3 Morphology

This section looks at the morphological variability of Maltese Πs from two different angles. For a start, the focus is on the inflectional properties of the members of BLOMP 2.0. Section 3.1 and its further subdivisions survey the inflected Πs, the inflectional classes they constitute, the allomorphic processes they are subject to, and sundry issues which belong to word-based morphology. Section 3.2 is dedicated to the competition between long and short forms of certain Πs which is neither explicable with reference to word-based morphology nor in terms of sandhi phenomena. We look beyond the word-boundary in Section 3.3 where external sandhi and further aspects of a sentence's phonetic nature are highlighted. In Section 3.4, the results are made use of to provide a new summary account of allomorphy in the domain of Maltese Πs. Saari (2003: 111–152) addresses these issues for his own inventory of Maltese Πs in some detail but does not strictly differentiate between word-morphology and morphosyntax. The latter topic forms part of the contents of Section 4. Several of the phenomena to be discussed in the subsequent sections are also attended to in Schmidt/Vorholt/Witt (2020) for the previous version of BLOMP.

3.1 Inflectional morphology

3.1.1 Inflected vs invariant Πs

With 37 out of 60 Πs, a majority of almost two-thirds of the members of BLOMP 2.0 can be inflected whereas the minority of 23 Πs remains morphologically invariant. For the time being, (Π26) *kif* 'as', (Π42) *mintul* 'all along', and (Π43) *mnejn* 'from where' for which it is uncertain that they are subject to inflection are included in the latter category. In what follows we focus on type frequency.[1] In (3.1), we provide a list of all inflected Πs whereas the invariant Πs are presented in (3.2). Grey shading highlights doubtful cases.

(3.1) Inflected Πs
(Π4) *bejn* 'between'; (Π5) *bħal* 'like'; (Π7) *bi* 'with'; (Π8) *biswit* 'facing'; (Π10) *daqs* 'equal to'; (Π11) *dwar* 'about'; (Π13) *favur* 'in favour of'; (Π14) *fejn* 'near'; (Π15) *fi* 'in'; (Π16) *fost* 'amongst'; (Π17) *fuq* 'on'; (Π20) *għajr* 'except'; (Π21) *għal* 'for'; (Π22) *għand* 'at s.o.'s place'; (Π23) *ħdejn* 'beside'; (Π24) *ħlief* 'except'; (Π27) *kontra* 'against'; (Π28) *lejn* 'towards'; (Π29) *lil* 'to'; (Π30) *ma'*

1 General information about the token frequency of inflected Πs is provided in Section 3.4.

https://doi.org/10.1515/9783111331591-003

'with'; (Π31) *madwar* 'around'; (Π32) *maġenb* 'close to'; (Π33) *matul* 'during'; (Π35) *minflok* 'instead of'; (Π36) *mingħajr* 'without'; (Π37) *mingħala* 'in s.o.'s opinion'; (Π38) *mingħand* 'from s.o.'; (Π41) *minn* 'from'; (Π46) *qabel* 'before'; (Π47) *qalb* 'amidst'; (Π48) *qrib* 'near'; (Π49) *quddiem* 'in front of'; (Π53) *skont* 'according to'; (Π55) *ta'* 'of'; (Π56) *taħt* 'under'; (Π59) *waqt* 'at the time of'; (Π60) *wara* 'after'

(3.2) Invariant Πs (including doubtful cases)
(Π1) *apparti* 'apart from'; (Π2) *a skapitu* 'at the expense of'; (Π3) *barra* 'outside'; (Π6) *bħala* 'as'; (Π9) *bla* 'without'; (Π12) *faċċata* 'opposite'; (Π18) *ġewwa* 'inside'; (Π19) *ġo* 'in'; (Π25) *inkluż* 'including'; (Π26) *kif* 'as'; (Π34) *minbarra* 'except'; (Π39) *minħabba* 'on account of'; (Π40) *minkejja* 'in spite of'; (Π42) *mintul* 'all along'; (Π43) *mnejn* 'from near'; (Π44) *oltre* 'beyond';[2] (Π45) *permezz* 'by means of'; (Π50) *rigward* 'concerning'; (Π51) *sa* 'till'; (Π52) *sforz* 'thanks to'; (Π54) *sotta* 'under'; (Π57) *versu* 'towards'; (Π58) *viċin* 'near'

It strikes the eye that the three uncertain cases in (3.2) are properly included in the class of doubtful Πs of whose membership they cover three quarters with the unlikely (Π54) *sotta* 'under' contributing the fourth member.[3]

The shares of the morphologically variable and morphologically invariable Πs are disclosed in Figure 3.1. Morphological invariability can be associated with Doleschal's (1997) concepts of uninflectedness and uninflectability. Invariable Maltese Πs always instantiate the latter option.

This distribution corresponds closely to that presented by Schmidt/Vorholt/Witt (2020: 254) on the basis of the original version of BLOMP.

Before we address the issue of what it means to be an inflected Π in Maltese, we first investigate possible factors which correlate with morphological (in)variability. As in the previous section on phonological issues, we start from the idea that the language of origin might make a difference when it comes to inflecting Πs. If we go by the shares of Semitic and Romance Πs as featured in Figure 2.2, we expect very different results from those computed for the languages of origin in relation to the types of inflected and invariant Πs. Figure 3.2 reveals that Romance contributes only a relatively small number of Π to the class of inflected Πs whereas the share of Πs with a historical background in Romance is strikingly high in the class of invar-

2 Sandra Abela (personal communication) argues that (Π44) *oltre* 'beyond' inflects for person in analogy to the Πs in (3.1). We nevertheless keep it as one of the invariant Πs. This case will be looked into again in Section 4.1.2.2.2.1.

3 Their cases will be looked at specifically in Section 3.1.2.3. Until then they are always tacitly included when we refer to invariant Πs.

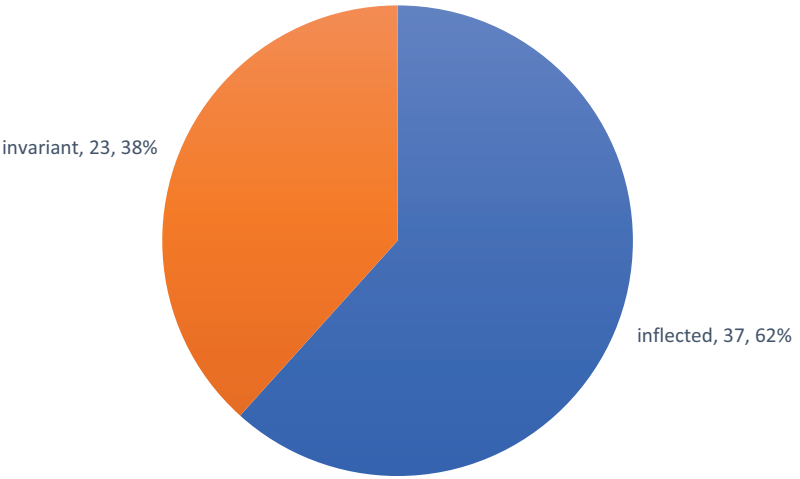


Figure 3.1: Shares of inflected vs invariant Πs.

iant Πs. It goes without saying that the reverse holds for the Semitic component of the Π-inventory: Semitic is strong in the domain of inflected Πs but relatively weak in that of invariant Πs.

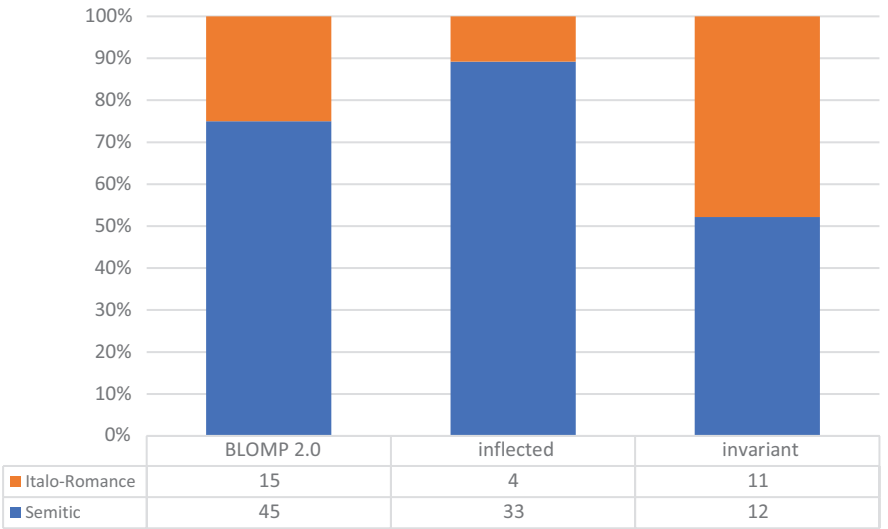
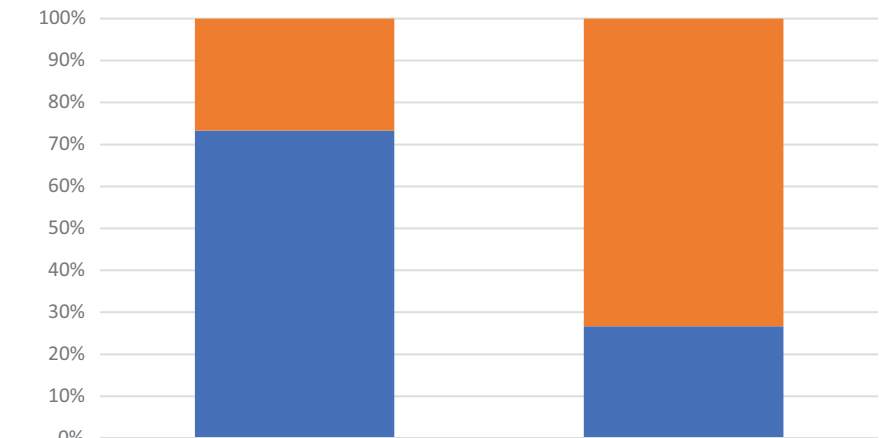


Figure 3.2: Shares of Semitic/Italo-Romance per inflected vs invariant Πs.

As is clearly visible, the Italo-Romance share shrinks considerably from a quarter of the entire Π-inventory to just 11% of the number of inflected Πs. At the same

time, the Italo-Romance share of invariant Πs amounts to 47.8% and thus reflects a remarkable increase as opposed to the 25% in BLOMP 2.0.

The above picture receives further corroboration by the values featured in Figure 3.3. Here we see that the languages of origin display opposing preferences in the domain of morphological variability. In the case of Semitic, 73% of the Πs can be inflected as opposed to 27% which are invariant. The relation is the other way around for Italo-Romance since a 73.3%-majority of the Πs derived from Italo-Romance belong to the class of invariant Πs. With a share of 26.7%, inflected Italo-Romance Πs form the minority option.



	Semitic	Italo-Romance
invariant	12	11
inflected	33	4

Figure 3.3: Shares of inflected vs invariant Πs per language of origin.

There is no one-to-one correlation between language of origin and inflection or invariance. Nevertheless, it is possible to speak of pronounced preferences. Italo-Romance Πs tend to be invariant whereas Semitic Πs display a preference for inflection. Inflected Πs are predominantly of Semitic origin. In contrast, no comparable dominance of a given language of origin can be observed in the case of invariant Πs. The influx of Italo-Romance Πs has strengthened the position of morphologically invariable Πs in the grammatical system of Maltese.

We know[4] that there is a similar connection between syllabicity and language of origin. As shown in Figure 2.3, BLOMP 2.0 contains balanced shares of monosyl-

4 From Section 2.1.1.

labic Πs (= 50%) and polysyllabic Πs (= 50%). This identity of the shares is replaced by more asymmetric distributions when we take account of the morphological (in) variability of the Πs. From Figure 3.4, it transpires that, as registered in the lexicon, inflected Πs tend to be monosyllabic rather than polysyllabic. Monosyllables account for 62% of all inflected Πs leaving a share of 38% for polysyllables. The distribution resembles that of inflected vs invariant Πs disclosed in Figure 3.1 above. Only one inflected Π is trisyllabic, namely (Π37) *mingħala* 'in s.o.'s opinion'. The minor role polysyllabic Πs play in the domain of inflected Πs fits in with the prominence Italo-Romance Πs display in the realm of polysyllabic Πs. According to the pattern reflected in Figure 3.5, monosyllabic Πs overwhelmingly inflect whereas polysyllabic Πs show no clear preference for morphological variability or invariability although there is a slight preference for the latter.

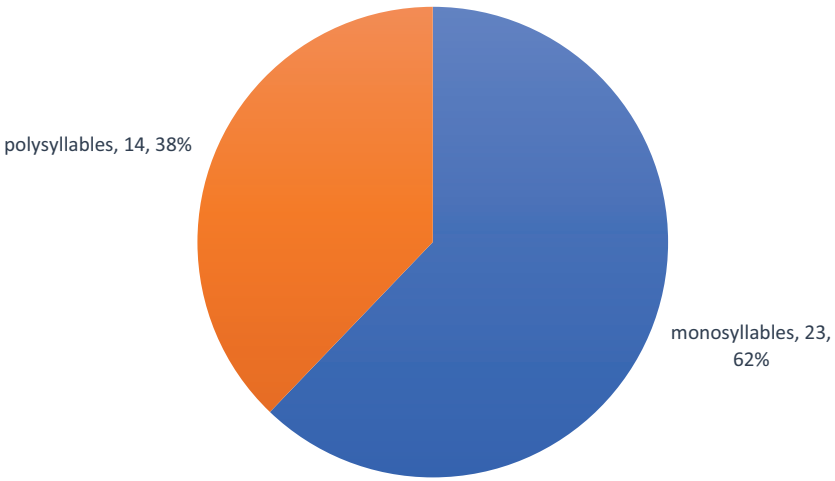


Figure 3.4: Shares of monosyllables/polysyllables with inflected Πs.

As in the case of the language of origin, syllabicity is not a hard criterion which determines whether a given Π inflects or not. Yet, again in parallel to the origin of the Πs, we can state that there are pronounced preferences. Monosyllabicity and inflection go together well. Polysyllabicity is clearly disfavoured in the domain of inflection. Polysyllables cover 69.5% of all invariant Πs so that monosyllables account for less than a third of the same syllabicity class.

In terms of syllable structure of the form in which the Π is registered in the lexicon, final closed syllables are typical of Πs which allow for inflection although final open syllables are by no means counted out. In BLOMP 2.0, there are alto-

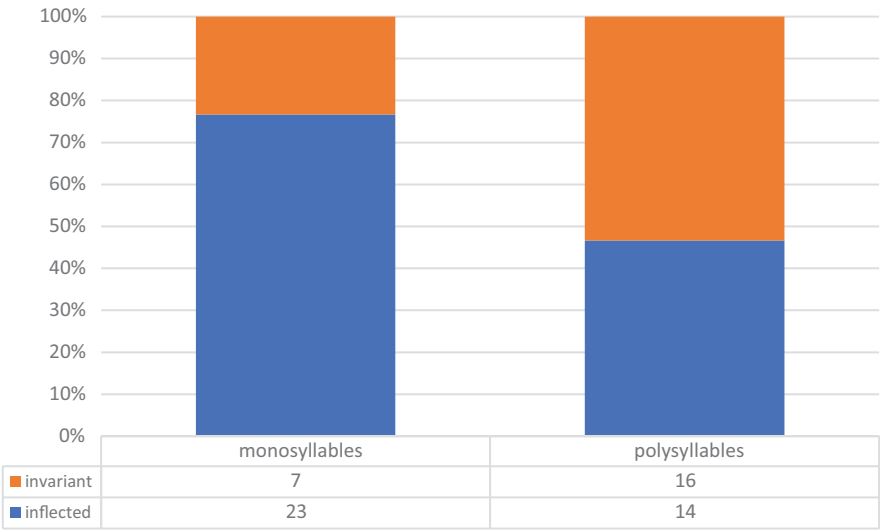


Figure 3.5: Shares of inflected/invariant Пs per syllabicity type.

gether 23 Пs which end in a vowel as opposed to 37 consonant-final Пs. This corresponds to shares of 38% and 62% of the entire inventory, respectively. The prominent position of Пs with the structure -C] increases considerably if we restrict the scope to inflected Пs. Figure 3.6 informs us about the relevant percentages.

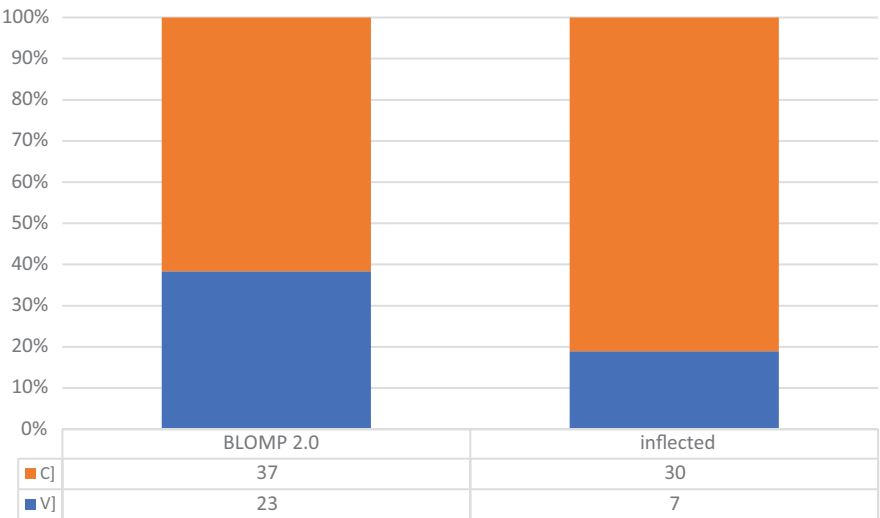


Figure 3.6: Shares of V-final vs C-final Пs.

With inflected Пs, the share of vowel-final Пs decreases to 19%. Final consonants can thus be considered to be particularly favourable to inflection whereas final vowels and inflection are less easy to accommodate. Note also that the majority of Пs (n = 10) with final consonant clusters or geminates allow for inflection whereas only three Пs with these properties are invariant. The assumption that C] facilitates inflection is further supported by the fact that far less than a third of all vowel-final Пs inflect as opposed to 81% of all consonant-final Пs as shown in Figure 3.7.

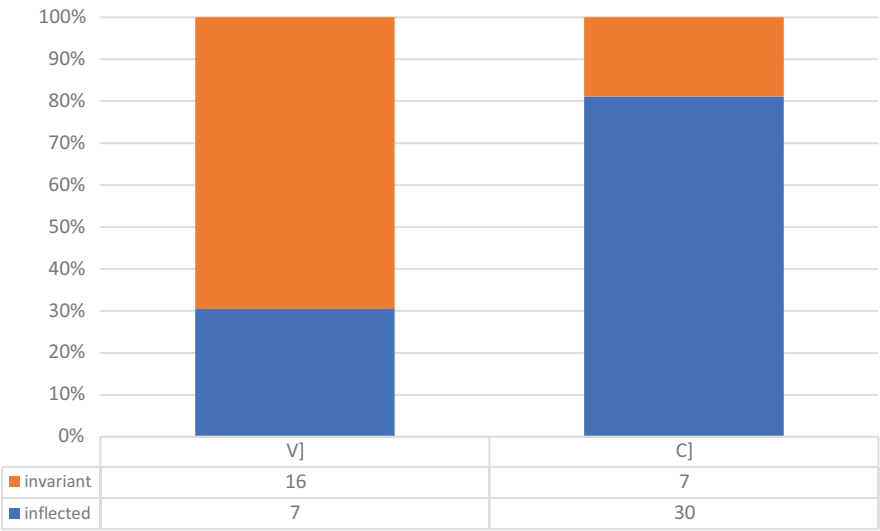


Figure 3.7: Shares of invariant/inflected Пs per V-final vs C-final Пs.

Schmidt/Vorholt/Witt (2020: 256) assume that the possibility of a П to inflect "seems to depend neither on the quality of the last segment nor on the number of syllables". Strictly speaking, there is indeed no 100% dependency. However, as we have noticed in connection with syllabicity, there are undisputable preferences which connect monosyllables with morphological variability more strongly than polysyllables are associated with inflection. Similarly, the presence of a final consonant in the lexicon form of the П yields a remarkably high probability that the П will also be inflected. In contrast, the probability of inflection is severely limited with vowel-final Пs as Schmidt/Vorholt/Witt (2020: 257) tell us when they conclude that "most prepositions which cannot be combined with personal suffixes end with a vowel."

On account of these preferences, it is interesting to determine whether the quality of the final consonant is in any way significant for the choice of invariance or inflection. According to Figure 2.20, there are only thirteen different consonantal

phonemes which occupy the final slot in the segmental chain of the 37 consonant-final Πs. The seven consonant-final Πs which are invariant share the place feature [denti-alveolar] which is also the majority option for final consonants throughout the Π-inventory as shown in Figure 2.21. This means that phonologically there is nothing special about the quality of the final segments of invariant Πs because the same consonants are also permitted in the word-final slot of inflected Πs. Thus, Schmidt/Vorholt/Witt (2020) are right when they discard the possibility of a correlation between morphological (in)variability and the quality of final consonants.

A particularly striking unidirectional correlation ties Πs whose segmental chain contains four filled slots to inflection, meaning each and every of the thirteen Maltese Πs with the phonological structure [x x x x]$_{\Pi}$ (with x denoting a filler of a slot) can be inflected. There is no invariant Π with the same property. Figure 3.8 can be compared to Figures 2.27–2.29 in the phonology section above.

[x x x x] ⊃ inflected

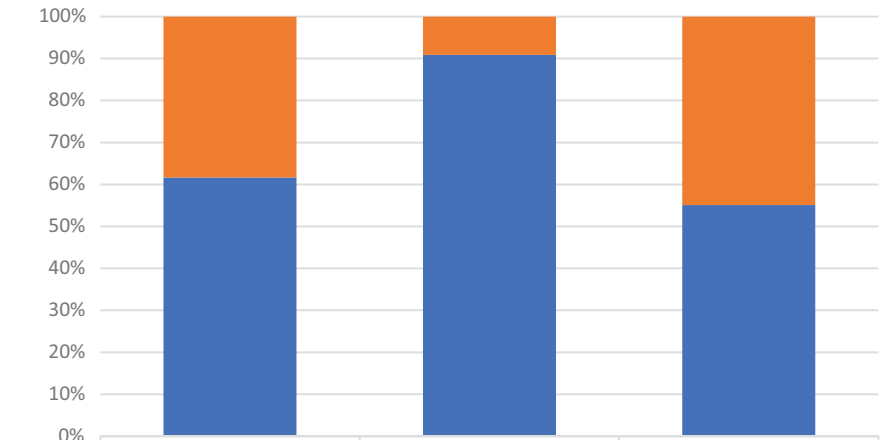
Figure 3.8: Implicational pattern of Πs with four segments.

No other number of segments is as strongly associated with either inflection or invariance.

It remains to be seen whether frequency and morphological variability are interconnected in any meaningful way. Table 1.11 accounts for the token frequency of the lexicon form of the Πs in the Korpus Malti 3.0. As explained above,[5] inflected, cliticised, or reduced forms of Πs are excluded on purpose from the frequency count since the quantities associated with these forms will be looked at separately in dedicated sub-sections below. To determine whether morphological (in)variability and high or low token frequency have anything to do with each other generally, it suffices to take the information contained in Table 1.11. What one recognises immediately is that ten of the eleven Πs which exceed the average of 214,568.63 matches[6] in the Korpus Malti 3.0 belong to the class of inflected Πs. Only morphologically invariant (Π6) *bħala* 'as' is an exception to this strong tendency. This means that 91% of all Πs displaying high token frequency are inflected Πs. Below the average, we find 49 Πs 27 (or 55%) of which can be inflected but 22 (or 45%) cannot. Figure 3.9 helps to visualise these remarkable differences.

5 Cf. Section 1.6.8.

6 Based on the estimates in column C of Table 1.11.



	BLOMP 2.0	above average	below average
invariant	23	1	22
inflected	37	10	27

Figure 3.9: Shares of invariant/inflected Πs per token frequency classes.

High token frequency and morphological variability associate with each other relatively strongly whereas there is no discernible preference for either inflection or invariance below the average although the share of invariant Πs is bigger in the domain of low frequency than it is in the entire inventory. This result is further supported by the distribution captured in Figure 3.10.

What we see here is that 22 out of 23 invariant Πs fail to reach the average so that 95.6% of the invariant Πs yield relatively low frequency rates. In the case of inflected Πs, the share of low frequency Πs equals 73%. Invariance is thus rather strongly associated with low token frequency; high token frequency of an invariant Π being exceptional. High token frequency is also a minority phenomenon with inflected Πs but cannot be termed exceptional since more than a quarter of all inflected Πs count as highly frequent. This fits well into the trend observed by Schmidt/Vorholt/Witt (2020). They report that the invariant Πs are not present in the three highest frequency classes while inflected Πs are present in all frequency classes but the last one (Schmidt/Vorholt/Witt 2020: 256).

On the basis of the above findings, we are now in a position to zoom in on the central component of the canonical pattern shown in Figure 1.5.[7] The central component is of course the canonical Maltese Π. In accordance with the practice

7 As discussed in Section 1.6.1.

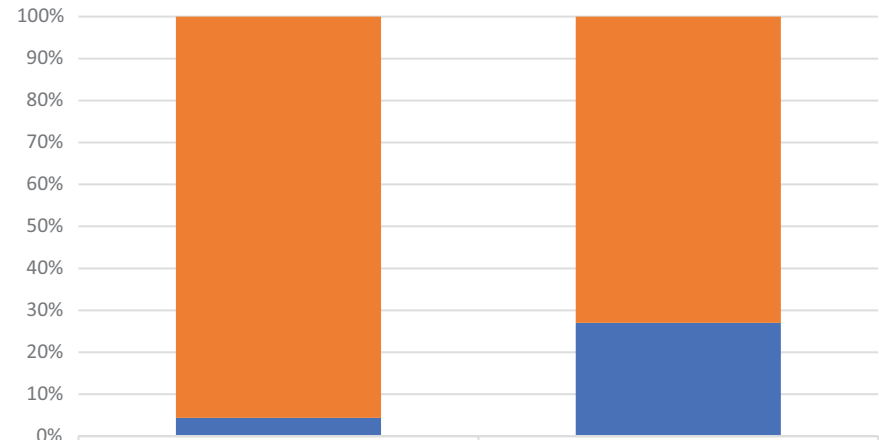


Figure 3.10: Shares of token frequency classes of invariant/inflected Πs.

employed above,[8] Figure 3.11 identifies the two combinations of properties which favour either inflection or invariance of a Maltese Π.

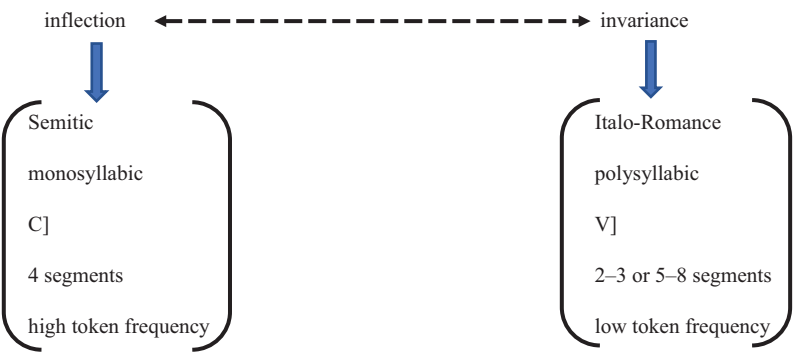


Figure 3.11: Continuum of preferred characteristics between inflection and invariance.

Since the majority of 61% of the Maltese Πs (cf. Figure 3.1) are inflected, we postulate that the left combination of properties is most typical for the members of BLOMP 2.0. The combination of properties on the right of the continuum, however,

8 Cf. Section 2.4 where the phonology of the canonical Maltese Π is described.

defines the most atypical kind of Maltese Π. In Table 3.1, we check which of the 37 inflected Πs fulfils how many of the criteria assumed to be prototypical for an inflected Π. MONO is short for monosyllabic, SEG abbreviates segments, and HF spells out as high frequency. Only if a criterion is fulfilled do we mark this in the appropriate cell. Yellow shading is indicative of an Italo-Romance Π. The Πs are ordered according to the decreasing number of fulfilled criteria which is revealed in the rightmost column.

Table 3.1: Number of prototypical criteria met by inflected Πs.

	Semitic	C]	MONO	4 SEG	HF	sum
(Π4) *bejn* 'between'	yes	yes	yes	yes	yes	5
(Π11) *dwar* 'about'	yes	yes	yes	yes	yes	5
(Π21) *għal* 'for'	yes	yes	yes	yes	yes	5
(Π41) *minn* 'from'	yes	yes	yes	yes	yes	5
(Π17) *fuq* 'on'	yes	yes	yes		yes	4
(Π29) *lil* 'to'	yes	yes	yes		yes	4
(Π5) *bħal* 'like'	yes	yes	yes	yes		4
(Π10) *daqs* 'equal to'	yes	yes	yes	yes		4
(Π14) *fejn* 'near'	yes	yes	yes	yes		4
(Π16) *fost* 'amongst'	yes	yes	yes	yes		4
(Π20) *għajr* 'except'	yes	yes	yes	yes		4
(Π22) *għand* 'at s.o.'s place'	yes	yes	yes	yes		4
(Π28) *lejn* 'towards'	yes	yes	yes	yes		4
(Π47) *qalb* 'amidst'	yes	yes	yes	yes		4
(Π48) *qrib* 'near'	yes	yes	yes	yes		4
(Π56) *taħt* 'under'	yes	yes	yes	yes		4
(Π59) *waqt* 'at the time of'	yes	yes	yes	yes		4
(Π15) *fi* 'in'	yes		yes		yes	3
(Π30) *ma'* 'with'	yes		yes		yes	3
(Π55) *ta'* 'of'	yes		yes		yes	3
(Π60) *wara* 'after'	yes			yes	yes	3
(Π23) *ħdejn* 'beside'	yes	yes	yes			3
(Π24) *ħlief* 'except'	yes	yes	yes			3
(Π7) *bi* 'with'	yes		yes			2
(Π8) *biswit* 'facing'	yes	yes				2
(Π31) *madwar* 'around'	yes	yes				2
(Π32) *maġenb* 'close to'	yes	yes				2
(Π33) *matul* 'during'	yes	yes				2

Table 3.1 (continued)

	Semitic	C]	MONO	4 SEG	HF	sum
(Π36) *mingħajr* 'without'	yes	yes				2
(Π38) *mingħand* 'from s.o.'	yes	yes				2
(Π46) *qabel* 'before'	yes	yes				2
(Π49) *quddiem* 'in front of'	yes	yes				2
(Π53) *skont* 'according to'		yes	yes			2
(Π13) *favur* 'in favour of'		yes				1
(Π35) *minflok* 'instead of'		yes				1
(Π37) *mingħala* 'in s.o.'s opinion'	yes					1
(Π27) *kontra* 'against'						0
total	33	30	24	16	10	113

There is a range from the maximum of five fulfilled criteria to the absence of any correspondence to the combination of properties which associate with inflected Πs. It is worth noting that the four Italo-Romance Πs which inflect are situated at or near the bottom of the ranking order in Table 3.1. (Π27) *kontra* 'against' is the only case of an inflected Π to violate all five of the criteria. The four Πs at the top of the hierarchy which stand out from the bulk of their competitors because they fulfil all five criteria are not too distant from the segmental chain of the canonical Π in Figure 2.31. The resemblance is especially strong since (Π4) *bejn* 'between', (Π11) *dwar* 'about', (Π21) *għal* 'for', and (Π41) *minn* 'from' constitute covered-closed syllables (provided, in the case of (Π21) *għal* 'for', that the abstract phoneme *għajn* is accepted as a consonantal element). Like the phonological canon, these Πs are represented by segmental chains with four slots. Apart from the largely identical syllable shells /m/ + /n/ of the canon in Figure 2.31 and (Π41) *minn* 'from' as well as the low vowel in (Π11) *dwar* 'about' and (Π21) *għal* 'for', the qualities of the segments involved in the phonological shape of the above top-ranking Πs do not directly reflect those of **ma:n.*

To assess the validity of the above patterns, we scrutinise the invariant Πs according to their fulfilment of the same criteria as those used in Table 3.1. The results can be seen in Table 3.2. As usual, yellow shading is indicative of Italo-Romance Πs. In addition, we shade those rows grey which host the three Πs whose ability to inflect is doubtful. The green colour is used for the sole invariant Π whose token frequency surpasses the average.

Table 3.2: Number of prototypical criteria met by invariant Πs.

	Semitic	C]	MONO	HF	4 SEG	sum
(Π26) *kif* 'as'	yes	yes	yes			3
(Π43) *mnejn* 'from near'	yes	yes	yes			3
(Π6) *bħala* 'as'	yes			yes		2
(Π9) *bla* 'without'	yes		yes			2
(Π51) *sa* 'till'	yes		yes			2
(Π42) *mintul* 'all along'	yes	yes				2
(Π52) *sforz* 'thanks to'		yes	yes			2
(Π3) *barra* 'outside'	yes					1
(Π18) *ġewwa* 'inside'	yes					1
(Π19) *ġo* 'in'	yes					1
(Π34) *minbarra* 'except'	yes					1
(Π39) *minħabba* 'on account of'	yes					1
(Π40) *minkejja* 'in spite of'	yes					1
(Π25) *inkluż* 'including'		yes				1
(Π45) *permezz* 'by means of'		yes				1
(Π50) *rigward* 'concerning'		yes				1
(Π58) *viċin* 'near'		yes				1
(Π1) *apparti* 'apart from'						0
(Π2) *a skapitu* 'at the expense of'						0
(Π12) *faċċata* 'opposite'						0
(Π44) *oltre* 'beyond'						0
(Π54) *sotta* 'under'						0
(Π57) *versu* 'towards'						0
total	12	8	5	1	0	26

No invariant Π meets all five criteria. There are six invariant Πs which do not comply to a single criterion. These six Πs stem from Italo-Romance. The remaining four Italo-Romance Πs fulfil just one criterion, namely that of involving a word-final consonant. The highest number of fulfilled criteria is three – reached only by (Π26) *kif* 'as' and (Π43) *mnejn* 'from near' which are doubtful candidates for the status of inflected Πs. As expected, none of the invariant Πs is represented by a segmental chain with four slots. We interpret the differences which come to the fore when we compare Tables 3.1 and 3.2 as proof of the general validity of the set of criteria we have proposed for the characterisation of the canonical inflected Π in our object language.

Inflected and invariant Πs do not only differ on the parameter of morphological (in)variability but also display markedly different preferences for other properties which are not genuinely morphological. This means that there is a network of factors – from language of origin via syllabicity, syllable structure, and segmental length to token frequency – which interact such that a given Π is made fit for inflection (or, the other way around, unfit for it). Now that we have familiarised ourselves with these aspects of the inflection-invariance contrast in BLOMP 2.0, we can focus more specifically on the class of inflected Πs.

3.1.2 What it means to be an inflected Π in Maltese

For a start, we take a detour via language typology – though only for the first paragraphs of this section. In his chapter on person marking on adpositions, Bakker (2005: 198) reviews a worldwide sample of 378 languages 63 of which do not attest to the category of adposition. With 209 languages, the majority of the sample languages do not mark person on adpositions at all. In contrast, 106 languages show person marking either for pronouns alone (83 languages) or for pronouns and nouns (23 languages). The shares are revealed in Figure 3.12.

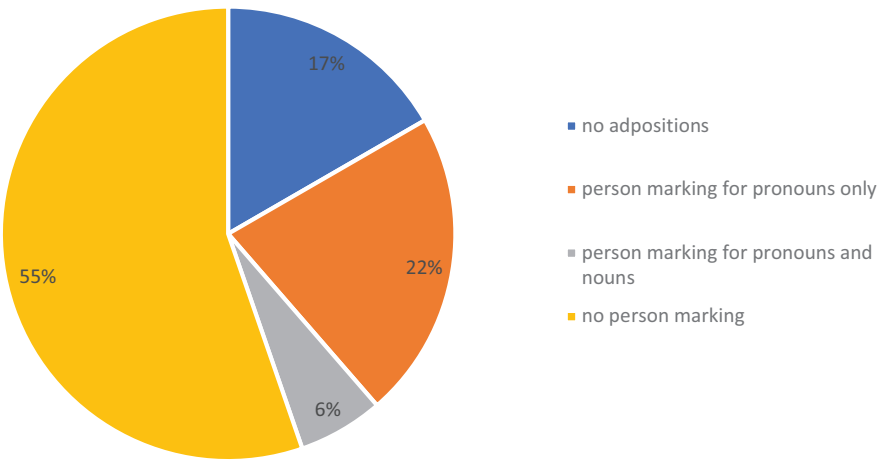


Figure 3.12: Share of person marking on adpositions in Bakker's (2005) sample.

Person marking thus occurs in about 28% of the sample languages. Maltese (which is absent from Bakker's sample) belongs to this sizable minority group – more precisely to those 22% of the sample for which person marking on adpositions is

restricted to pronominal complements. A more fine-grained typology would probably have differentiated further according to prepositional and postpositional languages as well as according to the use of prefixes or suffixes to encode person. In the case of Maltese, we are facing a language which uses the suffixal strategy to mark person on its ΠS. In what follows we review the patterns that arise in connection with this strategy. Throughout Section 3, we approach the subject matter exclusively from the synchronic point of view of descriptive linguistics.

According to the model of canonical inflection (Corbett 2007a: 23–24), it would be possible to produce a grid that represents the canonical paradigm of an inflected Maltese Π. To this end, the categories and their respective values that could ideally be expressed overtly on the word forms of the members of this paradigm must be multiplied with each other. For Maltese inflected ΠS the relevant categories are person (1st, 2nd, 3rd), number (singular and plural), and gender (masculine and feminine). In combination, the three categories with their seven values yield a grid with twelve cells of which only eight host a word form in realised Maltese.[9] To avoid lengthy (though in principle interesting) discussions about the four phantom cells, we relegate the confrontation of the canonical paradigm with its attested counterpart to a separate follow-up study. In what follows we study the paradigms of Maltese ΠS from the point of view of person marking. Number and gender will be discussed wherever this is called for.

3.1.2.1 Encoding person

Siewierska (2004: 145) states that "[i]n contrast to person agreement on predicates and possessed nouns, person agreement on adpositions has not been extensively studied." As we will see shortly, it is not only agreement that is understudied but

9 The discrepancy between the canonical paradigm and the realised paradigm is visible from the table in this footnote.

Table 3.I: Canonical vs realised paradigm.

person	number		gender	
	singular	plural	masculine	feminine
1st	X	X		
2nd	X	X		
3rd	X	X	X	X

The cells that host an X identify that part of the canonical paradigm that is identical with the realised paradigm whereas yellow shading indicates the excess cells that are only there because the formula according to which the canon is calculated requires their presence.

also person marking on adpositions, in general. Hagège (2010: 172–174) touches upon this phenomenon only in the context of supposedly verbal properties shared by adpositions. In cross-linguistic perspective, we are thus still largely underinformed as to person-inflection on adpositions.

In contrast, inflected Πs are usually given ample space in the descriptive and normative grammars of Maltese. In the course of the historical retrospection,[10] we repeatedly had the opportunity to refer to the attention various authors have paid to inflected Πs. Discounting minor details, there seems to be a general consensus as to what facts need to be mentioned in connection with the inflection of Maltese Πs (Borg/Azzopardi-Alexander 1997: 265–266, 274–277). An aspect we want to highlight especially is that of the allomorphy which characterises person marking.

Person inflection on Maltese Πs is triggered for the members of the class of inflected Πs if and only iff the complement of the Π is pronominal. In the presence of a lexical complement that does not function as apposition of a pronoun person inflection on the Π is barred. Person marking on the Π is thus not a case of agreement. This is an important trait that distinguishes Πs from pseudo-verbs since the latter host person-sensitive agreement markers.[11] Accordingly, person marking on Maltese Πs follows the principles of head-marking in as far as it instantiates person indexing in lieu of realizing person agreement (Haspelmath 2013: 197).[12] The basic structure of a Maltese Π which is inflected for person is schematised in Figure 3.13.

Π_{STEM}-____PERSON

Figure 3.13: Basic structure of a Maltese Π inflected for person.

The structure is basically binary in the default. The left slot hosts the stem which is often but not always identical with the citation form of the Π. The right slot is reserved for the affix which encodes person. It is this affix that we are about to investigate in this sub-section.

