the prefix *ʔv33* can be attached to kinship terms (*ʔv33-kɔŋ35* ‘grandfather’) or the first name of personal names (*ʔv33-kun22* ‘address a girl whose last syllable of first name is kun 22’) to express closeness and affection. The infix *ʔv51* can be inserted into disyllabic bases and serve as a modifying marker (*kjə35-ʔv51-tʰvɿw22* ‘bridge-*ʔv51*-head: a place name’), or a coordinative marker (*dʔ35-ʔv51-tse41* ‘year-*ʔv51*-festival: traditional festivals’). The suffix *ʔv51* can serve as

a purely nominal marker (*kɛm35-ʔv51* ‘orange-ʔv51: orange’), a nominaliser to some verbs (*ʃɛ55-ʔv51* ‘to clamp-ʔv51: plier’) and adjectives (*pwi35-ʔv51* ‘fat-ʔv51: fat person’) or a diminutive marker to kinship terms to deliver feeling of smallness, closeness, and affection (*tsɐw55-ʔv51* ‘daughter-ʔv51: daughter’). Given an increasingly high ratio of morphemes per word, it has become questionable to define these languages as being morphologically isolating.

Triggered by its intriguing affixational phenomenon, this study is devoted to exploring how prefixation is encoded and contributes to word formation in Zhangzhou Southern Min. This Sinitic dialect is under-described, because no systematic work has described its prefixing system. Fives specific research questions will be addressed, including (a) what semantic information can be encoded in the process of prefixation? (b) What morpho-syntactic consequences are induced? (c) What prosodic consequence can be evoked? (d) What pragmatic information can be conveyed by the prefixation, and (e) What linguistic factors can constrain the application of prefixation in this Sinitic dialect?

The exploration directly fills in the research gap and advances our knowledge of the encoding of prefixation in this Southern Min variety, while contributing vital linguistic data to the typology of affixation as an important morphological event not only in Sino-Tibetan language family but in human languages at the general level. The description also enlightens the discussion on how human beings employ different linguistic levels to encode and decode a particular language phenomenon in their mental grammar and language practice, while shedding light on the discussion of how Sinitic languages should be better defined.

The materials used in this study are collected from the field site by the author in 2019, and also from online consultation with native speakers over these years. The research locality is strictly limited to Xiangcheng and Longwen districts, the inner urban area of Zhangzhou, which are conventionally considered to be historically-socially-culturally-linguistically-geographically representative of Zhangzhou (Huang, 2022).

2 SEMANTICS OF PREFIXATION

Semantically, the prefixes in this dialect can be classified into either mono-semantic or polysemantic, depending on the range of lexical

information that they can convey. The mono-semantic prefixes refer to those prefixes whose derived words can only cover one semantic domain. For example, as illustrated in (1), the prefix *hwɛn35* exclusively indicates the foreign origin of the related object. For example, the lexical base *tsi22* literally means ‘potato’, while the derived word *hwɛn33-tsi22* particularly refers ‘sweet potato’. Because sweet potatoes historically are imported from other countries, rather than being produced domestically. The prefix *hwɛn33* indicates the foreign origin of sweet potatoes. Likewise, when attached to numbers, the prefix *te33* exclusively indicates an ordinal order of the base. For example, the lexical base *zi33* means ‘two’, while the derived word *te32-zi33* with the prefix particularly refers to ‘the second’.

(1) Mono-semantics of prefixation

- **hwɛn35 (foreign origin)**

hwɛn33-pɔ22 ‘hwɛn33-lady: foreign lady’

hwɛn33-tsi22 ‘hwɛn33-potato: sweet potato’

- **te33 (ordinal order)**

te32-ʔik41 ‘te32-one: the first’

te32-zi33 ‘te32-two: the second’

- **kɛ63.pɛk41 (internal relation)**

kɛ63.pɛk65-hjɛ35 ‘kɛ63.pɛk41-elder brother’

‘to address the elder son of father’s brother’

kɛ63.pɛk65-tsik41 ‘kɛ63.pɛk41-younger uncle’

‘the younger son of grandfather’s brother’

- **pjɛw51 (external relation)**

pjɛw35-hjɛ35 ‘pjɛw35-elder brother’

