

ON RELATIVE CLAUSES IN MALTESE

Maris Camilleri

Abstract

This work synthesises the literature that makes reference to the relative clause in Maltese, and shows that the relative clause is not a homogeneous structure in the language. Three types of clauses are discussed: restrictive relatives, non-restrictive relatives and free relatives. These come along with their individual constraints both on the antecedent (when available) and on the different strategies they employ. A clear divide between the Standard and dialectal Maltese is shown to exist in the employment of the pronominal strategy, at least in non-free relative clause structures. The discussion also reveals how the availability of complementiser-headed free relatives in Maltese constitutes a rare typological occurrence. This overview of our current knowledge on Maltese relative clauses lays bare what gaps exist in the Maltese relativisation system and how these gaps get circumvented via other means in the grammar. It further allows us to better evaluate certain behaviours whilst pinpointing what additional work still needs to be done on the subject.

Dan ix-xogħol jgħbor fil-qosor il-letteratura li fiha tisemma s-sentenza subordinata aġġettivali (SSA) fil-Malti u juri li s-SSA fil-lingwa mhijiex struttura omogenja. Jiġu diskussi tliet tipi ta'

SSA: restrittivi, mhux restrittivi u hielsa. Dawn iġibu magħhom restrizzjonijiet individwali kemm fuq l-anteċedent (meta jkun preżenti) kif ukoll fuq l-istrateġiji differenti li jużaw. Toħroġ ċara d-distinzjoni bejn is-sintassi tal-Malti Standard u tad-djalett fl-użu tal-istrateġija pronominali, għall-inqas fi strutturi tas-SSA mhux hielsa. Id-diskussjoni turi wkoll kif id-disponibbiltà tas-SSA hielsa li għandhom kongunzjoni subordinata fil-Malti hija tipoloġikament rari. Din il-ħarsa ġenerali lejn dak li nafu dwar is-SSA fil-Malti tesponi l-lakuni li hemm fis-sistema u turi kif dawn il-lakuni jiġu evitati bis-saħħa ta' mezzi oħra grammatikali. Barra minn hekk, inkunu f'qagħda aħjar li nevalwaw xi mġiba lingwistika u nagħrfu x'jista' jsir aktar fuq is-sugġett.

1. Introduction

The (morpho)syntax and semantics of different relative clause types in Maltese have recently received quite some attention. The presentation of this work here highlights the insights provided in Camilleri (2012), Camilleri (2014a), Camilleri & Sadler (2011), Camilleri & Sadler (2012a), Camilleri & Sadler (2016), Sadler & Camilleri (2018), rectifying, and sharpening the claims made therein. Here I choose to concentrate on three broad types of relative clauses (RCs) in Maltese, namely, restrictive relative clauses (RRCs), non-restrictive relative clauses (NRRCs), and free relative clauses (FRCs). I discuss the structure that constitutes the distinct type of clauses, the strategies employed in the expression of the different functions associated with the different RCs, and the constraints that govern the morphosyntactic interface to yield different semantic readings, which also includes reference to the strategies employed internal to the relative clause itself. The paper proceeds as follows. First I establish the major differences that characterise the different RCs under investigation (§2), and in §3, in what is the bulk of the study, I concentrate on the landscape of

strategies employed to introduce Maltese RCs, and the constraints that govern them. §4 provides a parenthesis that specifically focuses on FRCs, as particularly befits the discovery of a type of FRC in the grammar, which has been shown to be quite rare, crosslinguistically, while §5 concludes with the insights of this study.

2. A divide in form and function

The relative clause (RC) more broadly functions as a means with which to add information and elaborate upon a referent, the antecedent, which can be known, or otherwise, in which case, reference becomes identified via the presence of the RC. In (1), *the food* (i.e. the antecedent) being referred to is specifically the one that has been cooked for her, as opposed to any other *food* supply that may be available, or known from within the discourse context. Crucially, the antecedent bears a function, within the RC. In (1), *the food* functions as the direct object.

(1) *the food that they've cooked for her*

The structure of a RC is construed as involving a nominal antecedent, and an adjunct clause. Specifying here that the clause involved functions as an adjunct clause precludes the possibility of an alternative analysis that considers the clause as some complement to the nominal antecedent, as is the case with factual clauses of the type *the fact that*, in which the *that* clause is a complement of *the fact*. Specifying that the antecedent takes an in-clause function in turn excludes structures such as *why he came* in *the reason why he came in* from being interpreted as RCs. The above characterisation constitutes the prototypical structure true of both RRC (such as (2a)), and NRRC (2b) type constructions.

(2a) *I will eat the food*_[antecedent] *{that/which they'll give me}*_{adjunct clause} RRC

(2b) *I will eat the food*_[antecedent] *{which they gave me}*_{adjunct clause} NRRC

The structural characterisation that is true of RRCs and NRRCs does not hold for FRCs. In the literature, a number of labels have been used to refer to such types of RCs. Huddleston & Pullum (2002) use the term *fused* relative clauses, indicative of the fusion of the nominal antecedent and the *wh*-pronoun used to characterised English FRCs. Another term is *headless*, which is the one employed in the descriptive grammar of Maltese in Borg & Azzopardi-Alexander (1997). This terminology is usually laden with analytical concerns which we do not need to delve into, here (see e.g. Grosu & Landman (1998), Izvorski (2000), Citko (2002) for related discussions). The use of the term *headless* aligns with an analysis that views FRCs as void of an overt head, given that, as illustrated in (3), in contrast to the structures in (2), there is no distinguishable antecedent.

(3) *I will eat what they'll give me.*

In (3), as opposed to (2), there is no identifiable NP that can be said to function as the antecedent, and which is separate, or distinct from the *wh*-pronoun introducing the clause which modifies that antecedent. In contrast, what we have here is ‘just’ a clause, with the *wh*-pronoun *what* which ‘doubles’ its function both as the (nominal and non-clausal) argument of the (matrix) predicate *eat*, and a clause which additionally functions as the modifier of the same incorporated fused argument.

Having established broadly the major structural (and formal) difference between RRCs/NRRCs, on the one hand, and FRCs, on the other, we now focus on the semantic differences which obtain with respect to the function expressed by the adjunct clause part of the RC construction. The function of the RRC (as is also in essence that of a FRC but in perhaps a more opaque manner) is to

act as an intersective modifier that is meant to further specify (and identify) the antecedent.¹ As its name suggests, the function of this type of clause is to restrict the antecedent's reference. In contrast, a NRRC's function is to add more information about, or to elaborate upon whatever property is to be associated with the antecedent. This entails, in turn, that the antecedent of the NRRC involves an already specified entity that has been/is anchored contextually, or otherwise, e.g. via shared knowledge between the interlocutors, in the discourse interaction. Huddleston & Pullum (2002), for instance, refer to NRRCs with the label *supplementary relatives* whose function is to add and contribute further to some already known knowledge. Therefore, the NRRC, as opposed to the RRC is not meant to distinguish its antecedent from other members within a set. The contrastive reading that obtains between the choice of one RC as opposed to the other can be observed through the pair in (4), whereas per convention, the NRRC is distinguished from a RRC by means of a comma (,) that comes in between the antecedent and the clause. (3a) clearly identifies the book that was bought as being the cheapest book member out of a set of non-paperback books, while the function of the NRRC in (3b) is to add more information about the nature of the cheapest book bought, which, as it happens, is not a paperback. Further evidence that the semantics of the RRC is mainly to restrict reference can be illustrated by the substitution of the RRC by an attributive adjective. (3a) can thus read as (5).

(4a) *I bought the cheapest book {which was not a paperback}.* RRC

(4b) *I bought the cheapest book, {which was not a paperback}.* NRRC
Arnold (2007, p. 272)

(5) *I bought the cheapest non-paperback book.*

1 An intersective modifier is a type of adjective that does not change the category of the noun in question, and its content remains true independent of what it combines with.

Parallels to (4) obtain in the representative data set for Maltese in (6).

- (6a) *It-tifla* *{li n-af* *jien}* *kellm-it-ni* *lbierah.*
 DEF-girl LI 1-know.IPFV.SG I talk.PFV-3SGF-1SG.ACC yesterday
 ‘The girl that I know talked to me yesterday.’² NRRC
- (6b) *It-tifla,* *{li għad-ha* *kemm* *giet*
 def-girl LI just-3SGF.GEN how much come.PFV-3SGF
t-kellim-ni}, *qal-t-li* *li ...*
 3F-talk.IPFV.SG-1SG.ACC say.PFV.3-SGF-DAT-1SG COMP
 ‘The girl, who has just come to talk to me, told me that ...’ NRRC

In (6a), the antecedent *it-tifla* ‘the girl’ is identified from the larger set of girls in which it participates as a member. In contrast, the function of the adjunct clause as part of the larger NRRC structure in (6b) is merely to add more information about some already-anchored antecedent.

Concomitant with the distinct semantic characteristics that differentiate RRCs from NRRCs are syntactic constraints that have to do with the order of the RCs vis-à-vis one another, when they co-occur. It is possible to have the same RC type co-occurring, as illustrated through (7a), which involves the stacking of two NRRCs. The same follows for RRCs. In contrast, a general linear ordering constraint holds when two RCs that are not of the same type co-occur; a RRC (or FRC) must precede a NRRC, as illustrated in (7b). The obligatory requirement of the RRC to linearly precede the NRRC follows from the distinct semantic function of the two types of adjunct clauses, where the RRC’s function in structures involving stacked RCs is to initially restrict (fully) and anchor the reference of the antecedent. The NRRC that follows, then takes to the task to provide additional information about the already established reference.