In Maltese, the category of person is grammatically relevant for finite verbs, inalienably possessed nouns, and inflected Πs – typical targets of person marking according to Siewierska's (2004: 127–128) typological study. The sets of person exponents overlap in the sense that the affixes which attach to Πs are not unique but identical with those that mark the pronominal possessor in inalienable posses-

10 Cf. Section 1.4

11 Cf. Section 1.6.2.

12 How invariant Πs behave in combination with pronominal complements is discussed in some detail in Section 4.1.2.2. This is also the section in which the token frequencies of the different person inflections on Πs will be presented.

sion and, for a subset of the Πs, with the direct object clitics on transitive verbs. This is interesting insofar as each person value has its distinct morphological exponent under possession and for object marking whereas subject person markers on verbs display syncretism (Baerman/Brown/Corbett 2005: 4–7) both in the imperfective (*t-mur* 2SG.IPFV = 3SG.F.IPFV 'you$_{SG}$ go/she goes') and in the perfective aspect (*mor-t* 1SG.PFV = 2SG.PFV 'I/you$_{SG}$ went'). Since gender is formally distinguished only in the 3rd person singular where masculine and feminine constitute an opposition there is a paradigm of seven pronominal forms as shown in Table 3.3 for free-standing pronouns, inalienable possessors, and direct object clitics.

Table 3.3: Free pronouns and bound (non-subject) person markers.

person	free pronoun	possessor	object clitic
1SG	*jien(a)*	*-i ~ -ja*	*-ni*
2SG	*int(i)*	*-ek ~ -ok ~ -k*	
3SG.M	*hu(wa)*	*-h ~ -u*	
3SG.F	*hi(ja)*	*-ha*	
1PL	*aħna*	*-na*	
2PL	*intom*	*-kom*	
3PL	*huma*	*-hom*	

All the bound person markers mentioned in Table 3.3 are also employed for person inflection on Πs. There are no dedicated pronominal affixes which are exclusive to Πs. In example (3.3) for instance, we find the suffix *-ha* of the 3rd person singular feminine in three different functions. Grey shading is meant to help identify the relevant cases.

(3.3) [Buhagiar 2001: 7]
Is-soru *marret* *tiġri* ***[lejha]***$_{PP}$ *tgħinha,*
DEF-sister go:3SG.F.PFV 3SG.F.IPFV:run [**towards**:3SG.F] 3SG.F.IPFV:help:3SG.F
idha *sħuna* *fuq* *ġbin* *ix-xebba*
hand:3SG.F hot:F on brow DEF-young_woman
'The Sister went quickly [**towards** her] to help her, (putting) her hot hand on the young woman's brow [. . .].'

The inflected Π *lejha* 'towards her' consists of the stem *lej-* (of (Π28) *lejn* 'towards') and the suffix *-ha* for the pronominal complement. The finite verb *tgħinha* 'she helps her' involves *-ha* as object clitic whereas in the case of *idha* 'her hand' *-ha* indicates that the possessor of the body part is a 3rd person feminine.

Moreover, the obligatory phonologically conditioned allomorphy of person markers in the singular reported for inalienable possession and object clitics follows exactly the same rules in the domain of inflected Пs. The set of person markers which may fill the right slot in the schema presented in Figure 3.13 are identified once again in Figure 3.14.

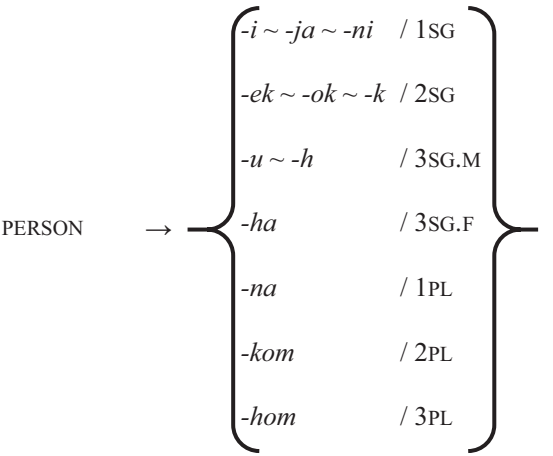


Figure 3.14: Person markers on Пs.

The choice of the possessor-like inflection vs the object clitic version in the 1st person singular does not depend on the phonological context.[13] What we need to know right here are the phonological conditions which trigger the selection of the allomorphs except for *-ni*.[14] Allomorphy is restricted to the speech-act participants in the singular and the 3rd person singular masculine. This distribution should be kept in mind because this pattern recurs also in other contexts to be discussed below.

There are two allomorphs each for the 1st person singular and the 3rd person singular masculine whereas there are three allomorphs for the 2nd person singular.[15] We take these allomorphs as basis for the distinction of two sets A and B of person markers.

– Set A → {*-i; -ek/-ok; -u; -ha; -na; -kom; -hom*}
– Set B → {*-ja/-ni; -k; -h; -ha; -na; -kom; -hom*}

13 We will address this issue separately in Section 4.1.2.2.2.2.3.

14 Whose status will keep us busy repeatedly in Sections 3.1.2.3.2 and 4.1.2.2.2.2.3.

15 Arguably this distribution of cells that are subject to allomorphy and those that are immune against it in П-paradigms could be connected to Round's (2015: 42) notion of meromorphome. The issue is however, too complex to be discussed at any length in the context of a descriptive-linguistic study like ours.

These sets overlap as to the 3rd person singular feminine and all plural persons. In the 1st and 2nd person singular as well as in the 3rd person singular masculine the choice of the correct allomorph depends on the kind of Π-stem. Set A combines with consonantal Π-stems (except those with final /j/) whereas Set B is the choice for vocalic Π-stems and /j/-final stems as shown in Section 3.1.2.2. In this section, we only address the distribution rules for the allomorphs of the 1st person singular and the 3rd person singular and those of the 2nd person singular. The former two are rather straightforward examples of inward sensitivity of the person marker to the stem-final segments. We start with the 3rd person singular masculine. Any consonant except /j/ in this position triggers the vocalic allomorph of the person marker. In contrast, if the stem ends in a vowel or in /j/, only the person marker which involves a consonant is licit. This general rule is directly reflected in the allomorphy for the person markers of the 3rd person singular masculine as shown in Figure 3.15.

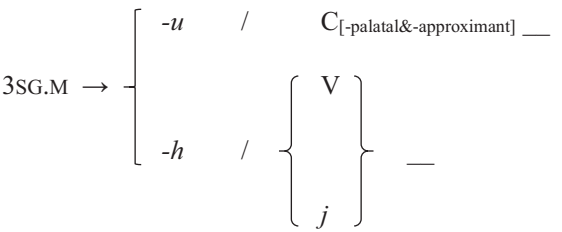


Figure 3.15: Allomorphy of 3SG.M person markers.

We illustrate the application of the rule with three sentences taken from one and the same primary source. In (3.4), (Π41) *minn* 'from' takes a pronominal complement in the 3rd person singular masculine. Since the Π-stem is identical with the citation form of (Π41) *minn* 'from' the phonological context offers a stem-final consonant other than /j/ so that the allomorph *-u* is chosen.

(3.4) [Bartolo/Vella 2009: 54]

Reggie	*ma*	*kellux*		*idea*	*x'*	*kien*	*qed*
Reggie	NEG	have.PFV:3SG.M:NEG		idea	what	be	PROG
jitlob		***[minnu]*** *PP*					
3SG.M.IPFV:request		[**from**:3SG.M]					

'Reggie had no idea what he was asking [**of** him].'

In example (3.5), the stem-final segment of (Π15) *fi* 'in' is the vowel /i/ which requires the person marker to come in the shape of the allomorph /h/.

(3.5) [Bartolo/Vella 2009: 54]

id-dlam	*ċappa*	*li*	*kien*	*jinsab*	*[**fi**<u>h</u>]$_{PP}$*	*kien*
DEF-darkness	lump	that	be	3SG.M.IPFV:RFL:find	[**in**:<u>3SG.M</u>]	be
tant	*iswed*					
so	black					

‘[. . .] the total darkness [**in** <u>which</u>] he found himself was so black [. . .].’

The same allomorph must be used for the 3rd person singular masculine in combination with (Π28) *lejn* ‘towards’ whose Π-stem is *lej-* ending in the palatal approximant /j/. This is the other phonological condition that calls for the use of the person marker allomorph *-h* as shown in (3.6). In what ways the Π-stem may differ from the segmental chain the Π is equipped with in the lexicon will be discussed below.[16]

(3.6) [Bartolo/Vella 2009: 27]

Iż-żewġt	*it-tfal*	*ħarsu*	*[**lej**<u>h</u>]$_{PP}$*		*bla*	*ma*
DEF-two	DEF-child.PL	look:3PL.PFV	[**towards**:<u>3SG.M</u>]		without	that
lissnu	*kelma*					
utter:3PL.PFV	word					

‘The two children looked [**towards** <u>him</u>] without uttering a word.’

These rules apply strictly. The domains of the allomorphs are disjunct. Neither can replace the other in a given context.

The same holds for allomorphy for the encoding of a pronominal complement of a Π in the 1st person singular. The rule for the distribution of the two allomorphs of the 1st person singular is given in Figure 3.16. It is a replica of the previous rule shown in Figure 3.15.

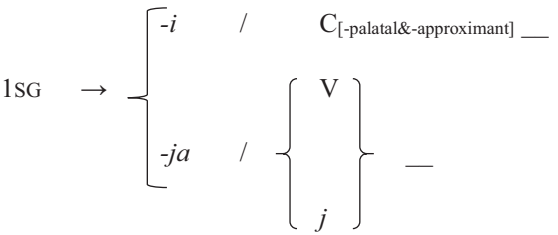


Figure 3.16: Allomorphy of 1SG person markers.

16 Cf. Section 3.1.2.2.

Sentence (3.7) features (Π41) *minn* 'from' again. It is clear from the above that the only permissible allomorph encoding the 1st person singular is *-i*.

(3.7) [Abela 2016: 39]
Isma' ***[minn****i****]****$_{PP}$*
listen **[from**:1SG**]**
'Listen **[to** me**]**!'

Similarly, (Π28) *lejn* 'towards' is combinable only with the allomorph *-ja* since the Π-stem ends in the palatal approximant /j/. This is shown in (3.8).

(3.8) [Abela 2016: 72]
Għaliex qed iħares ***[lejja]****$_{PP}$*
why PROG 3SG.M.IPFV:look **[towards**:1SG**]**
'Why is he looking **[at** me**]**?'

In (3.9), we provide an example of a vowel-final Π-stem which takes the same allomorph as shown in (3.8) in connection with /j/ in stem-final position. If a pronominal complement in the 1st person singular is to be marked on (Π7) *bi* 'with', the only possible choice is the allomorph *-ja*.[17]

(3.9) [Korpus Malti 3.0; literature14]
Forsi se tidħak ***[bija]****$_{PP}$* *Amy*
perhaps FUT 2SG.IPFV:laugh **[with**:1SG**]** Amy
'Perhaps you will laugh **[at** me**]**, Amy.'

The rule regulating allomorphy with the 2nd person singular resembles those schematised in Figures 3.15–3.16. However, this time, the rule is responsible for three different outputs in lieu of just two. The formula is presented in Figure 3.17.

17 But cf. Sections 3.1.2.3.2 and 4.1.2.

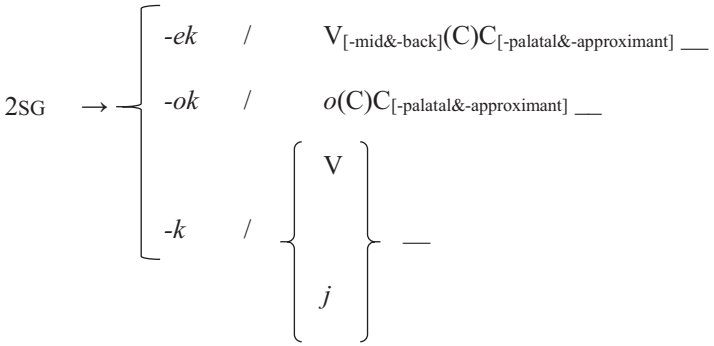


Figure 3.17: Allomorphy of 2SG person markers.

In contrast to the allomorphy in the 1st person singular and the 3rd person singular masculine, there is an additional condition which makes it necessary to differentiate between two kinds of consonant-final stems. The vast majority of Π-stems trigger the suffixation of *-ek* as illustrated in (3.10) where (Π38) *mingħand* 'from s.o.' ends in a denti-alveolar plosive.

(3.10) [Buhagiar 2001: 92]
Għandi *bżonn* *pjaċir* ***[mingħandek]***$_{PP}$ *Kurun*
have.IPFV:1SG need favour [**from_s.o.**:2SG] Kurun
'I need a favour [**from** you], Kurun.'

However, the employment of *-ek* is only possible because the last vowel in the Π-stem is not /o/. The mid high back vowel /o/ is unique because it is the sole vowel to trigger vowel harmony on suffixes which have the structure *-eC* (with C = either /t/ or /k/).[18] Vowel harmony is possible only if /o/ and the suffix are separated by at least a consonant. This condition is met by (Π53) *skont* 'according to' as shown in (3.11).

18 Maltese seems to instantiate a kind of backness harmony in the sense that the mid-high front vowel of the suffix gives way to the mid-high back vowel of th stem. Backness harmony is common cross-linguistically (Gordon 2016: 134). Its restriction to exactly one pair of vowels is interesting. As far as we know, there is as yet no study that focusses specifically on vowel-harmonic systems of this kind.

(3.11) [Korpus Malti 3.0, parl11592]
imbagħad *għidilna* *għalfejn* ***[skont<u>ok</u>]***$_{PP}$ *Karl Camilleri*
then tell:IO:1PL why **[according_to**:<u>2SG</u>] Karl Camilleri
mhux *korrett*
NEG:3SG.M:NEG correct
'[. . .] then tell us why [**in** <u>your</u> <u>opinion</u>] Karl Camilleri is not correct.'

This vowel-harmonic pattern is by no means restricted to Maltese ΠIs (Cachia 1994: 111). Borg (1997: 276) speaks of /o/ being "subject to a rule of progressive roundness assimilation both intra- and intermorphemically" which affects the 2nd person singular possessor suffix (e.g. *ommok* 'your mother' vs. *darek* 'your house'), the direct and indirect object clitics (e.g. *nitolbok* 'I beg you' vs *nibgħatek* 'I send you' or *nagħti-homlok* 'I give them to you' with vowel harmony caused by the /o/ vowel in the direct object clitic *-hom*[19]), and the person marker on ΠIs. For verbs like *romol* 'become a widower' the 3rd person singular feminine in the perfective is *romlot* 'she became a widow' with *-ot* in lieu of *-et* as portmanteau suffix co-encoding the subject. Thus, vowel harmony is not limited to contexts where the 2nd person singular is involved.

In (3.12), an example of the use of the monoconsonantal allomorph *-k* on a Π-stem ending in /j/ is provided. The citation form of (ΠI60) *wara* 'after' contains no palatal approximant.

(3.12) [Abela 2016: 49]
jien *inkun* ***[waraj<u>k</u>]***$_{PP}$
1SG 1SG.IPFV:be.FUT **[after**:<u>2SG</u>]
'[. . .] I will be [**behind** <u>you</u>].'

The same allomorph *-k* is triggered by a vowel as final segment of the Π-stem. This is illustrated in (3.13) with (ΠI21) *għal* 'for'. As in the previous case, the segment /i/ which is crucial for the choice of the allomorph of the person marker is absent from the citation form of the Π.

(3.13) [Buhagiar 2001: 32]
U *nibqa'* *nitlob* ***[għali<u>k</u>]***$_{PP}$ *sa* *ma* *mmut*
and 1SG.IPFV:stay 1SG.IPFV:request **[for**:<u>2SG</u>] until that 1SG.IPFV:die
'And I keep asking [**for** <u>you</u>] until I die.'

19 Borg/Azzopardi-Alexander (1997: 315) argue that vowel harmony is relatively productive in Maltese exactly because of the frequent combination of the direct object clitic *-hom* and the indirect object clitic of the 2nd person singular. The vowel /o/ in the former enforces vowel harmony on the suffix to its right which can only take the shape *-lok*.

No other person value is subject to allomorphic variation. We therefore have reached the point where we can address the existence of different morphological classes among the inflected Πs. In the foregoing paragraphs, we have repeatedly hinted at the non-identity of the lexicon form of certain Πs and their Π-stem to which the person affixes are attached. Since only a subset of the inflected Πs attests to special Π-stems, the predictability of the shape of the Π-stem is limited. Furthermore, not all special Π-stems reflect the same phonological properties. On the basis of these stem-related uncertainties, it suggests that there are different classes of inflected Πs. Whether these classes can properly be called inflectional classes will be discussed below.[20] Until then we make do with employing the uncommitted term class.

3.1.2.2 Π-stems

In this section, we briefly look at processes which affect the Π-stem so that for certain Πs, there is non-identity of citation form and Π-stem. The full paradigms of the individual Πs will be presented below.[21] The majority of the Maltese inflected Πs attests to the identity of citation form and Π-stem. The 27 Πs are enumerated in (3.14). The ten cases of Πs which have a special Π-stem are presented in (3.15).

(3.14) Π-stem = citation form
(Π4) *bejn* 'between'; (Π5) *bħal* 'like'; (Π7) *bi* 'with'; (Π8) *biswit* 'facing'; (Π10) *daqs* 'equal to'; (Π11) *dwar* 'about'; (Π14) *fejn* 'near'; (Π15) *fi* 'in'; (Π16) *fost* 'amongst'; (Π17) *fuq* 'on'; (Π20) *għajr* 'except'; (Π22) *għand* 'at s.o.'s place'; (Π24) *ħlief* 'except'; (Π29) *lil* 'to'; (Π31) *madwar* 'around'; (Π32) *maġenb* 'close to'; (Π33) *matul* 'during'; (Π35) *minflok* 'instead of'; (Π36) *mingħajr* 'without'; (Π38) *mingħand* 'from s.o.'; (Π41) *minn* 'from'; (Π47) *qalb* 'amidst'; (Π48) *qrib* 'near'; (Π49) *quddiem* 'in front of'; (Π53) *skont* 'according to'; (Π56) *taħt* 'under'; (Π59) *waqt* 'at the time of'

(3.15) Π-stem ≠ citation form
(Π13) *favur* 'in favour of'; (Π21) *għal* 'for'; (Π23) *ħdejn* 'beside'; (Π27) *kontra* 'against'; (Π28) *lejn* 'towards'; (Π30) *ma'* 'with'; (Π37) *mingħala* 'in s.o.'s opinion'; (Π46) *qabel* 'before'; (Π55) *ta'* 'of'; (Π60) *wara* 'after'

20 Cf. Section 3.1.2.3.2.
21 Cf. Section 3.1.2.3.

Figure 3.18 can be taken as an indicator for the identity of Π-stem and citation form to be another preferred property which can be added to those which have been identified as favourable to inflection in Figure 3.11.

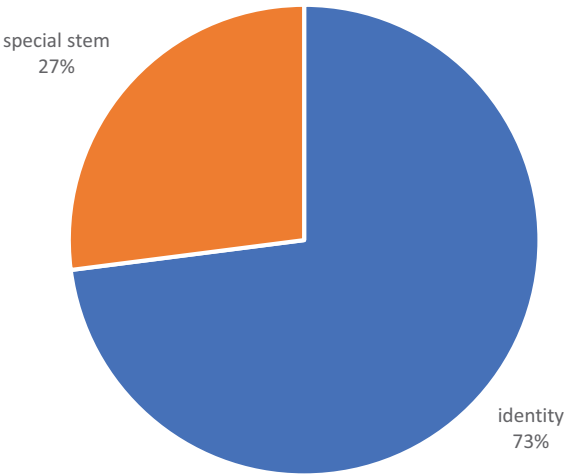


Figure 3.18: Share of special Π-stems vs identity with citation form.

Slightly more than a quarter of the inflected Πs give evidence of special stems.[22] Five of the ten Πs in (3.15) end in a consonant whereas the other five Πs display a final vowel. Five Πs are monosyllabic and five are polysyllabic. The length of the segmental chains ranges from two to eight segments. Going by the quantities exposed in Table 1.11, (Π21) *għal* 'for', (Π30) *ma'* 'with', (Π55) *ta'* 'of', and (Π60) *wara* 'after' boast high token frequencies whereas (Π13) *favur* 'in favour of', (Π23) *ħdejn* 'beside', (Π27) *kontra* 'against', (Π28) *lejn* 'towards', (Π37) *mingħala* 'in s.o.'s opinion', and (Π46) *qabel* 'before' do not. There are two Italo-Romance Πs as opposed to eight Semitic Πs. If we discount the dominance of Semitic Πs, it is hardly possible to pinpoint any criterion which is decisive for the existence of a special Π-stem. Since two Italo-Romance inflected Πs are characterised by stem-citation form identity, the language of origin does not seem to be sufficiently strong a factor to determine whether a Π has a special Π-stem or not.

22 One might argue that (Π4) *bejn* 'between' also belongs here because of its distinct plural forms. However, we argue that these plural forms do not constitute a special Π-stem. On account of the many other questions this Π raises, we postpone its detailed discussion until Section 3.1.2.3.

The ten IIs in (3.15) are not of the same kind. First of all, we have to single out (П46) *qabel* 'before' because we are not dealing with a proper П-stem but with an automatic morphonological process which deletes post-tonic mid high /e/ before a stem-final consonant if a vowel-initial suffix is attached.[23] If the suffix has an initial consonant, deletion is not possible but /e/ is raised to /i/. Note that the orthographic <h> of *-ha* in the 3rd person singular feminine and *-hom* in the 3rd person plural is silent but represents an abstract consonantal phoneme which blocks the application of deletion.[24] Besides migration of the stress site to the new penultimate syllable, deletion is a relatively common strategy to avoid violations of the prosodic restrictions imposed on polysyllables in Maltese. The deletion is mandatory before *-i* (1st person singular), *-ek* (2nd person singular), and *-u* (3rd person singular masculine) whereas raising must be realised before *-ha* (3rd person singular feminine), *-na* (1st person plural), *-kom* (2nd person plural), and *-hom* (3rd person plural) as schematised in Figure 3.19.

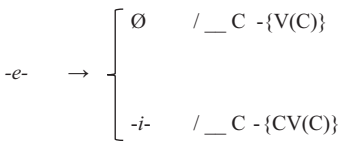


Figure 3.19: Deletion/raising of *-e-*.

The only Maltese inflected П which fits this pattern is indeed (П46) *qabel* 'before'. Deletion of /e/ to yield the stem *qabl-* is illustrated in (3.16) whereas raising of /e/ to yield the stem *qabil-* is presented in (3.17).

(3.16) [Korpus Malti 3.0; literature59]

Taħseb	*li*	***[qabl<u>ek</u>]$_{PP}$***	*ma*	*kellix*		*nisa*
2SG.IPFV:think	that	[**before**:<u>2SG</u>]	NEG	have.PFV:1SG:NEG		woman.PL
oħra	*jew*					
other:PL	or					

'You think that I did not have other women [**before** <u>you</u>], do you?'

23 The rules described in this paragraph are also valid beyond the domain of IIs. They are especially prominent in verb morphology (Ambros 1998: 204–205). For more details, the reader is referred to Aquilina (1959: 290–294).

24 We assume that this silent phoneme cannot be lumped together with the abstract *għajn*-phoneme since it has not the same effect as the latter on its phonological context (for instance, it does not trigger diphthongization of high vowels). However, this issue belongs to the domain of Maltese phonology whose internal catalogue of problems is too remote from our own topic to justify a dedicated digression on our part.

(3.17) [Korpus Malti 3.0; culture3071]
Jieħdu *sehem* *[**qabil**hom]*$_{PP}$ *Freddie Portelli* *u* *l-Isvediżi*
3.IPFV:take:PL part [**before**:3PL] Freddie Portelli and DEF-Swede:PL
The Rock Orchestra
The Rock Orchestra
'[**Before** them] Freddie Portelli and the Swedes *The Rock Orchestra* will participate.'

For the Π-stems of the other nine Πs mentioned in (3.15), no comparable general rules can be invoked. To illustrate these cases, we have picked one example for each Π (except (Π13) *favur* 'in favour of') from the ten pages 81–90 of our primary source [Bartolo/Vella 2009]. The opener is (Π28) *lejn* 'towards'. Examples (3.6) and (3.8) have prepared us already for the deletion of stem-final /n/ under suffixation. The loss of /n/ before suffixes is pervasive paradigmatically. Example (3.18) shows that it also applies in the 3rd person plural.

(3.18) [Bartolo/Vella 2009: 85]
Tommy *resaq* *[**lej**hom]*$_{PP}$
Tommy approach [**towards**:3PL]
'Tommy came [**towards** them].'

More importantly, /n/-deletion is not exclusive to (Π28) *lejn* 'towards' but is attested also with (Π23) *ħdejn* 'beside' as comes to the fore in (3.19).

(3.19) [Bartolo/Vella 2009: 86]
Estella *waslet* *[**ħdej**hom]*$_{PP}$
Estella arrive:3SG.F.PFV [**beside**:3PL]
'Estella arrived [**at** their side].'

According to Borg/Azzopardi-Alexander (1997: 333, original boldface), "the word-final **-n** is often deleted in words like prepositions" for which the authors mention (Π23) *ħdejn* 'beside', (Π28) *lejn* 'towards', (Π14) *fejn* 'near', and (Π43) *mnejn* 'from near' explicitly. The latter can be discarded from further discussion since this Π is considered invariant for the time being. Interestingly, (Π14) *fejn* 'near' never displays /n/-deletion under suffixation in our database.[25] Moreover, (Π4) *bejn* 'between' which is in a rhyming relation with the aforementioned Πs is also immune against /n/-deletion (Cachia 1994: 110). This clearly means that identical phonological con-

25 For a differently motivated pattern of *n*-deletion cf. Section 3.3.2.

ditions notwithstanding, the Πs behave differently from each other. It is therefore not possible to put forward a rule which holds for more than two Πs. However, (Π23) *ħdejn* 'beside' and (Π28) *lejn* 'towards' constitute the sole members of a small class.[26]

Another miniature class emerges in connection with the special Π-stems of (Π30) *ma'* 'with' and (Π55) *ta'* 'of'. In the paradigms of these Πs, the abstract phoneme *għajn* resurfaces not only orthographically but also phonetically because it is pronounced as voiceless velar fricative [x] in the 3rd person singular feminine and in the 3rd person plural, i.e. in those word forms where suffixes with initial orthographic <h> are attached.[27] This is the case for instance, in examples (3.20)–(3.21).

(3.20) [Bartolo/Vella 2009: 89]

Ma	*kellhiex*	*aptit*	*tiddiskuti*	*[**magħ**ha]*$_{PP}$
NEG	have.PFV:3SG.F:NEG	appetite	3SG.F.IPFV:discuss	[**with**:3SG.F]

l-pjanijiet
DEF-plan:PL
'She did not long for discussing the plans [**with** her] [. . .].'

(3.21) [Bartolo/Vella 2009: 90]

telqet	*tiġri*	*żżur*	*il-ġardina*	*żgħira*
leave:3SG.F.PFV	3SG.F.IPFV:run	3SG.F.IPFV:visit	DEF-garden	small:F

*[**tagħ**ha]*$_{PP}$
[**of**:3SG.F]
'[. . .] she left quickly to visit [**her**] little garden [. . .].'

The stems alternate between citation forms with a CV-structure and a special Π-stem with CVC-structure. The *għajn* has its usual effects – diphthongisation and vowel lengthening – so that the parallel paradigms of the two Πs appear relatively heterogeneous phonologically. They too will be presented in the subsequent section.

The previous cases discussed in this section involve pairs of Πs whose morphological behaviour is largely identical. We now enter a less homogeneous territory. The four cases of (Π13) *favur* 'in favour of', (Π21) *għal* 'for', (Π27) *kontra* 'against', and (Π37) *mingħala* 'in s.o.'s opinion' have in common that their Π-stem ends in

26 Cf. Section 3.1.2.3.

27 This case is intriguing insofar as – at least orthographically – *għajn* and the silent <h> form a cluster so that it is not at all clear to which of the two members of the cluster the phonetic realization can be ascribed. Note that both <għ> and <h> are realised as [x] word-finally. In this study we stipulate that what is phonetically realised is the *għajn*.

the vowel /i/ which does not form part of the segmental chain of the citation form. In connection to (Π27) *kontra* 'against', Saari (2009: 273) mentions that "Maltese also uses the Arabic possessive suffixation with this concrete preposition" to add that this also holds for (Π13) *favur* 'in favour of' and (Π53) *skont* 'according to'. However, the two former Italo-Romance Πs boast special Π-stems whereas (Π53) *skont* 'according to' does not. As to (Π13) *favur* 'in favour of', the citation form is consonant-final, i.e. the Π-stem counts a syllable more because of the additional stem vowel.[28] Since the Π-stem ends in /i/ the person marker allomorph for the 1st person singular is *-ja* as shown in (3.22).

(3.22) [Korpus Malti 3.0; news73391]

Naħseb	*li*	*din*	*taħdem*	***[favuri**ja]*$_{PP}$	
1SG.IPFV:think	that	DEM:F:PROX	3SG.F.IPFV:work	**[in_favour_of**:1SG]	
għax	*jien*	*politiku*	*tal-poplu*	*mhux*	*ta' partit biss*
because	1SG	politician	of:DEF-people	NEG:3SG.M:NEG	of party only

'I think that this works **[in** my **favour]** because I am a politician of the people and not of a party alone.'

The same pattern is attested for Semitic (Π21) *għal* 'for'. As in the previous case, the consonant-final citation form changes to a Π-stem which ends in the high front vowel /i/ as shown in (3.23).

(3.23) [Bartolo/Vella 2009: 81]

Naħseb	*li*	*r-riħa*	*kienet*	*wisq*	*qawwija*
1SG.IPFV:think	that	DEF-wind	be:3SG.F.PFV	too_much	strong:F

***[għali**ja]*$_{PP}$
[**for**:1SG]
'I think that the wind was too strong [**for** me].'

The behaviour of these two Πs runs counter to the usual behaviour of consonant-final inflected Πs such as e.g. (Π31) *madwar* 'around' and (Π5) *bħal* 'like' which are phonologically comparable to (Π13) *favur* 'in favour of' and (Π21) *għal* 'for' because of identical syllabicity and identical single word-final liquids. The former two cases suggest that it is perfectly feasible for a Π of this kind to host the person affixes without creating a special Π-stem: *madwari* 'around me' and *bħali* 'like me' are the only legitimate forms in the 1st person singular whereas **għali* 'for me' is unac-

28 Deviations from this pattern are discussed in Section 3.1.2.3.3.2 where the *i*-stems are looked into.

ceptable. As to the supposedly equally unacceptable **favuri* 'in my favour' further discussion is needed.[29] Thus, on the basis of the citation form, it is not possible to predict which stem is chosen under inflection.

The other two Πs with Π-stems ending in /i/ display citation forms which are equipped with a final /a/. This vowel is replaced with /i/ under suffixation, i.e. citation form and Π-stem show identical syllabicity. What makes the case of (Π37) *mingħala* 'in s.o.'s opinion' especially remarkable is the etymological closeness to (Π21) *għal* 'for'. In (3.24), (Π37) *mingħala* 'in s.o.'s opinion' is inflected for the 2nd person singular whereas in (3.25), (Π27) *kontra* 'against' combines with the person marker of the 1st person plural.

(3.24) [Bartolo/Vella 2009: 81]
U *int* ***[mingħali<u>k</u>]*** *li* *jien* *nerġa'*
and 2SG **[in_s.o.'s_opinion**:<u>2SG</u>] that 1SG 1SG.IPFV:return
nidħol *hemm* *taħt?*
1SG.IPFV:enter there under
'And [**according to** <u>you</u>] I shall re-enter down there?'

(3.25) [Bartolo/Vella 2009: 81]
wegħditni *li* *mhux* *se* *tmur*
promise:3SG.F.PFV:1SG that NEG:3SG.M:NEG FUT 3SG.F.IPFV:go
[kontri<u>na</u>]
[against:<u>1PL</u>]
'[. . .] she has promised me that she will not turn [**against** <u>us</u>].'

That there is no automatism which requires the replacement of a final /a/ with /i/ transpires from the next example which shows that (Π60) *wara* 'after' preserves the final vowel of the citation form by way of creating a Π-stem in /j/ as shown in (3.26).

(3.26) [Bartolo/Vella 2009: 82]
[Waraj<u>hom</u>] *daħal* *jiġri* *Erkole.*
[after:<u>1PL</u>] enter 3SG.IPFV:run Erkole
'[**Behind** <u>them</u>] Erkole entered quickly.'

The unpredictable behaviour of the nine Πs reviewed in the foregoing paragraphs is hard to explain synchronically. Whether the diachronic perspective promises better results in connection to these cases will be assessed in a follow-up study. For

29 Cf. Section 3.1.2.3.3.2.

the time being, however, it suffices to state that Maltese inflected Πs can be distributed over several classes. These classes are in the focus of the subsequent section.

3.1.2.3 Paradigms

In this section, we review the paradigms of all inflected Πs. The presentation and discussion extend to the doubtful cases mentioned in (3.2) above. We proceed as follows. For each class, a separate subsection is reserved. The classes receive distinctive labels. Their properties and the problems they raise are discussed in some detail. The inflectional paradigm of each member of a given inflectional class is featured in the appropriate subsection. We start with the biggest class in Section 3.1.2.3.1. This class comprises all those Πs whose Π-stem is identical to the citation form.

3.1.2.3.1 Class I (= C I)

The criterion for a Π to be allocated in C I is the identity of a consonant-final Π-stem and the corresponding citation form. Superficially, this criterion is valid for most of the Πs listed in (3.14). Since not all of the Πs included in (3.14) behave identically under inflection, the picture is less homogeneous than one might think. First of all, it is necessary to separate bona fide instances of membership in C I from problematic cases. Accordingly, Section 3.1.2.3.1.1 features the unproblematic majority of the members of this class. Section 3.1.2.3.1.2 is dedicated to the discussion of the problematic minority.

3.1.2.3.1.1 Straightforward members of C I

C I hosts twenty Πs which is equivalent to 54% of all inflected Πs. It is therefore relatively normal for an inflected Π to behave according to the following principles. The basic rule for person inflection of Πs which belong to C I is given in Figure 3.20.

$$\Pi_{\text{INFLECTED}} \quad \rightarrow \quad C]_{\text{CITATION FORM}} + \text{person marker}_{\text{SET A}}$$

Figure 3.20: Rule for inflection of Πs in C I.

The schema is reminiscent of the principles of agglutination. However, we know already that a distinction must be made between citation forms with the mid-high back vowel /o/ in the last syllable and those without /o/ because the vowel determines which allomorph is licit in the 2nd person singular. There is thus inward sensitivity of the person markers. The automatic character of this allomorphic choice notwithstanding, we divide C I into two subclasses, namely neutral stems (= C Ia) and vowel-harmonic stems (= C Ib).

The two subclasses differ in size. The subclass C Ia hosts 18 Пs whereas there are only two members in subclass C Ib. Neutral stems are thus nine times as frequent as vowel-harmonic stems. In Table 3.4, we provide the complete survey of the paradigms of all uncontroversial members of C Ia. The vowel-harmonic stems of C Ib are given in Table 3.5. Grey shading highlights the cells of the 2nd person singular which is affected by vowel harmony.

Table 3.4: Paradigms of Пs in C Ia.

П	singular				plural		
	1	2	3.M	3.F	1	2	3
(П5) *bħal* ‘like’	*bħali*	*bħalek*	*bħalu*	*bħalha*	*bħalna*	*bħalkom*	*bħalhom*
(П8) *biswit* ‘facing’	*biswiti*	*biswitek*	*biswitu*	*biswitha*	*biswitna*	*biswitkom*	*biswithom*
(П10) *daqs* ‘equal to’	*daqsi*	*daqsek*	*daqsu*	*daqsha*	*daqsna*	*daqskom*	*daqshom*
(П11) *dwar* ‘about’	*dwari*	*dwarek*	*dwaru*	*dwarha*	*dwarna*	*dwarkom*	*dwarhom*
(П14) *fejn* ‘near’	*fejni*	*fejnek*	*fejnu*	*fejnha*	*fejnna*	*fejnkom*	*fejnhom*
(П17) *fuq* ‘on’	*fuqi*	*fuqek*	*fuqu*	*fuqha*	*fuqna*	*fuqkom*	*fuqhom*
(П20) *għajr* ‘except’	*għajri*	*għajrek*	*għajru*	*għajrha*	*għajrna*	*għajrkom*	*għajrhom*
(П22) *għand* ‘at s.o.’s place’	*għandi*	*għandek*	*għandu*	*għandha*	*għandna*	*għandkom*	*għandhom*
(П24) *ħlief* ‘except’	*ħliefi*	*ħliefek*	*ħliefu*	*ħliefha*	*ħliefna*	*ħliefkom*	*ħliefhom*
(П29) *lil* ‘to’	*lili*	*lilek*	*lilu*	*lilha*	*lilna*	*lilkom*	*lilhom*
(П31) madwar ‘around’	*madwari*	*madwarek*	*madwaru*	*madwarha*	*madwarna*	*madwarkom*	*madwarhom*
(П32) *maġenb* ‘close to’	*maġenbi*	*maġenbek*	*maġenbu*	*maġenbha*	*maġenbna*	*maġenbkom*	*maġenbhom*
(П36) *mingħajr* ‘without’	*mingħajri*	*mingħajrek*	*mingħajru*	*mingħajrha*	*mingħajrna*	*mingħajrkom*	*mingħajrhom*

Table 3.4 (continued)

П	singular				plural		
	1	2	3.м	3.ғ	1	2	3
(П38) *mingɦand* 'from s.o.'	*mingɦandi*	*mingɦandek*	*mingɦandu*	*mingɦandha*	*mingɦandna*	*mingɦandkom*	*mingɦandhom*
(П41) *minn* 'from'	*minni*	*minnek*	*minnu*	*minnha*	*minna*	*minnkom*	*minnhom*
(П48) *qrib* 'near'	*qribi*	*qribek*	*qribu*	*qribha*	*qribna*	*qribkom*	*qribhom*
(П49) *quddiem* 'in front of'	*quddiemi*	*quddiemek*	*quddiemu*	*quddiemha*	*quddiemna*	*quddiemkom*	*quddiemhom*
(П56) *taɦt* 'under'	*taɦti*	*taɦtek*	*taɦtu*	*taɦtha*	*taɦtna*	*taɦtkom*	*taɦthom*

Table 3.5: Paradigms of Пs in C Ib.

П	singular				plural		
	1	2	3.м	3.ғ	1	2	3
(П35) *minflok* 'instead of'	*minfloki*	*minflokok*	*minfloku*	*minflokha*	*minflokna*	*minflokkom*	*minflokhom*
(П53) *skont* 'according to'	*skonti*	*skontok*	*skontu*	*skontha*	*skontna*	*skontkom*	*skonthom*

What all these twenty Пs have in common on the expression side is that their citation forms end in a consonant. Superficially, this seems to be a trivial fact. However, as will become evident below,[30] the fact is much more relevant than it might appear.

To better understand why several of the Пs are problematic,[31] it is helpful to show that the Пs in Tables 3.4–3.5 are equipped with complete paradigms. The crucial test for completeness (as will be explained below) involves the speech-act participants in the singular. A П has a complete paradigm if there is proof of inflectional forms for the 1st and 2nd person singular. Figure 3.21 presents the implication whose tenability will be addressed in the subsequent section.

30 Cf. Section 3.1.2.3.2.

31 To be discussed in Section 3.1.2.3.1.2.

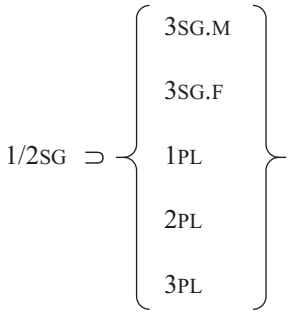


Figure 3.21: Implicational relation between person inflections.

Evidence of inflection in the persons corresponding to the speech-act participants has been provided already for the following five members of C I: (П14) *fejn* 'near' in (1.67), (П38) *mingħand* 'from s.o.', (П41) *minn* 'from' in (1.143), (П48) *qrib* 'near' in (1.37), and (П53) *skont* 'according to' in (3.11). There are thus fifteen Пs whose compliance with the implicational pattern in Figure 3.21 must still be substantiated. This is what we attempt to do in the subsequent paragraphs.

To prove our point, dialogues and direct speech are the most promising sources for the use of Пs in combination with a speech-act participant as their complement. By no means do all of our primary sources contain direct speech. Thus, the choice of sources is more restricted than in the case of other phenomena which are also attested in narrative, etc. Examples (3.27)–(3.41) illustrate the inflection of the remaining fifteen Пs for either the 1st person singular or the 2nd person singular.