‘the elder son of father’s sister or mother’s sibling’

pjɛw35-tsik41 ‘pjɛw35-younger uncle:

‘son of grandpa’s sister or grandma’s sibling’

The mono-semantic property can also be seen from the prefixes *kɛ63.pɛk41* and *pjɛw51* which can be attached to the same kinship terms but reveal different semantic readings. The prefix *kɛ63.pɛk41*, which literally means ‘next belly’, is exclusively created in Southern Min to indicate an internal relation to one’s family or clan. Such as the derived word *kɛ63.pɛk65-hjɛ35*, in which the base *hjɛ35* means ‘elder brother’, is used to address the son of one’s father’s brother who is elder than the addresser. On the contrary, the prefix *pjɛw51*, meaning ‘surface’, expresses an external relation to a family or a clan. For example, the derived word *pjɛw35-hjɛ35* exclusively refers to the elder son of one’s father’s sister or mother’s sibling.

On the contrary, the poly-semantic prefixes refer to those prefixes whose attachment can cover two or more semantic domains. This property is illustrated in (2). The prefix *ʔɐ35* can be attached to lexical bases of different types to transfer different semantics. Such as it can be attached to kinship terms to address one's family members who are senior in terms of age or generation with a sense of respect and closeness. For example, the derived word *ʔɐ33-ɦjɛ35* is colloquially used to address one's elder brother. It can be attached to person names of those family members who are at the same generation to deliver a feeling of closeness and affection. For example, given a person's first name contains *ts^hju33* morpheme that means 'tree', it is a common way to address him as *ʔɐ33-ts^hju33* that transfers a sense of closeness and affection. Likewise, the prefix *dɛw33* can be attached to kinship terms to address family members who are senior than the addresser with respect to age and/or generation with a sense of respect and closeness (*dɛw32-pe33* 'dɛw32-father: to introduce one's father'). It can also be attached to person names of those people at the same generation to convey a feeling of closeness and affection (*djɔk32 ʔi35.su35* → *dɛw32-su35* 'Su35; Si'). Apart from these, this prefix can also be attached to an entity to express a sense of a long history 'old'. Such as, the term *ts^hju33* itself means 'tree', while the derived word *dɛw32-ts^hju33* refers to 'an old tree'.

(2) Poly-semantics of prefixation

• **Prefix ʔɐ35**

Before kinship term (closeness and respect)

ʔɐ33-kɔŋ35 'grandfather'

ʔɐ33-βɛ51 'grandmother'

ʔɐ33-pɐ35 'father'

ʔɐ33-βɛ35 'mother'

Before first name (closeness and affection)

tɛn33. ɟɛ32.kun22 → *ʔɐ33-kun22* 'Qun'

ɦwɪ22 k^hɛj33.ts^hju33 → *ʔɐ33-ts^hju33* 'Shu'

• **dɛw33**

Before a kinship term (respect and closeness)

dɛw32-pe35 'dɛw32-father: introduce one's dad'

dɛw32-βu51 'dɛw32-mum: introduce one's mum'

Before person name (affection and closeness)

djɔk32 ʔi35.su35 → *dɛw32-su35* 'Su35; Si'

tɛn33 kɔk65.kjɛŋ22 → *dɛw32-kjɛŋ22* 'Kjɛŋ22'

Before an entity (long history)

dɛw32-tjɛm41 'dɛw32-store: an old store'

dɛw32-ts^hju33 'dɛw32-tree: an old tree'

• **dɛw51**

Before number (ordering)

dɛw35-zi33 'dɛw35-two: second eldest sibling'

dɛw35-sɛ35 'dɛw35-three: third eldest sibling'

Before family name (closeness and respect)

ʔɔŋ33 tsu35.zin22 → *dɛw35-ʔɔŋ22* 'ʔɔŋ22'

ʔwɪ33 ts^hiq33.tsui51 → *dɛw35-ʔwɪ22* 'ʔwɪ22'

As seen, the prefixation is productive to modify the lexical meanings of existing bases and create new lexemes across several semantic domains. The process substantially enriches the inventory of local vocabulary that native speakers can choose and use in their conversations, while expanding the lexicon in their mental grammar.