2 For now, I will just gloss *li* as LI so as not to engage in an analysis of this item, as yet.

ON RELATIVE CLAUSES IN MALTESE

- (7a) *Mario, li n-af jien, li dejjem*
 Mario, LI 1-know.IPFV.SG I, LI always
i-dur wahd-u l-bandl-i, ...
 3M-go around.IPFV.SG alone-3SGM.GEN DEF-SWING-PL
 ‘Mario, whom I know, who is always going around alone in the playing field ...’
 NRRC + NRRC
- (7b) *It-tifel li n-af jien, li dejjem*
 DEF-boy LI 1-know.IPFV.SG I, LI always
i-dur wahd-u l-bandl-i ...
 3M-go around.IPFV.SG alone-3SGM.GEN DEF-SWING-PL
 ‘The boy who I know, who is always going around on his own in the playing field ...’
 RRC > NRCC

Beyond considerations that have to do with ordering and co-occurrence constraints, RRCs and NRRCs are additionally differentiated on the basis of the constraints they are subject to, with respect to the antecedents they are able to modify. Below in Table (1) is a list of distinct antecedents along with a reference to their ability (or otherwise) to function as antecedents of a RRC or NRRC, or both. The data in (8)-(10) are then meant to illustrate several of these types of antecedents and the RC they are able to occur with.

Antecedent type	RRC	NRRC
NP: <i>tifel/it-tifel</i> ‘(the) boy’	✓	✓
temporal NP: <i>il-gimgha d-dieghla</i> ‘the next week’	*	✓
Proper Name: <i>Marija</i> ‘Mary’	*	✓
<i>il</i> -Proper Name: <i>il-Marija</i> ‘the Mary’	✓	*
free pronoun: <i>jien</i> ‘I’, <i>lilek</i> ‘you.NON-NOM’	✓	✓
clausal	*	✓
negative universal quantifier: <i>ebda</i> ‘no(ne)’	✓	*
positive quantifier: <i>uhud</i> ‘some’, <i>kollha</i> ‘all’, <i>kull</i> ‘every’	✓	✓
negative universal NP: <i>hadd</i> ‘no one’, <i>xejn</i> ‘nothing’, <i>mkien</i> ‘nowhere’	✓	*
positive universal NP: <i>kulhadd</i> ‘everyone’, <i>kollox</i> ‘everything’, <i>kullimkien</i> ‘everywhere’	*	*
split antecedent	*	✓

Table 1: Constraints on the antecedent types available when comparing RRCs vs. NRRCs

The contrast in (8), for instance, brings out the differences in the intricacies associated with Proper names as antecedents in the context of RRCs vs. NRRCs. The use of the definite article in (8b) is indicative of the fact that the antecedent *Mario* is being identified from a set of referents called *Mario*. The RRC puts the specific entity *Mario* in contrast with other referents that are also called *Mario*.³

- (8a) *Mario, li dahal issa ...*
 Mario LI enter.PFV.3SGM now
 ‘Mario, who’s entered now ...’ NRRC
- (8b) *Il-Mario li dahal issa ...*
 DEF-Mario LI enter.PFV.3SGM now
 ‘The Mario who’s entered now ...’
 RRC: Camilleri & Sadler (2016, 118)

(9) shows RCs with clausal antecedents which, as represented in Table (1), can only appear in the context of a NRRC.

- (9a) [*Marija poggie-t kollox f’kamrit-ha*], *li*
 Mary place.PFV-3SG everything in.room.SGF-3SGF.GEN LI
fil-verità kien l-ahjar li setgh-et
 in.DEF-truth be.PFV.3SGM DEF-good.ELAT LI can.PFV-3SGF
t-a-ghmel.
 3F-FRM.VWL-do.IPFV.SG
 ‘Mary placed everything in her room, which in reality was the best thing she could have done.’
- (9b) *Imbaghad [Kim beda j-sug*
 then Kim start.PFV.3SGM 3M-drive.IPFV.SG
bl-addocèç], li fil-fatt huwa
 with.DEF-random LI in.DEF-fact COP.3SGM
perikoluż hafna.
 dangerous.SGM a lot
 ‘Then Kim started to drive haphazardly, which is indeed very dangerous.’
 NRRC: Camilleri & Sadler (2016, p. 121)

3 It should perhaps be mentioned here that at times, especially in colloquial speech, the Proper Name can easily function as an antecedent of a RRC without the need to mark that Proper Name as [+DEF] via the presence of the article. The antecedent of this type of RRC implies that the speaker-hearer happen to have multiple common referents that share the same name.

The contrastive data in (10) is meant to display the differences that obtain in the context of negative vs. positive universal indefinites as antecedents, in particular. The major difference, as also represented in Table (1), is the fact that while negative universal indefinites *can* function as antecedents, even if restricted to RRCs, as illustrated through (10a-10b), positive counterparts cannot function as antecedents, as the ungrammaticality of (10c-10d) illustrates, creating an interesting POLARITY-based split in the grammar.

- (10a) *Ma kien hemm hadd li ma*
 NEG be.PFV.3SGM EXIST no one.SGM LI NEG
kon-t-x n-af-u qabel.
 be.PFV-1SG-NEG 1-know.IPFV.SG-3SGM.ACC before
 ‘There was no one that I didn’t know before.’ RRC
- (10b) **Xejn, li x<l>aq-et t-i-sma’*,
 nothing.SGM LI wish.REFL.PFV-3SGF 3F-FRM.VWL-hear.IPFV.SG
ma nt-qa.
 NEG PASS-say.PFV.3SGM
 ‘*Nothing, which she wanted to say, was said.’³⁴ *NRRC
- (10c) **kulhadd(,) li mar ...*
 everyone.SGM LI go.PFV.3SGM
 Intended: ‘everyone that went...’ *RRC/NRRC
- (10d) **kollox(,) li ghid-t-l-ek ...*
 everything.SGM LI say.PFV-1SG-DAT-2SG
 Intended: ‘all that I told you ...’ *RRC/NRRC

It is quite interesting that the observed gap in the context of positive universals, as displayed in their inability to function as

4 The gloss FRM.VWL in relation to the *i* in the imperfective form *tisma’* refers to the formative vowel (Puech, 1979) that comes in between the prefix and the stem in the imperfective sub-paradigm, and similarly, the vowel that precedes the stem in the imperative sub-paradigm. It is essentially an arbitrary morphological form that functions as a phonological extension of the morphological stem in the imperfective and imperative sub-paradigms, and which is conditioned, or governed by phonological constraints. Refer to Camilleri (2014b), for more details.

antecedents in the context of RRCs, which is where the contrast with respect to negative indefinites holds, is a reflex of yet another POLARITY-based split in the grammar. Maltese displays positive universal *wh*-pronouns, but lacks negative counterparts. For this reason, the gap that results, as evinced through the ungrammaticality of (10c-10d), is made up for by means of a FRCs, which, as mentioned above, are semantically closer to RRCs than NRRCs. The FRC data that in Maltese is used to substitute the ungrammaticality of positive universal indefinites-headed RRCs is provided below in (11). Similarly, the inability of the positive universal indefinite *kullimkien* ‘everywhere’ to function as the antecedent of a RRC is made up for by the use of the *wh*-pronoun *kull fejn* ‘everywhere’, in a FRC context, as in (12).

- (11a) *kull min* *mar ...*
 whoever go.PFV.3SGM
 ‘whoever went ...’
- (11b) *kulma* *ghid-t-l-ek ...*
 whatever say.PFV-1SG-DAT-2SG
 ‘Whatever I told you ...’ FRC
- (12) *kull fejn* *t-mur*
 wherever 2-go.IPFV.SG
 ‘wherever you go’ FRC

Beyond the nature of the constraints on the antecedent, and the actual function of the different RCs, yet another difference which distinguishes RRCs from NRRCs is the **head parameter**, i.e. the parameter that has to do with where the antecedent linearly occurs, vis-à-vis the adjunct clause. While RRCs in Maltese are always externally-headed, as illustrated through (5a) and (6b) above, for instance, i.e. where the antecedent sits outside of the RC proper, specifically at the left-edge, given the language’s head-initial parameter, NRRCs in Maltese, on the other hand, can be of two types. They can be either externally-headed, as

observed through the array of different NRRC examples above, or internally-headed, even if rather constrained, when so. Internally-headed NRRCs in Maltese require the concurrent presence of an external head, with anaphoric-binding occurring between the two. A parallel constraint, which only applies for, and is restricted to NRRCs, as opposed to RRCs, is also found in English and Italian. An instance from the latter is in (13), where the internal NP *romanzo* ‘novel’ is co-indexed (marked via the subscript *i*) with the external antecedent of the construction.

- (13) *Ha raggiunto la fama con [Il giardino dei Finzi-contini]_i quale romanzo_i*
 has reached DEF.SGF fame.SGF with DEF.SGM garden.SGM
dei Finzi-contini]_i *{il quale romanzo}_i*
 of.PL F-C DEF.SGM which novel.SGM
ha poi anche ... }
 has also even
 ‘He became famous with *Il giardino dei Finzi-Contini*, which novel was then also ...’
 Italian: Cinque (2008, p. 106)

In English, examples of such internally-headed structures include (14). (14a) involves the internal head *society* co-indexed with *the LAGB*, while (14b) is somewhat more complex, where the internal head is in fact co-indexed specifically with the quantifier/numeral that governs, modifies or specifies (depending on one’s theoretical analysis) the RC’s antecedent.