(3.27) [Camilleri 2013: 222]
Mela *taħdem* *biss* ***[bħal<u>ek</u>]***$_{PP}$
well_then 3SG.F.IPFV:work only **[like**:<u>2SG</u>]
'Does she only work then **[like** <u>you</u>]?'

(3.28) [Korpus Malti 3.0; literature23]
Qatt *ma* *rajt* *lil* *ħadd* *jiġri* ***[daqs<u>ek</u>]***$_{PP}$
ever NEG see:1SG.PFV to someone 3SG.M.IPFV:run **[equal_to**:<u>2SG</u>]
'I never saw anybody run **[like** <u>you</u>].'

(3.29) [Bartolo/Vella 2009: 62–63]
Estella *kuljum* *tistaqsi* ***[dwar<u>ek</u>]***$_{PP}$
Estella everyday 3SG.F.IPFV:ask **[about**:<u>2SG</u>]
'Everyday Estella asks **[about** <u>you</u>].'

(3.30) [Teuma 2015: 799]
Kif tasal hemm ***[biswit****ek]*$_{PP}$ *tara niċċa b'*
how 2SG.PFV:arrive there [**facing**:2SG] 2SG.IPFV:see niche with
lampa tixgħel fiha
lamp 3SG.F.IPFV:kindle in:3SG.F
'When you arrive there, you see a niche with a lighted lamp [**facing** you].'

(3.31) [Camilleri 2013: 101]
Rajtu x' kiteb ***[fuq****i]*$_{PP}$ *dak il-purċinell*
see:2SG.PFV:3SG.M what write [**on**:1SG] DEM:M:DIST DEF-punch
'Have you seen what this punch has written [**about** me]?'

(3.32) [Korpus Malti 3.0; literature77]
u hawn ma jkollhom 'il ħadd ***[għajr****ek]*$_{PP}$
and here NEG 3SG.M.IPFV:have.FUT:IO.3PL to someone [**except**:2SG]
'[. . .] and here they will have no-one [**except** you].'

(3.33) [Camilleri 2013: 131]
Leħnek mis-sema sejjaħli Mulejja, biex niġi
voice:2SG from:DEF-heaven call:IO:1SG Lord:1SG to 1SG.IPFV:come
[għand*ek]*$_{PP}$ *ħa ngħixu flimkien*
[**at_s.o.'s_place**:2SG] FUT 1.IPFV:live:PL together
'Your voice from heaven has called me, oh my Lord, to come [**to** you] so that we will live together.'

(3.34) [Bartolo/Vella 2009: 63]
il-verità ngħidhielha jien u ħadd ***[ħlief****i]*$_{PP}$
DEF-truth 1SG.IPFV:say:IO:3SG.F 1SG and someone [**except**:1SG]
'[. . .] I will tell her the truth and nobody else [**but** me].'

(3.35) [Camilleri 2013: 166]
Tgħajjarnix giddieb ***[lil****i]*$_{PP}$ *għax inxoqqok*
2SG.IPFV:call_names:1SG:NEG liar [**to**:1SG] because 1SG.IPFV:cleave:2SG
'Don't call [**me**] a liar, because I will cut you to pieces!'

(3.36) [Bartolo/Vella 2009: 55]
dawk li jħobbuk u jduru ***[madwar****ek]*$_{PP}$
DEM:PL:DIST that 3.IPFV:love:PL:2SG and 3.IPFV:turn:PL [**around**:2SG]
'[. . .] those who love you and care [**for** you].'

(3.37) [Korpus Malti 3.0; literature3]
Jien *se* *mmur* ***[minflok**ok]*$_{PP}$ *l-iskola*
1SG FUT 1SG.IPFV:go [**instead_of**:2SG] DEF-school
'[**Instead of** you] I will go to the school [. . .].'

(3.38) [Bartolo/Vella 2009: 51]
kif *tista'* *tibqa'* *kalm* *b'* *persuna* *tant*
how 2SG.IPFV:can 2SG.IPFV:remain calm with person so
irritant ***[maġenb**ek]*$_{PP}$
irritating [**close_to**:2SG]
'[. . .] how can you remain calm with such an irritating person [**next to** you]?'

(3.39) [Bartolo/Vella 2009: 195]
Tgħid *mhux* *se* *jkomplu* ***[mingħajr**i]*$_{PP}$
2SG.IPFV:say NEG:3SG.M:NEG FUT 3.IPFV:continue:PL [**without**:1SG]
'They must go on [**without** me]!'

(3.40) [Bartolo/Vella 2009: 26]
Int *kont* *bilqiegħda* *bil-ktieb* *magħluq* ***[quddiem**ek]*$_{PP}$
2SG be:2SG.PFV sitting with:DEF-book PART:close [**in_front_of**:2SG]
'You were sitting with the closed book [**in front of** you].'

(3.41) [Korpus Malti 3.0; literature58]
Mit-tieqa *tista'* *tara* ***[taħt**ek]*$_{PP}$ *il-bjut*
from:DEF-window 2SG.IPFV:can 2SG.IPFV:see [**under**:2SG] DEF-roof.PL
tar-raħal
of:DEF-village
From the window you can see the roofs of the village [**below** you].'

We now know that all of the above members of C I can be inflected for speech-act participants and thus (according to the implication in Figure 3.21) are furnished with complete paradigms. This is important to keep in mind because there are further potential members of C I whose paradigms are defective.

3.1.2.3.1.2 Problem children in C I

The IIs which show certain affinities with C I but do not seem to fulfil all of the necessary criteria are problematic for different reasons. We look at each of them one by one starting with a morphonologically motivated case of deviation from the

required pattern in subsection (i). Subsection (ii) addresses the particularly intriguing case of (Π4) *bejn* 'between'. Plural number is not only relevant for this Π but also for the Πs discussed in subsection (iii). Subsection (iv) is dedicated to Πs whose semantics block their use with speech-act participants as complements. The Πs in (iii)–(iv) instantiate defectiveness (Baerman/Corbett 2010). Whether defectiveness also applies in the case of the three doubtful inflected Πs as of (3.2) will be determined in subsection (v).

(i) (Π46) *qabel* 'before'

This Π has already been discussed in connection with the rule in Figure 3.19 which affects unstressed post-tonic /e/. Examples of deletion and raising are given in (3.16) and (3.17), respectively. The former example additionally shows that (Π46) *qabel* 'before' can take a pronominal complement of a speech-act participant in the shape of affixal morphology. The reason why this Π is not included among the straightforward members of C I is the outward sensitivity of the Π-stem to the person markers. One might object by way of claiming that we are facing regular synchronic morphonological processes which affect all inflected words whose segmental chain ends in the unstressed mid-high front vowel /e/ + single consonant. Given this automatism, the case of (Π46) *qabel* 'before' is not much different from those of the vowel-harmonic Πs in C Ib. In point of fact, the allomorph *-ok* of the 2nd person singular of (Π35) *minflok* 'instead of' and (Π53) *skont* 'according to' is also chosen on the basis of a morphonological automatism. Thus, we accept (Π46) *qabel* 'before' as a further (slightly special and therefore unique) member of C I. Since it neither fits into C Ia nor C Ib, we register it as the sole member of subclass C Ic. Its full paradigm is given in Table 3.6. Grey shading highlights those cases where deletion applies. All other cells of the paradigm give evidence of raising.

Table 3.6: Paradigm of (Π46) *qabel* 'before'.

person	form	process
1SG	*qabli*	DELETION
2SG	*qablek*	DELETION
3SG.M	*qablu*	DELETION
3SG.F	*qabilha*	RAISING
1PL	*qabilna*	RAISING
2PL	*qabilkom*	RAISING
3PL	*qabilhom*	RAISING

The pattern according to which 1SG, 2SG, and 3SG.M behave similarly to each other whereas 3SG.F, 1PL, 2PL, and 3PL form a group of word forms which reflect other properties is by no means an isolated trait of (Π46) *qabel* 'before'.

(ii) (Π4) *bejn* 'between'

This Π is remarkable for several reasons. What strikes the eye most is the use of a plural marker on the Π when the pronominal complement is one of the three persons in the plural. This is illustrated in (3.42) for the 3rd person plural. The additional number morpheme is highlighted in grey.

(3.42) [Camilleri 2013: 90]
Dik *il-btala* *kellha* *timmarka* *t-tieni*
DEM:F:DIST DEF-vacation have.PFV:IO:3SG.F 3SG.F.IPFV:mark DEF-second
fażi *tar-relazzjoni* *ta'* ***[beijn****iet**hom]*$_{PP}$
phase of:DEF-relation of [**between**:PL:3PL]
'This vacation must have marked the second phase of the relation [**between** them]'.

The inflected form *bejniethom* 'between them' consists of three morphemes, namely the Π-stem *bejn* which is identical with the citation form and thus in line with the requirements for allocation in class C I, the plural marker *-iet*, and the person marker *-hom*. No other Maltese Π boasts plural markers. The absence of plural markers from all other inflected Πs isolates (Π4) *bejn* 'between' from its fellow-Πs.

However, as shown in (3.43), this Π can combine the Π-stem directly with the person markers in the plural also in the absence of *-iet*.

(3.43) [Korpus Malti 3.0; academic460]
il-Montenegro *ivvota* *biex* *l-għaqda* *politika* ***[bejn****hom]*$_{PP}$
DEF-Montenegro vote to DEF-union political:F [**between**:3PL]
u *bejn* *is-Serbja* *tispiċċa*
and between DEF-Serbia 3SG.F.IPFV:end
'Montenegro voted for terminating the political union [**between** them] and Serbia.'

The competition between two options – plurals with vs plurals without extra plural marker – is another unique trait of (Π4) *bejn* 'between' because there is no other Maltese Π with this kind of overabundance in the plural.[32] Thornton

32 But cf. Section 3.1.2.3.2.

(2019) defines overabundance as the morphological mismatch which is obtained if one and the same cell in a paradigm is occupied by more than just one word form which are largely synonymous functionally. Sutcliffe (1936: 202) claims that the forms which involve the overt plural marker "are used to denote distinction between several members of a group". According to this author, the plural marker is absent when a contrast between groups is expressed. Examples (3.42)–(3.43) confirm this hypothesis.[33]

What Sutfcliffe's assumption entails further is that forms which involve *-iet* are excluded from coordinative constructions like that exemplified in (3.43). This is corroborated by a search on the Korpus Malti 3.0 which yielded no matches at all for constructions of this kind involving *bejnietna* 'between us', *bejnietkom* 'between you', or *bejniethom* 'between them' (Saari 2003: 117). This means that (Π4) *bejn* 'between' displays another unique property within the Maltese Π-inventory, namely overdifferentiation in the sense that in a subset of the cells of the paradigm formal distinctions are consistently made in order to mark out categories which are not registered in other paradigms of the same word-class (Corbett 2007a: 28). According to the principles of Canonical Morphology, overdifferentiation constitutes a morphological mismatch. Like overabundance (from which it is not always easily distinguished), overdifferentiation is a noncanonical phenomenon.

Before we take a look at the paradigm itself, it is worth noting that under coordination (Π4) *bejn* 'between' may occur on both conjuncts though not as often as example (3.43) might suggest (Stolz/Ahrens 2017: 138) as most of the Maltese Πs do.[34] At this point, it is sufficient to state that this Π is frequently inflected for speech-act participants as in (3.44).

(3.44) [Korpus Malti 3.0; news7055][35]

llum	*inżammet*	*laqgħa*	***[bejn**i]*$_{PP}$	*u*	***[bejn**ek]*$_{PP}$	
today	RFL:hold:3SG.F.PFV	meeting	[**between**:1SG]	and	[**between**:2SG]	
fil-Kwartieri	*tal-Partit*	*Laburista*				
in:DEF-quarters	of:DEF-party	Labour				

'[. . .] today a meeting was held [**between** me] and [you] in the quarters of the Labour Party [. . .].'

33 The semantic side of this case will be looked into in Section 5.1.2.1.13.

34 We inquire into this issue more thoroughly in Section 4.1.4.

35 Missing special Maltese characters have been added by us.

Not only does this sentence illustrate the doubling of the Π under coordination but it also involves two inflected forms of (Π4) *bejn* 'between' which refer to speech-act participants. This is remarkable insofar as conceptually the BETWEEN-relation always involves two participants so that an inflected form like *bejni* 'between me' does not make sense – superficially. However, it makes perfect sense because *bejni* 'between me' and *bejnek* 'between you' can never be used on their own, i.e. they are always part of a coordinative construction. The two or more conjunctions of this construction guarantee that there are more participants involved than just the 1st or 2nd person singular. That this is again something that makes (Π4) *bejn* 'between' special will transpire from the discussion of the next two Πs.

The paradigm of this special case is given in Table 3.7. We distinguish plain inflection from overt pluralisation.

Table 3.7: Paradigm of (Π4) *bejn* 'between'.

person	word form	
	plain	pluralised
1SG	*bejni*	
2SG	*bejnek*	
3SG.M	*bejnu*	
3SG.F	*bejnha*	
1PL	*bejnhom*	*bejnietna*
2PL	*bejnkom*	*bejnietkom*
3PL	*bejnhom*	*bejniethom*

As to the word forms in column PLAIN, it is obvious that they meet the criteria for the Π under scrutiny being admitted to class C Ia. The Π-stem and the citation form are identical. There is a word-final consonant to which the regular person affixes are attached. Were the paradigm as simple as that, (Π4) *bejn* 'between' would pass the test for class-membership in C Ia. The co-presence of two forms for each person in the plural mark out this Π as a special case. This special status notwithstanding, (Π4) *bejn* 'between' can be considered to be a marked member of C I. In analogy to the previous case, (Π4) *bejn* 'between' forms a subclass of its own, namely C Id. The reasons for the markedness assumed for (Π4) *bejn* 'between' are different (morphological and functional) from those assumed for (Π46) *qabel* 'before' (phonological). The plural marker *-iet* is alien to the bulk of the inflected Πs of Maltese. Outside the domain of Πs, *-iet* is relatively common in the number system of feminine nouns ending in *-a* such as SG *gremxula* 'lizard' → PL *gremxuliet* (Borg/Azzopardi-Alexander 1997: 176). Synchronically, the presence of *-iet* in the paradigm of a Maltese Π is inexplicable. For the time being, we conclude that those forms of (Π4) *bejn* 'between'

which host the overt plural marker mix elements of different word-classes and are thus instances of heteroclisis (Baerman 2007: 16).

(iii) (Π16) *fost* 'amongst' and (Π47) *qalb* 'amidst'
These two Πs are similar to (Π4) *bejn* 'between' conceptually in the sense that their complement must refer to a multitude of participants. In contrast to the foregoing case however, neither (Π16) *fost* 'amongst' nor (Π47) *qalb* 'amidst' makes a distinction along the lines of that postulated by Sutcliffe for the two plurals of (Π4) *bejn* 'between'. Moreover, neither of the two Πs under inspection is attested bearing the person markers of any speech-act participant in the singular. Cachia (1994: 115, original italics) claims that "*fost* tieħu biss suffissi pronominali plurali"[36] which is also Sutcliffe's (1936: 203) as well as Saari's (2003: 137) point of view. Accordingly, examples like (3.45a–b) meet the expectations.

(3.45) (a) [Camilleri 2013: 136]
Min *[**fost**kom]*$_{PP}$ *huwa* *ħerqan* *daqstant* *illi*
who [**amongst**:2PL] 3SG.M keen so_much that
jeħodli *post*
3SG.M.IMPFV:take:IO:1SG post
'Who [**amongst** you] is so keen as to take away my job?'

(b) (Aquilina 1991: 1111)
rajtu *[**qalb**hom]*$_{PP}$
see:1SG.PFV:3SG.M [**amongst**:3PL]
'I saw him [**amongst** them].' [O.T.]

Given the semantics of the two Πs, it is easy to understand that forms like **fostok* 'amongst you$_{SG}$' and **qalbek* 'amongst you$_{SG}$' are absent from the database.[37] Once more in contrast to (Π4) *bejn* 'between', coordination does not come into play here either. If the Πs are repeated on both (or all) conjuncts, there is never a form of the 1st person singular or 2nd person singular involved.

However, the assumed restriction to the morphological plural is not correct. As shown in (3.46), (Π16) *fost* 'amongst' may be inflected in the 3rd person singular if the person marker is coreferential with a noun invested with collective meaning. In this example, the noun fulfilling this criterion is *familja* 'family' which we highlight in grey in (3.46).

36 Our translation: "*fost* takes only plural pronominal suffixes".
37 *Qalbek* 'your heart' is of course attested frequently in the Korpus Malti 3.0 – but only as inalienably possessed body part (often used metaphorically).

(3.46) [Camilleri 2013: 146]
Wara kollox seta' jistenna mod ieħor minn wild familja
after all can 3SG.M.IPFV:wait manner other from child family
ultranazzjonalista mill-fortizza ta' Zemun tħaddan
ultranationalist from:DEF-fortress of Zemun 3SG.F.IPFV:embrace
*[**fost**ha]$_{PP}$ bi kburija veterani tal-ġenoċidji*
[**amongst**:3SG.F] with pride veteran:PL of:DEF-genocide:PL
fil-Bosnja
in:DEF-Bosnia
'After all what else could he expect from a child of an ultranationalist family from the fortress of Zemun which proudly counts [**amongst** them] veterans of the genocides in Bosnia?'

Familja 'family' is a feminine and formally (i.e. morphologically) singular. It is therefore anaphorically represented by the suffix *-ha* of the 3rd person singular feminine on the Π. In (3.47), we provide a parallel case in the masculine singular. The person suffix *-u* of the 3rd person singular attached to (Π16) *fost* 'amongst' refers back to the definite noun *il-Malta Labour Party* whose Maltese equivalent *il-Partit Laburista* has masculine gender and collective meaning.

(3.47) [Korpus Malti 3.0; parl1560]
Naħseb li l-Malta Labour Party jagħmel sew
1SG.IPFV:think that DEF-Malta Labour Party 3SG.M.IPFV:make right
*jekk jisma' lin-nies [**fost**u]$_{PP}$ li wkoll*
if 3SG.M.IPFV:listen to:DEF-people [**amongst**:3SG.M] that also
huma favur li dan isir
3PL in_favour_of that DEM:M:PROX 3SG.M.IPFV:become
'I think that the Malta Labour Party does the right thing if they listen to the people [**amongst** them] who are also in favour of this going to happen.'

We have not been able to find evidence of formally equivalent cases for the 3rd person singular masculine/feminine for (Π47) *qalb* 'amidst'. On account of its synonymy with (Π16) *fost* 'amongst' and parallel morphosyntactic behaviour of the two Πs, we stipulate that (Π47) *qalb* 'amidst' can host the suffixes *-u* and *-ha*, too provided there is an anaphorical relation to a noun with collective meaning. On account of their special behaviour, the two Πs under consideration are assigned to a separate subclass C Ie.

In Table 3.8, it is shown that we are facing two cases of semantically induced defectiveness of paradigms. Grey shading marks those cells which remain empty for (П16) *fost* 'amongst' and (П47) *qalb* 'amidst'.

Table 3.8: Defective paradigms of (П16) *fost* 'amongst' and (П47) *qalb* 'amidst'.

person	(П16) *fost* 'amongst'	(П47) *qalb* 'amidst'
1SG		
2SG		
3SG.M	*fostu*	*qalbu*
3SG.F	*fostha*	*qalbha*
1PL	*fostna*	*qalbna*
2PL	*fostkom*	*qalbkom*
3PL	*fosthom*	*qalbhom*

Corbett (2007a: 27) registers defectiveness among the morphological mismatches. It is clear that neither of the two Пs is defective for phonological or morphological reasons. The inflections of the speech-act participants are blocked only for semantic reasons. A similar motivation for defectiveness applies to the cases to be discussed in the subsequent paragraphs.

(iv) (П33) *matul* 'during' and (П59) *waqt* 'at the time of'

From the discussion above,[38] we are already familiar with some of the problems (П33) *matul* 'during' poses. (П59) *waqt* 'at the time of', too was scrutinised above.[39] Is there anything else that could be added to the information we already have? The answer to this rhetorical question is positive.

In the previous discussion of (П33) *matul* 'during', we have tried to establish whether there are significant differences as to its spatial or temporal readings. In this context, we have analysed examples in which this П is inflected for the 3rd person singular masculine and the 3rd person singular feminine. Sentence (3.48) proves that (П33) *matul* 'during' can also take the person marker of the 3rd person plural.

38 Cf. Section 1.6.4.2 (ix).

39 Cf. Section 1.6.5 (v).

(3.48) [Korpus Malti 3.0; academic13]
Il-pjanta *jrid* *ikollha*
DEF-plant 3SG.M.IPFV:require 3SG.M.IPFV:have.FUT:IO.3SG.F
mill-inqas *sentejn* *li* *[**matul**hom]*$_{PP}$ *ma*
from:DEF-little.CMPR year:DU that [**during**:3PL] NEG
nkunux *bdilna* *1-qasrija*
1.IPFV:be.FUT:PL:NEG change:1PL.PFV DEF-flower_pot
'The plant needs to have at least two years [**during** which] we will not have changed the flower-pot.'

Semantically surprising is the possibility of (П33) *matul* 'during' inflecting for the 2nd person singular as in (3.49).

(3.49) [Korpus Malti 3.0; news85507]
Illum *lanqas* *norqod* *aktar* *minn* *erba'* *sigħat*
today not_even 1SG.IPFV:sleep more from four hour:PL
*[**matul**ek]*$_{PP}$ *ja* *lejl*
[**during**:2SG] oh night
'Nowadays I do not even sleep four hours [**during**] the entire night [. . .].'

E. Serracino-Inglott (1979: 69) characterises this usage as poetic. The idiomatic construction involves the inflected П and the interjection *ja* 'oh' as specified elements. To the right of the interjection there is a slot that is open to fillers which designate periods of time. The meaning of the construction is non-compositional insofar as it refers to the entire period of time represented by the paradigmatically variable noun. The Korpus Malti 3.0 gives evidence of twenty tokens of the construction with five different types as shown in Figure 3.22.

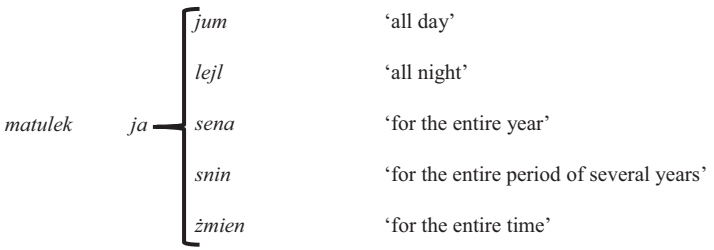


Figure 3.22: Poetic constructions with *matulek.*

We assume that originally the *-ek* suffix was possible on (П33) *matul* 'during' because the time expression underwent personification in the poetic style. The

possibility of using the plural *snin* 'years' in combination with *matulek* suggests that this construction is no longer fully transparent for at least some of those who employ it. *Matulek* is exclusively attested in this idiomatic construction. There are no matches for **matuli*, **matulna*, and **matulkom* in the Korpus Malti 3.0. The paradigm of (Π33) *matul* 'during' is thus more defective than the paradigms of (Π16) *fost* 'amongst' and (Π47) *qalb* 'amidst' because it displays three empty cells as opposed to only two empty cells in the latter two cases. Moreover, the cell of the 2nd person singular is filled only under certain highly specific stylistic conditions.

The temporal semantics of (Π33) *matul* 'during' make it plausible that the Π does not freely inflect for the speech-act participants of both numbers. Temporal semantics are also at issue with (Π59) *waqt* 'at the time of'. Examples (3.50)–(3.51) document the use of this Π with person markers of the 3rd person singular feminine and the 3rd person plural, respectively.

(3.50) [Korpus Malti 3.0; european5320]
fil-laqgħa *tal-grupp* *ta'* *ħidma* *leġislazzjoni* *fl-20* *ta'*
in:DEF-meeting of:DEF-group of work legislation in:DEF-20 of
Marzu *1996* *li* *[**waqt**ha]$_{PP}$* *l-Istati* *Membri*
March 1966 that **[at_the_time_of**:3SG.F] DEF:state:PL member:PL
ikkonfermaw *li* *rċevew* *id-dokument*
confirm:3PL.PFV that receive:3PL.PFV DEF-document
'[. . .] at the meeting of the legislation working group on 20 March, 1996 [**during** which] the member states confirmed that they had received the document [. . .].'

(3.51) [Korpus Malti 3.0; european4017]
Wara *konsultazzjonijiet* *li* *[**waqt**hom]$_{PP}$* *wieħed*
after consultation:PL that [**at_the_time_of**:3PL] one
mill-Istati *Membri* *qajjem* *oġġezzjonijiet* *għal*
from:DEF-state:PL member:PL rise:CAUS objection:PL for
din *is-soluzzjoni*
DEM:F:PROX DEF-solution
'After consultations [**during** which] one of the member states raised objections against this solution [. . .].'

As expected, inflected forms of (Π59) *waqt* 'at the time of' in the 1st/2nd persons of both numbers are not attested. This means that there are four gaps in the paradigm of this Π – a fact which renders (Π59) *waqt* 'at the time of' the most defective Π of all bona fide inflected Πs. The paradigms of the two Πs discussed in this subsection are given in Table 3.9.

Table 3.9: Defective paradigms of (П33) *matul* 'during' and (П59) *waqt* 'at the time of'.

person	(П33) *matul* 'during'	(П59) *waqt* 'at the time of'
1SG		
2SG	*matulek*	
3SG.M	*matulu*	*waqtu*
3SG.F	*matulha*	*waqtha*
1PL		
2PL		
3PL	*matulhom*	*waqthom*

On account of the special status of *matulek* as (perhaps) frozen unanalysable part of an idiomatic construction, we consider these Пs to constitute the subclass C If.

(v) (П26) *kif* 'as', (П42) *mintul* 'all along', and (П43) *mnejn* 'from where'

The final words of this section are dedicated to three of the notorious cases of doubt. Owing to their phonological properties, (П26) *kif* 'as', (П42) *mintul* 'all along', and (П43) *mnejn* 'from where' are candidates for the membership in C I. Whether they are members of the class of consonantal stems hinges on the question whether they can be inflected at all. We have put forward arguments for their inclusion in BLOMP 2.0.[40] We defended their inclusion inter alia by way of referring to sources which assume that these would-be Пs can undergo inflection. However, the morphological variability of (П26) *kif* 'as', (П42) *mintul* 'all along', and (П43) *mnejn* 'from where' remains questionable since neither the Korpus Malti 3.0 nor our corpus of contemporary written prose provides compelling evidence of inflected word forms of these doubtful cases. Moreover, the sources which suggest that we are dealing with inflected Пs are themselves not entirely trustworthy. Accordingly, we have registered the three candidates amongst the invariant Пs in (3.2). In this way, the paradoxical situation has arisen in which candidates which were originally counted as Пs because of their ability to inflect are at the same time classified as invariant Пs. It is therefore high time to determine once and for all the exact status of (П26) *kif* 'as', (П42) *mintul* 'all along', and (П43) *mnejn* 'from where'.

An example of inflection is given for (П42) *mintul* 'all along' in (1.127), for (П26) *kif* 'as' in (1.182), and for (П43) *mnejn* 'from where' in (1.183). The latter two stem from Aquilina's (1987, 1991) dictionary whereas inflected (П42) *mintul* 'all along' has been found in the Korpus Malti 3.0. The main problems connected to these examples are of two kinds. First of all, we have to ask whether the dictionary

40 Cf. Sections 1.6.4.2 (ix) and 1.6.7 (i)–(ii).

entries are reliable. Secondly, it remains to be seen whether we are dealing with isolated lexicalised word forms or genuine paradigms.

This is what Aquilina (1987: 652) has to say about (П26) *kif* 'as':

> **5.** ~ + pers[onal] suffixes, the equal of; [Vass[alli]] *m'hemmx ~u/~ha,* there is no one like him/her; *m'hawnx ~hom*, there is nobody like them (as good) [K[otba tal-]M[ogħdija taż-]Ż[mien] 14, p. 33] *intom il-qbejjel għaż-żwiemel ma hawnx ~kom*, there is nobody as expert as you are in the knowledge of equine species; *min hu ~na fid-dinja?*, who is our equal (like us) in the world?

Aquilina's sources for the examples of inflected (П26) *kif* 'as' are Vassalli's dictionary *Ktyb yl Klym Mâlti 'mfysser byl-Latin u byt-Talyân* published in 1796 and the 14th volume of the folkloristic series *Kotba tal-Mogħdija taż-Żmien* which existed between 1899 and 1915. This means that there is a considerable time-gap of some 75 to 180 years between the publication of the first volume of Aquilina's dictionary in 1987 and that of the two sources. To prove that (П26) *kif* 'as' hosts person affixes, E. Serracino-Inglott (1978: 108) employs the sample sentence *Min hu kifna fid-dinja?* which is identical to the last one mentioned in the above quote so that we assume that both dictionary compilers have exploited the same source. An additional idiomatic use is mentioned as well, namely *Għala kifu minn ħaddieħor* 'act according to one's own liking (not caring about others)'. Like Aquilina, E. Serracino-Inglott does not list the complete set of possible forms of inflected (П26) *kif* 'as'. He mentions *kifek* 'like you', *kifu* 'like him', and *kifna* 'like us'. Aquilina provides examples of *kifkom* 'like you$_{PL}$' and *kifhom* 'like them'. We have to go back in time as far as Falzon (1882: 183–184) to find a list of word forms which resemble a (defective) paradigm:

> *Si costruisce cogli affissi nella maniera seguente;*[41] Kîfu, kifha, kifek, kifna, kifkom, kifhom, kifna [sic!]. Fid-dinja kolha, ma hemx kifna. *In tutto il mondo, non v'è persona al par di noi,* in the whole world there is nobody equal to us.

From the second edition of Falzon's trilingual Maltese-Italian-English dictionary, a next-to-complete paradigm emerges from which only the hypothetical **kifi* 'like me' is missing. Both E. Serracino-Inglott and Aquilina have made use of Falzon (1882). It is therefore not surprising to see that one of the sample sentences in the three dictionaries is almost identical. Aquilina (1987: xxv) is critical of the quality of Falzon's work especially in relation to the second edition from which the above quote has been drawn. According to Aquilina (1987: xxv), "Falzon's trilingual dictionary [. . .] reproduces Vassalli's dictionary with a good number of additions." We assume that Falzon has taken over inflected (П26) *kif* 'as' from Vassalli. Since there

41 Our translation: "It combines with the affixes in the following manner".

is no trace of inflected (Π26) *kif* 'as' in the Korpus Malti 3.0 and evidence of morphologically variable (Π26) *kif* 'as' is also absent from our corpus of contemporary literary Maltese, it is legitimate to ask whether the inflection of this Π was only an ephemeral possibility in the past, if at all. Given these uncertainties, we adopt the following compromise. Diachronically, (Π26) *kif* 'as' could be inflected for person at least in some idiolects of Maltese. We assume that, for an extended period of time in the past, it competed with quasi-synonymous (Π5) *bħal* 'like' which occurred also in fixed expressions similar to those reported above for (Π26) *kif* 'as'.[42] The possibility to inflect for person must have gradually become obsolete for (Π26) *kif* 'as' in the early 20th century so that, synchronically, this Π is now invariant.

The story of (Π42) *mintul* 'all along' is not exactly the same as that of the previous Π. Aquilina (1991: 834) considers this Π to result from the univerbation of a former PP *minn* 'from' + *tul* 'length, duration'. In the lexicon entry for *tal* 'become long', Aquilina (1991: 1390) provides a sentential example of this PP which we reproduce as (3.52).

(3.52) (Aquilina 1991: 1390)
waqa' ***[minn*** *tulu]*$_{PP}$ *fl-art*
fall **[from** length:3SG.M] in:DEF-ground
'He fell [**lengthwise**] on the ground.' [O.T.]

The orthographic separation of the Π and its possessed complement seems to speak against considering (Π42) *mintul* 'all along' to be univerbated at all. In the same lexicon entry, Aquilina (1991: 1390) mentions that Vassalli used to write *mintul* + PERSON SUFFIXES in one word. The example he probably copies from Vassalli is *ma' mintulek ja sena* 'all the year round/throughout the year'. This example corresponds to the poetic construction with (Π33) *matul* 'during' illustrated in Figure 3.22. E. Serracino-Inglott (1979: 156) takes issue with Vassali's and Falzon's practice of restricting the use of person suffixes with (Π42) *mintul* 'all along' to the 2nd person singular. He claims that the Π can combine "bis-suff[issi] pron[ominali] pers[onali] kollha skond il-każ".[43] He provides a single example for the use of the suffix of the 3rd person singular masculine which we reproduce in (3.53).

(3.53) (E. Serracino-Inglott 1979: 156)
Somtu ***[mintulu*** *kollu* *r-Randan]??*
fast:2SPL.PFV **[all_along:3SG.M** all:3SG.M DEF-Lent]
'You have fasted [**throughout** the entire Lent]!'

42 Such as *min bħalu* 'who is like him?' (E. Serracino-Inglott 1976a: 154).
43 Our translation: "with all of the person suffixes according to what is required".

This sentence is problematic because the person inflection in the presence of a lexical complement NP violates the criteria we have laid down for Π-hood.[44] The other example given in E. Serracino-Inglott's (1979: 156) dictionary fits the description of the poetic construction in Figure 3.22. Falzon (1882: 251) offers a lexicon entry only for the inflected form *mintulek* which he classifies as adverb. The examples he provides are again of the type *mintulek ja sena* translated into Italian as *lungo l'anno* and into English as *during the whole week* without mention of (Π33) *matul* 'during'. Since there is no match for uninflected (Π42) *mintul* 'all along' in the Korpus Malti 3.0, it comes as no surprise that none of the theoretically possible inflected forms of this Π is attested either. What is attested in the electronic resource is the PP *minn tul-* as shown (with added token frequencies) in Figure 3.23.

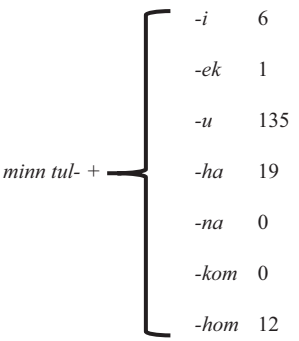


Figure 3.23: Token frequency of person inflection with *minn tul-*.

More often than not these forms are attested in combination with verbs like *(n)tefa'* 'throw (oneself)', *x(t)eħet* 'cast (oneself)', *firex* 'spread', *waqa'* 'fall', etc. A typical example is given in (3.54).

(3.54) [Korpus Malti 3.0; literature75]
*L-imsejkna kienet mixħuta [**minn** tulha]*$_{PP}$ *fuq is-sodda*
DEF-pitiful:F be:3SG.F.PFV PART:cast:F [**from** length:3SG.F] on DEF-bed
'The poor [girl] was thrown [**lengthwise**] on the bed [. . .].'

There is nothing that prevents us from analysing cases of this kind as PPs which consist of two syntactic words, i.e. there is no synchronic evidence proving that (Π42) *mintul* 'all along' is an inflected Π. As in the foregoing case, it is possible that (Π42) *mintul* 'all along' enjoyed this status in an earlier phase of the diachronic

44 Cf. Sections 1.6.1–1.6.2.

development of Maltese. To our minds, this status must have been lost at some point in the early 20th century. As to contemporary Maltese, we assume that (Π42) *mintul* 'all along' is invariant.

The final doubtful candidate is (Π43) *mnejn* 'from where'. Aquilina (1991: 847) provides examples of person inflection of this Π in the 1st person singular and plural the latter being drawn from Caruana (1903) reproduced as (3.55) here.

(3.55) (Aquilina 1991: 847)

naf	*dak*	*ir-raġel*	*għax*	***[mnejn**<u>na</u>**]**$_{PP}$
1SG.IPFV:know	DEM:M:DIST	DEF-man	because	**[from_where**:<u>1PL</u>**]**

'I know that man because he lives [**near** <u>us</u>].' [O.T.]

Sutcliffe (1936: 195) who uses exactly the same example as Aquilina speaks of (Π43) *mnejn* 'from where' as an adverb that "is used with the plural pronominal suffixes: *mnejna, mnejkom, mnejhom*", i.e. with loss of the final nasal of the citation form under inflection. As mentioned above,[45] E. Serracino-Inglott (1979: 183) casts doubt upon the naturalness of the inflected forms of this Π which he denounces as an invention of Falzon's. Falzon (1882: 264) mentions only the 1st person plural *mnejnna* for which he provides the Italian translation 'dalle parti o contorni nostri' and the English translation 'from our place or neighbourhood'. E. Serracino-Inglott (1979: 183) claims that it would be better to replace *mnejnna* with *mnejn aħna*, i.e. with the free pronoun of the 1st person plural as complement of the Π. However, even this alternative is judged unnatural because native speakers usually opt for *minn fejnna* or *minn ħdejna* which are combinations of two Πs, namely (Π41) *minn* 'from' + (Π14) *fejn* 'near' / (Π23) *ħdejn* 'beside' with the rightmost Π hosting the person inflection. The search in the Korpus Malti 3.0 has not yielded any match for any of the theoretically possible inflected forms of (Π43) *mnejn* 'from where'. Moreover, our native-speaker consultant Sandra Abela never uses inflected forms of this Π but concedes the possibility that there might be Maltese idiolects for which person inflection on (Π43) *mnejn* 'from where' is acceptable. Without hard proof of this possibility, we assume that like in the other two doubtful cases, (Π43) *mnejn* 'from where' is synchronically invariant whereas it might have been an inflected Π at least for some speakers of Maltese in the past.

In sum, no matter what their morphological behaviour was in the 19th century, (Π26) *kif* 'as', (Π42) *mintul* 'all along', and (Π43) *mnejn* 'from where' must be classified as invariant in contemporary Maltese because their morphological variability cannot be proved empirically.

45 Cf. Section 1.6.7. (ii).

3.1.2.3.2 Class II (= C II) – a provisional arrangement

C II comprises those Πs in (3.14) which are not covered by the rule exposed in Figure 3.20. This means that we are now confronted with vocalic stems which fulfil the criterion of identical Π-stem and citation form. The appropriate rule is schematised in Figure 3.24.

$\Pi_{\text{INFLECTED}} \rightarrow V]_{\text{CITATION FORM}}$ + person marker$_{\text{SET B}}$

Figure 3.24: Rule for inflection of Πs in C II.

In point of fact, there are only two Πs which behave according to this rule, namely (Π7) *bi* 'with' and (Π15) *fi* 'in'. Phonologically, the two resemble each other closely as their citation forms are in a rhyming relation. With a covered-open syllable of two segments, they are rather short. Other Πs with a citation form in the shape of a CV-syllable inflect differently. This is the case with (Π30) *ma'* 'with' and (Π55) *ta'* 'of' to be discussed below.[46] Others remain invariant as e.g. (Π19) *ġo* 'in' and (Π51) *sa* 'till'.

The paradigms of the two Πs are structured in identical manner. This morphological parallelism includes a property which renders (Π7) *bi* 'with' and (Π15) *fi* 'in' unique within BLOMP 2.0. Borg/Azzopardi-Alexander (1997: 330, original boldface) state that "[t]he preposition takes the nominal suffixes but **bi** and **fi** can take both the nominal and the verbal suffixes" so that in the 1st person singular *fija* and *fini* 'in me' as well as *bija* and *bini* 'with me' co-exist. This co-existence if illustrated for (Π15) *fi* 'in' in (3.56)–(3.57).

(3.56) (Borg/Azzopardi-Alexander 1997: 265)

Il-karozza	*għodda*	*daħlet*	*[**fi**ja]*$_{PP}$
DEF-car	almost:3SG.F	enter:3SG.F.PFV	[**in**:1SG]

'The car almost bumped **into** me].' [O.T.]

(3.57) (Borg/Azzopardi-Alexander 1997: 266)

*[**Fi**ni]*$_{PP}$	*x'*	*tara*	*mxarrab*	*kif*	*jien*
[**in**:1SG]	what	2SG.IPFV:see	PART:wet	how	1SG

'I'm a pretty sight to see, wet as I am!' [O.T.]

46 Cf. Section 3.1.2.3.5.

The important point about this allomorphy is that *fini* cannot replace *fija* nor vice versa (Borg/Azzopardi-Alexander 1997: 266). Sutcliffe (1936: 201, original boldface and italics) assumes that "**[f]ini** does not mean simply *in me*, but *there is in me, I have*, having thus a verbal meaning attached to it." In analogy, the same author claims that "[f]or the [1st person singular] the form used is **bini** when the meaning is verbal and equivalent to *I have*." (Sutcliffe 1936: 201, original boldface and italics). However, in contrast to *fija* and *fini*, *bija* and *bini* seem to be alternative options in one and the same context as transpires from (3.58).