3 MORPHO-SYNTAX OF PREFIXATION

Morpho-syntactically, the prefixing process seldom changes the part of speech of related item in Zhangzhou Southern Min. In most cases, the derived words are categorically the same as their corresponding bases being attached. For example, the bases that can be attached by the above-mentioned prefixes (*ɦwɛn35, te33, ke63.pɛk41, pjɛw51, te33, ʔɐ35, dɛw33, dɛw51*) in (1) and (2) are all nominal, so are their derived lexemes. Therefore, the prefixation process presents a categorical-preserving characteristics.

Apart from this, most of lexical bases that can undergo prefixation are dominantly nominal. Only few non-nominal bases can be prefixed to derive words of a different part of speech. This can be seen in (3), for example, the prefix *k^hɔ51*, a cognate of Mandarin *ke214 可*, can transfer verbal or nominal bases to lexemes of an adjective category to deliver a semantics of 'do-able', equivalent to the English suffix '-able'. Such as in the word *k^hɔ35-ʔɛj41*, the base *ʔɛj41* is a verb meaning 'to like, love', while the derived word refers to 'likable'. In the word *k^hɔ35-k^hɛw51*, the base *k^hɛw51* is a noun meaning 'mouth', with this prefix, the derived word is used to describe something which is *delicious*.

(3) Categorical-changing prefixation

• **k^hɔ51**

verbal base

k^hɔ35-ʔɛj41 'k^hɔ35-like: likeable'

k^hɔ35- k^hɔ41 'k^hɔ35-rely: reliable'

nominal base

k^hɔ35-k^hɛw51 'k^hɔ35-mouth: delicious'

k^hɔ35-zin22 'k^hɔ35-people: lovable'

• **ɦɔ51**

verbal base

hə35-tʰjɛ35 ‘hə35-listen: sound-good’
 hə35-tsjɛ221 ‘hə35-to eat: taste-good; delicious’
 hə35-sjɛ51 ‘hə35-to write: good-writing’

• ɸɛj41

verbal base

ɸɛj35-tʰjɛ35 ‘ɸɛj35-to listen: sound-unpleasant’
 ɸɛj35-tsjɛ221 ‘ɸɛj35-to eat: bad-tasting’
 ɸɛj35-kʰwɛ41 ‘ɸɛj35-to look: bad-looking; ugly’

The prefixes *hə35* and *ɸɛj35*, which separately mean ‘good’ and ‘bad’, are commonly attached to verbal bases to derive new lexemes of an adjective category that expresses the positive or negative characteristics of related verbal actions. For example, the derived word *hə35-tsjɛ221*, with the verbal base *tsjɛ22* ‘to eat’, is used to describe something that tastes good. Similarly, the derived word *ɸɛj35-tsjɛ221* describes something that tastes bad. As seen, the attachment of these prefixes not only changes the semantics but also the word class. However, not so many cases involve such a categorical change, instead, in most cases, the grammatical category of nominal lexical bases is maintained over the prefixation in this dialect.

4 PROSODY OF PREFIXATION

The prefixing process in Zhangzhou Southern Min does not cause any phonological alternation on their subsequent lexical bases, but all prefixes themselves are seen changing their tonal profiles to be entirely different from their corresponding forms in citation. Such a tonal alternation can be considered resulting from the operating effect of a right-dominant tone sandhi system in Zhangzhou (Huang, 2018; 2020; 2022). All tones at the non-right-most position, referred to as sandhi position, alter their realizations phonologically and phonetically, while tones at the rightmost position maintain their realization categorically similar to their citation forms, but may be subject to certain variation at the phonetic level because of their sensitivity to occurring environments (Huang, 2018; 2020; 2022). So that, all prefixes are supposed to change their tonal profiles if they are attached to lexical bases to fulfil their semantics and/or morpho-syntactic functions.

What needs a further mention is that no special tone sandhi pattern is evoked over the prefixing process. But rather, all prefixes follow the general sandhi tendency to change their tonal forms. For

example, tone 1 is realised as a rising [35] contour in citation but is altered to be a mid-level [33] contour in the sandhi context. Tone 3 changes its contour shape to a rising [35] from a high falling contour in citation. All tones within general morpho-syntactic phrases XP in which X may be adjective, verbal, nominal among others, are expected to change in this way (Huang, 2018; 2020). Table 1 summaries tonal changes of individual prefixes, in which the forms in bold show their corresponding sandhi forms.