- (14a) [*The LAGB*]_{*r*} *{which society}_i* was founded in ...} (Citko, 2008, p. 635)
 (14b) *There were only* [*[thirteen]_i* senators] present, *{which number}_i* was too few for a quorum}.
 (Arnold, 2007, p. 289)

The Maltese internally-headed NRRC data is just as interesting. Beyond a clear demonstration of the fact that this structure is available, as shown through the data in (15), Maltese introduces internally-headed NRRCs with a very particular item: the *wh*-pronoun *liema* ‘which’. In (15a), for instance, we observe the

internal head’s co-indexation with a coordinated set of antecedents that head the relative clause. In (15b) we get to observe how, and in which way, it becomes possible to have **split antecedents** in the context of NRRCs (but not with RRCs, as represented in Table (1)). The internal-head *frott* ‘fruit’ gets co-indexed with two antecedents that are present in two distinct clauses. The data in (15c) is there to additionally exemplify that it is possible to also have an internal-head embedded within a pied-piped relative clause, i.e. one in which the clause functions as a complement of a preposition (*fi* ‘in’ in this case), heading a PP (*f’liema post* ‘in which place’), which appears in a fronted position to the left-edge of the RC.

(15a) *{Pawlu u Salvu}*_r *liema rġiel*_i *qal-u* *li* ...
 Paul CONJ Salvu, which men say.PFV.3-PL COMP
 ‘Paul and Salvu, which men said that ...’

(15b) *Marija t-hobb* *it-tuffieħ*_i *filwaqt li*
 Mary 3F-LOVE.IPFV.SG DEF-apple.MASS while COMP
*Rita t-hobb il-banana*_j *{liema frott}*_{i,rj}
 Rita 3F-LOVE.IPMV.SG DEF-banana, which fruit.MASS
*dejjem j-ehd-u-h magħhom għal-lunch*_i.
 always 3-take.IPFV-PL-3SGM.ACC with-3PL.GEN for.DEF-lunch
 ‘Mary loves apples, while Rita loves banana, which fruit they always take with them for lunch.’
 Camilleri & Sadler (2016, p. 121)

(15c) *Il-Palazz*_r *f’liema post*_i *t-laqqgħ-u*
 DEF-palace in.which place PASS-CAUSE.gather.PFV.3-PL
l-mistedn-in ...
 DEF-guest-PL
 ‘The Palace, in which place the guests where gathered ...’
 Camilleri & Sadler (2012a, p. 20)

A clause introduced by *liema* is not the only strategy used in Maltese to express internally-headed NRRCs. *Liema* functions as some sort of specifier to the internal head. However, when the internal head is not specified via what is termed as a *wh*-pronoun in English, such that it is required to be specified via

other means, such as syntactic/analytic adjunction, it is possible to resort to the usual *li*, which has characterised the RRC/NRRC structures prior to the discussion associated with considerations of an internal head. An illustration of the employment of *li* in a context involving an internal-head is (16). In the presence of *li*, the internal head is specified via the adjunction of the PP *bħal din* ‘like this.SGF’. This specification then co-indexes the internal NP head *ħaġa* with the antecedent external to the clause.

It is needless to say that, the *liema* strategy would have worked just the same here, and it is only for reasons of space that I am not providing an example of the alternative. The employment of *liema* can thus be understood as being in a complementary distribution with the use of *li* + PP adjunction. *Liema* would thus be possible only with a non-PP modified *ħaġa* as the internal head. What is further special with the internally-headed NRRC in (16) is the fact that it shows how co-indexation does not necessarily imply agreement resolution, as is the case of (15a-b), or agreement matching, as in the case of (15c). Rather, while the RC’s antecedent’s head is *qtil* ‘killing.SGM’, the internal head is *ħaġa* ‘thing.SGF’ in (16).

- (16) [Il-*qtil* *tat-tifel*]_i *li* [*ħaġa* *bħal* *din*]_i
 DEF-killing.SGM of.DEF-boy LI thing.SGF like DEM.SGF
ma *stennej-nie-ħa*_i *qatt*, *ħasad*
 NEG expect.PFV-1PL-3SGF.ACC never shock.PFV.3SGM
lil *kulħadd*.
 ACC everyone
 ‘The boy’s killing, which was something no one expected, shocked everyone.’
 Agreement mismatch: Camilleri & Sadler (2012a, p. 25)

With this discussion of the core differences in the form and function of RRCs and NRRCs in particular, we now move on to consider the relativisation strategies available for Maltese RCs, which has been something I briefly touched upon in the last part of the discussion on internally-headed RCs when contrasting the

constraints that govern the complementary distribution of the *wh*-specifier *liema* and the use of *li* in the context of internally-headed RCs. Further discussion follows below.

3. Relativisation strategies

As established in Camilleri (2010), the strategies employed to introduce Maltese RCs are: (i) the use of *li*, (ii) the use of a *wh*-pronoun (as is the case of *liema* in the context of internally-headed NRRCs discussed earlier, for instance), and (iii) a \emptyset (zero) strategy. Notwithstanding the availability of the *wh*-pronoun strategy in Maltese, it is constrained in quite a complex way in Standard Maltese, as opposed to the laxer distribution it displays in non-Standard varieties (see Camilleri (2012) for more detail). In line with Fabri (1987), Borg (1991), Borg (1994), Borg & Azzopardi-Alexander (1997), I analyse *li* as a complementiser (see Camilleri (2014a), Camilleri & Sadler (2016), Sadler & Camilleri (2018) for more detail), in contrast to Sutcliffe (1936) and Aquilina (1973), who analyse it as a *wh*-pronoun.⁵ While the former two strategies can introduce both RRCs and NRRCs (as well as FRCs, as we will see in §4), the \emptyset zero strategy is highly constrained, and is additionally almost exclusive to RRCs.⁶ An illustration of the *wh*-

5 From now onwards I will thus be glossing *li* as COMP, indicative of the complementiser (C) category and consequently the C position I consider this item to take at the constituent-structure level.

6 That distinct strategies are employed in the context of different RC types, or that restrictions are imposed upon the array of strategies involved, or the extent of their employment, is not something that occurs only in Maltese. In English, for instance, NRRCs can only be introduced through the *wh*-pronoun strategy, in contrast to the *that* or zero strategies which are additionally able to introduce RRCs. In Italian too, for instance, the *wh*-pronoun strategy involving *il quale* is used instead of *cui/che* in the context of NRRC (as exemplified in (13) above). Moreover, English NRRCs and FRCs, for instance, which are obligatorily introduced by a *wh*-pronoun do not involve the same set of pronouns. *Ever*-type *wh*-pronouns, such as *whoever*, *whenever*, and others, are only available as a subset of the *wh*-pronouns that can introduce FRCs.

pronoun strategy, and the \emptyset (zero) strategy is provided through the data in (17).

- (17a) *it-tifel* *ma'* *min* *kon-t*
 DEF-boy with who be.PFV-1SG
 'the boy with whom I was'⁷ *wh*-pronoun strategy
- (17b) *Tifel* \emptyset *j-o-qtol* *il-qtates* *mhux* *se*
 boy 3M-FRM.VWL-kill.IPFV.SG DEF-cat.PL NEG PROSP
j-i-b'za' *minn* *gurdien*.
 3M-FRM.VWL-feat.IPFV.SG from mouse
 'A boy who kills cats is not going to fear a mouse.'
 \emptyset strategy: Borg & Azzopardi-Alexander (1997, p. 35)

Apart from *li* as a complementiser, Maltese also employs *milli* (see *milli*), which in Camilleri (2010) and subsequent works is referred to as a partitive complementiser, at least in its function to introduce RCs. Its partitive function is clearly carried forward from the fusion of the P *minn* 'from' along with the complementiser (*il*)*li*, which, in turn, provides the antecedent with an element out of a set reading. This then impinges on the nature of the antecedent, which must be indefinite. *Milli* as a complementiser in the grammar does not solely occur in the context of partitive RCs of the type in (18). Rather, *milli* also functions as a complementiser that introduces an adjunct clause at the sentential level, meaning 'from, instead of', rather than solely an adjunct clause at the NP level, as in the case of RCs. This function is exemplified through the Maltese proverb in (19).

- (18) *Ghoġb-ok* *xi* *ktieb* *milli*
 like.PFV.3SGM-2SG.ACC some book from.COMP
gib-t-l-ek?
 bring.PFV-1SG-DAT-2SG
 'Did you like any book from the ones that I brought you?'

7 Note that this structure may not be acceptable for all, and may be indicative of dialectal variation.

- (19) *Aħjar* *uff* *milli* *aħħ*.
 good.ELAT uff from.COMP ahh

Lit: It is better an uff, instead of an ahh.

It is better to complain for a while, instead of suffering, or feeling pain.

Maltese Proverb

3.1 The *wh*-pronoun strategy

While perhaps the *li* strategy is the most commonly used in Maltese to introduce RRCs and NRRCs (and FRCs (§4)), together with *milli*, which is less common, *wh*-pronoun introduced RCs have not been studied much. Borg & Azzopardi-Alexander (1997) only discuss them with respect to what we are here referring to as FRCs.⁸ As illustrated through (17a), however, non-FRCs can indeed be introduced by a *wh*-pronoun strategy in Maltese. We have in fact in §2 seen that internally-headed NRRCs can also be similarly-introduced in Maltese.

Focusing on Standard Maltese, the *wh*-strategy is widely used in pied-piped contexts. (17a) above is one such instance. It involves the use of the [+HUMAN] *wh*-pronoun *min* ‘who’, while (20a) below involves the use of the [-HUMAN] *wh*-pronoun counterpart *xiex* ‘what’.⁹ Such pied-piping contexts can easily be substituted by the *li* strategy, as in (20b), along with changes in the morphosyntax internal to the RC, to be discussed further below.

- (20a) *It-trav-i* *{ma' xiex}* *j-i-d-dendl-u*
 DEF-beam-PL with what 3-EPENT.VWL-REFL-hand.IPFV-PL
l-qnienep}, *is-sadd-u*.
 DEF-bell.PL REFL-rust.PFV.3-PL

‘The beams to which the bells are hung, have got rusted.’