(3.58) (Sutcliffe 1936: 200)

	[***bi**ja*]$_{PP}$			
jisgħob		*għax*	*rgħextek*	
3SG.M.IPFV:repent	[***bi**ni*]$_{PP}$	because	offend:1SG.PFV:2SG	
	[**with**:1SG]			

'I am sorry because I have offended thee.' [O.T.]

Aquilina (1991: 1342) uses the same example identifying it as a religious formula to be used during the Act of Contrition. Fabri (1993: 200) classifies *fini* as pseudo-verb whereas *bini* is not mentioned in this context. The latter is also not included in Peterson's (2009: 187) list of pseudo-verbs. In contrast to Fabri, Peterson speaks of (Π15) *fi* 'in' in general as a pseudo-verb, meaning all forms of its paradigm are involved and not just the 1st person singular.[47] Since in this section we are only interested in properly morphological phenomena, we feel entitled to skip the semantico-syntactic implications of the above allomorphy.

We therefore present the paradigms of the Πs under consideration in Table 3.10. This reveals how the paradigms look like if we take the statement of Borg/Azzopardi-Alexander (1997: 330) as our point of departure. According to this statement, the competition between nominal and verbal person affixes is limited to the 1st person singular.

47 We will have to come back to this issue in Section 4.1.2.2.2.2.3.

Table 3.10: Paradigms of (П7) *bi* 'with' and (П15) *fi* 'in' – version I.

person	(П7) *bi* 'with'		(П15) *fi* 'in'	
1SG	*bija*	*bini*	*fija*	*fini*
2SG	*bik*		*fik*	
3SG.M	*bih*		*fih*	
3SG.F	*biha*		*fiha*	
1PL	*bina*		*fina*	
2PL	*bikom*		*fikom*	
3PL	*bihom*		*fihom*	

For all other persons, there is only a single person inflection each. In this situation, the question arises whether from the 2nd person singular down to the 3rd person plural the person affixes are indeed those which occur also as possessor affixes on nouns as the quoted authors seem to suggest. The problem is that this question cannot be answered as clearly as one might think.

Table 3.3 reveals that, except in the 1st person singular, it is simply impossible to decide – on the basis of the morphological form of the affixes alone – whether *-k, -h, -ha, -na, -kom*, or *-hom* marks the possessor or the direct object. Playing the devil's advocate for a while, given the indistinction of possessor marking and object marking for the majority of the affixes, version II of the paradigms as given in Table 3.11 is a relatively likely alternative interpretation.

While Table 3.10 depicts the situation as one in which overabundance applies to only one out of seven values, Table 3.11 gives evidence of syncretism. Accordingly, the functional distinction assumed for the pair *fija* ≠ *fini* is neutralised in all other persons. Another possibility could be to analyse the two cellmates in the 1st person singular to represent a case of overdifferentiation with clear-cut functional differences between the cellmates. Does this entail that there is large-scale defectiveness in the paradigm because none of the other persons has a dedicated marker for one of the functions? On top of that, we have explicitly excluded pseudo-verbs from BLOMP 2.0.[48] On the assumption that *fini* is a pseudo-verb, it thus can be eliminated from the paradigm of (П15) *fi* 'in' which then takes an entirely regular shape. This solution however is possible only for (П15) *fi* 'in' but not for (П7) *bi* 'with' since

48 Cf. Section 1.6.2.

Table 3.11: Paradigms of (П7) *bi* 'with' and (П15) *fi* 'in' – version II.

person	(П7) ***bi*** **'with'**		(П15) ***fi*** **'in'**	
1SG	*bija*	*bini*	*fija*	*fini*
2SG	*bik*		*fik*	
3SG.M	*bih*		*fih*	
3SG.F	*biha*		*fiha*	
1PL	*bina*		*fina*	
2PL	*bikom*		*fikom*	
3PL	*bihom*		*fihom*	

pseudo-verb status has not yet been claimed for this П as decidedly as in the case of (П15) *fi* 'in'. A third version of the paradigms could therefore look like Table 3.12.

Table 3.12: Paradigms of (П7) *bi* 'with' and (П15) *fi* 'in' – version III.

person	(П7) ***bi*** **'with'**		(П15) ***fi*** **'in'**
1SG	*bija*	*bini*	*fija*
2SG	*bik*		*fik*
3SG.M	*bih*		*fih*
3SG.F	*biha*		*fiha*
1PL	*bina*		*fina*
2PL	*bikom*		*fikom*
3PL	*bihom*		*fihom*

These little *Gedankenspiele* are only meant to suggest that whatever interpretation is applied to the members of C II, morphological mismatches and noncanonical behaviour cannot be avoided. To create two parallel well-behaved paradigms, *bini* must be argued not to belong there in the first place. To this end, the morphosyntax and semantics of the cellmates have to be looked into.[49]

49 This is a task for Section 4.1.2.2.2.2.3 where a fourth version of the paradigms (= Table 4.13) will be presented to solve the riddle these IIs pose.

3.1.2.3.3 Class III (= C III)

We now enter the domain of those inflected Π-stems that do not equal the citation form. Different processes may operate on the citation form to create the Π-stem if we assume that the latter is indeed derived from the former. We distinguish three subclasses of C III which we label with reference to the final segment of the Π-stem. We discuss *j*-stems in Section 3.1.2.3.3.1, *i*-stems in Section 3.1.2.3.3.2, and conclude this overview with the presentation of *għajn*-stems in Section 3.1.2.3.3.3. We emphasise that there are alternative ways of class-formation based on different principles such as the final segment of the citation form or the process which generates the Π-stem. Our choice is solely motivated by practicality.

3.1.2.3.3.1 *j*-stems (= C IIIa)

There are three inflected Πs whose Π-stem ends in the palatal approximant /j/ although this is not the final segment of the citation form. To start, this is the case for (Π23) *ħdejn* 'beside'. Sutcliffe (1936: 203) and Aquilina (1987: 471) postulate the existence of a Π *ħada* 'beside' which cannot host the person suffixes. Cachia (1994: 115, original italics) specifies that "*[ħ]ada* li tintuża flok *ħdejn* ma tiħux suffissi".[50] The exact synchronic relation between *ħada* and (Π23) *ħdejn* 'beside' is unclear. Aquilina (1959: 300) sketches the situation as follows: *ħada* is the free form of the Π but *ħdejn* is used in combination with person markers. E. Serracino-Inglott (1977: 107) only registers (Π23) *ħdejn* 'beside' for which he assumes a historical connection to *ħeda* (= *ħada*). In the Korpus Malti 3.0, one comes across nineteen occurrences of *ħada* eighteen of which result from a recurrent spelling error: the intended verb-form in the 3rd person singular masculine perfective + direct object clitic *-ha* of the 3rd person singular feminine is *ħadha* 'he took her'. The only case of a prepositional use of *ħada* in the Korpus Malti 3.0 is example (1.8).[51] According to our estimate in Table 1.11, (Π23) *ħdejn* 'beside' as a free form has a token frequency of 16,489. Clearly, (Π23) *ħdejn* 'beside' has ousted *ħada* in contemporary Maltese. The latter has probably been more widely in use in the 19th century when Falzon (1882: 106 and 119) described it as the citation form of the Π under inspection. The absence of tangible evidence of the current use of *ħada* induces us to exclude this historical form from further discussion in the morphology section.

As to the formation of the *j*-stem, in two cases – (Π23) *ħdejn* 'beside' and (Π28) *lejn* 'towards' – /j/ belongs to the segmental chain of the citation form whereas (Π60) *wara* 'after' lacks this segment in the citation form (Borg/Azzopardi-Alexander 1997: 265). This means that two very different processes are required to derive the Π-stem. The final nasal /n/ of the citation form of (Π23) *ħdejn* 'beside' and (Π28) *lejn* 'towards'

50 Our translation: "*ħada* which is used instead of *ħdejn* does not take suffixes".
51 Presented and discussed in Section 1.4.1.3.

is deleted yielding the Π-stems *ħdej-* and *lej-* whose final segment determines that the person suffixes are taken from the B-set (cf. Section 3.1.2.1). The stem-formation process is thus subtractive. In contrast, (Π60) *wara* 'after' leaves the segmental chain of the citation form intact but adds /j/ to the final vowel to create the *j*-stem. This is an additive process. Since other Πs which rhyme with (Π23) *ħdejn* 'beside' and (Π28) *lejn* 'towards' keep their final /n/ and other Πs with citation forms ending in /a/ behave differently from (Π60) *wara* 'after' no generalisations can be put forward. The members of C IIIa are specified for their behaviour in the lexicon.

Examples for the inflection of these Πs in the 3rd person plural have been given already in (3.18)–(3.19) and (3.26). We still have to prove that they can also be inflected for speech-act participants. To this end, we present examples (3.59)–(3.61).

(3.59) [Bartolo/Vella 2009: 50]
tista' *tpoġġi* ***[ħdejja]***$_{PP}$
2SG.IPFV:can 2SG.IPFV:sit [**beside**:1SG]
'[. . .] you can sit [**beside** me].'

(3.60) [Bartolo/Vella 2009: 319]
Ħares ***[lejja]***$_{PP}$ *meta* *nkellmek*
look [**towards**:1SG] when 1SG.IPFV:speak:2SG
'Look [**at** me] when I speak to you!'

(3.61) [Bartolo/Vella 2009: 53]
Se *toqgħod* *toffrilhom* *it-tazzi* *tat-te*
FUT 2SG.IPFV:stay 2SG.IPFV:offer:IO:3PL DEF-glass:PL of:DEF-tea
afrodiżijaku *lin-nies* *biex* *iġġenninhom*
aphrodisiac to:DEF-people in_order_to 2SG.IPFV:instigate:3PL
[warajk]$_{PP}$
[**after**:2SG]
'Will keep offering the aphrodisiac tea to the people to make them become fond [**of** you]?'

Table 3.13 features the paradigms of the three Πs in C IIIa. Note that (Π60) *wara* 'after' may also appear as *ura* under inflection (Sutcliffe 1936: 207). E. Serracino-Inglott (1989: 26) assumes that *ura* is possible only in combination with *'l* (as in *'l ura* > *lura* 'back'). Except for the single occurrence of *urajha*, there is no evidence of this alternative Π-stem in the Korpus Malti 3.0. It is likely that the alternative Π-stem *ura* has become obsolete while it enjoyed a much wider use in the past. For the sake of comprehensiveness, we mention the word forms which involve *ura* under the proviso that they are no longer in common use.

Table 3.13: Paradigms of (П23) *ħdejn* 'beside', (П28) *lejn* 'towards', and (П60) *wara* 'after'.

person	(П23) ***ħdejn*** **'beside'**	(П28) ***lejn*** **'towards'**	(П60) ***wara*** **'after'**	
1SG	*ħdejja*	*lejja*	*warajja*	*urajja*
2SG	*ħdlejk*	*lejk*	*warajk*	*urajk*
3SG.M	*ħdejh*	*lejh*	*warajh*	*urajh*
3SG.F	*ħdejha*	*lejha*	*warajha*	*urajha*
1PL	*ħdejna*	*lejna*	*warajna*	*urajna*
2PL	*ħdejkom*	*lejkom*	*warajkom*	*urajkom*
3PL	*ħdejhom*	*lejhom*	*warajhom*	*urajhom*

3.1.2.3.3.2 *i*-stems (= C IIIb)

In C IIIb, we find four Пs which reflect two different patterns for the formation of the П-stem. To the П-stem, the person suffixes of Set B attach. There are two Пs whose citation form qualifies them for membership in C I because the final segment is a consonant. These are (П13) *favur* 'in favour of' and (П21) *għal* 'for'. From potential consonantal stems they change to vocalic stems by way of adding the vowel /i/ to the citation form as shown in (3.22)–(3.23). These examples also prove that both Пs are compatible with the person suffixes of speech-act participants. The П-stem of (П13) *favur* 'in favour of' and (П21) *għal* 'for' results from an additive process.

This is different with (П27) *kontra* 'against' and (П37) *mingħala* 'in s.o.'s opinion'.[52] Their citation form is polysyllabic and ends in the low vowel /a/. Thus, they resemble (П60) *wara* 'after' discussed in the foregoing subsection. However, this phonological resemblance does not entail identical morphological behaviour. In the case of (П27) *kontra* 'against' and (П37) *mingħala* 'in s.o.'s opinion' the final /a/ of the citation form is replaced with /i/ under suffixation as shown in (3.24)–(3.25). The compatibility of (П37) *mingħala* 'in s.o.'s opinion' with person suffixes of speech-act participants has been documented in (3.24) already. This possibility can also be proved for (П27) *kontra* 'against' as shown in (3.62).

(3.62) [Bartolo/Vella 2009: 201]

Din	*il-potenza*	*tintuża*	***[kontrija]***$_{PP}$
DEM:F:PROX	DEF-power	3SG.F.IPFV:RFL:use	[**against**:1SG]

'This power is used [**against** me].'

52 The unlikely possibility of (П44) *oltre* 'beyond' being a further member of this subclass is rebutted in Section 4.1.2.2.2.2.2 (ii).

The paradigms of the four members of C IIIb are presented in Table 3.14.

Table 3.14: Paradigms of (П13) *favur* 'in favour of', (П21) *għal* 'for', (П27) *kontra* 'against', and (П37) *mingħala* 'in s.o.'s opinion'.

person	(П13) *favur* 'in favour of'	(П21) *għal* 'for'	(П27) *kontra* 'against'	(П37) *mingħala* 'in s.o.'s opinion'
1SG	*favurija*	*għalija*	*kontrija*	*mingħalija*
2SG	*favurik*	*għalik*	*kontrik*	*mingħalik*
3SG.M	*favurih*	*għalih*	*kontrih*	*mingħalih*
3SG.F	*favuriha*	*għaliha*	*kontriha*	*mingħaliha*
1PL	*favurina*	*għalina*	*kontrina*	*mingħalina*
2PL	*favurikom*	*għalikom*	*kontrikom*	*mingħalikom*
3PL	*favurihom*	*għalihom*	*kontrihom*	*mingħalihom*

The story of (П13) *favur* 'in favour of' does not end here. The Korpus Malti 3.0 gives ample evidence of violations of the rules for the formation of the П-stem of this П. In point of fact, beside the expected *i*-stem hosting the person inflections, there is a not negligible number of cases where *favur* is treated as a member of C Ia, i.e. the stem formative *-i* does not show up so that the person suffixes attach directly to the final consonant of the citation form. This alternative pattern is attested for all persons except the 1st and 2nd person singular. The resulting person inflected forms are identical to those of the pronominally possessed noun *favur* 'favour'.

Table 3.15 compares the turnouts of the competing forms of person-inflected (П13) *favur* 'in favour of' in the Korpus Malti 3.0.

Table 3.15: Competing forms of person-inlected (П13) *favur* 'in favour of'.

person	*i*-stem		consonant stem	
	form	tokens	form	tokens
3SG.M	*favurih*	291	*favuru*	59
3SG.F	*favuriha*	198	*favurha*	44
1PL	*favurina*	41	*favurna*	3
2PL	*favurikom*	1	*favurkom*	2
3PL	*favurihom*	158	*favurhom*	130

Except in the 2nd and 3rd person plural, the regular *i*-stems outnumber the alternative П-stem by a wide margin. The ratios are 4.5-to-one, 4.9-to-one, and 13-to-one for the 3rd person singular feminine, the 3rd person singular masculine, and the 1st

person plural, respectively. In the case of the 2nd person plural, the token frequencies of the two contenders are too low to justify generalizing on their basis. The *i*-stem of the 3rd person plural is only 1.2 times more frequent than the consonant stem. What strikes the eye immediately is the distribution of the consonant stem over genres. There is not a single instance in belles-lettres, academic, or religious texts. In contrast, the attestations cluster in the domain of parliamentary speeches, news, E.U.-related documents, and occasionally show up in legal texts, too. The frequency is too high to sweepingly classify the cases as typographical errors. Table 3.16 provides examples of the use of the consonant stem for each of the person categories mentioned above.

Table 3.16: Examples of usage with consonant stem of (Π13) *favur* 'in favour of'.

person	example /translation	source
3SG.M	*għamlu sforzi kbar biex jimmobilizzaw il-vot* ***favuru*** *u daħħlu wkoll lil-Liberali fl-alleanza tagħhom* '[. . .] they made big efforts to mobilise a **favourable** vote **for him** and brought the Liberals too into their alliance [. . .]'	news113113
3SG.F	*ma naqbilx ma' din il-mozzjoni u mhux se nivvota* ***favurha*** '[. . .] I don't agree with this motion and will not vote **for it** [. . .].'	parl9797
1PL	*Dawn m'humiex se jivvotaw* ***favurna*** *għax iridu jbiegħu l-prodott tagħhom* 'They will not vote **for us** because they want to sell their product.'	news108657
2PL	*se jmexxi xi kruċjata* ***favurkom*** '[. . .] he will lead a crusade **to your benefit** [. . .].'	news79026
3PL	*Hafna paroli kontrihom jew* ***favurhom*** *minghajr l-edukazzjoni u informazzjoni bażika u tajba* 'Many empty words against them and **in their favour** without basic and good education and information [. . .].'	news60666

Especially the co-occurrence of the *i*-stem *kontrihom* 'against them' and the consonant stem *favurhom* 'in their favour' suggests that the *i*-stem is not generally avoided in the genres under inspection. On account of the consonant stem's relatively strong position in certain genres, it makes sense to study the competition of the stems in connection to the possibility of the emergence of a Maltese Eurolect according to the ideas expressed in Portelli/Caruana (2018). We relegate this investigation to a follow-up study in the not too distant future. The tokens resulting from the occurrences of the consonant stem of (Π13) *favur* 'in favour of' will be integrated in the overall frequency count in Section 3.4.

3.1.2.3.3.3 *għajn*-stems (= C IIIc)

C IIIc counts only two members which however are very interesting morphologically. We are speaking of (Π30) *ma'* 'with' and (Π55) *ta'* 'of'. Were it not for the

orthographic apostrophe, the citation forms would call to mind vowel stems. However, the apostrophe conventionally indicates that a historically lost *għajn* re-emerges elsewhere in the paradigm of a given word. This is also the case with (Π30) *ma'* 'with' and (Π55) *ta'* 'of'.

The resurrection of the *għajn* is not simply an orthographic phenomenon. First of all, the addition of <għ> to the (superficially) vowel-final citation forms of (Π30) *ma'* 'with' and (Π55) *ta'* 'of' creates a consonantal stem. Accordingly, the person suffixes of Set A have to be employed. Under suffixation, the abstract phoneme *għajn* interacts with the segments in its neighbourhood so that considerable phonological changes affect the segmental chain of the individual word forms. Diphthongisation occurs in the 1st person singular and the 3rd person singular masculine, lengthening of the preceding /a/ occurs in the word forms of the 1st and 2nd persons plural, *għajn* is realised as voiceless velar or uvular fricative [x] or [χ] in 3rd person singular feminine and the 3rd person plural where it is adjacent orthographically to the silent <h> of the suffixes *-ha* and *-hom*, the suffix vowel in the 2nd person singular undergoes lengthening. These processes are identified in the paradigms in Table 3.17. Note that the diphthongs have two different phonetic realisations which depend on the individual speaker's preferences. The abbreviations in Table 3.17 are D = diphthongisation, L = lengthening, X = velar fricative.

Table 3.17: Paradigms of (Π30) *ma'* 'with' and (Π55) *ta'* 'of'.

person	(Π30) *ma'* 'with'		(Π55) *ta'* 'of'		process
	orthography	IPA	orthography	IPA	
1SG	*miegħi*	[mɪ.ɛɪ] ~ [mɪ.eɪ]	*tiegħi*	[tɪ.ɛɪ] ~ [tɪ.eɪ]	D
2SG	*miegħek*	[mɪ.ɛːk] ~ [mɪ.eːk]	*tiegħek*	[tɪ.ɛːk] ~ [tɪ.eːk]	L
3SG.M	*miegħu*	[mɪ.ɔʊ] ~ [mɪ.eʊ]	*tiegħu*	[tɪ.ɔʊ] ~ [tɪ.eʊ]	D
3SG.F	*magħha*	[mɛxxɐ]	*tagħha*	[tɛxxɐ]	X
1PL	*magħna*	[mɛːna]	*tagħna*	[tɛːna]	L
2PL	*magħkom*	[mɛːkɔm]	*tagħkom*	[tɛːkɔm]	L
3PL	*magħhom*	[mɛxxɔm]	*tagħhom*	[tɛxxɔm]	X

While the cellmates in the IPA columns constitute cases of free variation, the paradigm gives ample evidence of phonological (or weak) suppletion (Corbett 2007b). The Π-stem is affected by several processes which can nevertheless be considered regular insofar as they are triggered by *għajn* according to patterns which hold throughout the morphonological system of Maltese. It would be possible therefore to integrate C IIIc into C I as subclass C Ig if one assumes an underlying final *għajn* for the citation forms of the two Πs. However, we have reason to object this integra-

tion because both (П30) *ma'* 'with' and (П55) *ta'* 'of' are involved in external sandhi patterns which make it highly improbable that the citation forms involve a silent final *għajn*.[53]

Sample sentences for the use of inflected forms of (П30) *ma'* 'with' and (П55) *ta'* 'of' were given in (3.20)–(3.21) for persons other than the speech-act participants. To fill the gap, we provide examples of the latter in (3.63)–(3.64).

(3.63) [Attard 2019: 139]

tridux	*tiġu*	*[**miegħ**i]*$_{PP}$	*mela*
2.IPFV:require:PL:NEG	2.IPFV:come:PL	[**with**:1SG]	then

'[. . .] don't you want to come [**with** me] then [. . .]?'

(3.64) [Attard 2019: 84]

dik	*hi*	*l-intenzjoni*	*[**tiegħ**i]*$_{PP}$
DEM:F:DIST	3SG.F	DEF-intention	[**of**:1SG]

'[. . .] that is [**my**] intention.'

3.1.2.3.4 Intermediate summary

The density and richness of the information given in the previous subsections calls for a short recapitulation of some of the major insights we have gained so far. Table 3.18 provides a survey of the morphological classes, their label, and their members.

Table 3.18: Survey of morphological classes of inflected Пs.

class	subclass	label	members	n
C I	C Ia	plain consonantal	(П5) *bħal* 'like'; (П8) *biswit* 'facing'; (П10) *daqs* 'equal to'; (П11) *dwar* 'about'; (П14) *fejn* 'near'; (П17) *fuq* 'on'; (П20) *għajr* 'except'; (П22) *għand* 'at s.o.'s place'; (П24) *ħlief* 'except'; (П29) *lil* 'to'; (П31) *madwar* 'around'; (П32) *maġenb* 'close to'; (П36) *mingħajr* 'without'; (П38) *mingħand* 'from s.o.'; (П41) *minn* 'from'; (П48) *qrib* 'near'; (П49) *quddiem* 'in front of'; (П56) *taħt* 'under'	18
	C Ib	vowel-harmonic	(П35) *minflok* 'instead of'; (П53) *skont* 'according to'	2
	C Ic		(П46) *qabel* 'before'	1
	C Id		(П4) *bejn* 'between'	1
	C Ie	defective I	(П16) *fost* 'amongst'; (П47) *qalb* 'amidst'	2
	C If	defective II	(П33) *matul* 'during'; (П59) *waqt* 'at the time of'	2

53 The data which support our interpretation will be discussed in Section 3.3.

Table 3.18 (continued)

class	subclass	label	members	n
C II		plain vocalic	(П7) *bi* 'with'; (П15) *fi* 'in'	2
C III	C IIIa	*j*-stems	(П23) *ħdejn* 'beside', (П28) *lejn* 'towards'; (П60) *wara* 'after'	3
	C IIIb	*i*-stems	(П13) *favur* 'in favour of'; (П21) *għal* 'for'; (П27) *kontra* 'against';(П37) *mingħala* 'in s.o.'s opinion'	4
	C IIIc	*għajn*-stems	(П30) *ma'* 'with'; (П55) *ta'* 'of'	2

Except C Ia none of the classes can be called big. At a considerable distance, C IIIb with just four Пs is second best. Given the number of small classes with two to three members together with C Ic and C Id which host only one П each, the catalogue of morphological classes might look relatively uneconomical. However, it was not our intention to organise the system of inflected Пs in terms of descriptive economy. Our guiding principle has been qualitative in nature. Whether our classifications always represent the best choice is a completely different story.

What needs to be kept in mind is the importance of morphological mismatches in the system. We had occasion to discuss phenomena such as overabundance, overdifferentiation, defectiveness, and suppletion. If the cellmates *bija* and *bini* of the 1st person singular of (П7) *bi* 'with' in C II can be shown to be functionally (more or less) the same insofar as *bini* can also be used in contexts where an interpretation as pseudo-verb fails, one might even consider the possibility that some kind of deponency-like mismatch is also attested (Baerman 2007). This is one of the many open questions that remain after we have reviewed the above morphological classes. Some of these questions will receive an answer in due course in the remainder of the morphology section and/or subsequently. In spite of the fact that most of the differences between the above classes are neither of the affixal nor the prosodic kind (Corbett/Baerman 2006), we assume that the use of deviant inflectional material in C Id and C II justifies our speaking of inflectional classes. If (П4) *bejn* 'between' and (П7) *bi* 'with' and (П15) *fi* 'in' display inflections that are not shared by the bulk of the Пs, there is reason to assume four inflectional classes, namely C I (except C Id), C Id, C II, and C III. Given the morphological intricacies caused by the interaction of several mismatches, it might turn out to make sense to increase the number of inflectional classes further. This however is a subject matter for a separate study.

Other problems have dissolved because it could be shown that certain inflected forms, П-stems, or citation forms are archaisms, especially in extant Maltese dictionaries. The dictionary compilers have relied substantially on primary and secondary sources which date back to the period which ranges from the late 18th

century through the 19th century to the beginning of the 20th century. The Korpus Malti 3.0 and our separate corpus of contemporary Maltese prose give no evidence of the current existence of these elements of the past. Therefore, it was possible to exclude these items from further discussion in the synchronic part of this study.

3.2 Long vs short forms: morphological reduction

This section takes up an issue which repeatedly came up above,[54] namely the possibility of certain dimorphemic Πs to dropping their initial constituent which is usually either *ma-* or *minn-*. The allomorphy of long forms with *ma-/minn-* and short forms without *ma-/minn-* can be subsumed neither under the rubric of stem allomorphy addressed in the foregoing section nor under that of sandhi phenomena to be discussed in Section 3.3. It is therefore in order to dedicate a separate section to the long-short alternation attested for a small number of Maltese Πs.[55]

In this section, the Πs of interest and their corresponding short allomorphs are (Π33) *matul* 'during' vs *tul* (cf. examples (1.124) and (1.126)); (Π34) *minbarra* 'except' vs *mbarra* (cf. examples (1.108)–(1.109)); (Π35) *minflok* 'instead of' vs *flok* (cf. examples (1.93)–(1.94)); and (Π39) *minħabba* 'on account of' vs *mħabba* vs *ħabba* (1.97)–(1.99). In addition, we also look at the competition of alloforms for (Π2) *a skapitu* 'at the expense of' and (Π13) *favur* 'in favour of'.[56] On account of the many intricacies connected to a potential sixth case, the discussion of (Π50) *rigward* 'concerning' is relegated to the chapter on morphosyntax.[57] What we want to show in what follows is that the choice of alloform is not contextually determined. This means that there is no phonological or morphosyntactic trigger which requires the employment of any particular allomorph. The empirical illustration of the phenomenon stems exclusively from the Korpus Malti 3.0 to guarantee compatibility of the data. Owing to its exemplary character, we start with the competition between the two alloforms of (Π34) *minbarra* 'except' to which Section 3.2.1 is dedicated. In the section on (Π34) *minbarra* 'except' and those following it, we will conduct very simple tests in order to determine whether there are any structural reasons for the choice of a given alloform. The format of these tests is decribed in Section 3.2.1. Section 3.2.7 evaluates the findings.

54 Cf. Section 1.6.4.2.

55 A particularly intricate and at the same time doubtful additional case of short-long alternation is discussed at length in Section 4.1.2.2.1.2.1 (x).

56 Cf. Sections 3.2.5 and 3.2.6, respectively.

57 Cf. Section 4.1.2.2.1.2.1 (ix).

3.2.1 Alloforms of (П34) *minbarra* ‘except’

As Figure 1.6 has shown for the two allomorphs of (П34) *minbarra* ‘except’ (= *minbarra* and *mbarra*), they are exclusively used to encode EXCEPTION whereas *barra*, *minn barra* and *barra minn* are far less dedicated to this function. We therefore restrict the comparison of the alternative expressions of EXCEPTION to the two first mentioned one-word alloforms. In Figure 3.25, the turnouts resulting from the quantitative evaluation of the first 100 matches in the Korpus Malti 3.0 are repeated below in a different format from Figure 1.6.

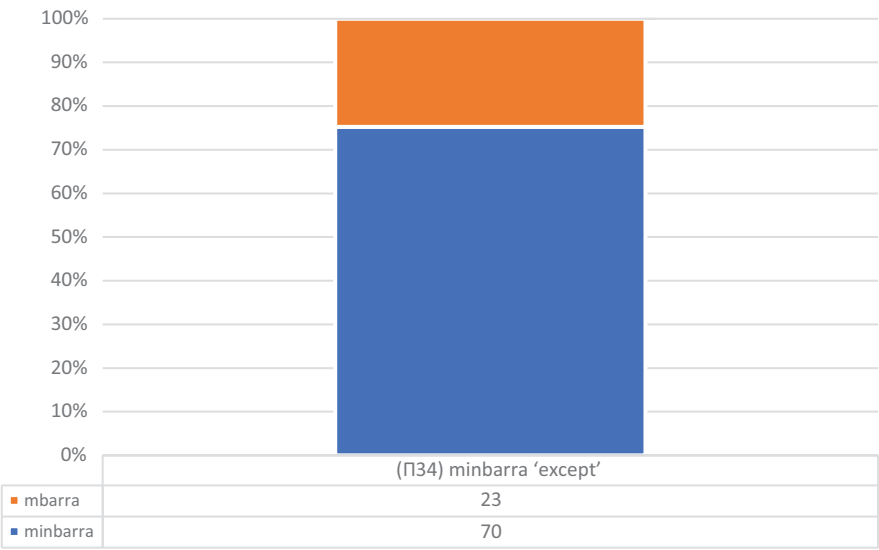


Figure 3.25: Token frequency (1st 100) of competing allomorphs of (П34) *minbarra* ‘except’.

The tokens in Figure 3.25 add up to the total 93 matches. With 75%, *minbarra*’s share of this total is 3.5 times the size of the share of its competitor. However, the picture is vastly distorted because the token frequency of *mbarra* in the entire Korpus Malti 3.0 is the same as that given in Figure 3.25. The estimated token frequency of *minbarra* is much higher, namely 21,035. Thus, going by the values in Figure 3.25, the allomorph *mbarra* is grossly overrepresented. If we take account of the estimated figures, *minbarra* with 99.9% leaves only a very narrow margin for *mbarra* (n < 0.1%). At least in terms of token frequency, *mbarra* can thus be considered to be exceptional. The marked status of *mbarra* offers us a perfect starting point for the identification of possible factors in the choice of allomorphs. The small number

of attestations of this allomorph in the Korpus Malti 3.0 is helpful for recognising potential patterns.

Examples of *mbarra* can be found in only four genres. E.U.-related texts are responsible for twelve matches and thus constitute a majority of 52% of all cases of *mbarra*. Parliamentary speeches are the source for seven cases, news reports are responsible for three tokens and legal texts contribute one token. This allomorph seems to be alien to belles lettres, academic, and religious genres. This fact alone is already interesting because it is indicative of the possibility of stylistic preferences for or against *mbarra*. In eight out of twelve matches in E.U.-related texts, *mbarra* heads a PP which is surrounded by brackets in writing. We interpret the use of brackets as a sign of the PP's status as addition to the clause or constituents thereof. Table 3.19 contains all bracketed *mbarra*-PPs.

Table 3.19: Bracketed *mbarra*-PPs.

source	example / translation
european3436	*Il-pitrava zokkrija (**mbarra** ż-żrieragħ)* 'the sugar-beet (**except** the seeds)'
european3436	*Egħruq tal-għalf u l-brassicas (**mbarra** ż-żrieragħ)* 'feed roots and brassicas (**except** the seeds)'
european3436	*Fjuri u pjanti ornamentali (**mbarra** tal-mixtla)* 'ornamental flowers and plants (**except** the nursery bed)'
european3436	*Żrieragħ u nebbiet f' raba' li jinħarat (**mbarra** ċ-ċereali, il-ħxejjex niexfa, il-patata u l-pjanti ta' żrieragħ li minnhom jingħasar iż-żejt)* 'seeds and seedlings on farmland under the plough (**except** cereals, dry grass, potatoes and plants of seeds from which oil is pressed)'
european3436	*Uċuħ tar-raba' sekondarji suċċessivi (**mbarra** uċuħ tar-raba' f'ġonna tas- suq u wċuħ tar-raba' taħt il-ħġieġ)* 'successive secondary arable land (**except** arable land in market gardens and arable land under glass protection)'
european651	*dawk il-prodotti speċifikament eskluż taħt id-Direttiva ta' Vultaġġ Baxx (**mbarra** apparat mediku)* 'those products which are specifically excluded under the Low Voltage Directive (**except** medical apparatus)'
european8298	*Ħass ikkaboċċjat (**mbarra** ħass tat-tip "Iceberg")* 'lettuce in the form of cabbage (**except** lettuce of the type "Iceberg")'
european8298	*ħass Cos jew Romaine (**mbarra** ħass b' weraq oħxon)* 'Cos or Romaine lettuce (**except** lettuce with thick leaves)'

The first five examples stem from one and the same text which is also the source for two further instances of *mbarra*-PPs. These additional cases and another one from a different E.U.-related text resemble the bracketed examples in Table 3.19 insofar as the *mbarra*-PP is clearly marked as an insertion – this time not by brackets but by commas as in (3.65) where we keep the interpunction.

(3.65) [Korpus Malti 3.0; european3436]
*Mergħa u art miżrugħa ħafur, **[mbarra** mergħat*
pasture and land PART:SOW:F wild_oat **[except** pasture:PL
ħorox]$_{PP}$
rugged.PL]
'[. . .] pasture and land sown with wild oat, [**except** rugged pastures] [. . .]'

Almost all of the examples with inserted *mbarra*-PPs stem from longish lists which enumerate those items to which certain E.U. regulations must be applied and which exceptions must be made. The entries in these lists do not display a full-blown sentence structure because they lack a proper predicate. Thus, we are confronted with enumerations of more or less complex NPs. Outside syntactically fragmentary contexts of this kind, *mbarra*-PPs have been identified, too.

Since the presence/absence or shape of the initial constituent of the above ΠIs is crucial for the distinction of long and short allomophs, it makes sense to take stock of the final segment of the syntactic word to the immediate left of the Π in the same sentence. There are three sentence-initial instances of *mbarra* which have to be excluded from the count. Of the remaining twenty attestations of *mbarra*, eight are preceded by a vowel-final word whereas twelve follow a consonant-final word. The gap between 40% and 60% is not big enough to prove beyond doubt that the choice of *mbarra* depends on the surrounding phonological context. *Mbarra* starts with a binary cluster which would normally trigger the use of the prosthetic /i/ if the preceding word ends in a consonant (Borg/Azzopardi-Alexander 1997: 334). This is the case in (3.66) where the word to the left of *mbarra* ends in the voiceless postalveolar fricative /ʃ/.

(3.66) [Korpus Malti 3.0; news56537]
*Għax **[imbarra** leħinha]$_{PP}$ dawk ix-xufftejn tagħha*
because **[except** voice:3SG.F] DEM:PL:DIST DEF-lip:PL of:3SG.F
mimlija u ħomor f' wiċċ qamħi mfaqqa' kienu
full:PL and red.PL in face corn_coloured PART:burst be:3PL.PFV
jħarrku d-demm tal-irġiel kollha li
3.IPFV:produce_ardour:PL DEF-blood of:DEF:man.PL all that
kienu jikluha bil-ħars
be:3PL.PFV 3.IPFV:eat:PL:3SG.F with:DEF-look
'Since [**apart from** her voice], these full and red lips of hers in a shining corn-coloured face made the blood of all men boil who devoured her with their eyes.'

The expected *i*-prosthesis does not always take place as shown in (3.67) where the final /n/ of *snin* 'years' should require the presence of /i/ on *mbarra* but the prosthetic vowel fails to appear.

(3.67) [Korpus Malti 3.0; parl566]
F' *dawn* *l-aħħar* *tliet* *snin* ***[mbarra*** *għajnuna]*$_{PP}$
in DEM:PL:PROX DEF-last three year.PL **[except** help]
dan *il-Gvern* *ivvota* *Lm 85,000* *għall-iżvilupp*
DEM:M:PROX DEF-government vote £m 85,000 for:DEF-development
ta' *elite sport*
of elite sport
'In the last three years [**apart from** help], this government voted £m 85,000 for the development of elite sports.'

We assume that the violation of the sandhi rules of Maltese which is a recurrent phenomenon with *mbarra* has a sentence prosodic explanation. As emphasised above, *mbarra*-PPs more often than not come as insertions which are probably prosodically marked as such. The orthographic means – interpunction and brackets – signal potential intonation breaks. The minimal pauses separate the insertion from the preceding context such that the phonological properties of the final element of the word immediately preceding the insertion fails to activate the usual sandhi processes. This means that the *mbarra*-PPs behave as if uttered in isolation which, in turn, is the same as occupying the clause-initial or sentence-initial position. However, of the three sentence-initial attestations of *mbarra* in this position, only two give evidence of *i*-prosthesis. This is the case in (3.68). Example (3.69) illustrates the absence of the prosthetic /i/.

(3.68) [Korpus Malti 3.0; parl9830]
[Imbarra *l-mentalità* *li* *l-ministru* *jista'*
[except DEF-mentality that DEF-minister 3SG.M.IPFV:can
jagħmel *li* *jrid]*$_{PP}$ *hemm* *il-mentalità*
3SG.M.IPFV:do that 3SG.M.IPFV:want] there DEF-mentality
l-oħra *wkoll*
DEF-other:F too
'[**Apart from** the mentality according to which the minister can do what he wants] there is also the other mentality [. . .].'

(3.69) [Korpus Malti 3.0; parl4231]

[Mbarra	*dan]*$_{PP}$	*isir*	*ukoll*	*xogħol*
[except	DEM:M:PROX]	3SG.M.IPFV:become	too	work
mal-familji	*ta'*	*dawn*	*iż-żgħażagħ*	*biex*
with:DEF-family:PL	of	DEM:PL:PROX	DEF-adolescent.PL	in_order_to
jiġu	*ntegrati*	*lura*	*fil-familji*	
3.IPFV:come:PL	integrate:PART:PL	back	in:DEF-family:PL	

'[**Apart from** this] there will also be work with the families of these youngsters to reintegrate them into the families.'

Interestingly, in both cases the final word of the preceding sentence ends in a vowel, namely *jagħmlu* 'they do' and *pariri* 'advice$_{PL}$', respectively. The vacillation as to the appropriate alloform in a given context should not be overvalued because the small number of cases and the possibility of typos preclude generalisations. It should not go unmentioned nevertheless that *mbarra* occurs three times in sentence-initial position. These cases account for 13% of all tokens registered for *mbarra*. As to the seventy tokens counted for *minbarra* functioning as Π (of the 1st 100 matches in the Korpus Malti 3.0), this long alloform occupies the leftmost slot in 37 sentences which equals a share of 53%. We can only speculate that this relative propensity of the long alloform to occur sentence-initially might be connected causally to the phonotactic "disadvantage" of the initial cluster in the short alloform. *Minbarra* needs no prosthetic /i/ and may combine with vowel-final and consonant-final words to the left of it. What is additionally noteworthy about the long alloform is that amongst the above seventy matches for *minbarra*, there is only a single instance of an inserted *minbarra*-PP surrounded by brackets. Three further cases are marked as insertions by means of commas. Thus, only 6% of the *minbarra*-PPs function as (orthographically marked) insertions. On top of this, *minbarra* is attested in all of the genres which are represented in the Korpus Malti 3.0.