Table 1. Tonal changes of individual prefixes.

Citation	Sandhi Form
dɛw33	dɛw32 -bu51 ‘to introduce one’s mother’
dɛw51	dɛw35 -sɛ35 ‘the third (of the siblings)’
ʔɛ35	ʔɛ33 -hjɛ35 ‘elder brother’
pjɛw51	pjɛw35 -hjɛ35 ‘the elder son of father’s sister or mother’s sibling’
kɛ63.pɛk41	kɛ63.pɛk65 -hjɛ35 ‘the elder son of father’s brother’
ʔɛj51	ʔɛj35 -kɔ35 ‘father’s sister’
hwɛn35	hwɛn33 -kjɛ35 ‘foreign <u>chilli</u> ’
te33	te32 -zi33 ‘the second’
twɛ33	twɛ32 -tsi51 ‘the elder sister’
se41	se63 -kɔ35 ‘husband’s younger sister’
sjɛ51	sjɛ35 -ɸɛj33 ‘younger sister’
kʰɛ51	kʰɛ35 -ʔɛj41 ‘likeable; adorable’
ɸɛj51	ɸɛj35 -kʰwɛ41 ‘ugly’
hə51	hə35 -tsjɛ221 ‘delicious’

As seen, the tonal pitch of all prefixes has been changed phonetically and phonologically. Such as the prefix *dɛw51* has a high-falling [51] contour in citation, but when attached to lexical bases, the pitch is changed to a rising [35] contour (*dɛw35-sɛ35* ‘the third (of the siblings)’). Similarly, the prefix *hwɛn35* has a rising contour [35] in citation but the pitch is changed to a mid-level [33] when attached to lexical bases to denote their foreign origin (*hwɛn33-kjɛ35* ‘foreign chilli’). The tone sandhi pattern in the prefixing context is different from that occurs in other affixational environment in which tones are changed to either a rising or high-level contour, depending on their contour shape in citation (Huang, 2023).

5 Pragmatics of Prefixation

Certain prefixes are pragmatically significant to reveal certain relation within the social-cultural setting of Southern Min. This can be demonstrated by the usage of prefixes *pjɛw51*, *kɛ63.pɛk41* and

ʔŋ51. They can be attached to the same kinship terms but reveal different social relationships. As illustrated in (4), the prefix *pjɐw51* indicates an external relation to a family or a clan; the derived words are particularly used to address the descendant of (grand-) father's sisters or (grand-) mother's siblings. Such as the term *pjɐw35-ħjɛ̃35*, in which the base *ħjɛ̃35* refers to the elder brother, is specifically used to address the son of father's sister or mother's sibling who is elder than the addresser. The prefix *kɛ63.pɐk41* indicates an internal relation to one's family or clan; the derived terms are limited to address the descendant of (grand-) father's brothers. Such as the term *kɛ63.pɐk65-ħjɛ̃35* specifically refers to the son of father's brother who is elder than the addresser. Similarly, the prefix *ʔŋ51* expresses the core blood relationship on the paternal side. Such as the term *ʔŋ35-ħjɛ̃35* refers to one's blood-related elder brother who has the same parents.

(4) Pragmatics of prefixation

• **pjɐw51**

pjɐw35-ħjɛ̃35 'pjɐw35-elder brother'
 'the elder son of father's sister or mother's sibling'
pjɐw35-tsik41 'pjɐw35-younger uncle'
 'son of grandfather's sister or grandma's sibling'

• **kɛ63.pɐk41**

kɛ63.pɐk65-ħjɛ̃35 'kɛ63.pɐk41-elder brother'
 'the elder son of father's brother'
kɛ63.pɐk65-tsik41 'kɛ63.pɐk41-younger uncle'
 'the younger son of grandfather's brother'

• **ʔŋ51**

ʔŋ35-ħjɛ̃35 'ʔŋ35-elder brother'
 'the blood-related elder brother'
ʔŋ35-tsik41 'ʔŋ35-younger uncle'
 'father's younger brother (s)'