MLRS

8 I am here deliberately excluding reference to Aquilina (1973), for instance, who treats *li* as a *wh*-pronoun. Moreover, similar to Borg & Azzopardi-Alexander (1997), Sutcliffe (1936) only discusses *wh*-pronouns in the context of FRC structures.

9 Yet again, one should mention that this structure may not necessarily be considered grammatical in Standard Maltese, even if it constitutes part of the *MLRS* Corpus.

- (20b) *It-trav-i_i* *{li* *j-i-d-dendl-u*
 DEF-beam-PL COMP 3-EPENT.VWL-REFL-hang.IPFV-PL
magh-hom *il-qniepen}*, *is-sadd-u*.
 with-3PL.GEN DEF-bell.PL REFL-TUST.PFV.3-PL
 ‘the beams that the bells are hung on to, have got rusted.’
 Camilleri (2014a, p. 185)

Further evidence indicative of the widespread use of a *wh*-pronoun strategy in the context of RRCs/NRRCs, particularly within pied-piped structures, comes from the grammaticalisation of new *wh*-pronouns in the grammar that have come about via the univerbation, i.e. the fusion of two distinct and separate word-forms, which in this case are a P and a *wh*-pronoun; parallel to the process that renders the complementiser *milli* just referred to above. This process is also suggestive of the linear adjacency that governed the P and *wh*-pronoun items prior to their fusion, which would have in turn also been precisely what facilitated, and led to the very fusion. Such univerbated *wh*-pronominal instances include *fiex* (< *fi* ‘in’ + *xiex* ‘what’) and *mnejn* (< *minn* ‘from’ + *fejn* ‘where’), as represented through (21a) and (21b), respectively. (Refer also to Table (2) below).

- (21a) *Xtraj-t* *kaxxa* *{fiex* *in-qeghid-hom}*.
 buy.PFV-1SG box in what 1-place.IPFV.SG-3PL.ACC
 ‘I bought a box to put them in.’

- (21b) *T-af-ha* *t-triq* *{mnejn t-i-sta’*
 2-know.IPFV.3SG.ACC DEF-road.SGF whence 2-EPENT.VWL-can.IPFV.SG
t-ghaddi}.
 2-PASS.IPFV.SG
 ‘You know the way from where you can pass.’

In the Standard variety, beyond the use of a *wh*-pronominal strategy in pied-piping contexts, antecedents that take a locative thematic-role can be similarly introduced. In such instances, it is the *wh*-pronoun *fejn* ‘where’ that is employed, as in (22) below. Once again, this is optional, as the *li* strategy along with concurrent morphosyntactic changes can also be employed.

- (22) *Ir-restaurant* *fejn* *mor-na* *d-darba* *l-ohr-a ...*
 DEF-restaurant where go.PFV-1PL DEF-once.SGF DEF-other-SGF
 ‘The restaurant where we went last time ...’

From the above characterisation of the constraints that govern the *wh*-pronominal strategy in the Standard variety, we appear to have a strategy that is ‘restricted’ to contexts involving antecedents that take an adjunct (ADJ) function, and an oblique (OBL) and oblique object (OBL OBJ) (i.e. object argument of a preposition) in-clause grammatical function, i.e. the NP which the antecedent displays a dependency on, internal to the RC. I use the term ‘restricted’ here in the context of Keenan & Comrie’s (1977) Accessibility Hierarchy, presented in (23) below.

- (23) SUBJ > DO > IO > OBL > GEN (possessor) > OCOMP (object of comparison)
 Accessibility Hierarchy: Keenan & Comrie (1977, p. 66)

The hierarchy should be interpreted such that the grammatical function furthest on the left-edge is understood to be more accessible for relativisation than the one that follows it on the right-edge, crosslinguistically. Hence, if a grammatical function lower on the hierarchy is available for relativisation in a particular linguistic system, then the expectation is such that any grammatical function higher on the hierarchy, i.e. to the left, would be also available for relativisation. While I will not engage in a discussion as to how much more fine-grained the grammatical functions on the Accessibility Hierarchy ought to be for Maltese (see Camilleri (2010), Camilleri (2014a), Camilleri & Sadler (2016) for more detail), what is key to our observation at this point in the discussion is the fact that the *wh*-pronoun strategy in Standard Maltese appears to be *unusually* confined to positions lower on the hierarchy. From the distribution as laid out above, these positions specifically include obliques and object of prepositions, as well as adjuncts, which would be positioned lower still, on the hierarchy in (23), given that adjuncts are not subcategorised arguments as the

rest of the grammatical functions on the Accessibility Hierarchy are.

This landscape is in contrast with the use of the *wh*-pronoun strategy in dialectal Maltese, where it can additionally be used with [+HUMAN] antecedents that display a dependency with in-clause functions other than the ones just listed above for the Standard variety. These include direct, and indirect object functions (i.e. OBJ and OBJ θ , respectively). The latter is the case in (24). A constraint appears to hold, however; the antecedent of such RCs is constrained to be [+DEF], (apart from being [+HUMAN]).

- (24) *Ilbieraħ, *(ir)-raġel 'il min ċempil-t,*
 yesterday DEF-man DAT who phone.PFV-1SG
qdie-ni.
 serve.PFV.3SGM-1SG.ACC
 ‘Yesterday, the man whom I phoned attended to me.’

While the dialectal scenario provides us with a wider distribution of the *wh*-pronominal RC strategy, in comparison with the Standard variety, a glaring gap remains in the system, and that is the absence of [-HUMAN] RC antecedents, whether definite, or otherwise. Constructions such as (25) are ungrammatical, even if the *xi/x* ‘what’ [-HUMAN] *wh*-pronoun presents itself as an available counterpart to [+HUMAN] *min* ‘who’ in the grammar.

- (25a) **l-ahbar x'ghaġġb-et lil kulhadd*
 DEF-news.SGF what.surprise.PFV-3SGF ACC everyone
 Intended: ‘the news that surprised everyone’ Camilleri & Sadler (2016, p. 120)

- (25b) **Xitraj-t ktieb xi n-sellef.*
 buy.PFV-1SG book what 1-lend.IPFV.SG
 Intended: ‘I bought a book to be able to lend.’

Notwithstanding the ungrammaticality of the above examples, it turns out, however, that the gap associated with the absence

of [-HUMAN] antecedents in the system is *only* apparent. At first sight, it *does* translate as a gap, just as (wrongly) claimed in the earlier works in Camilleri (2010), Camilleri (2012), and Camilleri & Sadler (2011); however, this is only because of the highly constrained nature of the structure that can allow for the use of *xi/x'* in both Standard and dialectal RCs. On unravelling this possibility in the system, the [+HUMAN] counterpart, which then makes use of the *wh*-pronouns *min* 'who'/'l *min* 'whom', also becomes available to the Standard variety, so long as it is governed by the same set of constraints.

Camilleri (2014) identifies the following set of constraints said to govern the availability of *xi/x'* in Standard Maltese, with the final constraint having been identified later in Camilleri & Sadler (2016), and then discussed and developed further in Sadler & Camilleri (2018). It was also in the latter works that it also became clear that this same set of constraints also governs the use of *min* 'who' in the Standard variety, beyond its uses in association with adjunct, oblique, and object of preposition in-clause functions.

1. [-DEF] (indefinite) antecedent;
2. matrix clause function of the antecedent can only be a term, particularly a SUBJ, OBJ, or OBJ *theme* (i.e. non-DAT);
3. in-clause function can only be a term of the type: SUBJ, OBJ, or OBJ θ (i.e. DAT/non-DAT);
4. imperfective RC predicate (excluding any ASPECTUAL augmentation via auxiliaries);
5. the matrix predicate must entail an existential component in its semantics, expressing notions of coming into being, view, or availability via possession or transfer, and the like.¹⁰

10 It is this lexical dimension that pertains to the predicates that take such indefinite-headed RCs as their argument, that the literature refers to these

Examples instantiating this set of constraints is provided through the data in (26) below. In (26a), the indefinite NEG universal antecedent *xejn* ‘nothing’ is the OBJ of the possessive predicate in the matrix that then functions as the SUBJ of the RC’s (imperfective) predicate *dejjaq* ‘bother’. In (26b), the indefinite *rota* ‘bicycle’ functions as the OBJ in both the matrix clause, headed by the stative *fadal* ‘remain’, and the RC. In contrast, the (quantified) indefinite antecedent *ħobż* ‘bread’ is the OBJ theme of the distransitive matrix (transfer-of-possession) predicate *ta* ‘give’, which is then in a dependency with the OBJ of the verb *xewa* ‘toast’ within the RC. (26d) provides us with an illustration of the antecedent functioning both as the SUBJ of the matrix predicate, as well as the SUBJ of the RC’s (imperfective) predicate.

- (26a) *M'ghand-i* *xejn* */xi*
 NEG.have-1SG.GEN nothing.SGM what
j-dejjaq-ni.
 3M-bother.IPFV.SGM-1SG.ACC
 ‘I have nothing that’s bother me.’ Sutcliffe (1936, p. 182)
- (26b) *Fadal* *rota* */xi* *n-ġib*.
 remain.PFV.3SGM bicycle.SGF what 1-get.IPFV.SG
 ‘There remains a bicycle to bring along.’
- (26c) *Ta-ni* *biċċt-ejn* *ħobż*
 give.PFV.3SGM-1SG.ACC piece.F-DU bread
{x'n-i-xwi-l-hom}.
 what.1-FRM.VWL-toast.IPFV.SG-DAT-3PL
 ‘He gave me two pieces of bread to toast for them.’
- (26d) *J-eżist-u* *alternattiv-i* *oħr-ajn* *{x'j-i-stgħ-u*
 3-exist.IPFV-PL alternative-PL other-PL what.3-EPENT.VWL-can.IPFV-PL
j-i-nt-uża-w.
 3-EPENT.VWL-PASS-USE.IPFV-PL
 ‘There exist other alternatives that can be used.’

types of RCs as *headed modal existential constructions*. In §4 we will consider the non-headed counterparts.