Moreover, we have also looked at the complements of *mbarra* with focus on definiteness. There are eight indefinite NPs which function as complement. If we discount cases of coordination and enumeration of several NPs overtly marked for definiteness, we have detected thirteen definite NPs as complements of *mbarra*. Nine of these involve nouns which host the definiteness pro-clitic. Three complements are pronominal, one an inalienably possessed noun, and one is a PP with a definite complement. To simplify, we disregard the latter case for the time being as it requires a dedicated discussion which will be started only later.[58] After removing the problematic case, we have twelve cases of definite complements (= 60%) as

58 In Section 4.1.

opposed to eight cases of indefinite complements (= 40%) combining with *mbarra*. This means that (in)definiteness is neither an obstacle nor an instigator for the employment of *mbarra*. In contrast, the first seventy matches of *minbarra* involve sixty definite (= 86%) and ten indefinite NPs (= 14%) as complements. In spite of the considerable differences in the shares of (in)definite complements with the two competing alloforms, we refrain from drawing definitive conclusions since the turnout of tokens is far too small in the case of *mbarra*. The impossibility of pinpointing any structural factors in our quest for the logic behind the choice of *mbarra* from the list of allomorphs of (Π34) *minbarra* 'except' supports the hypothesis that we are dealing with a matter of style and not with a grammatical rule. This conclusion is not too far-fetched in the case of an only marginally attested allomorph. Is the situation similar for the other patterns of allomorphy?

3.2.2 Alloforms of (Π35) *minflok* 'instead of'

In Section 1.6.4.2. (i) we have argued that the long alloform *minflok* is the best representative of (Π35) *minflok* 'instead of' because it is much more frequent than *flok* in the Korpus Malti 3.0. The number of matches we referred to on that occasion did not differentiate between uses as Π and other functions of the alloforms. In Figure 3.26, we only take account of the Π-uses of *minflok* and *flok*.

For the 1st 100 matches of the competitors, *minflok* yields 65 matches as opposed to the 61 matches counted for *flok*. The small gap between the two turnouts widens considerably if we look at the estimated token frequencies. The estimates are given in Figure 3.26. According to these hypothetical values, the alloform *minnflok* is used 3.4 times as often as *flok*. If we add up the token frequencies, we get the total of 38,068 tokens 22% of which go to the credit of *flok* whereas *minflok* claims a share of 78%. The quantitative differences are thus significant although they are by no means comparable to those computed for the previous pair *minbarra-barra*.

Before we tick off the same parameters as in the previous section we have to take account of a property which the alloforms of (Π34) *minbarra* 'except' lack, namely the ability to inflect for person. There are altogether 5,563 matches of inflected forms of (Π35) *minflok* 'instead of' in the Korpus Malti 3.0. Figure 3.27 shows that the two alloforms are unevenly involved in person inflection.

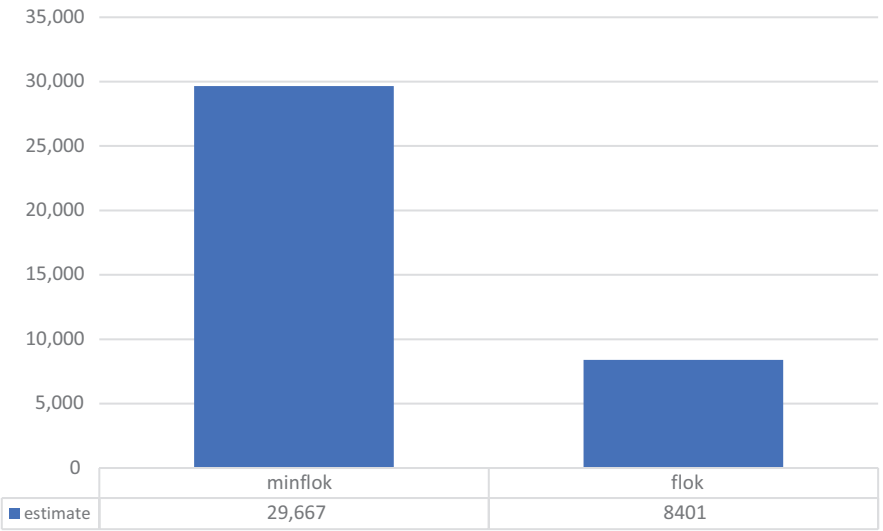


Figure 3.26: Token frequency of competing allomorphs of (П35) *minflok* 'instead of'.

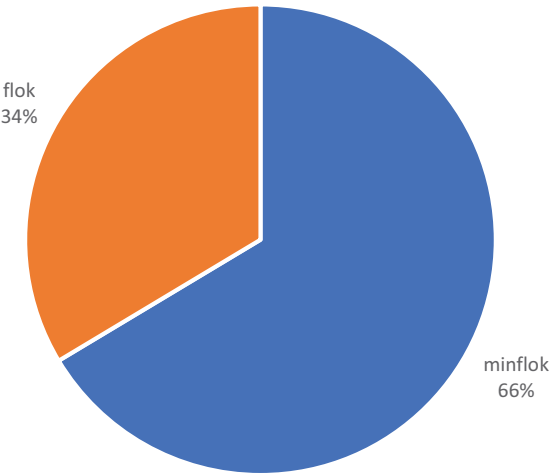
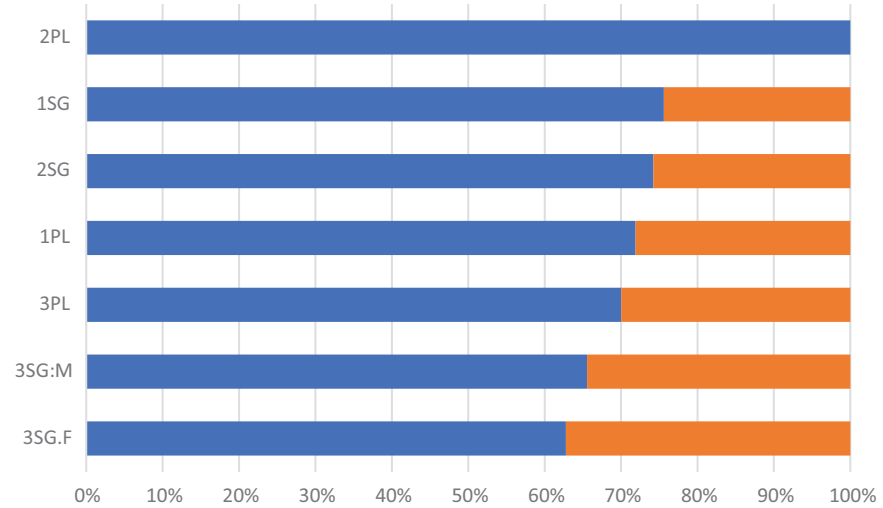


Figure 3.27: Shares of alloforms of (П35) *minflok* 'instead of' under inflection.

Under inflection, the share of *flok* increases visibly. From less than a quarter of the uninflected tokens of (П35) *minflok* 'instead of' the alloform *flok* claims slightly more than a third of all inflected tokens of (П35) *minflok* 'instead of'. This increase notwithstanding, the long alloform still outnumbers the short alloform also where person inflection comes into play. The question arises whether person inflection

generally is a favourable condition for the choice of the alloform *flok*. In Figure 3.28, we determine the frequencies of inflected *minflok* and inflected *flok* for each of the persons. It immediately comes to the fore that independent of the person *minflok* always remains the most frequently chosen option. At the same time, Figure 3.28 reveals that the shares of *minflok* and *flok* differ from person to person.



	3SG.F	3SG.M	3PL	1PL	2SG	1SG	2PL
minflok	803	1750	972	23	49	96	1
flok	476	920	416	9	17	31	0

Figure 3.28: Inflected alloforms of (П35) *minflok* 'instead of' per person.

We discount the 2nd person plural because it is a hapax for this П in the Korpus Malti 3.0. For the remaining six person values, the shares of *flok* range from 28% for the 1st person singular to 37% for the 3rd person singular feminine. More generally, *flok* is relatively strong in the 3rd persons of both numbers with shares of n ≥ 30% whereas it is relatively weak with speech-act participants in the singular. However, these gradual differences do not alter the fact that in each person (except the 2nd plural) the share of *flok* is bigger than that given in Figure 3.26 for the uninflected word forms. The differential behaviour of *flok* with and without person inflection is certainly interesting but no hard-and-fast rules emerge from these differences. The most we learn from the above quantitative data is that both alloforms of (П35) *minflok* 'instead of' go together well with person inflection.

At this point, we turn out attention to checking the data which result from the search for the 1st 100 matches in the Korpus Malti 3.0. Of the 61 hits for *flok*, 36

feature this alloform in combination with a preceding vowel-final word in the same sentence. There are 21 tokens of *flok* which combine with a consonant-final word on the left. In addition, we have identified four cases of sentence-initial *flok*. This means that 59% of all instances of *flok* in the search of the 1st 100 matches are preceded by a word that ends in a vowel. As to the long alloform, the phonological quality of the final segment of the preceding word is irrelevant. *Minflok* combines 22 times with a preceding word ending in a vowel and the same number of tokens holds for combinations of this alloform with consonant-final words to the left of it. If we add the four sentence-initial occurrences of *minflok* to the number of combinations with consonant-final words, we find that only 46% of all instance of *minflok* in the search of the 1st 100 matches are preceded by a word that ends in a vowel. The long and the short alloforms seem to prefer different contexts without, however, avoiding the disfavoured context completely. Once more, we are witnessing relatively weak tendencies instead of strict distributional constraints.

The situation is largely similar with regards to the (in)definiteness of the complement NPs. *Flok* takes complement NPs in sixty of the 61 matches in the 1st 100. Of these sixty cases, 35 involve a definite NP (as shown in (3.70)) whereas 25 involve indefinite NPs (as shown in (3.71)) the shares being 58% and 42%, respectively.

(3.70) [Korpus Malti 3.0; culture1115]
William u Kate iltaqgħu mal-President Tan u
William and Kate meet:3PL.PFV with-president Tan and
martu ***[flok*** *ir-reġina]*$_{PP}$ *f' lukanda lussuża*
woman:POSS:3SG.M **[instead_of** DEF-queen] in hotel luxurious:F
'[**Instead of** the Queen] William and Kate met President Tan and his wife in a luxurious hotel [. . .].'

(3.71) [Korpus Malti 3.0; culture2054]
Din kienet tkun storja differenti kieku
DEM:F:PROX be:3SG.F.PFV 3SG.F:be.FUT story different if
[flok *tifla]*$_{PP}$ *kellhom tifel*
[instead_of child:F] have.PFV:IO:3PL child
'This would have been a different story if **[instead of** a girl] they had a boy.'

Minflok is attested 45 times with a complement NP. In 21 cases the NP is definite as in (3.72) and in 24 cases it is indefinite as in (3.73). The shares are 47% for definite NPs and 53% for indefinite NPs.

(3.72) [Korpus Malti 3.0; academic13]
aħjar *li* *nużaw* *il-kompost* ***[minflok*** *il-ħamrija*
good.CMPR that 1.IPFV:use:PL DEF-compost **[instead_of** DEF-red_soil
komuni]$_{PP}$
ordinary]
'[. . .] it is better that we use compost [**instead of** ordinary red soil].'

(3.73) [Korpus Malti 3.0; academic46]
ippublika *edizzjoni* *privata* *għall-abbonati* *biss* ***[minflok***
publish edition private:F for:DEF-subscriber:PL only **[instead_of**
ktieb *għall-publiku]*$_{PP}$
book for:DEF-public]
'[. . .] he published a private edition exclusively for subscribers **[instead of** a book for the general public].'

We do not intend to read too much into these relatively subtle differences. It is likely that a more thorough search of the Korpus Malti 3.0 will show that the shares level out for both alloforms. One should not jump to the conclusion that *minflok* has a leaning towards the indefiniteness of its complement whereas *flok* prefers definite complements over indefinite ones.

On the basis of the parameters we have defined for the present purpose it is not possible to decide what exactly determines the choice of the alloforms of (Π35) *minflok* 'instead of'. This unsatisfactory result might change if more and different criteria are applied to the cases under scrutiny. For the time being, however, we must assume that the alloforms constitute a case of free variation. Most probably, the preference for the one or the other is a matter of style or idiolectal choices.

3.2.3 Alloforms of (Π33) *matul* 'during'

The possibility of a semantically motivated split of the alloforms of (Π33) *matul* 'during' resulting in two distinct candidates for the status of Π has been discussed at length and finally rebutted.[59] Given that semantics can largely be ruled out as a determining factor, the distribution of the long alloform *matul* and the short alloform *tul* needs to be looked at afresh.

59 Cf. Section 1.6.4.2. (ix).

We approach the problems first from the perspective of quantities. In Figure 3.29 we compare the estimated token frequencies of *matul* and *tul* in the Korpus Malti 3.0. Figure 3.29 takes account only of uninflected free forms.

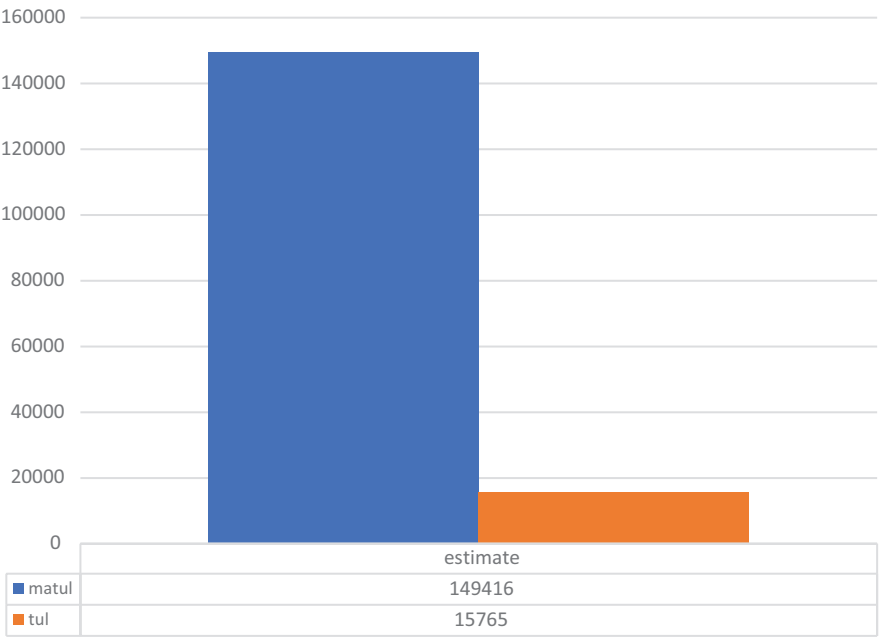


Figure 3.29: Token frequency of competing allomorphs of (Π33) *matul* 'during'.

Matul yields almost ten times as many tokens as *tul*. The latter is thus a marginal option in comparison to the predominant long allomorph. The discrepancy between the frequencies of the two alloforms is even more pronounced under inflection. Figure 3.30 reveals that the long alloform clearly outranks the short alloform. Of the 6,220 inflected forms of (Π33) *matul* 'during', 6,069 go to the credit of *matul* whereas only 151 matches have been counted for *tul*.

We know that (Π33) *matul* 'during' is subject to paradigmatic defectiveness in the sense that inflected forms are attested almost exclusively for the 3rd persons of both genders and both numbers.[60] The 2nd person singular *matulek* occurs only infrequently and in a particular idiomatic construction type. The same holds for the short alloform *tul* as shown in Figure 3.31.

60 Cf. Section 3.1.2.3.1.2 (iv).

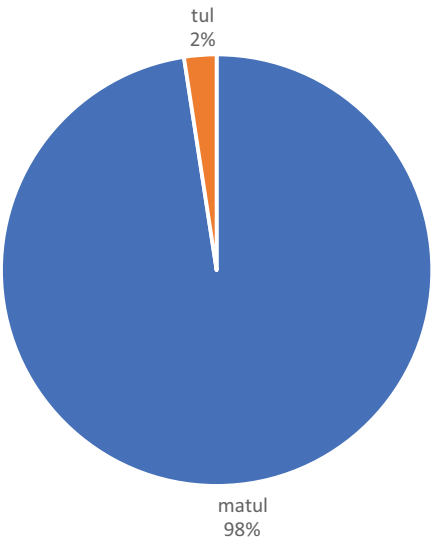
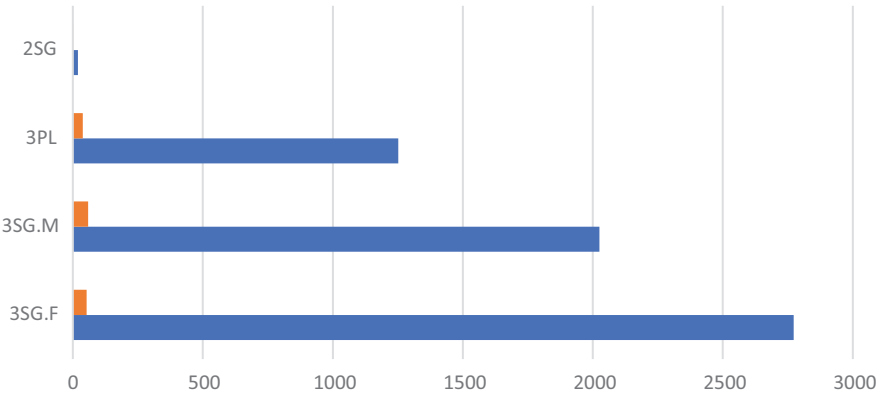


Figure 3.30: Shares of alloforms of (П33) *matul* 'during' under inflection.



	3SG.F	3SG.M	3PL	2SG
tul	53	59	38	1
matul	2772	2025	1252	20

Figure 3.31: Inflected alloforms of (П33) *matul* 'during' per person.

The short alloform *tul* displays shares which range from 1.8% in the 3rd person singular feminine to 4.7% in the 2nd person singular. The latter relatively high percentage results from the sparing use of the idiomatic construction type presented in Figure 3.22. The isolated case of the short alloform *tul* being used in this construction frame is given in (3.74) (cf. (3.49) above).

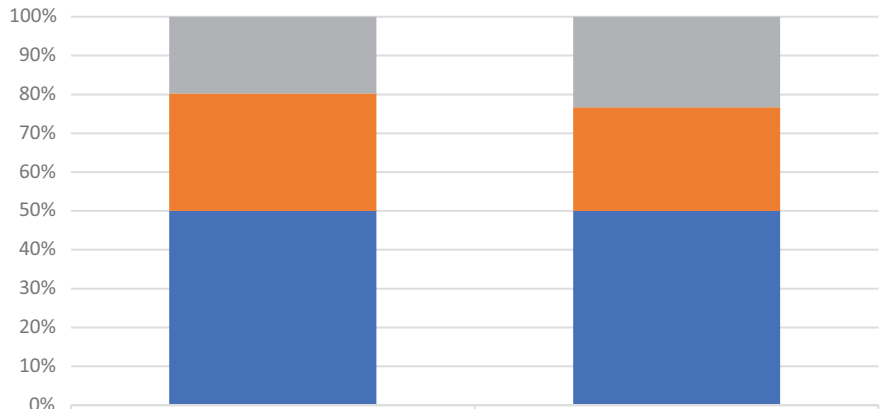
(3.74) [Korpus Malti 3.0; news123284]
fil-ħarifa *nikkonsolidaw* *dak* *kollu* *li*
in:DEF-autumn 1.IPFV:consolidate:PL DEM:M:DIST all:M that
nkunu *ottjenejna* *bis-sagrifiċċji* *kollha*
1.IPFV:be.FUT:PL obtain:1PL.PFV with:DEF-sacrifice:PL all:PL
*[**tul**ek]*$_{PP}$ *ja* *sena*
[**during**:2SG] oh year
'[. . .] in the autumn we consolidate all that we will have obtained by means of all the sacrifices [all year long].'

In contrast to the competition between *minflok* and *flok* addressed in the foregoing section, person inflection does not increase the shares of the short allomorph of (Π33) *matul* 'during'. Its frequency remains marginal independent of the presence of person inflection.

For the remaining tests we limit the scope to the hits within the 1st 100 returns in the Korpus Malti 3.0. We had to remove four tokens for each of the competing alloforms on account of unclear structural properties. Thus, in what follows, we assume thirty tokens for *tul* and 96 tokens for *matul*. According to Figure 3.32, the distribution of the alloforms over the three contexts – after a vowel-final word, after a consonant-final word, and in the leftmost slot of the sentence – is almost identical. If we lump together C] __ and [S, we immediately recognise that the chance factor makes itself felt. *Matul* and *tul* are attested to the right of a preceding word with a final vowel in 50% of the cases. The other half of their attestations is covered by the non-vocalic conditions. On these grounds, we rebut the idea that the choice of alloform of (Π33) *matul* 'during' depends on phonology.

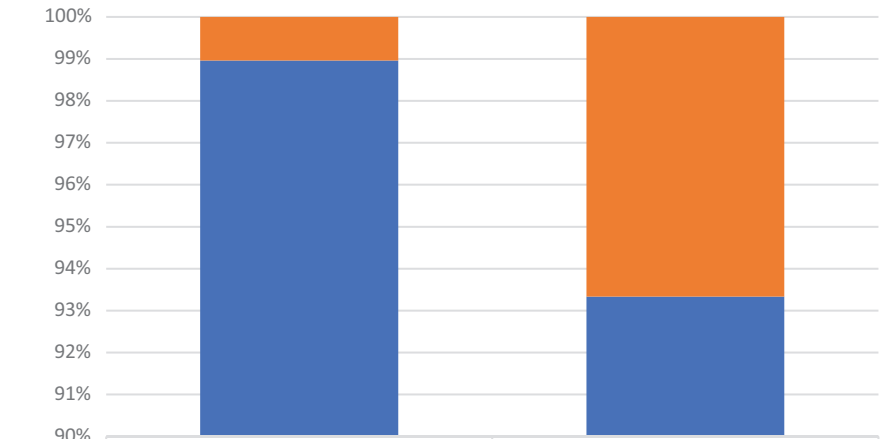
The situation is not much different for the parameter of definiteness. Figure 3.33 shows that neither of the alloforms is prone to taking indefinite complements. For technical reasons, only the percentages between 90% and 100% are visible in Figure 3.33.

Both *matul* and *tul* prefer definite complements over indefinite ones in nine out of ten cases. There is thus no discernible difference between the two alloforms on this parameter either. This leads us to the conclusion that in analogy to the previous cases of competing long and short alloforms, the alloforms of (Π33) *matul* 'during' are in free variation. In the absence of structural reasons, their choice must depend wholly on idiolectal and stylistic preferences.



	matul	tul
[S	19	7
C] __	29	8
V] __	48	15

Figure 3.32: Distribution of alloforms of (П33) *matul* 'during' over phonological contexts.



	matul	tul
indefinite	1	2
definite	95	28

Figure 3.33: Alloforms of (П33) *matul* 'during' and (in)definite complements.

3.2.4 Alloforms of (П39) *minħabba* ‘on account of’

The case of (П39) *minħabba* ‘on account of’ differs from the three previous ones insofar as it involves three instead of only two competitors. Besides the long alloform *minħabba* and the short alloform *ħabba* there is also *mħabba* as third option. Going by the different lengths in terms of the number of segments, the three alloforms yield the order *minħabba* > *mħabba* > *ħabba* from long to short. We provided evidence of the semantic equivalence of the three expressions already above.[61] Since we are dealing with allomorphy and not with distinct Пs, one wonders what the factors might be which regulate the choice of the three alloforms of (П39) *minħabba* ‘on account of’. When we addressed these alloforms for the first time,[62] we already mentioned their widely divergent token frequencies. These are recapitulated on the basis of the usual estimate in Figure 3.34. For the 1st 100 returns in the Korpus Malti 3.0. the results are eighty tokens for *minħabba,* 35 tokens for *mħabba,* and 25 tokens for *ħabba.*

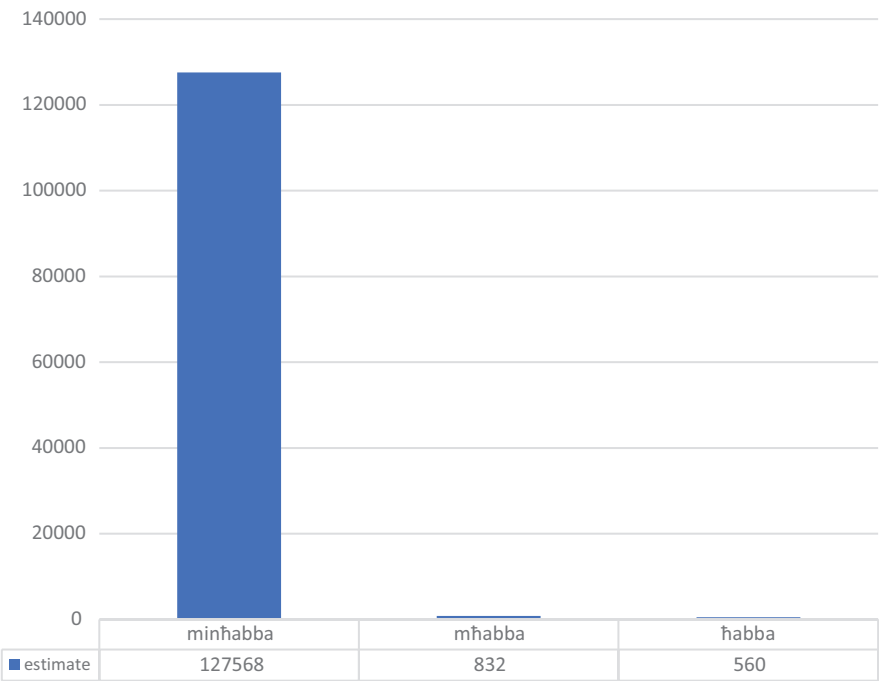
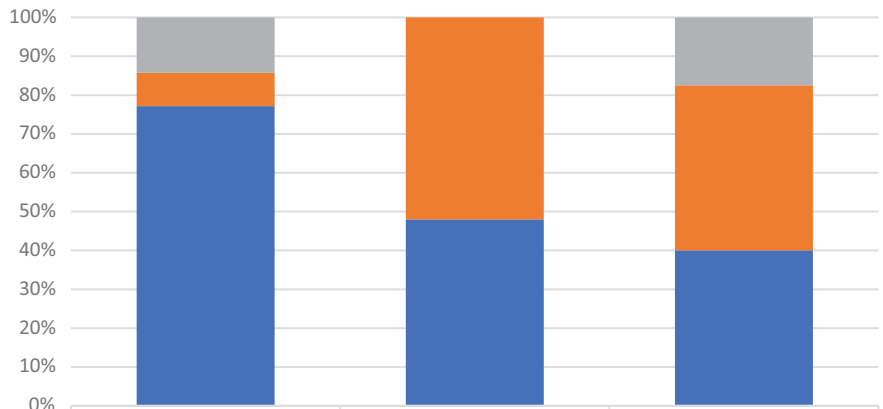


Figure 3.34: Estimated token frequency of alloforms of (П39) *minħabba* ‘on account of’.

61 Cf. Section 1.6.4.2 (iii).
62 Cf. Section 1.6.4.2 (iii).

The long alloform is 153 to 182 times more frequent than the two shorter alloforms. The short alloforms are thus only marginal alternatives for the realisation of (Π39) *minħabba* 'on account of'. The marginal status of the short alloform as opposed to the dominant long alloform is a leitmotif of this kind of allomorphy in Maltese.

We turn our attention to testing the possibility of whether phonology has a say in the choice of alloforms of (Π39) *minħabba* 'on account of'. To this end, we compare the results for the combinations of the three alloforms with preceding vowel-final and consonant-final words as well as the occurrences in absolute sentence-initial position. The data which serve as input for Figure 3.35 stem from the search of the 1st 100 matches.



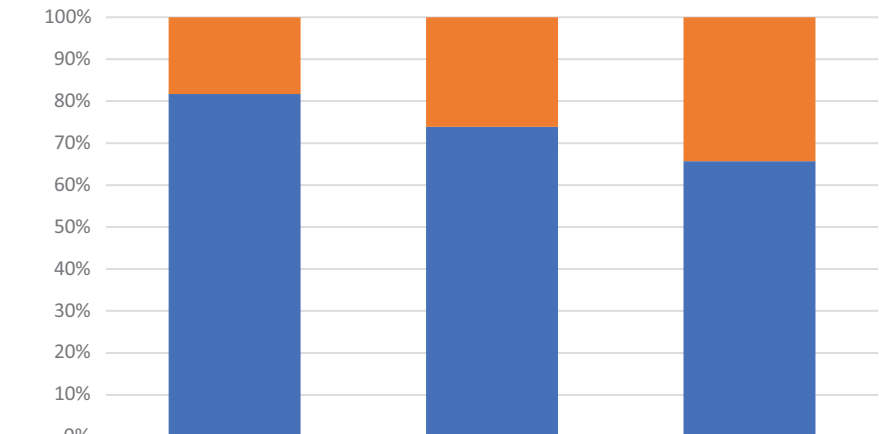
	mħabba	ħabba	minħabba
[S	5	0	14
C] __	3	13	34
V] __	27	12	32

Figure 3.35: Distribution of alloforms of (Π39) *minħabba* 'on account of' over phonological contexts.

The alloforms are ordered from left to right according to the increase of the number of combinations with words to their left which ends in a consonant. The alloforms do not behave homogeneously. *Mħabba* occurs nine times as frequently with vowel-final words as with consonant-final-words. If we reduce the three contexts to the binary opposition of vocalic vs consonantal context we notice that 77% of the tokens of *mħabba* can be found in vocalic contexts whereas this context is relevant only for 40% of the tokens of the long allomorph. Interestingly, the shortest allomorph *ħabba* attests to almost equal shares for vocalic and consonantal contexts, namely 48% and 52%, respectively. This means that, for the first time in our review of this kind of allomorphy, there emerges a relatively strong divergence in the distribution of alloforms over phonological contexts. The long allomorph clearly favours con-

sonantal contexts whereas the preference of *mħabba* for vocalic contexts is even more pronounced. In contrast, the shortest alloform appears to be uncommitted, in a manner of speaking.

In Figure 3.36, we try to establish whether a comparable situation arises when the alloforms take (in)definite complements. The data are again those which result from the search of the 1st 100. For structural reasons, the absolute numbers given for *minħabba* and *ħabba* are smaller than those reported in connection to Figure 3.35.



	minħabba	ħabba	mħabba
indefinite	13	6	12
definite	58	17	23

Figure 3.36: Alloforms of (Π39) *minħabba* 'on account of' and (in)definite complements.

The alloforms are ordered from left to right according to the decreasing share claimed by definite complements. Like in the previous test, *minħabba* and *mħabba* wind up at the opposite extremes of the scale with *ħabba* occupying the intermediate position. Definite complements are in the majority for all three allomorphs. In the case of *minħabba,* definite complements account for 82% of all registered instances. The share drops to 66% for *mħabba,* whereas *ħabba* has a percentage of 74% for definite complements. These differeces are certainly not as striking as those which come to the fore in the analysis of the distribution over phonological contexts.

In point of fact, the following shares in Table 3.20 are indicative of a given alloform being overrepresented or underrepresented on a given parameter. The yellow colour is indicative of significantly low percentages whereas a cell highlighted in grey hosts an unexpectedly high percentage.

Table 3.20: Overrepresentation/underrepresentation per parameter.

alloform	1st 100		phonology				(in)definiteness			
			C]/[S		V]		definite		indefinite	
minħabba	80	57%	48	69%	32	45%	58	59%	13	42%
mħabba	35	25%	8	12%	27	38%	23	23%	12	39%
ħabba	25	18%	13	19%	12	17%	17	17%	6	19%
total	140		69		71		98		31	

From this table it is obvious that *ħabba* is largely well-behaved in the sense that its shares remain close to the share it has within the 1st 100. This is different for *minħabba* and *mħabba*. In combination with definite complements, the three allomorphs meet our expectations. In contrast, *minħabba* is overrepresented in non-vocalic contexts where *mħabba* is widely underrepresented. The opposite holds for vocalic contexts where the size of *minħabba*'s share is considerably smaller than that of this alloform in the 1st 100. *Mħabba* however has a share that exceeds that of the same alloform in the 1st 100. The same pattern applies to combinations with indefinite complements. Here, *minħabba* is again widely underrepresented whereas *mħabba* is overrepresented.

The observed differences are interesting but fail to characterise the alloforms as being categorically different from each other. It is better by far to assume preferences which are shaped by stylistic and/or idiolectal choices. There is no hard evidence of genuinely grammatical rules which dictate the choice of a given alloform. Rare examples like (3.75) even preclude the possibility that the idiolectal choices are always strict.

(3.75) [Korpus Malti 3.0; literature59]
Ġenninhom *u* *dan* *mhux* *biss* ***[minħabba***
instigate:3PL and DEM:M:PROX NEG:3SG.M:NEG only **[on_account_of**
l-ħwejjeġ *żmattati* *u* *x-xagħar* *twil]*$_{PP}$
DEF-thing.PL become_untidy:PART:PL and DEF-hair long]
iżda *anke* ***[ħabba*** *l-ħarsa* *t'* *għajnejh]*$_{PP}$
but also **[on_account_of** DEF-look of eye:PL:3SG.M]
'He drove them crazy and this not only [**because of** the untidy clothes and the long hair] but also [**because of** the look of his eyes].'

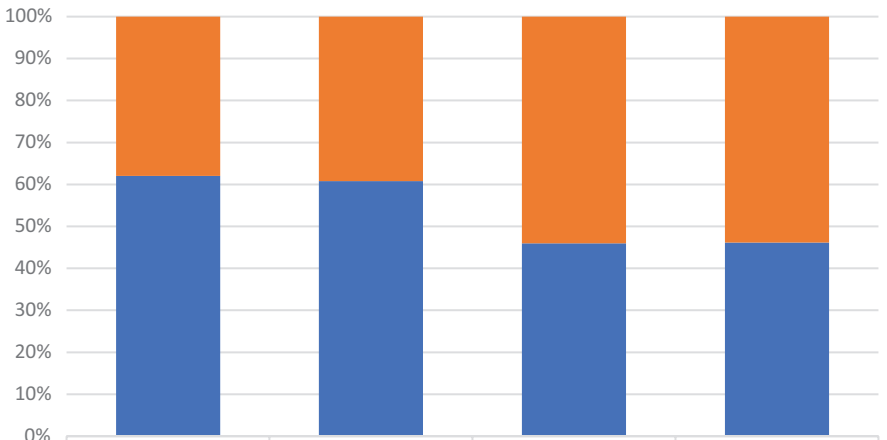
In this sentence, the two alloforms *minħabba* and *ħabba* are used in two consecutive adverbial phrases. Both take definite complements. *Minħabba* is preceded by a consonant-final word whereas *ħabba* follows a vowel-final word. Since

Figure 3.35 characterises *ħabba* as being equally compatible with consonant-final and vowel-final words to its left, the sequence *anke* + *ħabba* is not surprising. That *ħabba* and not *minħabba* is chosen for this combination is perhaps more telling since the long allomorph prefers consonantal contexts over vocalic contexts (though only gradually). The fact remains that in one and the same sentence several alloforms of (П39) *minħabba* 'on account of' may peacefully co-exist without creating confusion. It cannot be ruled out that the author from whose work example (3.75) has found its way into the database of the Korpus Malti 3.0 was guided by the principle of *variatio delectat* according to which it is stylistically preferable not to use identical word forms invested with the same meaning in the same context.

3.2.5 Alloforms of (П2) *a skapitu* 'at the expense of'

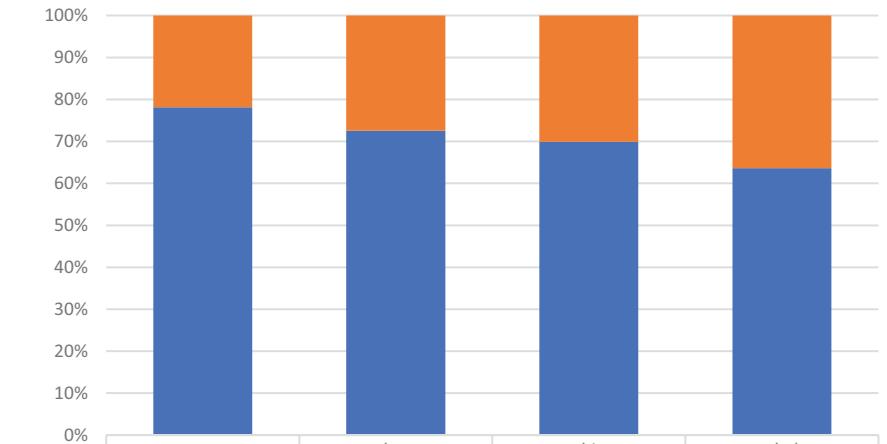
Like in the case of (П39) *minħabba* 'on account of', (П2) *a skapitu* 'at the expense of' comes with an array of alloforms. The shortest alloform *skapitu* is statistically insignificant. All other alloforms are longer by one (= *a skapitu*) to three segments if *għajn* is counted as full consonant (= *bi skapitu, għas-skapitu, għal skapitu*). There are no morphological or phonological criteria according to which one of the allforms is chosen instead of others in a given context. Figure 3.37 takes account of post-vocalic and post-consonantal occurrences of the alloforms under scrutiny for the 1st 100 hits of each alloform in the Korpus Malti 3.0. The sentence-initial position is occupied only once by *a skapitu*, all other attestations of no matter which alloform are sentence-medial. The overall frequency of bare *skapitu* is too small to justify the representation of the respective values in Figure 3.37. The alloforms are ordered from left to right according to the decreasing shares of the C] __ context. As can be seen immediately, the two alloforms to the left have a slight preference for following a consonant-final word whereas the two alloforms on the right display a similar preference for occurring after a word which ends in a vowel. The percentages are still relatively close to the 50%-mark so that the chance factor cannot be ruled out.

As to the combinability with definite and indefinite complements, Figure 3.38 informs us about the behaviour of the same four alloforms of (П2) *a skapitu* 'at the expense of'.



	bi	għas-	a	għal
V]__	30	38	54	7
C]__	49	59	46	6

Figure 3.37: Distribution of alloforms of (П2) *a skapitu* 'at the expense of' over phonological contexts.



	a	għas-	bi	għal
indefinite	21	25	22	4
definite	75	66	51	7

Figure 3.38: Alloforms of (П2) *a skapitu* 'at the expense of'and (in)definite complements.

The preference for definite complements ranges from 75.1% with *a skapitu* to 63.6% with *għal skapitu*. The variation is too small to assume categorical differences. To our minds, the four alloforms largely reflect the same behaviour.

Similarly, we have not encountered any discernible semantic differences between the alloforms *a skapitu* (= (3.76)), *għas-skapitu* (= (3.77)), *bi skapitu* (= (3.78)), *għal skapitu* (= (3.79)), and *skapitu* (= (3.80)).[63]

(3.76) [Korpus Malti 3.0; news136050]
jagħmlu *l-flus* *mill- ambjent* ***[à skapitu***
3.IPFV:do:PL DEF-money from:DEF-environment **[at_the_expense**
***ta**l-poplu]*$_{PP}$
of:DEF-people]
'[. . .] they make money from the environment [**at the expense of** the people].'

(3.77) [Korpus Malti 3.0; news124496]
dan *isir* ***[għas-skapitu*** ***ta**l-kundizzjonijiet*
DEM:M:PROX 3SG.M.IPFV:become **[at_the_expense** **of**:DEF-condition:PL
u *d-drittijiet* *tal-ħaddiema]*$_{PP}$
and DEF-right:PL of:DEF-worker:PL]
'[. . .] this happens [**at the expense of** the conditions and the rights of the workers].'

(3.78) [Korpus Malti 3.0; news126217]
sejrin *igawdu* *biss* *erbgħa* *min-nies*
FUT:PL 3.IPFV:enjoy:PL only four from:DEF-people
[bi skapitu ***ta**r-residenti]*$_{PP}$
[at_the_expense **of**:DEF-respdent:PL]
'[. . .] only a few people will enjoy it [**at the expense of** the residents] [. . .].'

(3.79) [Korpus Malti 3.0; news115614]
jagħmel *aktar* *qliegħ* ***[għal skapitu*** ***ta**l-ħaddiema]*$_{PP}$
3SG.M.IPFV:do more profit **[at_the_expense** **of**:DEF-worker:PL]
'[. . .] he makes more profit [**at the expense of** the workers].'

63 For similarities with (П50) *rigward* 'concerning' the reader is referred to Section 4.1.2.2.1.2.1 (ix).

(3.80) [Korpus Malti 3.0; news105051]
Progress *mhux* ***[skapitu*** ***ta**l-passat]*$_{PP}$
progress NEG:3SG.M:NEG **[at_the_expense** **of**:DEF-past]
'Progress is not [**to the detriment of** the past].'

What the alloforms have in common is that (П55) *ta*' 'of' always forms part of the PPs – a topic to which we come back below.[64] To conclude the discussion of the П under inspection, we look at the overall token frequencies of the four alloforms featured in the previous figures in the Korpus Malti 3.0 in Figure 3.39.