• **twɐ33**

twɐ32-pɛ41 'twɐ32-uncle'
 'to address father (or husband)'s eldest brother'
twɐ32-kɔ35 'twɐ32-parental aunty'
 'to address father (or husband)'s elder sister'

• **se41**

se63-kɔ35 'se63-father's sister'
 'to address husband's younger sister'
se63-tsik41 'se63-father's younger brother'
 'to address husband's younger brother'
se63-kim35-ʔvɛ51 'se63-mother's brother's wife'

The pragmatic function can also be illustrated by the usage of the prefixes *twɐ33* and *se41* before kinship terms. The prefix *twɐ33*, lexically meaning

'big', is often used to indicate the elder (not necessarily needs to be the eldest) member of a group, especially within a family or a clan. On the contrary, the prefix *se41*, lexically meaning 'small', indicates the younger member. However, in Southern Min, housewives are discovered using exactly the same kinship words as their children to address their husband's siblings.

For example, as illustrated in (4), the word *twɐ32-kɔ35*, in which the base *kɔ35* means 'aunty on the parental side', can be used to refer to either father's elder sister or husband's elder sister. On the contrary, the words *se63-kɔ35* and *se63-tsik41*, which literarily mean 'younger aunty (father's younger sister)' and 'younger uncle (father's younger brother)', respectively, are exclusively used by housewives to address their husband's younger siblings. The reason for existing such a special addressing is because, in the old society of Southern Min, married women are given a lower status within a family and a clan. Thus, they step down their seniority and address their husband's siblings in the same way as their children do. Such an addressing has been customized over time and is still adopted by the married women in the modern society. Therefore, as seen, the application of certain prefixation is pragmatically related by the local social culture and custom.

6 OCCURRENCE CONSTRAINT

The prefixation is productive in this dialect to expand its lexicon; however, several different constraints can be seen governing what prefixes can be used; what lexical bases can be attached, and/or what new lexemes can be generated.

6.1 Semantic constraint

The occurrence of certain prefixes is strictly limited to a particular semantic domain. For example, the prefixes *pjɐw51* (*pjɐw35-twɐ32-tsi51* 'to address the daughter of father's sister or mother's sibling who is elder than the addresser'), *kɛ63.pɐk41* (*kɛ63.pɐk65-twɐ32-tsi51* 'to address the daughter of father's brother who is elder than the addresser') and *ʔŋ51* (*ʔŋ35-kɔŋ35* 'to address the blood-related grandfather') can only occur before kinship terms to deliver the blood relation or the affinity by marriage to a family or a clan. On the contrary, the prefix *te33* (*te32-sɛ̃35* 'te32-three: the third') can occur before numbers to indicate ordering.

6.2 Phonological constraint

The prefixing process in Southern Min can be constrained phonologically because there exist some cases in which only parts of the lexical bases, rather than the entire bases, can be prefixed to fulfil a particular semantic function. For example, as illustrated in (5), the prefixes *dɛw33*, *dɛw51*, *ʔɐ35* and *sjə51* can all be attached to person names, but the prefixes *dɛw51* and *sjə51* are typically attached to the family names, while the prefixes *dɛw33* and *ʔɐ35* are exclusively attached to the last syllables of the first names. If they are attached to other part of the lexical bases, the derived forms are considered to be colloquially ill-formed.

(5) Phonological constraint on prefixation

Before family name

- **dɛw51 (seniority and respect)**

ʔɔŋ33 tsu35.zin22 → dɛw35-ʔɔŋ22 ‘ʔɔŋ22; Wang’
tən33 kək65.kɛ35 → dɛw35-tən22 ‘Tən22; Chen’

- **sjə51 (diminution and affection)**

tən33. ɣɛ32.kun22 → sjə35-tən22 ‘Chen’
ɦwɪ22 sjək65.kwan35 → sjə35-ɦwɪ22 ‘Huang’

Before first name

- **dɛw33 (seniority and respect)**

dʒək32 ʔi35.su35 → dɛw32-su35 ‘Su35; Si’
tən33 kək65.kjɛŋ22 → dɛw32-kjɛŋ22 ‘Kjɛŋ22’