The use of *min* in the [+HUMAN] counterpart is illustrated below. In (27), the indefinite antecedent *xi ħadd* ‘someone’ functions as the internal argument of the existential predicate *hemm*, and displays a dependency with the OBJ of the predicate *kellem* ‘talk’.

(27)	<i>Hemm</i>	<i>xi</i>	<i>ħadd</i>	{ <i>il</i>	<i>min</i>
	EXIST	some	no one	ACC	who
	<i>n-i-stgħ-u</i>			<i>n-kellm-u</i> ?	
	1-EPENT.VWL-can.IPFV-PL			1-talk.IPFV-PL	
	‘Is there anyone whom we can talk to?’				

(27) in the Standard variety thus stands in contrast to the lesser constrained distribution of *min* ‘who’ in the dialect, where, as illustrated through (24) above, can also be employed in the context of [+DEF] antecedents. It is however interesting to observe that a gap remains in the unavailability to relativise [-HUMAN] [+DEF] antecedents in both the Standard and non- Standard varieties.

Table (2) summarises the facts, and brings in one place the rich array of *wh*-pronouns that can introduce RRCs and NRRCs in Maltese.

3.2 The zero strategy

While it would be possibly fair to say that the zero (\emptyset) strategy is the least widely distributed, it is also the most constrained. If we maintain our focus on finite RCs, rather than considering RCs involving participial forms, then RCs introduced by a zero strategy are constrained to involve:

1. [-DEF] antecedent;
2. imperfective RC predicate, if the construction is verbal;
3. in-clause function can only be an immediate- or long-distance SUBJ or POSS

Antecedents - in-clause function	<i>wh</i> -prn
[+HUMAN] [+DEF] - OBJ/OBJ \emptyset	<i>min</i> 'who'
[+HUMAN] [+DEF] - OBJ/OBJ \emptyset	' <i>l min</i> 'whom'
[+HUMAN] [-DEF] & matrix OBJ/OBJ <i>theme</i> - SUBJ/OBJ/OBJT	' <i>l min</i> 'whom'
[-HUMAN] [+DEF]	n.a
[-HUMAN] [-DEF] & matrix OBJ/OBJ <i>theme</i> - SUBJ/OBJ/OBJ \emptyset	<i>xi</i> ; <i>x</i> ' 'what'
[+HUMAN] - OBL OBJ	P + <i>min</i>
[-HUMAN] - OBL/ADJ	<i>fuq</i> 'on what' < <i>fuq</i> 'on' + <i>xiex</i> 'what' <i>fiex</i> 'in what' < <i>fi</i> 'in' + <i>xiex</i> 'what' <i>biex</i> 'with what' < <i>bi</i> 'with' + <i>xiex</i> 'what' <i>mniex</i> 'from what' < <i>minn</i> 'from' + <i>xiex</i> 'what' <i>ghaliex</i> 'for what' < <i>ghal</i> 'for' + <i>xiex</i> 'what'
[-HUMAN] - OBL OBJ/ADJ OBJ	P + <i>xiex</i>
Locative - OBL/ADJ	<i>fejn</i> 'where'
Locative - OBL/ADJ	<i>mnejn</i> 'from where' < <i>minn</i> 'from' + <i>fejn</i> 'where'
Locative - OBL OBJ/ADJ OBJ	P + <i>fejn</i>
Internally-headed NRRCs	<i>liema</i>

Table 2: The patch-work that constitutes the employment of the *wh*-strategy in Maltese RRC/NRRCs

The above identified constraints that determine the distribution of \emptyset -marked finite RCs could be understood as a residue of an earlier, more widely used strategy in the history of Maltese. The fact that it is constrained to indefinite antecedents is not random, since it could be a remnant of an earlier situation in Maltese when it was closer to Arabic. Indeed, a constraint still holds in different Arabic varieties to this day, whereby in the context of an indefinite antecedent, a zero strategy is employed. Beyond this point of similarity, the rest of the constraints on the employment of this strategy in Maltese are specific to the language. In (17b) above, which I repeat below in (28) for ease of exposition, beyond the presence of a [-DEF] antecedent, we observe the requirement to have an imperfective predicate internal to the RC, namely,

joqtol ‘kill.IPFV’, as well as an antecedent which is functionally-dependent with a SUBJ in-clause function, i.e. where *tifel* ‘boy’ is not merely the SUBJ of the main clause headed by the verb *beża* ‘fear’ but, crucially, also the in-clause SUBJ of the predicate within the RC.

- (28) *Tifel* \emptyset *j-o-qtol* *il-qtates* *mhux* *se*
 boy 3M-FRM.VWL-kill.IPFV.SG DEF-cat.PL NEG PROSP
j-i-bża' *minn* *gurdien.*
 3M-FRM.VWL-fear.IPFV.SG from mouse
 ‘A boy who kills cats is not going to fear a mouse.’
 Borg & Azzopardi-Alexander (1997, p. 35)

If we attempt to change the RC’s predicate to one with a perfective form, as in (29a), or if we change the in-clause function to a direct object, or an object of a preposition, for instance, as in (29b-c), ungrammaticality results.

- (29a) **tifel* \emptyset *{qatel* *il-qtates}* ...
 boy kill.PFV.3SGM DEF-cat.PL
 Intended: ‘a boy that killed cats’ *PFV predicate
- (29b) **Tifel* \emptyset *{n-af}* *qed* *j-i-studja.*
 boy 1-know-IPFV.SG PROG 3M-EPENT.VWL-study.IPFV.SG
 Intended: ‘A boy I know, is studying.’ *OBJ in-clause
- (29c) **cavetta*, \emptyset *{n-i-ftaħ* *il-bieb* *bi-ha,*
 key.SGF 1-FRM.VWL-open.IPFV.SG DEF-door with-3SGF.GEN
 Intended: ‘a key I open the door with’ *OBJ of P in-clause

To exemplify the whole array of the constraints that govern the employment of the zero strategy, (30) instantiates an RC introduced via this means while additionally involving a long-distance anaphoric dependency between the indefinite antecedent and a POSS in-clause function that is an argument of the OBJ *omm* ‘mother’ internal to the clausal argument embedded by the RC’s matrix (imperfective) predicate *haseb* ‘think’.

- (30) Tifel, \emptyset {*n-a-hseb* *li* *t-af* *lil*
 boy 1-FRM.VWL-think.IPFV.SG COMP 2-know.IPFV.SG ACC
omm-u }, *wegġa*’.
 mother-3SGM.GEN be hurt.PFV.3SGM
 ‘A boy I think you know his mother has been hurt.’
 long-distance POSS in-clause function: Camilleri & Sadler (2016, p. 159)

3.3 The gap and resumptive pronoun strategies

In association with these three different strategies used to introduce RCs is the presence of either a gap, or a resumptive pronoun strategy, which this time round is present internal to the RC. (28), for instance, presented above, illustrates the presence of a gap, i.e. the absence of any overt material *in situ* at the location of the in-clause function, which happens to be the subject. The resumptive pronoun strategy, in contrast, involves the presence of a pronominal form occupying the grammatical function position internal to the clause with which the antecedent is anaphorically linked. An earlier instance of this strategy is shown in (20b), as well as (30). (31) below exemplifies the resumptive strategy in the context of all of the three RC strategies we have been looking at. (31a) illustrates the use of the *li* strategy in the context of an anaphoric dependency between the antecedent *id-dar* ‘the house’ and the pronominal resumptive form fulfilling the OBL OBJ function, i.e. the OBJ of the P *fi* ‘in’, with the PP headed by *fi* ‘in’ functioning as the locative OBL argument of the RC’s predicate *trabba* ‘bring/raise up’.

The obligatory nature of the resumptive pronoun in this *in-situ* position in Maltese follows naturally from the fact that the language does not allow P-stranding, i.e. the presence of a preposition without its associated complement *in situ*. This then explains the morphosyntactic contrast that obtains in the semantically equivalent constructions in (20) above, once the *li* strategy in (20b) substitutes the *wh*-pronoun strategy in (20a). In the former, the resumptive pronoun is obligatorily

bound to the P *ma* ‘with’, while, in the latter, a gap in-clause strategy is present. (31b) is a dialectal, rather than a Standard construction, for reasons established earlier above. Nonetheless, I am providing this instance here so as to be able to display the complete paradigmatic array of contextual and structural possibilities. In this DAT-marked *wh*-pronoun introduced RRC, the antecedent is anaphorically-bound by the non-selected/extra-argumental DAT pronoun bound onto the RC’s predicate *faqa* ‘burst’.¹¹ (31c), on the other hand, involves the presence of a (rare) NRRC that is introduced via a zero strategy and whose indefinite antecedent is anaphorically-bound to the internal possessor function annexed in a construct state structure headed by the noun *sid* ‘owner’.