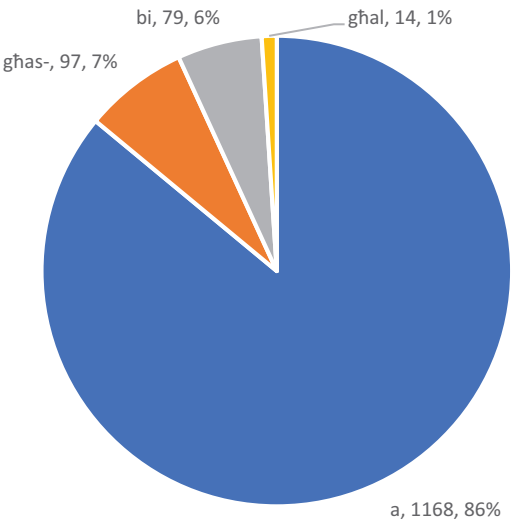


Figure 3.39: Token frequency of alloforms of (П2) *a skapitu* 'at the expense of'.

The major option, *a skapitu*, outnumbers all other alloforms by far. Not even added up do the lesser options come anywhere near the dominant competitor. Whether and to what extent stylistic or idiolectal preferences are responsible for the choice of some of the minority options cannot be determined on the basis of our data.

64 Cf. Section 4.1.2.2.1.1.

3.2.6 Alloforms of (П13) *favur* 'in favour of'

For this П, three alloforms have to be taken account of, namely the shortest *favur* and two which are one (*a favur*) and three segments including *għajn* (*affavur* with the probably only orthographic variant *għaffavur*).[65] Figure 3.40 makes it clear that the longer alloforms are only marginally attested in the Korpus Malti 3.0 whereas the short alloform *favur* is represented by an abundance of tokens.

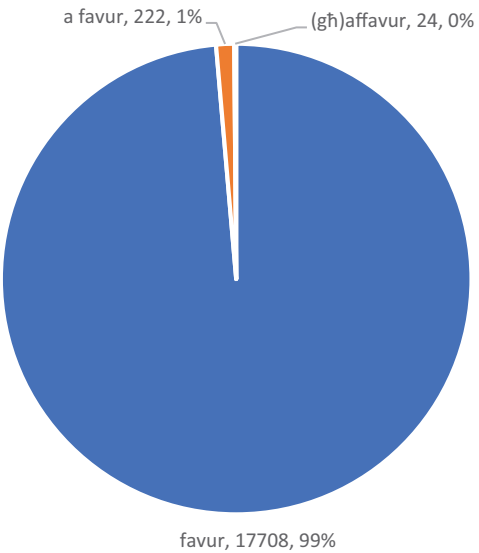
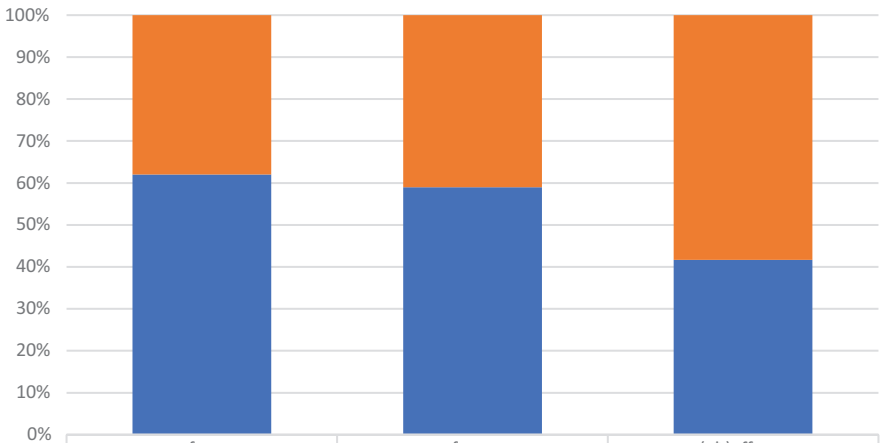


Figure 3.40: Token frequency of alloforms of (П13) *favur* 'in favour of'.

65 Saari (2009: 272) additionally speaks of a "modern variant" *għal-favur ta'* 'in favour of'. It cannot be ruled out that this is a reanalysis of *għaffavur* which in written form appears often as *għaf-favur* suggesting the presence of a cliticised combination of (П21) *għal* 'for' and the definiteness marker although /f/ is never the product of assimilation in Maltese. The search in the Korpus Malti 3.0 yielded a mixed bag of fifteen instances four of which are bona fide cases of nominative government of a nominal complement (such as [news147040] *Forsi vvintawha biex jiġbru aktar simpatija* ***[għal favur*** *id-divorzju]*$_{PP}$*?* 'Have they perhaps invented it to receive more sympathy [in favour of divorce]?'). There is also one instance of genitive government ([news117772] *jiżdied* ***[għal favur*** *ta' kull min għandu x' jaqsam mas- suq tax-xogħol]*$_{PP}$ '[. . .] it adds something [to the benefit of everyone who has to do with the work market].') and a doubtful case involving (П29) *lil* 'to' as linker ([news106593] *Dik ommissjoni inumana* ***[għal favur*** *lil tal- klikka]*$_{PP}$. 'This is an omission [**in favour of** those of the clique].'). On account of many uncertainties, we refrain from discussing these cases because this so-called modern variant does not seem to be fully established in the language.

Since none of the alloforms is attested sentence-initially in the 1st 100-test in the Korpus Malti 3.0, it suffices to look at the final segment of the preceding word to determine whether there are any favourable phonological conditions for the choice of the alloforms. The results of the test are exposed in Figure 3.41.

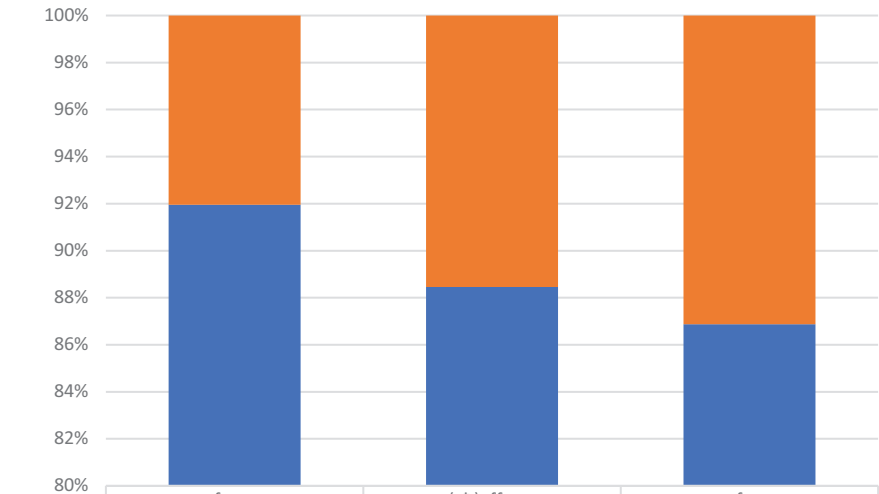


	a favur	favur	(għ)affavur
V]__	38	41	14
C]__	62	59	10

Figure 3.41: Distribution of alloforms of (Π13) *favur* 'in favour of' over phonological contexts.

With 62% and 59%, *a favur* and *favur*, respectively display a moderate preference for the context C]__. The leanings of *(għ)affavur* towards combinations with vowel-final words amount to 59.4%. However, in none of the cases, the relation between majority and minority are especially skewed. It is therefore recommendable not to postulate any phonologically motivated distribution of the above alloforms.

The situation is much the same if we take the (in)definiteness of the complement into account. As Figure 3.42 suggests the alloforms display similar predilections for definite complements. The range of variation is from the maximum of 91.9% with definite complements to 86.8% for the same complement type. The gap between these two values is not huge enough to declare (in)definiteness of complements a factor which determines which alloform is given preference over the others.



	favur	(għ)affavur	a favur
indefinite	7	3	13
definite	80	23	86

Figure 3.42: Alloforms of (П13) *favur* 'in favour of' and (in)definite complements.

The examples (3.81)–(3.84) additionally prove that the alloforms are indeed semantically equivalent. They may replace each other without affecting the meaning of the utterance. What is expressed by any of the alloforms is a BENEFACTIVE relation.

(3.81) [Korpus Malti 3.0; academic12]
Id- direttur il-ġdid beda b' enerġija kbira jaħdem
DEF-director DEF-new begin with energy:F big:F 3SG.M.IPFV:work
***[favur** l-emigranti u l-familji tagħhom]*$_{PP}$
[in_favour_of DEF-emigrant:PL and DEF-family:PL of:3PL]
'The new director began very energetically to work [**for the benefit of** the emigrants and their families]'

(3.82) [Korpus Malti 3.0; news172198]
*jintużaw il- fondi pubbliċi **[a favur** persuni bi*
3.IPFV:RFL:use:PL DEF-fund:PL public:PL **[in_favour_of** person:PL with
bżonn ta' appoġġ u ħarsien partikolari]$_{PP}$
need of support and protection particular:PL]
'[. . .] the public funds are used [**to the benfit of** persons in need of special support and protection]'

(3.83) [Korpus Malti 3.0; news153235]
bdew *jippjanaw* *strateġiji* *kif* *ixaqilbu*
begin:3PL.PFV 3.IPFV:plan:PL strategy:PL how 3.IPFV:turn:PL
l-miżien *elettorali* ***[affavur*** *sidhom]*$_{PP}$
DEF-balance electoral:PL **[in_favour_of** master:3PL]
'[. . .] they began to plan strategies how to tip the electoral balance **[in favour of** their master]'

(3.84) [Korpus Malti 3.0; law1337]
jiġu *kkonfiskati* ***[għaf-favur*** ***tal-Gvern]***$_{PP}$
3.IPFV:come:PL confiscate:PART:PL **[in_favour_of** **of**:DEF-government]
'[. . .] they are confiscated **[to the benefit of** the government]'

3.2.7 Free variation

The six Πs whose allomorphic patterns involving long and short forms have been reviewed above yield similar results. One of the alloforms predominates quantitatively so much so that the competitor(s) is/are severely marginalised. The alloform with the highest token frequency is most of the time the long(est) form. This fact is interesting in itself because it contradicts Zipf's Law which postulates an inverse relationship of segmental length and frequency.[66] Short forms and high frequency should thus go together well. The alloforms of (Π33) *matul* 'during', (Π34) *minbarra* 'except', (Π35) *minflok* 'instead of', and (Π39) *minħabba* 'on account of' do not confirm this correlation because they attest to long forms which are particularly frequent as opposed to short forms which are much less frequently attested. The distribution of the alloforms of (Π13) *favur* 'in favour of' is however in line with Zipf's Law. In the case of (Π2) *a skapitu* 'at the expense of', the privileged alloform is neither the shortest (which turns out to be only marginally attested) nor the longest. What one can say to accommodate this situation to the expectations according to Zipf's Law is that of the three alloforms attested with more than marginal frequency, *a skapitu* is definitely the shortest alloform.

Furthermore, in none of the cases of allomorphic competition is there any tangible proof of structural reasons for the choice of alloform. There is no denying that in some of the cases certain preferences are discernible. However, these preferences are never absolute, meaning, by and large, the domains of the alloforms overlap to a considerable extent so that each can be used in every context albeit

66 As discussed in Section 2.3.

with different frequency. Phonological factors seem to be relatively strong for the distribution of the alloforms of (Π39) *minħabba* 'on account of' whereas person inflection has different effects in the cases of (Π33) *matul* 'during', (Π35) *minflok* 'instead of', and (Π13) *favur* 'in favour of'. Especially in the case of (Π34) *minbarra* 'except', the text genre also seems to influence the choice of alloforms.

These interesting different tendencies on the micro-level notwithstanding, we hypothesise that the alternation between long and short alloforms of the above Πs can best be captured by way of referring to style. Grammatically, they are instances of free variation. This conclusion rests however on shaky ground because the parameters we have controlled and the quantitative method we have applied are certainly far too simplistic to call the case closed. We are convinced that a more finegrained and methodologically more sophisticated in-depth study of this type of allomorphy will reveal linguistically meaningful patterns which have escaped our notice.

3.3 From segmental reduction to external sandhi

In contrast to the opposition of short and long forms discussed above, the phenomena highlighted in this section do not reduce originally dimorphemic Πs to monomorphemic short forms. In point of fact, by no means all of the processes are connected to the loss of segmental material on the part of the Πs. In the interaction of certain Πs with the definite proclitic it is often the latter which suffers reduction. The target of the reductive process is not a morph but a phonological segment. Moreover, the Πs which are featured in this section are monosyllabic (= σ) and (synchronically) monomorphic (= μ). As will come to the fore in what follows, the loss of single segments more often than not is caused by the phonological context created by the words with which the Π interacts syntagmatically. We are confronted with external sandhi (Andersen 1986). No Italo-Romance Π is affected by external sandhi (= EXS). In what follows we use external sandhi as a terminological cover for the slightly heterogeneous class of phenomena addressed below. To sum up, the three following unilateral implicational patterns hold for all cases discussed in this section (cf. Figures 3.43–3.45).

EXS ⊃ σ

Figure 3.43: External sandhi implies monosyllabicity.

EXS ⊃ μ

Figure 3.44: External sandhi implies monomorphism.

EXS ⊃ Semitic

Figure 3.45: External sandhi implies Semitic origin.

In Section 3.3.1, (Π29) *lil* 'to' represents the only case of a Maltese Π which is subject to phonological reduction at the left margin. The vast majority of the Πs which are sensitive to external sandhi are affected by reduction at the right margin of their segmental chains. The first of these cases is *n*-deletion presented in Section 3.3.2. The phenomena investigated in Sections 3.3.1–3.3.2 are largely optional and thus only infrequently attested in the Korpus Malti 3.0. We assume that the segmental reduction of (Π29) *lil* 'to' and *n*-deletion occur more frequently in everyday oral conversation. The spoken register is underrepresented in our database.[67] The conclusions we draw must therefore be taken with a grain of salt. This is different for the topics of Section 3.3.3–3.3.4 because in these cases we address phenomena which for the most are mandatory. Section 3.3.3 is dedicated to the protocliticisation of Πs in syntagms from which the definite proclitic is absent. The last scenario, i.e. the fusion of Πs and the definite proclitic, is explored in Section 3.3.4.

3.3.1 Segmental reduction of (Π29) *lil* 'to'

Diachronically, (Π29) *lil* 'to' can be analysed as resulting from the univerbation of two morphemes (Saari 2003: 33).[68] Sutcliffe (1936: 171, original boldface) argues that this Π

> is itself composed of the fragmentary preposition **l** and the article **il**, and meant originally *to the*. The force of the article became obscured [. . .] and the word became what it still remains, a preposition meaning *to*.

While E. Serracino-Inglott (1978: 296) adheres to this hypothesis too, Cachia (1994: 131) takes issue with this interpretation. According to this author (Π29) *lil* 'to' goes back to the combination of two Arabic Πs *li* + *ila*. This possibility is also mentioned by Procházka (1993: 148). We are uncommitted as to the correct diachronic analysis. What counts for us in the present context is the fact that the erstwhile morphological compositionality of (Π29) *lil* 'to' is no longer transparent to the average native speaker of Maltese for whom the Π can only be monomorphemic. This synchronic opacity distinguishes (Π29) *lil* 'to' from the morphologically transparent cases discussed in the previous section.

67 As we know from Section 1.7.

68 For the (im)possible connection of (Π29) *lil* 'to' to the putative postposition *ilu* 'ago', we refer the reader back to Section 1.6.2.

The three alloforms of (П29) *lil* 'to' have been presented already above where their competition is illustrated with examples (1.138)–(1.140).[69] What especially distinguishes the short forms from the long form is the disability of the former to inflect. If (П29) *lil* 'to' is inflected for person, only the long alloform is admissible as host of the person suffixes. The paradigm of this П in Table 3.4 is only possible if the long alloform serves as П-stem. Thus, a pronominal complement in the 3rd person singular masculine is always represented as *lilu* and never as **'ilu* or **'lu*. Accordingly, it is entirely sufficient for the purpose of this section to look into the behaviour of the three alloforms outside the domain of pronominal complements. In Figure 3.46 we provide the overall token frequencies of the competing uninflected candidates computed in accordance to the practice applied to the cases discussed in Section 3.2.

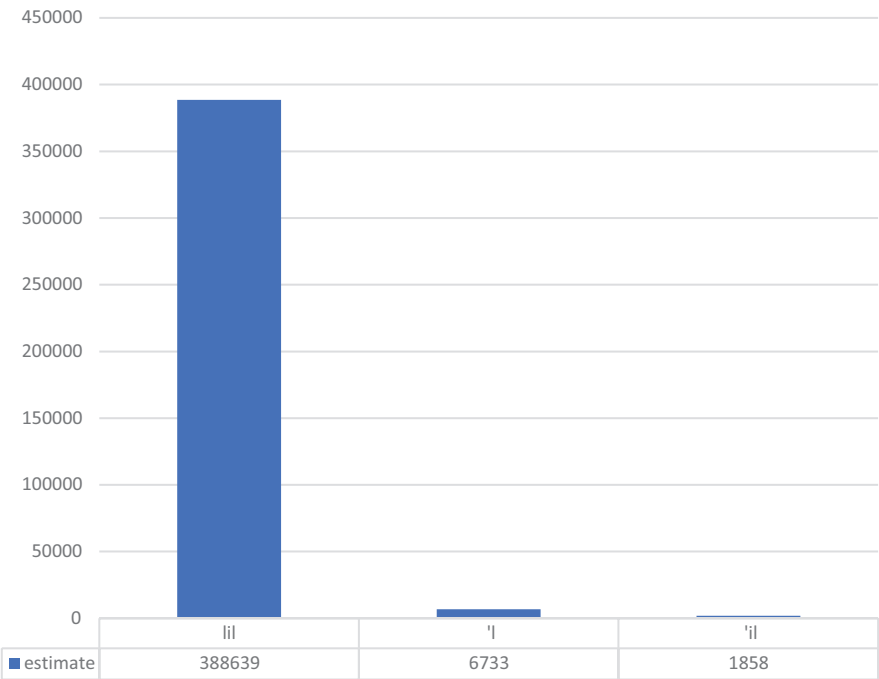


Figure 3.46: Token frequency of competing allomorphs of (П29) *lil* 'to'.

The estimates speak a very clear language. The long alloform is responsible for the bulk of attestations of (П29) *lil* 'to' in the Korpus Malti 3.0. The long form is 58 times as frequent as *'l*. In the case of *'il*, the discrepancy is even much bigger since *lil*

69 Cf. Section 1.6.5 (ii).

occurs 209 times more often than *'il*. The two short alloforms are clearly marginal in comparison to the dominant long alloform. As mentioned repeatedly already in connection with the competition of short and long forms in the previous section, the overwhelming quantitative predominance of *lil* and the general infrequency of *'l* and *'il* cast doubt on the sweeping applicability of Zipf's law. The validity of this oft-invoked law is disproved for the contrast between long and short forms. However, it seems to work much better if we only take account of the two short forms. The shortest alloform *'l* is 3.6 times more frequent than the bisegmental *'il*. As will become obvious in the course of the further discussion in this section, the two short forms relate to each other differently from their relation to the common long form *lil*. At this point a clarification is called for. The candidates *'il* and *'l* boast many more matches in the Korpus Malti 3.0. These additional matches, however, do not involve these alloforms as genuine Πs but result from their frequent use as prefixes of spatial adverbs. This use has been excluded from the grammar of Maltese Πs and thus can be discounted in the ensuing discussion.[70]

Figure 3.47 gives us a clearer idea about the compatibility of the alloforms with final vowels and consonants of words positioned to their immediate left.

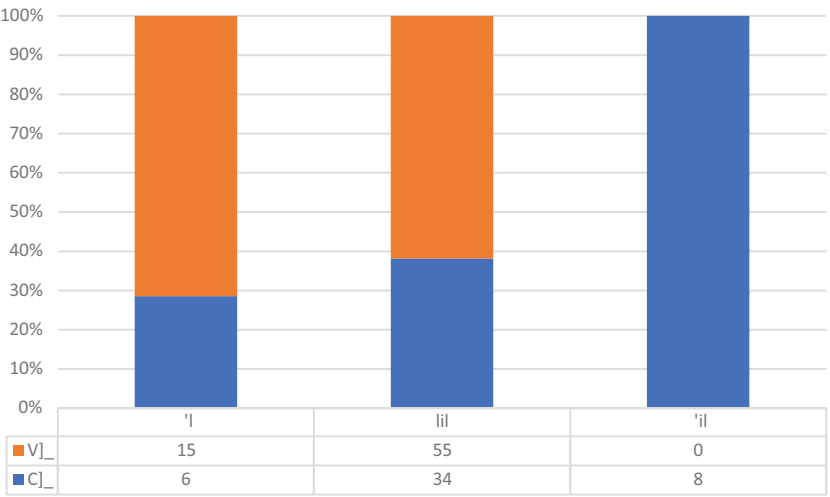


Figure 3.47: Distribution of alloforms of (Π29) *lil* 'to' over phonological contexts.

The three alloforms are characterised by different preferences. The shortest alloform *'l* clearly has a leaning towards combinations with preceding vowel-final

70 Cf. Section 1.6.5 (ii).

words which account for 71% of the token of *'l* in the 1st 100. From the point of view of sentence phonetics, the tendency of *'l* to follow a vowel is only logical in the sense that *'il* would have created a hiatus in this context. Only 29% of the *'l*-tokens combine with consonant-final words. For these cases, we would have expected to find that the complement of the Π starts with a vowel as in (3.85).

(3.85) [Korpus Malti 3.0; academic14]
warrab minn quddiemna għax i<m>morru nugżawk
move from before:1PL because 1.IPFV:go:PL 1.IPFV:accuse:PL:2SG
['l *ommok]*$_{PP}$ *u 'l missierek*
[**to** mother:2SG] and to father:2SG
'[. . .] leave us because we are going to accuse you [**before** your mother] and your father.'

Note that the second *'l* in (3.85) is triggered by the preceding monovocalic conjunction *u* 'and'. Surprisingly the shortest – monoconsonantal – alloform shows up also in a position where it is sandwiched between consonants as in (3.86)

(3.86) [Korpus Malti 3.0; academic138]
Wara l-mewt ta' martu Berlioz iżżewweġ ***['l***
after DEF-death of woman:POSS:3SG.M Berlioz marry [**to**
Marie Recio]$_{PP}$
Marie Recio]
'After the death of his wife, Berlioz married [Marie Recio].'

The same phenomenon occurs repeatedly in the same source but not elsewhere. It is likely that we are facing a typographical error. At the opposite end of the scale in Figure 3.47, we find the second short alloform *'il* for which no combination with vowel-final words is attested in the 1st 100. Thus, consonant-final words cover 100% of all instances of *'il*. This unequivocal situation makes sense phonologically because the aphaeresis of the initial lateral approximant avoids a clash of two or more consonants at the word boundaries. On account of this, *'il* would have been the better choice for the representation of (Π29) *lil* 'to' in (3.86). Between the two extremes in Figure 3.47, there is *lil* which also attests to a majority for V] __ (= 62%) and a minority for C] __ (= 38%). The preponderance of the vocalic contexts might result from our selfmade quantitative method of checking only the 1st 100 for the estimates. Interestingly, the long allomorph is the only possible choice for a *lil*-PP in sentence-initial position. There are four cases of this kind amongst the 1st 100 of *lil*. Neither *'il* nor *'l* is attested at the left margin of sentences in the 1st 100. In contrast to most of the pairs of short and long forms discussed in the foregoing

section, the alloforms of (Π29) *lil* 'to' display a distribution which seems to be sensitive to the phonological context. It is important to note that consonant-final words do not automatically require the alloform *'il* whereas the use of *'il* presupposes the co-presence of a consonant-final word to its left.

(In)definiteness of the complement too plays a more important role in the distribution of the alloforms of (Π29) *lil* 'to' than in the previously discussed cases. Figure 3.48 shows that indefinite complements are of minor importance for the choice of the short alloforms. With only 12% and 19%, *'il* and *'l* display relatively small shares for indefinite complements in comparison to the 43%-share indefinite complements claim in the case of the long alloform. It should not go unmentioned that ten of the seventeen definite complements of *'l* and three of the seven definite complements of *'il* are proper names as in (3.87)–(3.88).

(3.87) [Korpus Malti 3.0; academic138][71]
jidher *ċar* *li* *kien* *influwenza* *lil* *Liszt* *u* ***['l***
3SG.M.IPFV:appear clear that be influence to Liszt and **[to**
Wagner]$_{PP}$
Wagner]
'[. . .] it seems clear that he had influenced Liszt and [Wagner].'

(3.88) [Korpus Malti 3.0; academic135]
tħobb *il-letteratura* *klassika* *l-iżjed* ***['il*** *Shakespeare]*$_{PP}$
3SG.F.IPFV:love DEF-literature classic:F DEF-more **[to** Shakespeare]
'[. . .] she loves the classical literature, especially [Shakespeare].'

As the PP *lil Liszt* 'to Liszt' in example (3.87) proves, the long alloform also combines with proper names. However, in contrast to the two short alloforms proper names are not as prominent a class of complements for the long alloform.

Our findings corroborate Borg/Alexander-Azzopardi's (1997: 137) claim according to which the short alloforms of (Π29) *lil* 'to' are optional in the sense that they can always be replaced with the long form (Akkademja tal-Malti 1998: 54). On the other hand, certain conditions transpire from the search of the Korpus Malti 3.0 which seem to be particularly favourable for the selection of the one or the other of the short alloforms. Both *'il* and *'l* give preference to definite complements (especially proper names). Furthermore, *'il* exclusively occurs after consonant-final words whereas *'l* displays a clear preference for vowel-final words. Both short alloforms are banned from the sentence-initial position. They are also morphologically

71 In this example, only the *lil*-PP with the short allomorph appears in brackets.

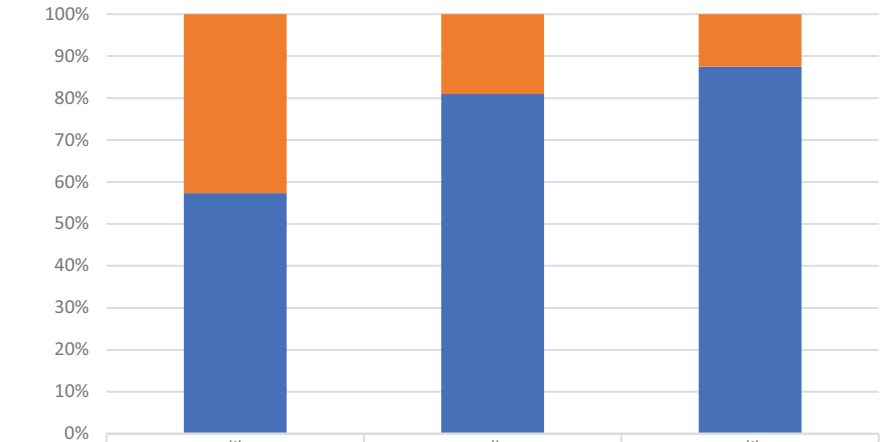


Figure 3.48: Alloforms of (П29) *lil* 'to' and (in)definiteness.

invariant. Their optional status thus does not preclude the existence of more or less pronounced preferences. Since *'il* cannot replace *'l* in vocalic contexts, the allomorphic patterns of (П29) *lil* 'to' cannot simply be regarded as straightforward instances of free variation. Short and long forms are in free variation with the latter constituting the default case. The two short forms cannot freely be exchanged the one for the other. In Figure 3.49, we recapitulate the preferences of the short forms discounting minor exceptions (Cassar 2000: 25).

(П29) *lil* 'to'$_{\text{SHORT FORM}}$ → { *'il* / C __ NP_{DEF} ; *'l* / V __ NP_{DEF} }

Figure 3.49: Preferred contexts of short forms of (П29) *lil* 'to'.

While *'il* and *'l* are in free variation with *lil*, the distribution of the two short forms over contexts is such that one might want to speak of phonologically conditioned allomorphy in the making.

3.3.2 *n*-deletion

Beginning with this section, we turn our attention exclusively to the right margin of the segmental chains of the Πs. This means that the final segments of words which precede the Πs syntagmatically are no longer of any relevance for the identification of allomorphic patterns. This criterion is therefore replaced with the properties of the initial segment(s) of the word which is placed to the right of the Π. The phenomenon addressed in this section is far too sparingly attested to show that this change of perspective may yield interesting results.

We have learned above about *n*-deletion in connection to the formation of Π-stems in general and the *j*-stems in particular.[72] Less than a handful of Πs display the necessary phonological shape for *n*-deletion to apply. Those two Πs which create their Π-stem by way of subtracting the final nasal of their citation form account for half of all potentially *n*-deleting Πs. The number of Πs which delete /n/ under inflection is small. This number increases only minimally when we count in cases of *n*-deletion with uninflected Πs. Table 3.21 tells us that the phenomenon is generally exceptional in the Korpus Malti 3.0. Only those cases of *n*-deletion are counted which involve the items under inspection in Π-function.

Table 3.21: Instances of *n*-deletion in the Korpus Malti 3.0.

	ħdej	***bej***	***lej***	**sum**
__ [V	1	1	3	5
__ [C	0	1	1	2
definite	1	2	3	6
indefinite	0	0	1	1
total	1	2	4	7

There are seven Πs whose segmental chain ends in a denti-alveolar nasal, namely (Π4) *bejn* 'between', (Π14) *fejn* 'near', (Π23) *ħdejn* 'beside', (Π28) *lejn* 'towards', (Π41) *minn* 'from', (Π43) *mnejn* 'from near', and (Π58) *viċin* 'near'. As transpires from Table 3.21, only three of those are subject to *n*-deletion. Besides the two representatives of C IIIa (Π23) *ħdejn* 'beside' and (Π28) *lejn* 'towards', there is also (Π4) *bejn* 'between' – a member of C Ia – which never undergoes *n*-deletion under inflection. Sentence (3.89) shows that the final /n/ is occasionally dropped also in the case of this Π when used with a lexical complement NP.

72 Cf. Sections 3.1.2.2 and 3.1.2.3.3.1.

(3.89) [Korpus Malti 3.0; european333]
jista' *jeffetwa* *l-kummerċ* ***[bej*** *il-Komunità*
3SG.M.IPFV:can 3SG.M.IPFV:affect DEF-trade **[between** DEF-E.U.
u *ir-Russja]*$_{PP}$
and DEF-Russia]
'[. . .] it can affect the trade [**between** the E.U. and Russia].'

More than half of the few *n*-deleted tokens go to the credit of (П28) *lejn* 'towards' whose use is illustrated in (3.90) followed suit by example (3.91) for *n*-deletion with (П23) *ħdejn* 'beside'.

(3.90) [Korpus Malti 3.0; news169997]
It-titjira *imbagħad* *tkompli* *fi* *triqitha* ***[lej***
DEF-flight then 3SG.F.IPFV:continue in street:POSS:3SG.F **[towards**
Dubai]$_{PP}$
Dubai]
'Then the flight continues on its course [**towards** Dubai].'

(3.91) [Korpus Malti 3.0; news119927]
jmur *jiltaqa'* *miegħu* ***[ħdej*** *l-għalqa*
3SG.M.IPFV:go 3SG.M.IPFV:meet with:3SG.M **[beside** DEF-field
fil-Qala]$_{PP}$
in:DEF-Qala]
'[. . .] he goes to meet him [**near** the field in Qala].'

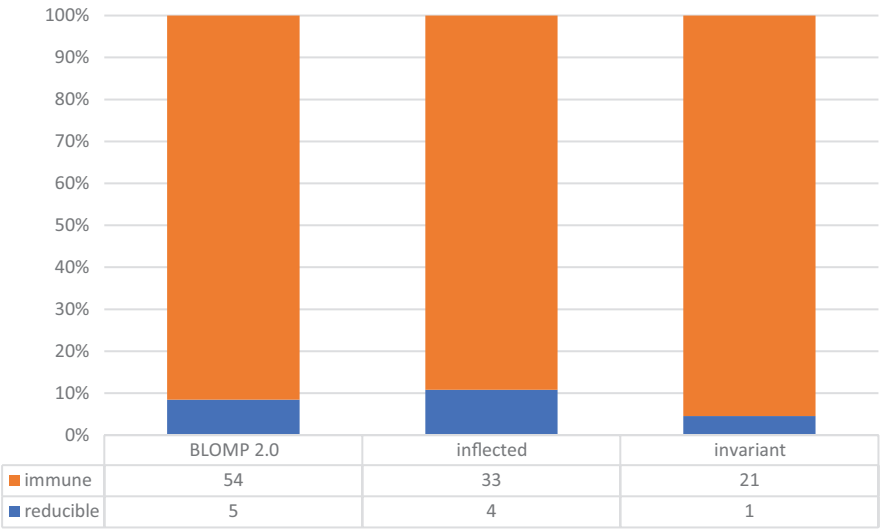
Five out of seven times, the final /n/ is dropped in the presence of a vowel-initial word on the right. Twice *n*-deletion is attested in the context __ [C. The matches are too few to allow for far-reaching generalisations. The phonological logic behind the dropping of /n/ in front of a vowel remains unclear to us. Similarly, the preponderance of *n*-deletion in combination with a definite complement is hard to explain and may be nothing but a negative frequency effect.

More generally, in all of the above contexts the *n*-deleted forms are outranked by the full citation forms of the Пs. The token frequency of the *n*-deleted allomorphs is absolutely negligible in comparison to the long forms. However, the small turnouts of reductive processes reported below should not be misunderstood as proof of the general scarcity of external sandhi affecting Maltese Пs.[73]

73 Cf. Sections 3.3.3.1–3.3.3.2.

3.3.3 Procliticisation

Under this heading we subsume all cases of segmental reduction of Πs in those contexts where the syntagmatic neighbour on the right side of the Π is not the definite proclitic.[74] Procliticisation of the kind discussed in this section affects only monosyllabic Πs with CV-structure. However, not all Maltese Πs which meet this criterion are subject to segmental reduction. Five of the six candidates procliticise, namely the inflected Πs (Π7) *bi* 'with' and (Π15) *fi* 'in' representing C II, the *għajn*-stems (Π30) *ma'* 'with' and (Π55) *ta'* 'of' from C IIIs, and the invariant Π (Π51) *sa* 'till'. In contrast, the invariant (Π19) *ġo* 'in' does not participate in procliticisation. Figure 3.50 supports the impression that segmental reduction is generally infrequent in terms of type frequency.



	BLOMP 2.0	inflected	invariant
immune	54	33	21
reducible	5	4	1

Figure 3.50: Type frequency of segmentally reducible Πs.

Only in the class of the inflected Πs does the number of types which are reducible exceed the 10%-mark albeit only minimally (n = 11%). As we will see shortly, the low type frequency is counterbalanced by relatively high token frequencies of individual short forms.

Under procliticisation the Πs drop their vowel to form a phonological word with the host to their right. Consequently, the Πs loose their syllabic status. The

74 The interaction of Π and definite proclitic is the topic of Section 3.3.4.

susceptibility of the Πs to procliticisation is not the same for the above group of five. They all undergo procliticisation if they precede a vowel-initial word. However, only the two Πs whose citation form ends in the high front vowel /i/ also procliticise if the word to their right starts with a single consonant. We postulate a hierarchy of vowels /i/ > /a/ > /o/ reflecting the decreasing number of contexts in which they are deleted. Figure 3.51 captures the conditions which trigger vowel deletion under procliticisation. To what extent these rules are optional will be discussed in due course below.

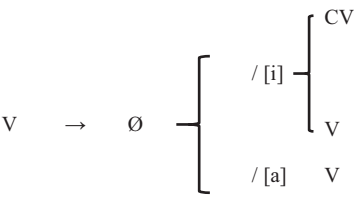


Figure 3.51: Rules for vowel deletion under procliticisation – version I.

On account of the different sizes of the domains in which (Π7) *bi* 'with' and (Π15) *fi* 'in', on the one hand, and (Π30) *ma'* 'with', (Π55) *ta'* 'of', and (Π51) *sa* 'till', on the other hand, are subject to procliticisation, the token frequencies of the segmentally reduced allomorphs of the Πs diverge from each other on a grand scale. This clearly comes to the fore in Figure 3.52 from which (Π30) *ma'* 'with' is absent. The absence of this Π is again explicable with reference to the simplistic quantitative methodology we apply when it comes to calculating the overall frequency in the Korpus Malti 3.0. The check of the 1st 100 matches of *m'* yields a turnout of zero instances for the reduced allomorph of the Π since they exclusively represent the homophonous shortened form *m'* of the negation *ma*. This does not mean however that (Π30) *ma'* 'with' never procliticises.

In the cases of (Π7) *bi* 'with' and (Π15) *fi* 'in', the token frequencies given in Figure 3.52 considerably exceed those estimated for the corresponding long forms as of Table 1.11. The reduced allomorph *f'* is five times as frequent as the long allomorph *fi*. Even more strikingly, the tokens of *b'* outnumber those of *bi* by a ratio of 6.7-to-1. Accordingly, the members of inflection class C II climb up several steps in the quantitative ranking order of the Maltese Πs. In contrast, *m'*, *s'*, and *t'* are attested by far more infrequently than the respective long forms *ma*, *sa*, and *ta*. The additional tokens of the procliticised allomorphs do not alter the rank position of these Πs.

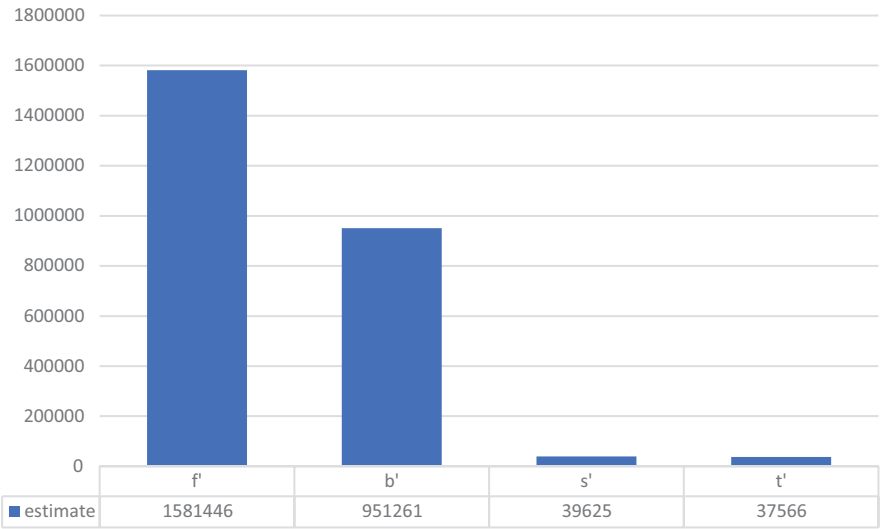


Figure 3.52: Token frequency of procliticised Πs in the Korpus Malti 3.0.

We illustrate the process of procliticisation for each of the Πs with examples mostly taken from the literary sources and only occasionally from the Korpus Malti 3.0. We begin with prevocalic procliticisation. Sentences (3.92)–(3.96) feature the reduced allomorphs of the five Πs in combination with different vowel-initial words.

(3.92) [Cauchi 1997: 38]
x-xwejjaħ *Gerfex* *tfaċċa* *fil-Każin* ***[b'*** *umbrella*
DEF-old:DIM Gerfex emerge in:DEF-band_club **[with** umbrella
sewda *tassew* *pulita]*$_{PP}$
black:F really neat:F]
'[. . .] the old man Gerfex appeared suddenly in the band club [**with** a really neat black umbrella].'

(3.93) [Cauchi 1997: 20]
seta' *jieħu* *l-għasfur* ***[f'*** *idu]*$_{PP}$
can 3SG.M.IPFV:take DEF-bird **[in** hand:3SG.M]
'[. . .] he could take the bird [**in** his hand].'

(3.94) [Cauchi 1997: 6]
Ommu *kienet* *mietet* *u* *għalhekk* *ġie*
mother:3SG.M be:3SG.F.PFV die:3SG.F.PFV and thus come
joqgħod ***[m'*** *oħtu* *armla]*$_{PP}$ *f'* *Ħal Busbies.*
3SG.M.IPFV:stay **[with** sister:3SG.M widow] in Ħal Busbies
'His mother had died and therefore he came to live **[with** his widowed sister] in Ħal Busbies.'

(3.95) [Korpus Malti 3.0; academic69]
kienet *mifruxa* *sew* *matul* *in-Nofs in-nhar*
be:3SG.F.PFV PART:spread:F precisely during DEF-South
tal-katina *tal-muntanji* *tal-Ħimalaja* *f'* *arja* *vasta*
of:DEF-chain of:DEF-mountain:PL of:DEF-Himalaya in area vast:F
minn *Uttar Pradesh* *fin-Nepal* *Sikkim* *Bengal* *u* *Butan*
from Uttar Pradesh in:DEF-Nepal Sikkim Bengal and Bhutan
[s' *Assam]*$_{PP}$
[till Assam]
'[. . .] it was quite common along the southern part of the Himalaya Mountain range in a vast area from Uttar Pradesh, Nepal, Sikkim, Bengal, and Bhutan **[as far as** Assam].'