- **ʔɐ35 (diminution and affection)**

ɦwɪ22 ɣɛ32.kjɛŋ22 → ʔɐ33-kjɛŋ22 ‘Qiang’
lim33 sjək65.kwan → ʔɐ33-kwən35 ‘Juan’

For example, given a person is called *ʔɔŋ33 tsu35.zin22*, in which *ʔɔŋ22* is the family name and *tsu35.zin22* is his first name, it is grammatically well-formed to address him as *dɛw35-ʔɔŋ22* with a sense of respect and seniority. Similarly, the prefix *sjə51* can also be attached to family names to convey a sense of diminution and affection, such as *sjə35-tən22* ‘Chen’ given a person’s family name is *tən22*. The two prefixes can only be attached to family names, and it is grammatically ill-formed to attach them to other position of the person names.

On the contrary, the prefixes *dɛw33* can only be attached to the last syllables of the first names to deliver a semantics of seniority and respect. Such as, given a person is called *dʒək32 ʔi35.su35* in which *dʒək32* is the family name, it is grammatically well-formed and colloquially respectful to address him as *dɛw32-su35*, but ill-formed to call him as **dɛw32-dʒək32* or **dɛw32-ʔi35.su35*. Likewise, the prefix *ʔɐ35* can only be attached to the last syllables of the first names to

convey a sense of closeness and diminution, such as *ʔɐ33-kwən35* given a person is called *lim33 sjək65.kwan35*. As seen, the occurrence of certain prefixes is phonologically limited to certain syllables, and this has become an important part of the mental grammar of native speakers.

6.3. Pragmatic constraint

The occurrence and usage of certain prefixes can also be constrained by the pragmatic factor. For example, as discussed in Section 5, the derived words with the prefix *pjɛw51* are exclusively used to address descendants of (grand-) father’s sisters; and/or (grand-) mother’s siblings. The derived words with the prefix *kɛ63.pək41* are dominantly used to address descendants of (grand-)father’s brother(s), whereas the derived words with the prefix *ʔɲ51* only refer to those core family members who hold a blood relationship on the parental side. As well as this, the married women in Southern Min address their husband’s siblings in the same way as their children. Such as the derived word *tɔw32-kɔ35* can be used to address one’s father’s eldest sister, but also one’s husbands’ elder sister(s). These reflects the constraints from the social culture and custom in Southern Min.

7 Discussion

As discussed in this paper, the prefixing process has been developed as an important device in the word formation in Zhangzhou Southern Min. Semantically, the prefixation is constructive to create new lexemes and substantially enlarge the local vocabulary. Some prefixes are polysemantic to derive words that can cover different semantic domains, like the prefixes *dɛw51*, *dɛw33*, and *ʔɐ35*, while some prefixes are shown to be mono-semantic whose derived items can only cover one single semantic domain, such as *ɦwɛn35* and *tɛ33*.

Morpho-syntactically, the prefixing process, in general, presents a categorical-preserving property, because both the lexical bases and their derived words are largely nominal, the process of which does not evoke a new word class. But some prefixes in few cases, like *kʰə51*, *ɦə51*, and *bɛj41* can change the category of the bases from a non-adjective category to adjective. Phonologically, the tonal forms of all prefixes are changed categorically over the process, because of the forcing factor of the right-dominant tone sandhi system in this Southern Min variety. Pragmatically, the usage of certain prefixes, like *pjɛw51*,

ke63.pək41, ʔŋ51, twə33 and *se41*, can reveal some particular social culture and custom of Southern Min. As seen, the prefixing can substantially affect the semantic, morpho-syntactic, and prosodic structures of this dialect. However, the encoding also subjects to several constraints from semantics, morpho-syntactics, phonology and pragmatics, reflecting a close interface between different linguistic levels in this dialect.

This study is the first to discuss the prefixation in Zhangzhou, which directly fills in the research gap of this under-described Southern Min variety. The exploration substantially stretches and advances our knowledge of how prefixation is encoded and contributes to the word formation in southern Chinese dialect, shedding an important light on the generalization of areal characteristics of prefixation within the Sino-Tibetan language family. The innovative description also contributes vital empirical data to the typology of prefixation in world's natural languages. The discussion also challenges the conventional assumption of regarding Sinitic languages as being isolating without significant affixation, while enlightening the theoretical discussion on how Sinitic languages should be better defined from the morpho-syntactic perspective, given their existing rich prefixing system in the synchronic speech.