- (31a) *id-dar_i* *li* *t-rabbej-t* *fi-ha* ...
 DEF-house.SGF COMP REFL-bring up.PFV-1SG in-3SGF.GEN
 ‘the house that I was brought up in ...’
li strategy + resumptive pronoun

- (31b) *ir-raġel ‘il* *min* *faqgħ-u-l-u* *l-karozza* ...
 DEF-man DAT who burst.PFV.3-PL-DAT-3SGM DEF-car.SGF
 Lit. ‘the man to whom they burst (on-him) the car ...’
wh-pronoun strategy + resumptive pronoun - (non-Standard Maltese)

- (31c) *Dahl-u* *f’dar_i* *ø* *sid-ha_i*
 enter.PFV.3-PL in.house.SGF owner.SGM-3SGF.GEN
msiefer.
 abroad.SGM
 ‘They entered a house, whose owner is abroad.’
 ø strategy + resumptive pronoun - Aquilina (1973, p. 338)

Constraints hold, however, as to where and when it is possible to employ a resumptive pronoun strategy. So for instance, Maltese is governed by what is in the literature referred to as the Highest Subject Restriction (Borer (1984),

11 More detail on the morphosyntax and semantics of non-selected DAT pronominal uses in Maltese can be found in Camilleri & Sadler (2012b).

McCloskey (1990)), which bars the presence of a resumptive pronoun such as *hu* ‘he’ in (32), in the position of the highest SUBJ within the RC.

- (32) *it-tifel li ø/*hu hareġ issa ...*
 DEF-boy COMP he go OUT.PFV.3SGM now
 ‘the boy that went out now ...’
 Highest SUBJ Restriction: gap/*resumption

To better understand what is meant by the highest SUBJ, (32) is contrasted with (33), where this time we observe that the in-clause SUBJ function with which the antecedent displays a dependency is embedded deep within the RC; specifically as the SUBJ of the predicate *hareġ* ‘go out’ in the embedded clause of the embedded predicate *ħaseb* ‘think’. Such a type of dependency between the antecedent and the in-clause function is referred to as a long-distance dependency, in contrast to the immediate distance dependency that obtains vis-à-vis the in-clause SUBJ position in (32), which is in the highest (and only) clause within the RC. Since the dependency that obtains in (33) does *not* involve the highest SUBJ, the presence of a free (i.e. non-bound) resumptive pronoun in the in-clause SUBJ position becomes optionally available, and stands as a possible alternative to the gap strategy. It may well be the case that for different speakers, the resumptive pronoun strategy only becomes possible when deeper embedding is involved.

- (33) *T-kellim-t ma' tifel_i {li smaj-t [li*
 recip-talk.IPFV-1SG with boy COMP hear.PFV-1SG COMP
intom t-af-u-(ħ)_i sew]} u
 you.PL 2-know.IPFV-PL-3SGM.ACC well CONJ
qal-l-i ...
 say.PFV.3SGM-DAT-1SG
 ‘I talked with a boy that I heard that you (PL) know well, and he told me ...’
 Long-distance [-DEF] OBJ: resumption/gap

Notwithstanding the robustness of the Highest SUBJ constraint in Maltese, it can nonetheless be overridden in the context of island environments (Ross, 1967). Such environments, for our purposes here can be understood as constructions that, in Maltese and other languages that employ similar resumptive strategies, can be ‘saved’ via the obligatory presence of an anaphoric dependency, rather than a functional one involving a gap, and where extraction outside of them is not otherwise possible. One such instance is the Coordinated Island constraint. In such an island context, if the antecedent’s in-clause function is a SUBJ, specifically an element within a set of coordinated predicates that make up the SUBJ value, i.e. *Rita u hi* in (34), the dependency involved between the antecedent, i.e. *Marija* in (34) and the in-clause grammatical function must be anaphoric, i.e. involving the obligatory presence of a resumptive pronoun, *hi* in (34), even if it happens to be in the highest SUBJ position of the RC. This is what we have in (34). The omission of the free resumptive pronoun *hi* ‘she’ in (34), which would have otherwise safeguarded the Highest SUBJ restriction, would have, in turn, resulted in the ungrammaticality of the whole structure.

- (34) *Ma n-af-x jekk*
 NEG 1-know.IPFV.SG-NEG whether
t-i-f<t>akar-x, iżda Marija, li
 2-EPENT.VWL-remember.REFL.IPFV.SG-NEG but Marija COMP
{rita u hi} kien-u ħargu flimkien, ...
 Rita CONJ she be.PFV.3-PL go out.PFV.3-PL together,
 ‘I don’t know whether you remember, but Mary, who Rita and her had gone out together ...’
Coordinate Island constraint: resumption/*gap in SUBJ

Such island environments override the general gap-resumptive pronoun distribution in other contexts. For instance, a [-DEF] OBJ in-clause function can take either a gap or a (bound) resumptive pronoun, as illustrated in (35), which specifically involves a long-distance dependency between *tifel* and (-*h*). (The same distribution holds in the immediate distance dependency counterpart.) However, in the context of what is referred to as a

Complex NP constraint, where what is involved is a RC within another RC, thus creating an even more complex NP headed by the matrix RC's antecedent, the same dependency, i.e. that between a [-DEF] antecedent and a long-distance in-clause object function, must this time round obligatorily involve a resumptive pronoun, as shown in (36).

- (35) *T-kellim-t* *ma' tifel_i {li* *smaj-t* *{li* *intom*
 RECIPIENT-talk.IPFV-1SG with boy COMP hear.PFV-1SG COMP YOU.PL
t-af-u-(h)_i *sew}}* *u* *qal-l-i ...*
 2-know.IPFV-PL-3SGM.ACC well CONJ say.PFV.3SGM-DAT-1SG
 'I talked with a boy that I heard that you (PL) know well, and he told me ...'
 long-distance [-DEF] OBJ: resumption/gap

- (36) ... *tifel_i {li* *smaj-t* *{li* *intom* *(huma)* *dawk*
 ... boy COMP hear.PFV-1SG COMP YOU.PL (COP.3PL) DEM.PL
{li *t-af-u-*(h)_i* *sew }}*
 COMP 2-know.IPFV-PL-3SGM.ACC well
 '... a boy that I heard you are those who know him well'
Complex NP Island: long-distance [-DEF] OBJ: resumption/*gap

Just as Island constraints can override the prototypical gap-resumptive pronoun distribution otherwise present in *li*-introduced RCs, the same applies in the context of RCs introduced by the *wh*-pronoun strategy. If we stick to Standard contexts (and thus remove the example in (31b) from the equation), the data in (20a), (21), and (22) all involve the presence of a gap strategy, which is indeed obligatory. The presence of island environments within the RC *changes* that distribution, such that in parallel to what we have observed in the context of *li*-introduced RCs, in the context of *wh*-pronoun introduced RCs too, an obligatory resumptive pronoun becomes necessary.

The island contexts presented this time round to illustrate this behaviour include the Adjunct Island constraint and the *Wh*-Island constraint in (37a) and (37b), respectively. The former involves a context where the in-clause function which the antecedent displays a dependency with is embedded within the ADJ-clause introduced by

qabel ‘before’ within the RC. The *Wh*-island context in (37b), on the other hand, involves an in-clause function that is deeply embedded within the *wh*-introduced clausal argument of the predicate *skopra* ‘discover’, which is itself, in turn, embedded as a clausal argument of *pprova* ‘try’, embedded by the RC’s matrix predicate *ried* ‘want’.

- (37a) *il-mara_i* *{ma' min* *il<t>qaj-t* *{qabel ma*
 DEF-WOMAN with who meet-RECIP.PFV-1SG before COMP
biss *kon-t* *n-af-*(ha)}*
 only be.PFV-1SG 1-know.IPFV.SG-3SGF.ACC
 ‘the woman with whom I met before even knowing’
Adjunct Island constraint: resumption/*gap

- (37b) *Dan* *hu* *l-post_i* *{fejn int*
 DEM.SGM COP.3SGM DEF-place.SGM where you.SG
rid-t *darba* *[t-i-pprova*
 want.pfv-2SG once 2-EPENT.VWL-try.IPFV.SG
[t-i-skopri *{jekk qattx ghix-u*
 2-EPENT.VWL-discover.IPFV.SG whether ever live.PFV.3-PL
fi-(h)_i* *id-dinosawr-i}}]*
 in-3SGM.GEN DEF-dinosaur-pl
 ‘This is the place where you wanted to know whether dinosaurs ever lived in.’
Wh-Island constraint: resumption/*gap

With that contained, yet comprehensive overview of the strategies employed internal to the Maltese RRCs and NRRCs, and their interaction with strategies used to introduce them, along with the constraints that govern both these types of RC strategies, we now turn our attention to the sub-types of FRCs.

4. A note on Maltese FRCs

Structurally, FRCs are special in the sense that, unlike both RRCs and NRRCs, they do not involve an identifiable antecedent, yet semantically, they behave like RRCs, rather than NRRCs, as was mentioned earlier on in §2. However, a major semantic difference which distinguishes FRCs from RRCs is the fact that plain FRCs of

the type in (3), repeated below as (38), are interpreted as definite, in line with findings in Jacobson (1995), Grosu & Landman (1998), Izvorski (2000), and Caponigro (2003), implying therefore, that a paraphrase of such FRCs is *only* possible with definite NP antecedents (39). This is in contrast with the otherwise unrestricted availability of both [+/-DEF] antecedents in the context of RRCs.

(38) *I will eat **what** they'll give me.* Plain FRC

-

(39) *I will eat **that/*anything** which they'll give me.* [+DEF]-headed RRC

In English, plain FRCs contrast with *ever*-type FRCs, such as (40), which take on a distinct reading. For instance, plain FRCs are definite descriptions that can also be paraphrased by universal quantifiers. This may not necessarily be the case with *ever* type FRCs. Moreover, while plain FRCs entail or presuppose existence, this may not be the case with *ever*-type FRCs.