(3.96) [Cauchi 1997: 47]
Niġi *nagħti* *daqqa* ***[t'*** *id]*$_{PP}$ *jien*
1SG.IPFV:come 1SG.IPFV:give stroke **[of** hand] 1SG
'I will come to lend you [a hand] [. . .].'

The vowel deletion is mandatory with those Πs which end in /i/. For those which have a final low vowel, the picture is not as clear. There are examples like (3.97)–(3.99) where the final vowel resists being deleted.

(3.97) [Bartolo/Vella 2009: 116]
kienet *għadha* *irrabjata* ***[ma'*** *oħtha]*$_{PP}$
be:3SG.F.PFV still:3SG.F anger:PART:F **[with** sister:3SG.F]
'[. . .] she still was angry **[with** her sister].'

(3.98) [Korpus Malti 3.0; academic2]
Meta jasal il-monsoon minn Mejju ***[sa*** *Awwissu]*$_{PP}$
when 3SG.M.IPFV:arrive def-monsoon from May [**till** August]
u minn Novembru sa Jannar id-dar kollha
and from November till January DEF-house all:3SG.F
tiddedika ħinha għall-kannela
3SG.F.IPFV:dedicate time:3SG.F for:DEF-cinnamon
'When the monsoon arrives – from May [**until** August] and from November until January – the entire house dedicates its time to the cinnamon.'

(3.99) [Korpus Malti 3.0; culture1084]
m' għandux l-użu ***[ta'*** *idu x-xellugija]*$_{PP}$
NEG have:3SG.M:NEG DEF-use [**of** hand:3SG.M DEF-left:F]
'[. . .] he could not make use [**of** his left hand].'

The realisation of the rules set by Akkademja tal-Malti (1998: 53–54) as to the procliticisation of Πs in front of vowel-initial words is by no means homogeneous across the texts of our literary corpus. In [Bartolo/Vella 2009] for instance, procliticisation of *a*-final Πs is mostly but not entirely avoided whereas *i*-final Πs regularly procliticise to words which fulfil the criteria laid down in Figure 3.51. A rare example of the employment of *t'* instead of *ta'* in this primary source is given in (3.100). There are two other cases, namely [Bartolo/Vella 2009: 379] ***t'ommi*** '**of** my mother' and [Bartolo/Vella 2009: 467] ***t'ommu*** '**of** his mother' with, on the same page, [Bartolo/Vella 2009: 379] ***ta' ommu*** '**of** his mother' showing that procliticisation is not obligatory.

(3.100) [Bartolo/Vella 2009: 248]
ma' għonqu kellu mdendel il-basket tad-drapp
with neck:3SG.M have.PFV:IO:3SG.M PART:suspend DEF-basket of:DEF-cloth
[t' *oħtu]*$_{PP}$
[**of** sister:3SG.M]
'[. . .] around his neck he had suspended the cloth basket [**of** his sister].'

In Table 3.22, we register all instances of person names (= first names) starting with a vowel as complement of the four of the five Πs under inspection. No example for the use of (Π51) *sa* 'till' with a following person name could be identified in the novel. Table 3.22 exclusively features PPs without further sentential context. Instances of blocking are presented in the upper part of the table. At the bottom, the four instances of procliticisation can be found. The cases are ordered according to the decreasing number of tokens.

Table 3.22: Blocked and permitted procliticisation with proper names in [Bartolo/Vella 2009].

page	example	translation
13, 33, 46, 49, 50, 53, 62, 80, 225, 232, 253, 259, 264, 339, 431, 478	*ta' Estella*	'Estella's'
97, 99 (3x), 102, 137, 338, 339, 436	*ta' Efrem*	'Efrem's'
28, 74, 240, 259, 283, 308, 411, 441	*ma' Estella*	'with Estella'
224, 229, 231 (2x), 377	*ta' Erkole*	'Erkole's'
16, 70, 210, 445	*ta' Antida*	'Antida's'
37, 131, 212, 234	*ma' Antida*	'with Antida'
99, 389, 429	*ma' Efrem*	'with Efrem'
30, 369	*ta' Anita*	'Anita's'
39, 44	*ta' Elena*	'Elena's'
29	*ta' Annie*	'Annie's'
459	*ma' Elaine*	'with Elaine'
471	*ma' Elena*	'with Elena'
155	*b'Efrem*	'with Efrem'
52	*b'Estella*	'with Estella'
211	*f'Antida*	'in Antida'
61	*f'Estella*	'in Estella'

The evidence is unequivocal. Πs with final /a/ never procliticise to vowel-initial person names whereas Πs with final /i/ always do. If we look beyond this particular primary source, the picture becomes less straightforward. An informal and unsystematic check of the Korpus Malti 3.0 yielded an admittedly small number of matches for the procliticisation of Πs which never procliticise with names in [Bartolo/Vella 2009]. However, we are convinced that a more systematic search of the electronic resource will yield a much more sizable harvest than the few cases listed in Table 3.23.

Table 3.23: Procliticised *m'* and *t'* with first names in the Korpus Malti 3.0.

source	example	translation
parl8675	*m'Angela Abela*	'with Angela Abela'
literature19	*m'Albert*	'with Albert'
literature11	*m'Ernest*	'with Ernest'
news218043	*t'Angela Bodin*	'of Angela Bodin'
literature19	*t'Albert*	'of Albert'
literature11	*t'Ernest*	'of Ernest'

The scarcity of the matches notwithstanding, it is evident that there are no insurmountable obstacles to the procliticisation of the two members of C IIIc. In contrast, no evidence of the short allomorph of (П51) *sa* 'till' being procliticised to person names could be identified in our informal search in the Korpus Malti 3.0. If we abstract away from human names by way of extending the search to the name of God *Alla*, the results confirm what we have seen above. Figure 3.53 reflects the usual partition of the five Пs: (П51) *sa* 'till' never combines with *Alla* whereas (a) the *i*-final Пs always procliticise and (b) the *a*-final Пs are divided between procliticisation and its blockage. What is especially interesting is the different preferences of (П30) *ma'* 'with' and (П55) *ta'* 'of'. Where the latter gives preference to the short form, (П30) *ma'* 'with' opts more frequently for the long form. These preferences do not translate into patterns of strong dominance because with shares of 36% for *m'* and 43% for *ta'*, the two minority solutions are by no means marginal phenomena.

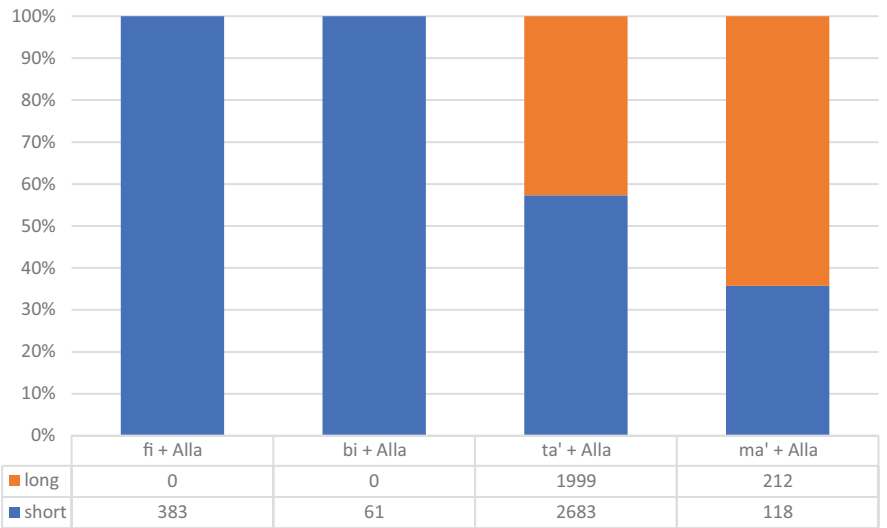
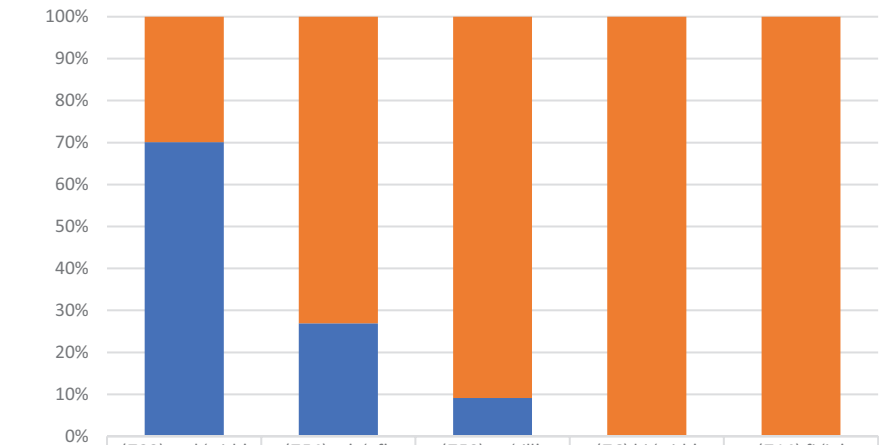


Figure 3.53: Procliticisation vs blockage with *Alla* 'God' in the Korpus Malti 3.0.

The above vacillation of the Пs from C IIIc is not restricted to the domain of combinations with proper names. We do not deny that it might turn out to be the case that blockage of procliticisation is especially strong in the realm of names. However, the competition between blockage and procliticisation pervades the entire inventory of nouns of Maltese.

Since the above primary source gives evidence of variation with kinship terms as to the possibility of *a*-final Пs dropping their vowel before a vowel-initial host, it makes sense to look at the patterns which emerge from the comparison of the com-

bination of the five Пs with selected vowel-initial complements. Figure 3.54 takes stock of the cooccurrences of the allomorphs *bi* and *b'* with *umbrella* 'umbrella', *fi* and *f'* with *idu* 'his hand', *ma'* and *m'* with *oħtu* 'his sister', *ta'* and *t'* with *id* 'hand', and *sa* and *s'* with *issa* 'now' in the Korpus Malti 3.0.



	(П29) ma' 'with'	(П54) ta' 'of'	(П50) sa 'till'	(П6) bi 'with'	(П14) fi 'in'
deleted V	23	515	39094	9	1297
long form	54	190	3939	0	0

Figure 3.54: Variation of long and short forms of (П7) *bi* 'with', (П15) *fi* 'in', (П30) *ma'* 'with', (П55) *ta'* 'of', and (П51) *sa* 'till' in the Korpus Malti 3.0.

The share of long forms with the *a*-final Пs ranges from 10% to 70%, i.e. for this group of Пs the rule in Figure 3.51 turns out to be only a tendency of certain Пs and not an exceptionless automatism. The results in Figure 3.54 need to be checked against other combinations of the same Пs with different complements to make sure that there is no skewing effect caused by especially high token frequencies of collocations such as *s'issa* 'until now'. For the kinship term *omm* 'mother' with a 3rd person masculine possessor (*ommu* 'his mother') the results are as follows: (П7) *bi* 'with' and (П15) *fi* 'in' are exclusively represented by their short allomorphs *b'* (14 times) and *f'* (7 times) whereas (П30) *ma'* 'with' and (П55) *ta'* 'of' give evidence of a majority of long forms, namely 37 times *ma'* vs a single match for *m'* and 59 times *ta'* vs three times *t'*. (П51) *sa* 'till' is not attested in combinations with this kinship term. Going by these ratios, we assume that procliticisation is not a must for (П30) *ma'* 'with', (П55) *ta'* 'of', and (П51) *sa* 'till' while it is definitely compulsory in the case of (П7) *bi* 'with' and (П15) *fi* 'in'.

Examples of preconsonantal procliticisation are given in (3.101)–(3.102) for (П7) *bi* 'with' and (П15) *fi* 'in'.

(3.101) [Cauchi 1997: 59]
Ma' *dan* *il-kliem* *ix-xwejjaħ* *fetaħ* *il-miżwet*
with DEM.M.PROX DEF-word.COLL DEF-old:DIM open DEF-shell
[b' *difrejh]*$_{PP}$
[**with** fingernail:PL:3SG.M]
'This said the old man opened the bean shell [**with** his fingernails] [. . .].'

(3.102) [Cauchi 1997. 26]
Lil *martu* *Lugrezja* *ma* *qallhiex* *x'*
to woman:POSS:3SG.M Lugrezja NEG say:IO:3SG.F:NEG what
kellu ***[f'*** *rasu]*$_{PP}$
have.PFV:IO:3SG.M [**in** head:3SG.M]
'He did not tell his wife Lugrezja what was [**on** his mind] [. . .].'

It makes no difference what vowel or what consonant occupies the initial slot of the host, procliticisation cannot be escaped. Similarly, the word-class to which the host belongs is irrelevant for the rule exposed in Figure 3.51. In the case of the representatives of C II this means that they procliticise also to hosts whose initial segment is identical with the consonant of the Π as shown in (3.103)–(3.104).

(3.103) [Cauchi 1997: 18]
Mar *għand* *Peppi* *tal-Ħaxix* ***[b'*** *borża*
go at_s.o.'s_place Peppi of:DEF-vegetable [**with** bag
tal-plastik *f'* *idu]*$_{PP}$
of:DEF-platsic in hand:3SG.M]
'He went to Peppi the greengrocer [**with** a plastic bag in his hand] [. . .].'

(3.104) [Camilleri 2013: 65]
qallu *iżjed* ***[f'*** *forma* *ta'* *kmand]*$_{PP}$ *milli* *b'*
say:IO:3SG.M more [**in** form of command] from:that with
kortezija
courtesy
'[. . .] he said to him more [**in** the form of a command] than with politeness.'

In this way, geminates arise in the initial position of the phonological word. Galea/Ussishkin (2018: 70) state that "[w]ord-initial geminates occur due to morphonological processes" which they assume to be disallowed phonologically. According to their analysis word-initial geminates are underlyingly ambisyllabic and thus require the presence of an epenthetic vowel /i/. The orthographic representation of the phenomenon in cases like (3.103)–(3.104) does not confirm this hypothesis

although the reduced allomorphs of the Πs are surrounded by consonants on both sides: *ʃ* + *b* + *b* in (3.103) and *d* + *f* + *f* in (3.104). Galea and Ussishkin's rule holds for word-internal morphonological rules. Its applicability to geminates resulting from external sandhi remains doubtful. We concede however that this rule was never intended to also cover word-external processes.

Independent of the solution to this perhaps only imagined problem, there is a more serious difficulty to confront. We have defined the abstract *għajn* as a consonantal phoneme of Maltese.[75] This status is challenged by the rule in Figure 3.51 because as a full-blown consonant *għajn* should block procliticisation of those Πs which end in the low vowel /ɐ/. This however is not the case as transpires from examples (3.105)–(3.109) which prove that all of the five Πs under inspection drop their final vowel before *għajn*.

(3.105) [Camilleri 2013: 200]
poġġiet *maġenbu* *u* *ħalliet* *idha*
sit:3SG.F.PFV close_to:3SG.M and let:3SG.F.PFV hand:3SG.F
tibda *vjaġġ* *ta'* *sejba* *minn* *irkopptu*
3SG.F.IPFV:start journey of treasure_trove from knee:POSS:3SG.M
'l fuq ***[b'*** *għajnejha]*$_{PP}$ *jħeġġu*
upwards **[with** eye:PL:3SG.F] 3.IPFV:shine:PL
'[. . .] she sat close to him and let her hand start a discovery trip from his knees upwards **[with** her eyes] shining [. . .].'

(3.106) [Cauchi 1997: 44]
qasqas *minnha* *tliet* *biċċiet* ***[f'*** *għamla* *ta'*
cut_with_scissors from:3SG.F three piece:PL **[in** shape of
tbajja *tal-linka]*$_{PP}$
stain.PL of:DEF-ink]
'[. . .] with the scissors he cut three pieces from it **[in** the shape of ink stains].'

Examples (3.105)–(3.106) do not pose any problems since (Π7) *bi* 'with' and (Π15) *fi* 'in' procliticise no matter whether the next word starts with a vowel or a single consonant. In contrast, (Π30) *ma'* 'with', (Π55) *ta'* 'of', and (Π51) *sa* 'till' are excluded from procliticisation in front of a consonant. Nevertheless, their short forms are attested too if the host displays an initial *għajn*.

75 Cf. Section 2.2.1.

(3.107) [Korpus Malti 3.0; literature21]
*[**M’** għonqu]*$_{PP}$ *kellu* *ġiżirana* *tal-fidda*
[**with** neck:3SG.M] have.PFV:IO:3SG.M necklace of:DEF-silver
‘[**Around** his neck] he wore a silver necklace [. . .].’

(3.108) [Camilleri 2013: 65]
Jekk *tgħaddihomli* *[**s’** għada]*$_{PP}$ *aħjar*
if 2SG.IPFV:pass:3PL:IO:1SG [**till** tomorrow] good.CMPR
‘It would be better if you pass them on to me [**until** tomorrow].’

(3.109) [Camilleri 2013: 253]
jneħħi *r-riħa* *[**t’** għaraq]*$_{PP}$
3SG.M.IPFV:take_off DEF-smell [**of** sweat]
‘[. . .] it takes off the smell [**of** sweat].’

However, there is variation in the behaviour of (П30) *ma’* ‘with’, (П55) *ta’* ‘of’, and (П51) *sa* ‘till’ before *għajn*-initial words as becomes clear from the comparison of examples (3.107)–(3.109) above with examples (3.110)–(3.112) below.

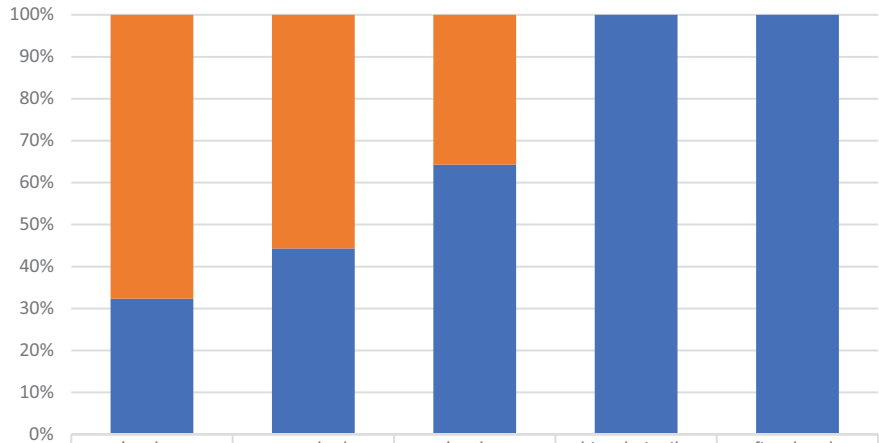
(3.110) [Korpus Malti 3.0; literature1]
Ġina *qamet* *u* *dawret* *idejha* ***[ma’***
Gina rise:3SG.F.PFV and surround:3SG.F.PFV hand:PL:3SG.F [**with**
għonqu]$_{PP}$
neck:3SG.M]
‘Gina rose and put her hands [**around** his neck] [. . .].’

(3.111) [Korpus Malti 3.0; literature29]
[Sa *għada]*$_{PP}$ *għad* *baqa’* *erbgħa u għoxrin* *siegħa*
[**till** tomorrow] still remain twenty_four hour
‘There are still twenty-for hous [**until** tomorrow] [. . .].’

(3.112) [Korpus Malti 3.0; news18317]
hemm *ukoll* *riħa* *qawwija* ***[ta’*** *għaraq]*$_{PP}$
there also smell strong:F [**of** sweat]
‘[. . .] there is also a strong smell [**of** sweat].’

The Пs under inspection combine with the same complements in the two ternary sets of examples. However, in (3.107)–(3.109) the initial *għajn* of *għonqu* ‘his neck’, *għada* ‘tomorrow’, and *għaraq* ‘sweat’ causes segmental reduction whereas the same words fail to do so in (3.110)–(3.112). This variation is relatively common for

(Π30) *ma'* 'with', (Π55) *ta'* 'of', and (Π51) *sa* 'till' but unattested for (Π7) *bi* 'with' and (Π15) *fi* 'in'. Consider the token frequencies given in Figure 3.55.



	ta' + għaraq	sa + għada	ma' + għonqu	bi + għajnejha	fi + għamla
long	23	259	81	0	0
short	11	206	146	214	538

Figure 3.55: Range of variation with *għajn*-initial complements.

We have searched the Korpus Malti 3.0 for evidence of variation involving the five Πs featured in this section as heads of PPs with the complements we know from examples (3.103)–(3.112). The members of C II never show up in their long form when followed by the selected *għajn*-initial complement. As to (Π30) *ma'* 'with', (Π55) *ta'* 'of', and (Π51) *sa* 'till', the turnouts speak a different language insofar as short and long allomorphs compete with each other to different degrees. (Π55) *ta'* 'of' and (Π51) *sa* 'till' prefer long forms over short forms with 68% to 32% and 56% to 44%, respectively. (Π30) *ma'* 'with' is represented by the short allomorph in 64% of the cases and by the long allomorph in 36% of the cases. We assume that the patterns of variation would not be much different had we chosen different *għajn*-initial complements. We conclude on the above basis that the phonological status of *għajn* is undecided. Sometimes it is treated like a consonantal segment triggering the long allomorphs of (Π30) *ma'* 'with', (Π55) *ta'* 'of', and (Π51) *sa* 'till' and at other times it does not have segmental status so that the above Πs are represented by their short allomorphs.

We cannot solve this problem satisfactorily for Maltese phonology. To circumvent the intricacies of the status of *għajn*, we take a shortcut by way of modifying the rule in Figure 3.51. Figure 3.56 features an additional branch for the subrule

defining the domain of procliticisation of *a*-final Πs. The brackets around the lower branch indicate that this part of the subrule is optional. We know from the above exemplification that *a*-final Πs may or may not undergo procliticisation. There is no denying that this solution is ad hoc and might not stand the test in a proper phonological study. Nevertheless, it suffices for the purpose of this section. The five Πs whose procliticisation has been reviewed in the foregoing paragraphs are going to occupy our minds again since they are also involved in processes of fusion with the definite proclitic.[76]

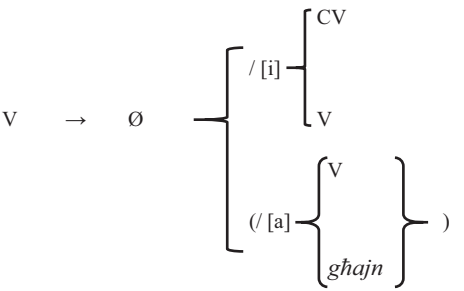


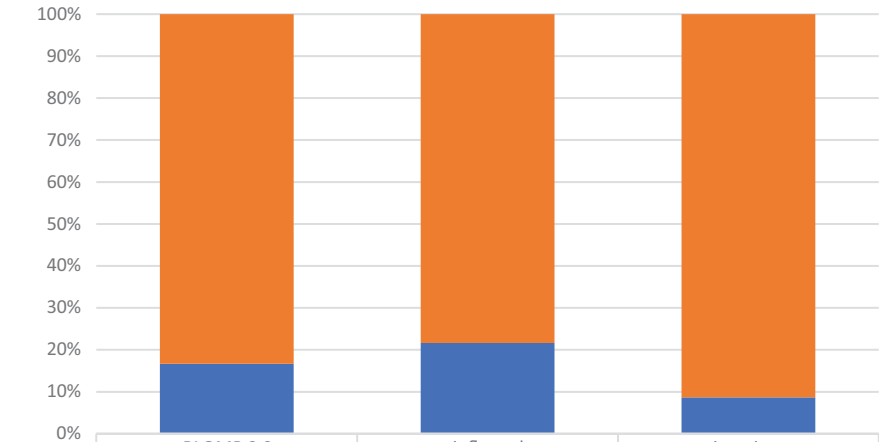
Figure 3.56: Rules for vowel deletion under procliticisation – version II.

3.3.4 Fusion (Π + definite proclitic)

The following ten Πs fuse with the definite proclitic: (Π5) *bħal* 'like', (Π7) *bi* 'with', (Π15) *fi* 'in', (Π19) *ġo* 'in', (Π21) *għal* 'for', (Π29) *lil* 'to', (Π30) *ma'* 'with', (Π41) *minn* 'from', (Π51) *sa* 'till', and (Π55) *ta'* 'of'. The two Πs highlighted in grey are invariant whereas four times as many Πs affected by fusion inflect for person. Figure 3.57 exposes the type frequency of Πs which are sensitive to combinations with the definite proclitic.

Compared to the picture painted in Figure 3.50 for the type frequency of segmentally reducible Πs the shares for Πs involved in fusion are visibly higher but that of the invariant Πs fails to come close to the 20%-mark. We are again facing a minority phenomenon in terms of the number of Π-types which participate in fusion. Like in the case of the segmentally reducible Πs the low type frequency goes along with an extremely high token frequency of certain Πs as will transpire from the subsequent paragraphs.

76 Cf. Section 3.3.4.



	BLOMP 2.0	inflected	invariant
immune	50	29	21
fusion	10	8	2

Figure 3.57: Type frequency of Πs undergoing fusion.

The five Πs which procliticise also participate in fusion. Moreover, all Maltese monosyllabic Πs with CV-structure fuse with the definite proclitic. The implicational patterns are again unilateral as shown in Figures 3.58–3.59.

procliticisation ⊃ fusion

Figure 3.58: Procliticisation implies fusion.

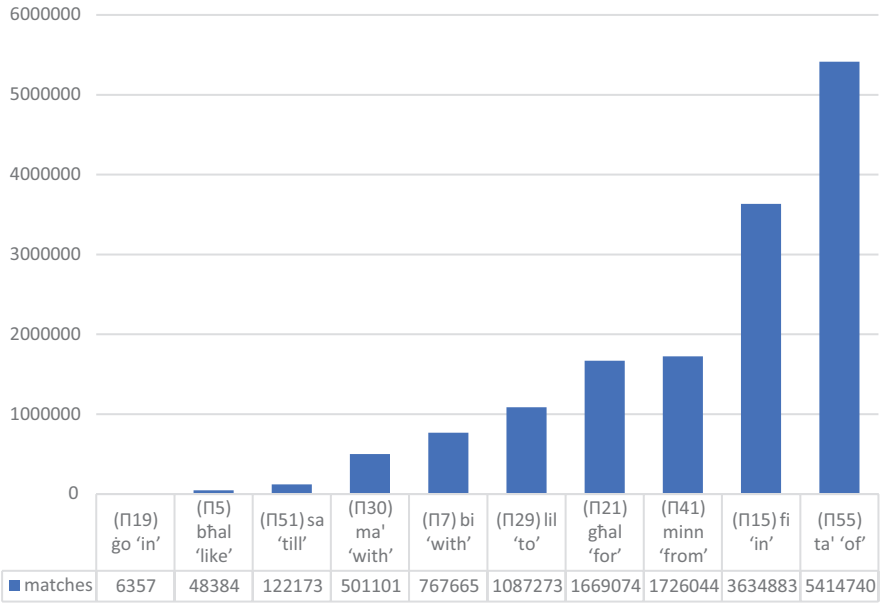
CV ⊃ fusion

Figure 3.59: CV-structure implies fusion.

Πs which have the shape of a closed syllable end in a sonorant which is preferably the lateral approximant /l/.

The fusion of Π and definite proclitic is not homogeneous in the sense that there exist several patterns. The Πs behave differently from each other. This differential behaviour extends to the definite proclitic so that it is not possible to generalise sweepingly over all Πs which are subject to fusion. As we will see below, the Πs can be divided into several groups according to their behaviour in interaction with the definite proclitic (henceforth: ART(icle)). Before we look at what it means to fuse in terms of the qualities involved, it makes sense to show how important fusion is for the token frequency of the Πs under scrutiny. The Korpus Malti 3.0 hosts almost 15,000,000 instances of Π-ART fusion. These matches outnumber the slightly less

than 13,000,000 instances of free forms of Πs found in the same source.[77] The ten Πs which participate in fusion are those privileged in the sense that their overall frequency increases considerably under fusion whereas the frequency count for the other 50 Maltese Πs remains unaltered. More importantly, the ten privileged Πs do not have even shares of the 15,000,000 matches as is shown in Figure 3.60.



	(Π19) ġo 'in'	(Π5) bħal 'like'	(Π51) sa 'till'	(Π30) ma' 'with'	(Π7) bi 'with'	(Π29) lil 'to'	(Π21) għal 'for'	(Π41) minn 'from'	(Π15) fi 'in'	(Π55) ta' 'of'
matches	6357	48384	122173	501101	767665	1087273	1669074	1726044	3634883	5414740

Figure 3.60: Token frequency of fused forms in the Korpus Malti 3.0.

More than a third of the tokens of fused forms are registered for (Π55) *ta'* 'of'. Fused forms of this Π are 852 times as frequent as those of (Π19) *ġo* 'in' at the bottom of the scale. (Π55) *ta'* 'of', (Π15) *fi* 'in', (Π41) *minn* 'from', and (Π21) *għal* 'for' exceed the average of 1.5 mio matches. It can be stated that Πs under the top four in Figure 3.60 are also among the top eleven in Table 1.11, i.e. their already established high token frequency is further increased under fusion. The three Πs at the bottom end of the scale in Figure 3.60 occupy also only lower ranks in Table 1.11.

We now know that the members of a selected set of Maltese Πs literally thrive in the context of fusion. Fusion applies if a Π procliticises to a host whose left-most morpheme is ART. The latter is a phonologically changeful proclitic with (V) C-structure whose obligatory but versatile segment is the lateral approximant /l/

77 As argued in Section 1.6.8.

(Aquilina 1976: 13). The optional vocalic segment is the high front vowel /i/ which is present only if ART is surrounded by consonants or occupies the sentence-initial position while procliticised to a consonant-initial host. The default form of ART is *(i)l-*. However, the lateral approximant regularly assimilates to a following coronal consonant (except /ʤ/) (Borg/Azzopardi-Alexander 1997: 136 and 328). Furthermore, if the host displays an initial consonant cluster starting with the voiceless fricatives /s/ (so-called impure /s/), /ʃ/ or a sonorant, an epenthetic /i/ separates the /l/ of ART from the first consonant of the host (Cassar 2000: 23). Interestingly, none of the descriptive-linguistic sources mentions the fact that the cluster-initial voiced alveolar fricative /z/ may also trigger /i/-epenthesis as in *żvilupp* 'development' → *l-iżvilupp* (Aquilina 1991: 1631). Cachia (1994: 61) mentions a number of (unpredictable) exceptions from these rules whereas Sutcliffe (1936: 18–19) assumes that the insertion of the epenthetic /i/ is generally possible if the host is equipped with an initial cluster.

Since the phonologically conditioned allomorphy of ART is crucial in the context of fusion, we recapitulate the above observations in the format of rules in Figures 3.61–3.63. In the formulas, the symbol L is employed as representative of the consonantal segment of ART which is subject to assimilation to coronal consonants.

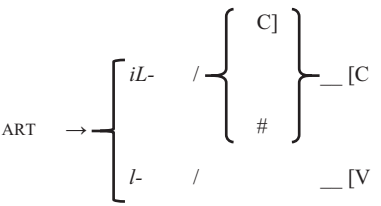


Figure 3.61: Default rule for the choice of allomorph of ART.

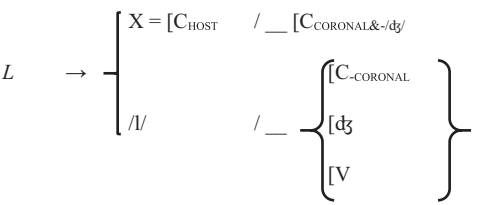


Figure 3.62: Assimilation rule for ART.

CC → *i*CC / ART + C1 SONORANT/S(H)IBILANT

Figure 3.63: /i/-epenthesis.

The open questions related to the morphonological behaviour of ART cannot be answered in this study. For the purpose at hand, it suffices to work on the basis of the rules presented in Figures 3.61–3.63. These rules guide us through Sections 3.3.4.1–3.3.4.3 which review the behaviour of the ten ΠIs in three different contexts which are defined by the initial segment of the host of the sequence of proclitics.

3.3.4.1 Π + ART + [V

The output of the above rules is relevant for the behaviour of the ten ΠIs under fusion. These ΠIs can be subdivided in three subclasses according to the quality of the final segments (Akkademja tal-Malti 1998: 53–54). The two ΠIs ending in /i/ behave differently from those whose segmental chain ends in /a/. Both *i*-final and *a*-final ΠIs differ from consonant-final ΠIs when interacting with ART. To outline the major differences between these subclasses, we start from the default situation as circumscribed in Figure 3.61. If the host of ART has an initial vowel, ART is represented by the lateral approximant alone. In this case, fusion is blocked for the ΠIs ending in a vowel other than /i/ as shown in Figure 3.64.

$V_{a/o}]$ → ~~FUSION~~ / __ ART-[V

Figure 3.64: Blocking of fusion.

Whether this is only a purely orthographic convention is difficult to determine in the absence of spoken language data. We therefore have to take the evidence for the blocking of fusion at face value. The Korpus Malti 3.0 features 980,203 cases of blocked fusion of which 887,219 (= 91%) involve (ΠI55) *ta'* 'of'. There are 73,623 matches of (ΠI30) *ma'* 'with' combining with ART without fusion, 18,011 matches of the same constellation for (ΠI51) *sa* 'till', and only 1,350 for (ΠI19) *ġo* 'in'. These turnouts for blocked fusion are accounted for in Table 1.11.

The above means that *i*-final and consonant-final ΠIs behave similarly to each other since they fuse with ART if the latter precedes a vowel. However, *i*-final and consonant-final ΠIs fuse with ART in different ways. In the former case, the rule for procliticisation exposed in Figure 3.56 applies, i.e. the lateral approximant of ART is treated like a single word-initial consonant which means that the vowel of the ΠI is dropped and no ancillary vowel is required for ART. The rule is specified in Figure 3.65.

$C_i]$ → C] / __ ART-[V

Figure 3.65: *i*-deletion with C II ΠIs under fusion.

The sequence of proclitics resulting from this rule is either *bl-* for (Π7) *bi* 'with' or *fl-* for (Π15) *fi* 'in' as illustrated in (3.113)–(3.114).

(3.113) [Żahra 2008: 33]
u *l-kompożizzjoni* *kienet* *issir* *kollha*
and DEF-composition be:3SG.F.PFV 3SG.F.IPFV:become all:F
*[**b**l-idejn]*$_{PP}$
[**with**:DEF-hand:PL]
'[. . .] the type-setting was executed entirely [**by** hand].'

(3.114) [Agius 2002: 30]
Apollo *kien* *mixħut* *[**f**l-art]*$_{PP}$ *ma'* *ġenbu*
Apollo be PART:throw [**in**:DEF-ground] with side:3SG.M
'Apollo was stretched out [**on** the floor] at his side.'

The nouns *idejn* 'hands' and *art* 'ground' host vowels in the initial slot of their segmental chains. This vowel triggers the allmoprh {/l/} of ART. This allomorph, in turn, selects the short i.e. monoconsonantal allomorph of the C II Πs. This holds also for cases of /i/-epenthesis according to Figure 3.63. Examples are the combination with the noun *skop* 'purpose' in (3.115) and the place name *Svezja* 'Sweden' in (3.116).

(3.115) [Korpus Malti 3.0; academic7]
jiffaċilita *l-investimenti* *tal-kapital* *[**b**l-iskop]*$_{PP}$
3SG.M.IPFV:facilitate DEF-investment:PL of:DEF-capital [**with**:DEF-purpose]
li *jtejjeb* *il-produzzjoni*
that 3SG.M.IPFV:CAUS:good DEF-production
'[. . .] it facilitates capital investment [**with** the aim] of ameliorating the production.'

(3.116) [Gauci 1994: 43]
Is-Sitt *Edizioni* *tat-Tazza* *tad-Dinja* *kien* *deċiż*
DEF-sixth edition of:DEF-cup of:DEF-world be decide.PART
li *tintlagħab* *[**f**l-Isvezja]*$_{PP}$
that 3SG.F.IPFV:RFL:play [**in**:DEF-Sweden]
'It was decided that the sixth edition of the World Cup should take place [**in** Sweden].'

No other Π's behaviour is covered by the above rule.

Turning our attention to the consonant-final Πs, we notice that all four of them fuse with ART such that a geminate lateral approximate arises. In the case of (Π5)

bħal ‘like’, (Π21) *għal* ‘for’, and (Π29) *lil* ‘to’, this is by no means remarkable since these Πs are already equipped with a final /l/. The resulting fused forms are *bħall-*, *għall-*, and *lill-*. In contrast, (Π41) *minn* ‘from’ whose final segment is the geminate denti-alveolar nasal /n/ gives evidence of total assimilation /n/ > /l/ in combination with ART yielding the fused form *mill-*.[78] Figure 3.66 shows that different inputs have identical outputs.

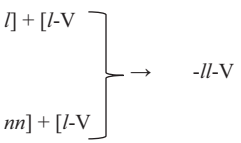


Figure 3.66: Gemination of /l/ under fusion.

We provide examples for the behaviour of each of the CVC-Πs before ART + [V in (3.117)–(3.120).

(3.117) [Camilleri 2013: 144]
Beża’ joħroġ ta’ bigotta jew ta’ razzista
fear 3SG.M.IPFV:come_out of hypocrite or of racist
***[bħal**<u>l-oħrajn]</u>*$_{PP}$
[**like**:<u>DEF-other.PL</u>]
‘He was afraid to prove to be a hypocrite or a racist [**like** <u>the others</u>].’

(3.118) [Bartolo/Vella 2009: 21–22]
Iżda min jidħol f’ din il-kamra-ġungla
but who 3SG.M.IPFV:enter in DEM:F:PROX DEF-room-jungle
*[**għal**<u>l-ewwel</u> <u>darba]</u>*$_{PP}$ *kien ikun xi ftit*
[**for**:<u>DEF-first</u> <u>time</u>] be 3SG.M.IPFV:be.FUT what a_little
maħsud
PART:surprise
‘However, whoever enters this jungle kind of room [**for** <u>the first time</u>] would be a bit surprised [. . .].’

78 The assimilation of the final segment of (Π41) *minn* ‘from’ will be discussed further in Section 3.3.4.3.

(3.119) [Cauchi 1997: 30]
beda *jgħid* *[**lil**l-irġiel* *l-oħra]*$_{PP}$
begin 3SG.M.IPFV:say [**to**:DEF-man.PL DEF-other.PL]
'[. . .] he started to say [**to** the other men].'

(3.120) [Abela 2016: 94]
Xogħli *li* *nara* *li* *jaslu* *qawwijin* *u*
work:1SG that 1SG.IPFV:see that 3.IPFV:arrive:PL strong:PL and
sħaħ *[**mil**l-Ingilterra]*$_{PP}$ *sal-Awstralja.*
whole.PL [**from**:DEF-England] till:DEF-Australia
'It is my job to see that they arrive safe and dry [**from** England] in Australia.'

3.3.4.2 Π + ART + [C$_{-CORONAL}$

The rule given in Figure 3.66 is specified for hosts with an initial vowel. In point of fact, gemination occurs wherever a CVC-Π encounters the *l*-allomorph of ART. This is also possible with consonant-initial hosts which, according to Figure 3.61, require the allomorph *il-* of ART. However, under fusion, this prosthetic vowel does not surface. In the absence of /i/ the final consonant of the Π and the lateral approximant of ART become direct neighbours. In this context, gemination applies and, in the case of (Π41) *minn* 'from', the final nasal assimilates to the lateral. Superficially, Figures 3.66–3.67 resemble each other closely (with X = either V or C).

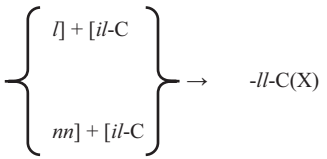


Figure 3.67: Gemination of /l/ and blockage of *i*-prosthesis under fusion.

However, the rule in Figure 3.67 is not as simple as that in Figure 3.66 because the former involves the additional requirement of deleting or blocking the prosthetic /i/. Once more we cannot properly judge whether we are confronted with phonologically irrelevant orthographic conventions. The realisation of the rule presented in Figure 3.67 is illustrated in (3.121)–(3.124).

(3.121) [Bartolo/Vella 2009: 181]
Kollox kien magħmul mill-istess kulur skur
everything be PART:make from:DEF-same colour dark
***[bħal**l-blat]*$_{PP}$
[**like**:DEF-rock]
'Everything was made of the same dark colour [**as** the rock].'

(3.122) [Gauci 1994: 63]
*diġà kienu bbukkjaw l-akkomodazzjoni **[għal**l-kwarti tal-finali]*$_{PP}$
already be:3PL.PFV book:3PL.PFV DEF-accomodation [**for**:DEF-quarter of:DEF-final:PL]
'[. . .] they had already booked the accommodation [**for** the quarter finals].'