8 REFERENCE

- Andrew Carstairs McCarthy. 2002. *An Introduction to English Morphology: Words and Their Structure*. Scotland, UK: Edinburgh University Press.
- Huang. 2018. *Tones in Zhangzhou: Pitch and Beyond*. Doctoral Dissertation: Australian National University.
- Huang. 2022. Right-Dominant Tones in Zhangzhou: On and Through Phonetic Surface. In *d*, 21-22 November 2022, Taipei Medical University, Taiwan, China.
- Huang. 2023. Suffix ʔe51 in Zhangzhou: An Interdisciplinary Exploration. In *Proceedings of The 24th Chinese Lexical Semantics Workshop (CLSW 2023)*. 29-31 May. Singapore.
- Huang. *Tones in Zhangzhou: Pitch and Beyond*. 2020. Cambridge, UK: Cambridge Scholar Publishing.
- Bianca Basciano. Morphology. 2017. In Rint Sybesma, Wolfgang Behr, Yueguo Gu, Zev Handel, James Huang and James Myers, *Encyclopedia of Chinese Language and Linguistics*, pp.104-118. Leiden, Netherlands: Brill.
- Christopher J. Hall. 2008. Prefixation, Suffixation and Circumfixation. In Geert Booij, Christian Lehmann, Joachim Kesselheim Mugdan, Wolfgang and Stavros Skopeteas (eds.) *Morphology, An International Handbook on Inflection and Word Formation. Handbooks of Linguistics and Communication Science*, 17 (1): 535-545. Berlin, Germany: De Gruyter.
- Emanuele Banfi and Giorgio Francesco Arcodia. 2007. The 生 shēng/sheng Complex Words in Chinese between Morphology and Semantics. In *Proceedings of the Sixth Mediterranean Morphology Meeting. Morphology and Dialectology*, 6:190-204.
- Giorgio Francesco Arcodia and Bianca Basciano. 2012. On the Productivity of the Chinese Affixes – 兒 -r, -化 -huà and -頭 -tou. *Taiwan Journal of Linguistics*, 10(2): 89-118.
- Giorgio Francesco Arcodia and Bianca Basciano. 2022. *Chinese Linguistics: An Introduction*. Oxford, UK: Oxford University Press.
- Hillary Chappell. 2019. A Sketch of Southern Min Grammar. In Alice Vittrant and Justin Watkins (eds). *The Mainland Southeast Asia Linguistic Area*, pp.176-233, Berlin, Germany: De Gruyter Mouton.
- Huei Ling Lin. 2001. The Interface between Syntax and Morphology: Taiwanese Verbal Complexes. In *Proceedings of the 16th Pacific Asia Conference on Language, Information and Computation*, pp.308–319, Jeju, Korea. The Korean Society for Language and Information.
- Joan. L. Bybee, William Pagliuca, and Revere D Perkins. 1990. On the Asymmetries in the Affixation of Grammatical Material. In William Croft, Keith Denning and Suzanne Kemmer (eds), *Studies in Typology and Diachrony: Papers Presented to Joseph H. Greenberg on his 75th Birthday*, pp.1-42. Amsterdam, Netherland: John Benjamins.
- John A. Hawkins and Gary. Gilligan. 1988. Prefixing and Suffixing Universals in Relation to Basic Word Order. *Lingua*, 74 (2-3): 219-259.
- Oládíipò Jacob Ajiboye. 2005. *Topics on Yoruba Nominal Expression*. Doctoral thesis: The University of British Columbia.
- Stephen Marlett. 1985. Some Aspects of Zapotecan Clausal Syntax. *Work papers of the summer institute of linguistics*, University of North Dakota Session, 29, Article 6.
- Wei-wen Roger Liao. 2014. Morphology. In C.-T. James Huang, Y.-H. Audrey Li and Andrew Simpson (eds). *The Handbook of Chinese Linguistics*, pp.3-25, Hoboken, New Jersey, United States: John Wiley & Sons.