(40) *I will eat **whatever** I find.* ever-type FRC

While Maltese, as illustrated in Camilleri (2010), has both types of FRCs, i.e. plain ones, and *ever*-type ones, and which are even inclusive of a partially different set of *wh*-pronominal forms, so far we only have a better grasp of the semantics and (morpho) syntax of plain FRCs, as provided in Sadler & Camilleri (2018). (41a), for instance, is representative of a plain FRC in Maltese which, with its definite interpretation, can be paraphrased as in (41b). The example in (41a) illustrates how definite interpreted plain FRCs in Maltese can occur as left-dislocated topics in a construction; in this case the FRC is anaphorically-bound by the resumptive pronoun *-u* functioning as the object of the predicate *nesa* 'forget'. We will see below that this is in contrast with the inability of such a dependency in Maltese, in the case of plain FRCs interpreted indefinitely.

- (41a) *T-af* *li* *[[x'qal-l-i]]_r* *kollu*
 2-know.IPFV.SG COMP what say.PFV.3SGM-DAT-1SG all
*nsej-t-u*_i?
 forget.PFV-1SG-3SGM.ACC
 ‘Do you know that I have forgotten all that he told me?’
 Definite plain FRC: Borg & Azzopardi-Alexander (1997, p. 37)

- (41b) *T-af* *li* *[dak* *}{li*
 2-know.IPFV.SG COMP DEM.SGM COMP
qal-l-i]]_r *kollu* *nsej-t-u*_i?
 say.PFV.3SGM-DAT-1SG all forget.PFV-1SG-3SGM.ACC
 ‘Do you know that I have forgotten all that he told me?’
 Definite plain FRC: Borg & Azzopardi-Alexander (1997, p. 37)

Maltese *ever*-type FRCs, such as those of the sort represented in (11)-(12), early on in §2, and below in (42) (with (42c) functioning specifically as an adjunct *ever*-type FRC), still await a better description and analysis.

- (42a) *T-i-sta'* *t-ieħu* *{liem(a)}*
 2-EPENT.VWL-can.IPFV.SG 2-take.IPFV.SG whichever
t-rid}.
 2-want.IPFV.SG
 ‘You can take whichever you want.’

- (42b) *I-mur* *{fejn i-mur}*, *dejjem ħa*
 3M-go.IPFV.SG where 3M-go.IPFV.SG always PROSP
j-sib-ni *waraj-h*.
 3M-find.IPFV.SG-1SG.ACC behind-3SGM.GEN
 ‘Wherever he goes, he’s always going to find me supporting him.’ *ever*-type FRC

- (42c) *Se n-a-għmel* *{(kull) kif* *t-għid-l-i*
 PROSP 1-FRM.VWL-do.IPFV.SG however 2-say.IPFV.SG-DAT-1SG
n-a-għmel}.
 1-FRM.VWL-do.IPFV.SG
 ‘I will do however you tell me to.’¹² adjunct *ever*-type FRC

12 The use of the form *kull kif* ‘however’ is dialectal, and specific to the Gozitan varieties.

I will from now on concentrate entirely on plain/non-*ever* FRCs in Maltese. As established in Sadler & Camilleri (2018), this sub-set of FRCs is in Maltese *not* restricted to definite interpretations, even if the indefinite counterparts are governed by certain restrictions on their occurrence, paralleling closely (but not completely overlapping) the set of constraints presented in §3 when discussing the structural restrictions that pertain to the contexts when [-DEF] [+HUMAN] antecedents are allowed to head RCs in Maltese. Beyond this interesting fact, i.e. that two semantic readings are available to non-*ever* FRCs in Maltese, albeit governed by distinct structural conditions, the *definite* sub-set of these FRCs can in fact be introduced not solely by a *wh*-pronoun strategy (as wrongly claimed in Camilleri (2010)), but *additionally* by means of the complementiser strategy we have been observing in the context of RRCs and NRRCs in our discussion in the previous sections, i.e. by means of the complementiser *li*.

Constructions such as (43) below, which are possible in Maltese (and in fact in different Arabic varieties, too, as explicitly discussed for the first time in Sadler & Camilleri (2018)) is typologically rare, if not unique to Arabic and Maltese. The crosslinguistic literature lacks any discussion of non-*wh*-pronominal strategies for FRCs; so much so that in Caponigro's (2003) crosslinguistic study of FRCs and *wh*-items, a free relative is indeed critically defined by the occurrence of a *wh*-item. To native speakers, expositions of the set of FRCs in (43) often feel as though they lack some sort of demonstrative head, e.g. *dik* 'DEM.SGF' in (43a), for example, which, once inserted, renders the whole construction into a (headed) RRC. This is one piece of syntactic proof (amongst others provided in Sadler & Camilleri (2018)) used in support of the definite semantics attributed to such complementiser introduced FRCs in Maltese (and Arabic). What is presented in (43) is an array of *li*-introduced FRCs in Maltese including ones with reference to a [+HUMAN] antecedent, as in (43a), as well as ones with a resumptive pronoun, as in (43c).

Moreover, (43a) involves a FRC that fulfills the matrix SUBJ argument, with the in-clause function being also a SUBJ; (43b) illustrates an OBJ function in both clauses; and (43c) involves a FRC that is in subject position, with the in-clause function being an object of a P.

- (43a) *{Li* *xtra-t* *minghand-ek}*, *gie-t*
 COMP buy.PFV-3SGF from-2SG.GEN come.PFV-3SGF
s'ghand-i *llum*.
 until.at-1SG.GEN today
 ‘The one who bought (something) from you came to me today.’
 [+HUMAN] [+DEF] & in-clause gap: Sadler & Camilleri (2018, p. 10)

- (43b) *Ghamil-t* *{li* *ghid-t-l-i}*.
 do.PFV-1SG COMP say.PFV-2SG-DAT-1SG
 ‘I did what you told me.’
 [-HUMAN] [+DEF] & in-clause gap

- (43c) *{Li_i* *kil-na* *fi-h_i* *ahna}* *kien*
 COMP eat.PFV-1 PL in-3SGM.GEN we be.PFV.3SGM
vera *tajjeb*.
 true good.SGM
 ‘That which we ate in, was really good.’
 [-HUMAN] [+DEF] & in-clause resumptive pronoun: Sadler & Camilleri (2018, p. 11)

Beyond the use of *li*, just as is the case in the contexts of non-FRCs as illustrated by example (18) in the introduction to the previous section, we also find the use of *milli* introduced FRCs, as is in fact documented in Sutcliffe (1936), who refers to such constructions as relatives with an ‘unexpressed antecedent’. Apart from *milli* (44a), as noted by Sutcliffe himself, it is possible to additionally find the use of *ghal li* (44b) in such FRC contexts, which is otherwise not an available option in the context of RRCs/NRRCs. *Ghal li* this time round involves the fusion of the P *ghal* ‘for’ and the complementiser (*il*)*li*. While the FRC in (44a) fulfills an OBL OBJ function as an argument of the P *barra* ‘apart’, the in-clause function is that of an OBJ. In (44b), the FRC fulfills the OBL function of *gie* ‘come’, and the in-clause OBJ function as an argument of *xtaq* ‘wish’.

- (44a) *barra* {*milli* *ghid-na*}
 apart from.COMP say.PFV-1 PL
 ‘apart from what we said’
- (44b) *issa* *n-i-ġ-u* {*għal li* *xtaq-t*} *n-għid*
 now 1-FRM.VWL-come.IPFV-PL for.what want.PFV-1 SG 1-say.IPFV.SG
 ‘now we come to what I wished to say’
 Sutcliffe (1936, p. 183)

Indefinite-interpreted non-*ever*-type FRCs differ from definite ones in that, while they are primarily constrained to be introduced via *wh*-pronouns, their availability in the grammar is governed by the lexical and (morpho)syntactic constraints that condition [-DEF] headed counterparts introduced by the *wh*-pronouns *x’/xi* and (*’l*) *min*, including the obligatory requirement for the RC’s predicate to be imperfective in form. Slight differences do exist, however. As discussed in Sadler & Camilleri (2018), non-headed modal existential constructions, as plain FRCs interpreted indefinitely are referred to, can *only* function as OBJs or theme OBJs to the predicate which takes them as their argument, in contrast to the possibility of the headed counterpart to also function as that predicate’s SUBJ. Moreover, while a certain lexical predicate may allow for its argument to be modified by a modal existential, that same predicate may not necessarily readily allow a non-headed modal existential construction to take the role of its own argument. Such a contrast is provided in (45), exemplified by the predicate *xtaq* ‘wish’.

- (45a) *N-i-x<ɿ>ieq* *xi* *ħaġa {x’n-a-għmel}*.
 1-EPENT.VWL-wish.REFL.IPFV.SG some thing what.1-FRM.VWL-do.IPFV.SG
 ‘I wish something to do.’ Headed modal existential RC
- (45b) **N-i-x<ɿ>ieq* {*x’n-a-għmel*}.
 1-EPENT.VWL-wish.IPFV.SG what.1-FRM.VWL-do.IPFV.SG
 Intended: ‘I wish what to do’. *Modal existential RC: Sadler & Camilleri (2018, p. 42)

As a consequence of the constraint requiring indefinite plain FRCs to be restricted to an OBJ grammatical function of sorts,

a clitic left-dislocated construction such as that in (46) is ruled ungrammatical. This is because the FRC bears a TOPIC discourse function, rather than the OBJ grammatical function of the predicate *sab* ‘find’. The predicate’s object function is filled in by the bound resumptive pronoun *-u*. The ungrammaticality of this construction is in direct contrast with that in (41a), where a definite-interpreted plain FRC was shown to be able to take a TOPIC function in a clitic left-dislocated structure.