(3.123) [Korpus Malti 3.0; academic10]
*tiġi proposta liġi popolari **[lil**l-gvern nazzjonali]*$_{PP}$
3SG.F.IPFV:come propose:PART:F law popular [**to**:DEF-government national]
'[. . .] a popular law is proposed [**to** the national government].'

(3.124) [Cauchi 1997: 28]
*ħarġet flixkun żgħir **[mil**l-basket]*$_{PP}$
come_out:3SG.F.PFV bottle small [**from**:DEF-basket]
'[. . .] she pulled a small bottle [**from** the basket].'

In Figure 3.67 it is shown that the ancillary /i/ of ART does not surface under fusion with consonant-final Πs. In combinations of (Π7) *bi* 'with' and (Π15) *fi* 'in' with ART two identical vowels meet at the morpheme boundary one of which is suppressed. /i/ + /i/ does not result in a long vowel. It is not absolutely clear which of the two high front vowels appears in the surface form. We assume that we are dealing with the ancillary /i/ of ART because this vowel is automatically required if ART attaches to a consonant-initial host. Only in a second step does the Π enter the scene, i.e. chronologically after the ancillary vowel. According to this logic, the members of C II drop their vowel in front of the vowel of ART. This in turn means that in this context, the short allomorphs *b'* and *f'* are used. This situation is captured schematically in Figure 3.68.

C*i*] → C] / __ ART-C(X)

Figure 3.68: Loss of /i/ before ancillary /i/.

Examples (3.125)–(3.126) present two cases in which the rule exposed in Figure 3.68 is realised.

(3.125) [Camilleri 2013: 90]
Biswit l-istazzjon sabu ħanut ibigħ umbrelel
facing DEF-station find:3PL shop 3SG.M.IPFV:sell umbrella.PL
*[**b**il-gzuz]*$_{PP}$
[**with**:DEF-stack.PL]
'Opposite the station they found a store which sold umbrellas [**by** the score].'

(3.126) [Bartolo/Vella 2009: 105]
*[**f**il-fatt]*$_{PP}$ *ħija Tommy dejjem jgħid li*
[**in**:DEF-fact] brother:1SG Tommy always 3SG.M.IPFV:say that
Melchior huwa l-aktar tifel bravu tal-iskola
Melchior 3SG.M DEF-more boy capable of:DEF-school
'[. . .] [**in** fact] my brother Tommy always says that Melchior is the cleverest boy in the school.'

In contrast to the cases featured in (3.125)–(3.126), the CV-Πs ending in either /a/ or /o/ keep their original vowel under fusion so that there is no slot which could be filled by the ancillary /i/ of ART. The formula for the corresponding sandhi process is disclosed in Figure 3.69.

il- → *l-* / V$_{a/o}$] __ C(X)

Figure 3.69: Blockage of ancillary /i/ under fusion.

We provide examples of this process in (3.127)–(3.130).

(3.127) [Abela 2016: 86]
*Il-vapur kien sorġut [**ma**l-moll]*$_{PP}$ *bħal bestja*
DEF-ship be lie_at_anchor:PART [**with**:DEF-jetty] like beast
ġganteska rieqda
gigantic:F sleep.PART:F
'The ship lay at anchor [**at** the mole] like a gigantic sleeping beast.'

(3.128) [Camilleri 2013: 17]
*U minn [**ġo**l-high chair]$_{PP}$ Eleanor [. . .] innutat*
and from [**in**:DEF-high chair] Eleanor note:3SG.F.PFV
il-bidla f' wiċċ ommha
DEF-change in face mother:3SG.F
'And from [the high chair] Eleanor [. . .] took notice of the change in her mother's face.'

(3.129) [Bartolo/Vella 2009: 18]
imma ħi dak diġà sar idum
but brother DEM:M:DIST already become 3SG.M.IPFV:remain
*barra [**sa**l-ħdax ta' billejl]$_{PP}$*
outside [**till**:DEF-eleven of night]
'[. . .] however, the brother of that one was already allowed to stay out [**until** eleven at night].'

(3.130) [Cauchi 1997: 27]
*ħa miegħu xi ħaġa [**ta**l-flus]$_{PP}$*
take with:3SG.M what thing [**of**:DEF-money]
'[. . .] he took some [**of** the money] with him [. . .].'

The differential morphonological behaviour of the final vowels of CV-IIs is in line with the pattern we have observed already in connection with procliticisation.[79] /i/ is prone to being deleted whereas /a/ and /o/ are much more resistant to reductive processes.

There is another problem we already mentioned in the previous sections, namely the role of *għajn*. With regards to the interpretation of this abstract phoneme either as an equivalent of a consonantal segment or as a phonological non-entity, there is again variation. Akkademja tal- Malti (1998: 53–54) twice uses the wording "jekk trid"[80] in connection to the supposedly silent graphemes <għ> and <h>. In this way, the authors of the booklet treating of the orthographic rules of Maltese leave it to the individual writers to decide whether they classify *għajn* as consonant or not. This flexibility explains why there is heterogeneity in the first place because the authors of the texts of our database are divided – and it is by no means exceptional that one and the same writer alternates between the two available options. The expected behaviour of (Π7) *bi* 'with' and (Π15) *fi* 'in' in (3.131)–(3.132) where *għajn*

79 Cf. Section 3.3.3.
80 Our translation: "if you want".

is treated like a consonant compete with cases where the *għajn*-initial host is taken to start with a vowel as shown in (3.133)–(3.134).

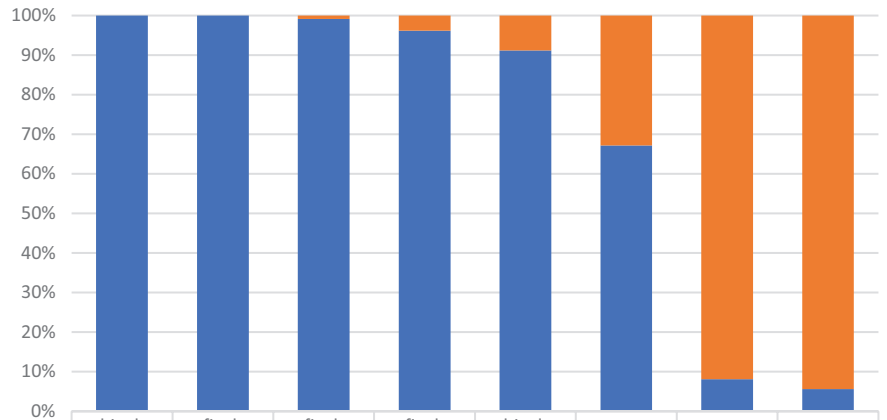
(3.131) [Bartolo/Vella 2009: 68]
*kien maħnuq u mejjet [**b**il-għatx]$_{PP}$*
be PART:make_hoarse and dead [**with**:DEF-thirst]
'[. . .] he was hoarse and dying [**of** thirst].'

(3.132) [Bartolo/Vella 2009: 159]
*bdew iduru [**f**il-għoli]$_{PP}$*
begin:3PL.PFV 3.IPFV:turn:PL [**in**:DEF-high]
'[. . .] they began to circle [**in** the sky].'

(3.133) [Bartolo/Vella 2009: 342]
*[**b**l-għajnuna ta' Tommy u sħabu]$_{PP}$ dewwiet*
[**with**:DEF-help of Tommy and companion.PL] heal:3SG.F.PFV
il-feriti kollha ta' Steve
DEF-wound:PL all of Steve
'[. . .] [**with** the help of Tommy and his companions] she healed all Steve's wounds.'

(3.134) [Bartolo/Vella 2009: 476]
*Il-gwida żamm l-umbrella ħamra [**f**l-għoli]$_{PP}$ fuq rasu*
DEF-guide hold DEF-umbrella red:F [**in**:DEF-high] on head:3SG.M
'The guide held the red umbrella [high] above his head [. . .].'

It is striking that this pattern of variation reflects the variable practice of the authors of the same primary source. Figure 3.70 suggests that no overall statement can be made as to the general preferences in the choice of allomorphs of (П7) *bi* 'with' and (П15) *fi* 'in'. We have searched the Korpus Malti 3.0 for combinations of *bi/b'* with *għajjat* 'shouting', *għajnuna* 'help', *għaqal* 'prudence', *għatx* 'thirst' and *fi/f'* with *għajjat* 'shouting', *għajnejn* 'eyes', *għerien* 'caves', *għoli* 'high'.



	bi + l-għajjat	fi + l-għajjat	fi + l-għajnejn	fi + l-għerien	bi + l-għajnuna	fi + l-għoli	bi + għaqal	bi + l-għatx
long	0	0	4	3	489	523	2619	285
short	107	11	477	76	5044	1072	232	17

Figure 3.70: Variation of allomorphs of C II-Πs in combination with *għajn*-initial nouns.

For several combinations, there is a clear preference for the short alloform – the long one being excluded completely in the two cases on the left of the scale. However, at the opposite end of the scale, we find two combinations which involve majorities of 90% and more for the long allomorph. This problem needs further study which is beyond the scope of our present project.

Given that the status of *għajn* is controversial among native speakers (or: writers), we would expect to find evidence for it being treated as phonologically non-existent such that the host is interpreted as vowel-initial in the case of CV-Πs which end in a vowel other than /i/. However, this expectation is not corroborated empirically. In (3.135)–(3.138), the four CV-Πs which end in a vowel other than /i/ fuse with ART so that the latter has no need for the ancillary vowel. This means that the rule exposed in Figure 3.69 applies also in these cases.

(3.135) [Bartolo/Vella 2009: 212]

[Mal-għajbien	*tal-missier]*$_{PP}$	*kulħadd*	*kien*	*qisu*	*sab*
[**with**:DEF-disappearance	of:DEF-father]	everybody	be	as_if:3SG.M	find

il-ħin	*tiegħu*	*differenti*	*minn*	*tal-oħrajn*	*biex*
DEF-time	of:3SG.M	different	from	of:DEF-other:PL	to

jinżel	*jiekol*
3SG.M.IPFV:descend	3SG.M.IPFV:eat

'[**With** the father gone] everybody seemed to have found their own time different from that of the others to come down to eat.'

(3.136) [Korpus Malti 3.0; culture239]
ir-raħal *se* *jiddawwal* *permezz* *tax-xemgħat*
DEF-village FUT 3SG.M.IPFV:CAUS:light by_means_of of:DEF-candle:PL
li *jirrappreżenta* *d-dawl* *li* *ħareġ* *minn*
that 3SG.M.IPFV:represent DEF-light that come_out from
[ġo<u>*l-għar*</u> <u>*ta’*</u> <u>*Betlehem]*</u>$_{PP}$
[**in**:<u>DEF-cave</u> <u>of</u> <u>Bethlehem</u>]
‘[. . .] the village will be illuminated by candles which represent the light which came out of [<u>the cave of Bethlehem</u>].’

(3.137) [Korpus Malti 3.0; culture205]
Il-Ġimgħa *filgħaxija* *l-fiera* *tiftaħ* *sa* *nofsillejl*
DEF-Friday evening DEF-fair 3SG.F.IPFV:open till midnight
is-Sibt *[sa*<u>*l-għaxra*</u> <u>*ta’*</u> <u>*filgħaxija]*</u>$_{PP}$ *filwaqt* *li*
DEF-Saturday [**till**:<u>DEF-ten</u> <u>of</u> <u>evening</u>] while that
l-Ħadd *il-fiera* *se* *tkun* *miftuħa* *matul*
DEF-Sunday DEF-fair FUT 3SG.F.IPFV:be.FUT PART:open:F during
il-jum *kollu*
DEF-day all:3SG.M
‘Friday evening the fair will be open until midnight, on Saturday [**until** <u>ten in the evening</u>] whereas on Sunday, the fair will be open during the whole day.’

(3.138) [Bartolo/Vella 2009: 18]
l-istorja *[ta*<u>*l-għajbien*</u> <u>*tas-subien*</u> <u>*mid-dehra]*</u>$_{PP}$
DEF-story [**of**:<u>DEF-disappearance</u> <u>of:DEF-boy.PL</u> <u>from:DEF-sight</u>]
kienet *taf ħa* *bl-amment*
be:3SG.F.PFV 3SG.F.IPFV:know:3SG.F with:DEF-memory
‘[. . .] she knew by heart the story [**of** <u>the disappearance out of sight of the boys</u>].’

Examples (3.139)–(3.142) demonstrate that consonant-final IIs behave according to the prerequisites of the rule given in Figure 3.67 when combining with ART and a host which starts with *għajn*.

(3.139) [Korpus Malti 3.0; academic176]
prodotti li ġejjin mill-annimali bħall-ġobon
product:PL that come.PART:PL from:DEF-animal:PL like:DEF-cheese
u l-mudullun jew sustanzi ħelwin ***[bħall****-għasel]*$_{PP}$
and DEF-marrow or substance:PL sweet:PL [**like**:DEF-honey]
'[. . .] products which stem from animals like cheese and marrow or sweets substances [**like** honey] [. . .].'

(3.140) [Bartolo/Vella 2009: 181]
Liċ-ċkejken maskot tagħna għad għandna bżonnu
to:DEF-little mascot of:1PL still have.IPFV:1PL need:3SG.M
[għall*-għeluq tat-turnament]*$_{PP}$
[**for**:DEF-conclusion of:DEF-tournament]
'We still need our little mascot [**for** the closure of the tournament].'

(3.141) [Korpus Malti 3.0; academic4]
taw tagħrif importanti kemm lill-istudenti
give:3PL.PFV information important how_much to:DEF-student:PL
kif ukoll ***[lill****-għalliema]*$_{PP}$
how also [**to**:DEF-teacher:PL]
'[. . .] they gave information which was important not only for the students but also [**for** the teachers].'

(3.142) [Camilleri 2013: 158]
lemaħ lil Eleanor iċċapċap fuq spallejn missierha
perceive to Eleanor 3SG.F.IPFV:slap on shoulder:PL father:3SG.F
[mill*-għoli ta' karru trijonfali]*$_{PP}$
[**from**:DEF-high of wagon triumphal]
'[. . .] he caught sight of Eleanor slapping her father's shoulders [**from** a wagon of the triumphal procession].'

To sum up the above observations, we state that *i*-final, *a/o*-final, and consonant-final IIs display different behavioural properties when it comes to fusing with ART in front of a host whose initial segment is a non-coronal consonant. The differences are also visible in the case of *għajn* which is treated as consonantal segment in combinations with *a/o*-final and consonant-final IIs but has uncertain status in combinations with the two members of C II. Further differences come to the fore in connection to the fate of the ancillary vowel of ART. In the case of the *i*-final IIs, the ancillary vowel is present and triggers the use of the short

allomorphs of the Πs. From all other combinations the prosthetic /i/ is excluded. The long allomorphs/citation forms of (Π5) *bħal* 'like', (Π19) *ġo* 'in', (Π21) *għal* 'for', (Π29) *lil* 'to', (Π30) *ma'* 'with', (Π41) *minn* 'from', and (Π51) *sa* 'till' are used in these contexts. In the subsequent section, the feature [+CORONAL] will diversify the picture further.

3.3.4.3 Π + ART + [C$_{+CORONAL}$

The sandhi processes to be discussed in this section are relatively unspectacular if we take account only of the vowel final Πs. Figure 3.62 has familiarised us with the assimilation that affects the lateral approximant of ART if it is in contact with an initial coronal of the host. The assimilation is full in the sense that the consonant of ART copies the entire set of phonological properties of the segment to its right. This means that, discounting the presence/absence of the ancillary /i/, ART can come in ten different realisation forms as shown in Figure 3.71.

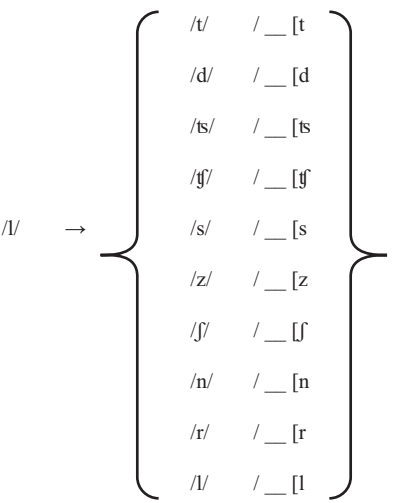


Figure 3.71: Realisation forms of ART.

In the case of the vowel-final Πs, the assimilation to which the lateral approxminant is subject does not affect the rules exposed in Figures 3.68–3.69. There is thus no need to fully document the interaction of the assimilated ART with either (Π7) *bi* 'with' and (Π15) *fi* 'in' or (Π19) *ġo* 'in', (Π30) *ma'* 'with', (Π51) *sa* 'till', and (Π55) *ta'* 'of'. For the present purpose it is sufficient to provide one example for each of these six Πs in combination with an assimilated form of ART in (3.143)–(3.148).

(3.143) [Cauchi 1997: 8]
sab ruħu bilqiegħda fil-kannestru
find soul:3SG.M sitting in:DEF-wicker_basket
*[**b**it-tadam imgħaffeġ taħtu]*$_{PP}$
[**with**:DEF-tomato.COLL PART:crush under:3SG.M]
'[. . .] he found himself sitting in the wicker basket [**with** the tomatoes crushed under him].'

(3.144) [Gauci 1994: 64]
*[**F**is-semi finali l-oħra]*$_{PP}$ *il-Portugiżi offrew*
[**in**:DEF-semi_final DEF-other:F] DEF-Portuguese:PL offer:3PL.PFV
oppożizzjoni kbira lill-Ingliżi
opposition big:F to:DEF-English:PL
'[**In** the other semi-final], the Portuguese opposed the Englishmen strongly.'

(3.145) [Korpus Malti 3.0; literature21]
*flimkien imxew minn [**ġo**x-xagħri]*$_{PP}$ *lejn*
together walk:3PL.PFV from [**in**:DEF-rocky_fields] towards
l-irdumijiet
DEF-cliff:PL
'[. . .] they walked together from [the rocky fields] towards the cliffs.'

(3.146) [Bartolo/Vella 2009: 168]
*Il-wirdien [**ma**s-swaba' tiegħu]*$_{PP}$
DEF-cockroach.COLL [**with**:DEF-finger.PL of:3SG.M]
bdew iferfru ġwenħajhom
begin:3PL.PFV 3.IPFV:flap:PL wing:PL:3PL
'The cockroaches [**with** their fingers] began to flap their wings [. . .].'

(3.147) [Korpus Malti 3.0; news61637]
x' fiha ħażin li l-istatwa tibqa'
what in:3SG.F bad that DEF-statue 3SG.F.IPFV:remain
*tinħareġ [**sa**z-zuntier tal- knisja]*$_{PP}$
3SG.F.IPFV:RFL:come_out [**till**:DEF-churchyard of:DEF-church]
'[. . .] what bad is there when the statue continues to be brought out [**as far as** the churchyard]?

(3.148) [Abela 2016: 96]

kien	*fi*	*triqtu*	*lejn*	*in-naħa*	*l-oħra*
be	in	street:POSS:3SG.M	towards	DEF-side	DEF-other:F

[ta*d-dinja]*$_{PP}$

[of:DEF-world]

'[. . .] it was on its way to the other side [**of** the world].'

In combination with the assimilated ART, the vowel-final ΠIs behave exactly the same as they would in combination with an unassimilated ART. This is different for the consonant-final ΠIs because their final segment is affected by the assimilation process, too.

To get a clear picture of the behaviour of (Π5) *bħal* 'like', (Π21) *għal* 'for', (Π29) *lil* 'to', and (Π41) *minn* 'from', it is necessary to remember that the lateral approximant of ART bears the feature [+CORONAL], too. According to Akkademja tal-Malti (1998: 54) the application of gemination along the lines of the rule in Figure 3.67 is prohibited if the host boasts an initial /l/ because "[h]ekk nevitaw tliet konsonanti L wara xulxin".[81] In point of fact, this convention holds also for all cases of assimilation of ART since the orthographic representation of three identical consonants in a row is generally avoided. We assume that the triplication of the consonants would have no direct phonological correlate since extralong consonants beyond geminates are not reported for Maltese.

More importantly, the regressive or anticipatory assimilation to which the lateral approximant of ART is exposed is inherited by the final consonant of the ΠIs. More precisely, the ΠI's CODA consonant assimilates to the consonant of ART. This explains why the final nasal /n/ of (Π41) *minn* 'from' regularly becomes /l/ when in direct contact with the lateral approximant of ART. Since all other consonant-final ΠIs investigated in this section end in /l/ already in their citation form, the assimilatory force of the ART-consonant is not immediately visible. If, however, ART is represented by a different coronal consonant the influence on the segmental chain of the ΠI is more transparent. It must be kept in mind though that gemination is blocked so that the final segment of the ΠI and the assimilated ART-consonant become one. Table 3.24 surveys the different shapes that the fusion of consonant-final ΠIs and ART can take.

81 Our translation: "in this way we avoid three L consonants in a sequence".

Table 3.24: Survey of fused forms of assimilated ART and consonant-final Π.

ART		Π			
		bħal	***għal***	***lil***	***minn***
/t/	<t>	*bħat-*	*għat-*	*lit-*	*mit-*
/d/	<d>	*bħad-*	*għad-*	*lid-*	*mid-*
/ʦ/	<z>	*bħaz-*	*għaz-*	*liz-*	*miz-*
/ʧ/	<ċ>	*bħaċ-*	*għaċ-*	*liċ-*	*miċ-*
/s/	<s>	*bħas-*	*għas-*	*lis-*	*mis-*
/z/	<ż>	*bħaż-*	*għaż-*	*liż-*	*miż-*
/ʃ/	<x>	*bħax-*	*għax-*	*lix-*	*mix-*
/n/	<n>	*bħan-*	*għan-*	*lin-*	*min-*
/r/	<r>	*bħar-*	*għar-*	*lir-*	*mir-*
/l/	<l>	*bħal-*	*għal-*	*lil-*	*mil-*

The different combinations are exploited quantitatively to widely different extents as becomes clear from a comparison of the absolute token frequencies in the Korpus Malti 3.0 given in Table 3.25. The presentation of the data is ordered as follows. The ART-consonants are ordered top-down according to the decreasing token frequency. The Πs are ordered from left to right also according to the decreasing number of matches. Cells are shaded grey if they host the highest number of tokens in a given column. Yellow is indicative of the highest quantity within a row. Where the number of tokens is the highest for both column and row the colour green is used. Green and yellow show up only in the domain of (Π21) *għal* 'for' and (Π41) *minn* 'from' which boast the two highest token frequency values. Together they account for 83% of all cases of fusion identified in the Korpus Malti 3.0.

Table 3.25: Token frequencies for fused consonant-final Πs and ART in the Korpus Malti 3.0.

ART	Π				sum
	għal	***minn***	***lil***	***bħal***	
<s>	128,680	88,019	39,185	5732	261,616
<t>	142,998	79,127	31,419	2,930	256,474
<d>	68,622	92,328	25,281	1,957	188,188
<n>	26,699	110,898	25,315	797	163,709
<r>	8,4748	47,611	14,868	1,279	148,506
<l>	32,822	43,737	5,991	31,106	113,656

Table 3.25 (continued)

ART	Π				sum
	għal	*minn*	*lil*	*bħal*	
<x>	31,550	18,536	3,249	583	53,918
<ż>	21,618	15,840	9,484	497	47,439
<ċ>	11,303	14,002	8,570	774	34,649
<z>	613	577	471	135	1,796
total	549,653	510,675	163,833	45,790	1,269,951

The four top-ranking alveolar obstruents resulting from assimilation cover 69% of the instances of fusion. The liquids /r/ and /l/ together are responsible for 21% whereas the remaining s(h)ibilants and especially the affricates make do with much smaller shares. These differences are to some extent explicable with reference to the different numbers of nouns in the Maltese lexicon which take their initial segment from this array of consonants.

The assimilation to the ART-consonant requires a thorough modification of the rule presented in Figure 3.67. This modification results in the formula given in Figure 3.72.

C] + [X → X / X = [+coronal]

Figure 3.72: Assimilation to coronal ART-consonant.

The process can be interpreted in different ways. One possibility is to assume that the final consonant of the Π is deleted so that no assimilation takes place at all. An alternative assumes that after assimilating to the coronal ART-consonant the final consonant of the Π coalesces with the ART-consonant and the resulting geminate is degeminated in turn. We are not committed to any of the options although the former appeals to us because of its simplicity. If we spell out this interpretation those Πs whose input form ends in a consonant have a special allomorph for fusion with coronal resulting from assimilation, namely *bħa-*, *għa-*, *li-*, and *mi-* – all of them deprived of the final segment of the citation form. A further possibility which we will not argue for in this study is that Π30 *ma'* 'with' and Π55 *ta'* 'of' loose their final *għajn* under fusion and thus behave similarly to the above class of Πs.

The ten examples (3.149)–(3.158) are meant to illustrate the process circumscribed in Figure 3.72 for each of the consonant-final Πs and each of the coronal consonants so that some Πs are represented more than once in this set of examples.

(3.149) [Gauci 1994. 53]
Iżda mbagħad ġew miżmuma draw
but then come:3PL.PFV PART:hold:F draw
*[**mi**t-team modest tal-Kolumbja]*$_{PP}$
[**from**:DEF-team modest of:DEF-Columbia]
'Then, however, a draw was defended [**by** the mediocre team of Columbia].'

(3.150) [Attard 2019: 15]
*ma deherx li kien wieħed sinjifikanti [**għa**d-dinja]*$_{PP}$
NEG appear:NEG that be one significant [**for**:DEF-world]
'[. . .] it did not appear to be a significant one [**for** the world].'

(3.151) [Korpus Malti 3.0; news117.883]
*Waħda minnhom baqgħet ħelwa [**bħa**z-zokkor]*$_{PP}$
one:F from:3PL remain:3SG.F.PFV sweet:F [**like**:DEF-sugar]
'One of them remained sweet [**like** sugar].'

(3.152) [Korpus Malti 3.0; culture2223]
Iċ-ċikkulata fiha biss 38 kalorija u għaldaqstant
DEF-chocolate in:3SG.F only 38 calory and for_this_reason
*ma tħaxxinx [**bħa**ċ-ċikkulata normali]*$_{PP}$
NEG 3SG.F.IPFV:CAUS.become_thick [**like**:DEF-chocolate normal]
'This chocolate only has 38 calories and thus does not make you fat
[**like** normal chocolate].'

(3.153) [Camilleri 2013: 209]
*tat xeħta iktar surreali [**li**s-sitwazzjoni]*$_{PP}$
give:3SG.F.PFV throw more surreal [**to**:DEF-situation]
'[. . .] it gave a more surreal touch [**to** the situation].'

(3.154) [Bartolo/Vella 2009: 102]
*se ssibuh [**li**ż-żgħir tagħna]*$_{PP}$
FUT 2.IPFV:find:PL:3SG.M [**to**:DEF-little of:1PL]
'[. . .] are you going to find [our little one]?'

(3.155) [Attard 2019: 211]
*Iddeċieda li jidħol [**għa**x-xogħol]*$_{PP}$
decide that 3SG.M.IPFV:enter [**for**:DEF-work]
'He decided to got [**to** work].'

(3.156) [Zammit 1977. 122]
għalhekk *kellu* *miegħu* *lill-ispiżjar* *u*
therefore have.PFV:IO:3SG.M with:3SG.M to:DEF-pharmacist and
*[**li**n-Nutar]*$_{PP}$
[**to**:DEF-notary]
'[. . .] he therefore had the pharmacist and [the notary] with him [. . .].'

(3.157) [Korpus Malti 3.0; academic107]
l-għana *kien* *jiġi* *kantat* *[**mi**r-raħħala*
DEF-folk_song be 3SG.M.IPFV:come sing:PART [**from**:DEF-villager:PL
u *ħaddiema* *komuni]*$_{PP}$
and worker:PL common:PL]
'[. . .] the folk song was being sung [**by** common villagers and workers].'

(3.158) [Korpus Malti 3.0; academic105]
r-regoli *kienu* *jvarjaw* *kemm* *mill-perjodi*
DEF-rule:PL be:3PL.PFV 3.IPFV:vary:PL how_much from:DEF-period:PL
kif *ukoll* *[**mi**l-lokazzjoni]*$_{PP}$
how also [**from**:DEF-location]
'[. . .] the rules varied not only between periods of time but also [**between** locations].'

We have reached the terminus of the empirical illustration of those phenomena which are connected to the morphology and morphonology of the Maltese IIs. Section 3.4 summarises the major findings of the foregoing sections and contains an update of the frequency count of the members of BLOMP 2.0.

3.4 Allomorphy revisited

Looking back on the morphology, morphonology, and the external sandhi phenomena which Maltese IIs are subject to, we notice that the relatively densely populated C Ia constitutes the only case of a sizable class. There is no example of the emergence of further classes whose membership is as numerous as that of the major inflectional class. This statement does not only hold for inflectional classes as such but also extends to the competition between long and short forms, segmental reduction, procliticisation, and fusion. In Table 3.26, we survey those alloforms which deviate from the citation forms of the IIs. The IIs are ordered alphabetically whereas the alloforms are presented chronologically, i.e. they follow the order of the sections in which the phenomena have been discussed in this part of the study.

Table 3.26: Survey of alloforms.

Π	inflection	short/long	reduced	procliticised	fused
(Π4) *bejn* ‘between’			*bej*		
(Π5) *bħal* ‘like’					*bħa-*
(Π7) *bi* ‘with’				*b’*	*b*
(Π13) *favur* ‘in favour of’	*favuri-*	*a favur ~ (għ) affavur*			
(Π15) *fi* ‘in’				*f’*	*f-*
(Π21) *għal* ‘for’	*għali-*				*għa-*
(Π23) *ħdejn* ‘beside’	*ħdej-*		*ħdej-*		
(Π27) *kontra* ‘against’	*kontri-*				
(Π28) *lejn* ‘towards’	*lej-*		*lej-*		
(Π29) *lil* ‘to’			*’il ~ ’l*		*li-*
(Π30) *ma’* ‘with’	*magħ- ~ miegħ-*			*m’*	
(Π33) *matul* ‘during’		*tul*			
(Π34) *minbarra* ‘except’		*mbarra*			
(Π35) *minflok* ‘instead of’		*flok*			
(Π37) *mingħala* ‘in s.o.’s opinion’	*mingħali-*				
(Π39) *minħabba* ‘on account of’		*mħabba ~ ħabba*			
(Π2) *a skapitu* ‘at the expense of’		*għas-skapitu ~ bi skapitu ~ għal skapitu*			
(Π41) *minn* ‘from’					*mil-*
(Π51) *sa* ‘till’				*s’*	
(Π55) *ta’* ‘of’	*tagħ- ~ tiegħ-*			*t’*	*t-*
(Π60) *wara* ‘after’	*waraj-*				

There are twenty-one Πs which give evidence of allomorphy. The highest number of allomorphs – including the citation form – is four. This range of allomorphy applies in the cases of (Π2) *a skapitu* ‘at the expense of’, (Π29) *lil* ‘to’, (Π30) *ma’* ‘with’, and (Π55) *ta’* ‘of’. Several allomorphs outside the domain of genuine inflection are used only optionally. The favourable conditions for their employment are mostly phonological. An especially strong factor, which contributes to the optional use of certain allomorphs, is the uncertain status of *għajn*. We are not absolutely sure whether the patterns we have discovered in connection to this abstract phoneme can be mapped onto utterances in the spoken register.

It has turned out that the members of the small inflectional classes C II and CIIIc behave in identical ways also outside the realm of inflection in the sense that they follow the same rules under external sandhi. Their parallel behaviour in different contexts lends support to our original classification. Further parallels can be found among a subset of the inflected consonant-final Πs. More generally, morphonology affects only 34% of the members of BLOMP 2.0. The picture is far from being homogeneous. The rules we have put forward in the previous sections more often than not only cover a small number of Πs.

The different susceptibility of Maltese Πs to inflection and other morpho(no) logical forces has an impact on the token frequency. In Table 1.11, the estimated token frequency of the free forms of the Πs was calculated for the entire Korpus Malti 3.0. We are now in a position to revise the count by way of accounting also for the occurrences of inflected forms, short allomorphs, reduced allomorphs, procliticised, and fused forms of Πs (i.e. the values are not based on the 1st 100-test). The quantitative data are revealed in Table 3.27. Column A gives the new rank position whereas B reminds us of the old rank position in Table 1.11. Grey shading marks out those Πs whose rank position has remained the same. For Πs which have climbed upwards in the hierarchy the colour yellow is used. The unmarked rows host Πs which have lost their former higher position. The new total amounts to 31,583,068 which means that the average token frequency per Π is 526,380. The first ten positions are filled by Πs which exceed the average (marked by an extra-fat line).

Table 3.27: Revised ranking order according to token frequencies in the Korpus Malti 3.0.

A	B	Π	free	inflection	short/ long	reduced	procliticised	fused	sum
1	1	(Π55) *ta'* 'of'	4,943,450	1,252,814			37566	3634883	9868713
2	9	(Π15) *fi* 'in'	319,840	173,887			1581446	3634883	5710056
3	2	(Π41) *minn* 'from'	1,131,110	192,515				1726044	3049669
4	4	(Π21) *għal* 'for'	995,448	164,576				1669074	2829098
5	16	(Π7) *bi* 'with'	141,102	63,282			951261	767665	1923310
6	6	(Π29) *lil* 'to'	388,639	69,022		8591		1087273	1553525
7	3	(Π17) *fuq* 'on'	1,071,352	85,647					1156999
8	7	(Π30) *ma'* 'with'	337,931	119,088				501101	958120
9	17	(Π5) *bħal* 'like'	131,013	14,200				501101	646314
10	5	(Π11) *dwar* 'about'	579,834	50,899					630733
11	8	(Π6) *bħala* 'as'	328,932						328932

Table 3.27 (continued)

A	B	П	free	inflection	short/ long	reduced	procliticised	fused	sum
12	20	(П51) *sa* 'till'	101,713				39625	122173	263511
13	10	(П60) *wara* 'after'	248,801	13,918					262719
14	11	(П4) *bejn* 'between'	236,899	20,123		2			257024
15	12	(П56) *taħt* 'under'	187,527	14,422					201949
16	13	(П28) *lejn* 'towards'	171,669	16,778		4			188451
17	14	(П27) *kontra* 'against'	167,406	8,405					175811
18	15	(П33) *matul* 'during'	149,416	6,487	15765				171668
19	21	(П16) *fost* 'amongst'	92,813	57,149					149962
20	18	(П39) *minħabba* 'on account of'	127,568		1392				128960
21	19	(П45) *permezz* 'by means of'	115,212						115212
22	26	(П46) *qabel* 'before'	66,657	12,334					78991
23	25	(П36) *mingħajr* 'without'	70,663	2,854					73517
24	29	(П49) *quddiem* 'in front of'	47,928	29,817					77745
25	22	(П50) *rigward* 'concerning'	73,009						73009
26	23	(П3) *barra* 'outside'	72,511						72511
27	24	(П9) *bla* 'without'	72,054						72054
28	27	(П53) *skont* 'according to'	65,511	306					65817
29	28	(П13) *favur* 'in favour of'	53,276	954	246				54476
30	34	(П35) *minflok* 'instead of'	29,667	5,640	8401				43708

Table 3.27 (continued)

A	B	П	free	inflection	short/ long	reduced	procliticised	fused	sum
31	30	(П40) *minkejja* ‘in spite of’	42,986						42986
32	33	(П38) *mingħand* ‘from s.o.’	32,167	4,395					36562
33	35	(П31) *madwar* ‘around’	24,911	10,833					35744
34	31	(П22) *għand* ‘at s.o.’s place’	32,965	1,746					34711
35	32	(П59) *waqt* ‘at the time of’	32,360	2,220					34580
36	40	(П19) *ġo* ‘in’	17,759					6357	24116
37	36	(П34) *minbarra* ‘except’	21,035		23				21058
38	37	(П18) *ġewwa* ‘inside’	20,844						20844
39	38	(П25) *inkluż* ‘including’	20,571						20571
40	39	(П48) *qrib* ‘near’	19,687	413					20100
41	41	(П23) *ħdejn* ‘beside’	16,489	3,583		1			20073
42	42	(П1) *apparti* ‘apart from’	16,032						16032
43	46	(П47) *qalb* ‘amidst’	6,059	6,776					12835
44	44	(П10) *daqs* ‘equal to’	10,864	1,836					12700
45	43	(П24) *ħlief* ‘except’	11,152	194					11346
46	45	(П58) *viċin* ‘near’	8,878						8878
47	47	(П20) *għajr* ‘except’	5,263	434					5697
48	48	(П14) *fejn* ‘near’	4,893	412					5305
49	56	(П37) *mingħala* ‘in s.o.’s opinion’	1	4,965					4966

Table 3.27 (continued)

A	B	Π	free	inflection	short/ long	reduced	procliticised	fused	sum
50	49	(Π8) *biswit* 'facing'	2,603	188					2791
51	52	(Π32) *maġenb* 'close to'	1,702	930					2632
52	50	(Π44) *oltre* 'beyond'	2,238						2238
53	51	(Π12) *faċċata* 'opposite'	1,927						1927
54	53	(Π2) *a skapitu* 'at the expense of'	1,168	190					1358
55	54	(Π52) *sforz* 'thanks to'	231						231
56	55	(Π57) *versu* 'towards'	223						223
57	57	(Π26) *kif* 'as'	0						0
58	58	(Π43) *mnejn* 'from near'	0						0
59	59	(Π42) *mintul* 'all along'	0						0
60	60	(Π54) *sotta* 'under	0						0
	total		12,873,959	24,14,232	25,827	8,598	2,609,898	13,650,554	31,583,068

The most remarkable cases of promotion in the ranking order are (Π7) *bi* 'with' with eleven ranks, (Π5) *bħal* 'like' and (Π51) *sa* 'till' with eight ranks each, (Π15) *fi* 'in' with seven ranks, and (Π37) *mingħala* 'in s.o.'s opinion' equally with seven ranks. The latter Π stands out additionally because it not only represents one of two cases where the inflected forms outnumber the free forms in terms of tokens but for (Π37) *mingħala* 'in s.o.'s opinion', the inflected forms account for 99% of all attestations in the Korpus Malti 3.0. The isolated case of (Π37) *mingħala* 'in s.o.'s opinion' taking a complement other than a pronominal one can be ignored for the discussion of the syntactic properties of this Π.[82]

82 Cf. Section 4.1.2.1.

The different categories referred to in Table 3.27 contribute differently to the total of Π-tokens in the Korpus Malti 3.0. It results from Figure 3.73 that the bulk of the tokens consists of free forms and fused forms which together account for 84% of all Π-tokens.

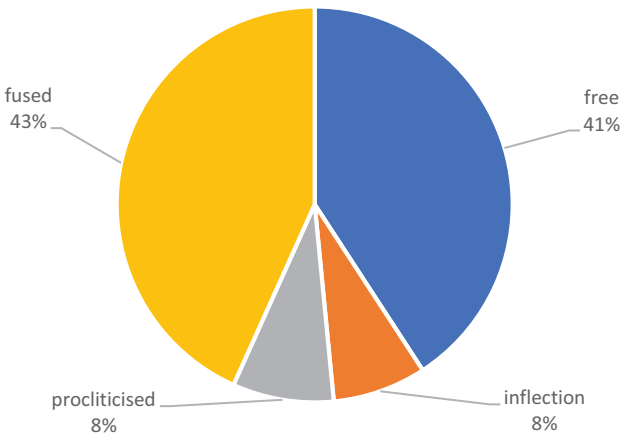


Figure 3.73: Shares of morphological categories.

The 8%-share of proclititicised forms is based almost in its entirety on the occurrences of the short allomorphs of the two members of C II. Inflected forms of IIs have the same share as the procliticised forms, namely 8%. This humble share notwithstanding, the inflected IIs will necessitate our full attention twice again when we address the issue the patterns of government of certain IIs, respectively.[83] Not before we take up these issues in the subsequent sections do we disclose the token frequencies of the different person and number values of the inflected IIs. Short/long and reduced forms are by far too infrequent to reach the 1%-mark and are thus not displayed in Figure 3.73.

We close the review of the morphological properties of Maltese IIs by way of repeating that one cannot treat the morphologically variable members of BLOMP 2.0 like a structural monolith. What we have seen in the previous paragraphs is a heavy dose of heterogeneity with only relatively small subsets of the Π-inventory displaying similar properties. It is of course not true that each Maltese Π behaves absolutely individually in the morphological domain. Yet, there is a plethora of parameters on which several IIs deviate in different ways from other IIs. It is one of the tasks of Section 4 to determine whether this tendency towards (limited) individuality also holds in the domain of morphosyntax.

83 Cf. Section 4.1.2.2.2.