- (46) * $[tX^t-i-lbes]_i$ *ma*
 what.2-FRM.VWL-wear.IPFV.SG NEG
sib-t-hu_i-l-ek-x.
 encounter.PFV-1SG-3SGM.ACC-DAT-2SG-NEG
 Intended: ‘What/Something to wear, I didn’t find-it for you.’
 Indefinite plain FRC: Sadler & Camilleri (2018, p. 37)

Having highlighted some of the most salient facts about Maltese plain FRCs, I conclude this dedicated side-note on such structures, and will leave a detailed description and analysis of *ever*-type FRCs for future research.

5. Conclusion

This paper has synthesised, highlighted, rectified, sharpened, and brought together full circle in one place the main claims and findings on RCs presented in earlier works. We have seen that Maltese has (at least) three different types of RCs: RRCs, NRRCs, which can be either externally, or internally-headed, and FRCs, which in Maltese can be of the plain type, or the *ever*-type. The plain type was shown to take two distinct readings in Maltese: definite, and the more constrained, indefinite, with significant structural, semantic, and lexical constraints contrasting the latter to the former. Definite FRCs in Maltese (as in Arabic) have been shown to be quite rare typologically, in that they can be introduced

by a complementiser strategy (which includes the complementisers *li*, *milli* and *għal li*), apart from a *wh*-strategy; the latter strategy having been otherwise said to define FRCs, crosslinguistically. *Ever*-type FRCs still remain to be better described and analysed.

As we narrowed in our focus, the core of the paper elaborated upon the strategies employed to introduce RCs in Maltese, as well as those employed internal to them. We have seen that Maltese makes use of two strategies for definite FRCs: complementiser and *wh*-, three strategies for RRCs: complementiser, *wh*-, and a zero, while NRRCs rarely take a zero strategy and are otherwise introduced via the complementiser and *wh*-pronoun strategies. The latter strategy includes the *wh*-item *liema* introducing internally-headed NRRCs, and which stands in complementary distribution with the complementiser strategy in such constructions. Internal to the different RCs introduced by these distinct strategies, we have seen that either a gap or a resumptive pronoun is present in the in-clause function, i.e. the in-situ grammatical function which the antecedent is associated with internal to the RC. Stress was laid upon how the choice of these strategies, i.e. when and in relation with what other concomitant factors they occur, is highly constrained.

In having brought the different facts together in one place here, the landscape obtained allows us to make better evaluations of certain behaviours. For instance, the highly constrained (and receding) zero strategy was posited to be the result of what vestiges reside from a once fully-fledged (and systematic) functioning strategy in the system of Maltese in some earlier stages of the language, given the reflex of the zero strategy constrained to indefinite antecedents, (as is the case when it is employed in Maltese), in the rest of the Arabic system. Furthermore, the landscape obtained in this paper, based on how things currently stand in Maltese, provides us with a vantage point from where we can now characterise what prevalent gaps exist in the grammar of RCs in Maltese. A primary gap has been identified, where

it has been shown that it is essentially impossible to relativise upon a [+DEF] [+/-HUMAN] antecedent using the *wh*-pronoun strategy in Standard Maltese. The dialectal varieties, in contrast differentiate on the basis of the [+/-HUMAN] parameter, and while able to relativise [+DEF] [+HUMAN] antecedents, this is not a possibility with [-HUMAN] counterparts. Yet another feature-value based split has been singled out in the system. The negative vs. positive POLARITY values attributed to universal indefinites primarily effect their distribution as antecedents of RRC vs. NRRCs. Of most interest however is the fact that it is impossible for positive universal indefinites to be relativised upon in the first place. This is in contrast with their negative universal counterparts, which can be relativised upon strictly as antecedents of RRCs. This POLARITY-based split becomes even more stark when one observes how the reflex of this gap maps out in the system. The positive universal indefinite RRC gap is substituted by a FRC structure introduced by positive universal *ever*-type *wh*-pronouns; for which a NEG counterpart does not exist in the system. The reason(s) behind these gaps and substitutions in the system, and whether there is a connecting link beyond the feature-value [-DEF] in these two identified case, if at all semantic or (morpho)syntactic, remain(s) yet to be discovered, and understood.

Abbreviations

1, 2, 3	first, second, third person		
ACC	accusative	GEN	genitive
CAUSE	causative	IPFV	imperfective
COMP	complementizer	M	masculine
CONJ	conjunction	MASS	mass noun
COP	copula	NEG	negative
DAT	dative	PASS	passive
DEF	definite article	PFV	perfective
DEM	demonstrative	PL	plural
DU	dual	PROG	progressive
ELAT	elative	PROSP	prospective

EPENT.VWL	epenthetic vowel	RECIP	reciprocal
F	feminine	REFL	reflexive
FRM.VWL	formative vowel	SG	singular

References

- Aquilina, Joseph (1973) *The structure of Maltese: A study in mixed grammar and vocabulary*. Malta: The Royal University of Malta.
- Arnold, Doug (2007) Non-restrictive relatives are not orphans. *Journal of Linguistics* 43, 271–309.
- Borer, Hagit (1984) Restrictive relatives in Modern Hebrew. *Natural Language and Linguistic Theory* 2, 219–260.
- Borg, Albert (1991) Complementation in Maltese. In: Brincat, Joseph (ed.), *Languages of the Mediterranean: Substrata: the islands, Malta*. Malta: University of Malta, 218–227.
- Borg, Albert (1994) Maltese complement sentences to non-verbs. In: Caubet, Dominique & Vanhove, Martine (eds.), *Actes des premières journées internationales de dialectologie arabe de Paris*. Paris: Publications Langues ‘O, 109–120.
- Borg, Albert & Azzopardi-Alexander, Marie (1997) *Maltese. Lingua descriptive grammars*. London & New York: Routledge.
- Camilleri, Maris (2010) *Relative Clauses in Maltese*. University of Essex: Unpublished MRes thesis.
- Camilleri, Maris (2012) The Maltese relative clause: A source of standard-dialect variation. *Ilsienna* 2, 1–12.
- Camilleri, Maris (2014a) The Maltese restrictive relative clause. In: Borg, Albert, Caruana, Sandro & Vella, Alexandra (eds.), *Perspectives on Maltese linguistics*. Berlin: Akademie Verlag, 161–200.
- Camilleri, Maris (2014b) *The stem in inflectional verbal paradigms in Maltese*. University of Surrey: PhD thesis.
- Camilleri, Maris & Sadler, Louisa (2011) Restrictive relative clauses in Maltese. In: Butt, Miriam & King, Tracy Holloway (eds.), *Proceedings of the LFG11 Conference*. Stanford, CA: CSLI Publications, 110–130.
- Camilleri, Maris & Sadler, Louisa (2012a) An LFG Approach to non-restrictive relative clauses in Maltese. University of Essex: *Research reports in linguistics*.
- Camilleri, Maris & Sadler, Louisa (2012b) On the Analysis of Non-selected Datives in Maltese. In: Butt, Miriam & King, Tracy Holloway (eds.), *Proceedings of LFG12*. Stanford, CA: CSLI Publications, 118–138.
- Camilleri, Maris & Sadler, Louisa (2016) Relativisation in Maltese. *Transactions of the Philological Society* 114(1), 117–145.
- Caponigro, Ivano (2003) *Free Not to Ask: On the Semantics of Free Relatives and Wh-words Crosslinguistically*. University of California, Los Angeles: PhD thesis.

- Cinque, Guglielmo (2008) Two types of non-restrictive relatives. In Bonami, Olivier & Hofherr, Patricia Cabredo (eds.), *Empirical Issues in Syntax and Semantics 7*, 99–138. <http://www.cssp.cnrs.fr/eiss7>.
- Citko, Barbara (2002) (Anti) reconstruction effects in free relatives: A new argument against the Comp account. *Linguistic Inquiry* 33(3), 507–511.
- Citko, Barbara (2008) An argument against assimilating appositive relatives to coordinate structures. *Linguistic Inquiry* 39(4), 633–655.
- Fabri, Ray (1987) An analysis of grammatical agreement in Maltese. University of Dusseldorf: MA Dissertation.
- Grosu, Alexander & Landman, Fred (1998) Strange relatives of the third kind. *Natural Language Semantics* 6, 125–70.
- Huddleston, Rodney & Pullum, Geoffrey K (2002) *The Cambridge Grammar of the English Language*. Cambridge: Cambridge University Press.
- Izvorski, Roumyana (2000) *Free relatives and related matters*. University of Pennsylvania: PhD thesis.
- Jacobson, Pauline (1995) On the quantificational force of English free relatives. In: Bach, Emmon, Jelinek, Eloise, Kratzer, Angelika, & Partee, Barbara H. (eds.), *Quantification in Natural Languages*. New York: Springer, 451–486.
- Keenan, Edward L. & Comrie, Bernard (1977) Noun phrase accessibility and universal grammar. *Linguistic Inquiry* 8(1), 63–99.
- McCloskey, James (1990) Resumptive pronouns, binding, and levels of representation in Irish. In: Hendrick, Randall (ed.), *The Syntax of the Modern Celtic Languages*, volume 23 of *Syntax and Semantics*. New York: Academic Press, 199–256.
- Puech, Gilbert (1979) *Les parlers maltais: Essai de phonologie polylectale*. University of Lyon 2: PhD thesis.
- Ross, John Robert (1967) *Constraints on Variables in Syntax*. MIT: PhD thesis.
- Sadler, Louisa & Camilleri, Maris (2018) Free relatives in Maltese. *Brill's Annual of Afroasiatic Languages and Linguistics* 1, 1–45.
- Sutcliffe, Edmund F. (1936) *A grammar of the Maltese language: With crestomathy and vocabulary*. Oxford: Oxford University Press and Humphrey Milfor.