

1 Introduction

This paper provides a comprehensive description of relative clause structures in standard Maltese, which is a mixed language belonging to the South Arabic branch of Central Semitic, with a Maghrebi/Siculo-Arabic stratum, a Romance (Sicilian, Italian) superstratum and an English adstratum. Where relevant, we draw attention to divergences between standard and dialectal Maltese. We provide detailed discussion of a number of structures which have not received attention in previous literature (including non-restrictives). Our discussion draws on, and substantially extends, the data in Camilleri and Sadler (2011) and Camilleri and Sadler (2012a) to provide a comprehensive overview of relative clause structures in Maltese. To keep the dataset within manageable proportions, we excluded free (headless) relative clauses from consideration here. Within the broader Semitic perspective, our description adds to the relatively substantial literature on relativisation in the Arabic vernaculars, laying the ground work for a better understanding of how Maltese fits into the dialectal spectrum. At several points we make direct cross-dialectal comparisons, in particular in relation to the distribution of gaps and resumptives in relative clauses and the availability of a *wh*-relativisation strategy.

Our paper identifies a number of relative clause types which have largely gone unreported in the literature on Maltese, and provides an initial exploration of their syntax.

The paper proceeds as follows. Section 2 introduces the basic distinction between restrictive and non-restrictive relative clauses (henceforth RRC and NRRC respectively), and shows that there are a number of significant differences between these relative clause types in Maltese. Sections 3 and 4 introduce the two major strategies used for relative clause formation. We then go on in section 5 and section 6 to illustrate two further minor or peripheral strategies, to complete our description of Maltese relatives. Section 7 concludes. We use standard Maltese orthography throughout.

2 Distinguishing Restrictive and Non-Restrictive Relative Clauses

This section presents some salient similarities and differences between restrictive and non-restrictive relative clauses (RRC and NRRC respectively) in Maltese. Contrary to a previous claim that no distinction exists between these relative clause types in Maltese (Borg and Azzopardi-Alexander, 1997, 37), we will show that the functional difference between them is accompanied by a number of constructional differences.

The basic functional difference between RRCs and NRRCs is that only the former function as intersective modifiers that identify the reference of the head. NRRCs express additional information about a specified entity that is already anchored in the discourse (Downing, 1978; Arnold, 2007).

It follows that RRCs may introduce a contrast set which is available for subsequent anaphoric reference, while NRRCs do not. This difference accounts for the contrast between the infelicity of the continuation in the non-restrictive (1a) and the acceptability of (1b) (from Camilleri and Sadler (2012a)) where the continuation is perfectly felicitous because the (restrictive) relative clause functions to delimit or define the (first) set of books.¹ There is a corresponding difference in the intonational contour associated with the two types of relative clause, in that a NRRC is offset by a prosodic boundary, as indicated orthographically by the commas.²

- (1) a. *Il-kotba, li xtraj-t-hom ilbieraħ, tajb-in ħafna.*
 DEF-book.PL COMP buy.PFV-1SG-3PL.ACC yesterday good-PL a lot
#L-oħr-ajn mhux ħażin.
 DEF-other-PL COP.SGM.NEG bad
 The books, which I bought yesterday are very good. #The others are not bad. NRRC
- b. *Il-kotba li xtraj-t ilbieraħ, tajb-in ħafna.*
 DEF-book.PL COMP buy.PFV-1SG yesterday good-PL a lot
L-oħrajn mhux ħażin.
 DEF-other-PL COP.SGM.NEG bad
 The books which I bought yesterday are very good. The others are not bad. RRC

¹See the Appendix for a list of the abbreviations used in this paper.

²Anticipating our discussion of this item, we gloss the element *li* as COMP (complementiser).

A number of differences concerning the nature of the nominal head also follow from the functional difference between RRCs and NRRCs. A bare proper noun is perfectly acceptable as the anchor for a NRRC (as in (2)), while in general, a RRC cannot modify a bare proper noun, because it denotes an (already specified) individual. Since Maltese allows DEF-marking on a proper noun, the RRC in (3) is possible, typically in a context where there exist more than one man named Mario.

(2) Mario, li daħal issa
 Mario COMP enter.PFV.3SGM now
 Mario, who came in now NRRC

(3) il-Mario li daħal issa
 DEF-Mario COMP enter.PFV.3SGM now
 Lit: the Mario that came in now RRC

Both types of relative clauses can have a free pronoun as an antecedent (but naturally enough, exclude a pronominal affix as head). Example (4a) has the intonational contour of a NRRC in which the nominal head is separated from the clause by a prosodic boundary, denoted by the commas offsetting the relative clause. This ‘comma intonation’ is absent in (4b), which suggests that this is structurally a RRC, although clearly the contrast set is people other than the denotation of *jien*.

(4) a. Lilha, li n-af-ha sew, ma
 her LI 1-know.IMPV.SG-3SGF.ACC well NEG
 n-a-għmil-hie-x t’hekk.
 1-FRM.VWL-do.IMPV-3SGF.ACC-NEG of.this
 As for her, who I know very well, I do not associate her with doing
 this. NRRC CS 2012a: 3

b. Jien li ma tant-x n-af-u sew, ukoll
 I LI NEG a.lot-NEG 1-know.IMPV.SG-3SGM.ACC well also
 dejjaq-ni, aħseb u ara int!
 bother.PFV.3SGM-1SG.ACC think.IMP.2SG CONJ see.IMP.2SG you
 As for me who doesn’t know him, I was also bothered by him, let alone
 you! RRC

It is claimed in the literature that nominals involving quantified expressions such as *each*, *every*, *no* can occur as anchors of RRCs but not of NRRCs, as reflected

in the judgements in (5) for English from McCawley (1988). McCawley argues on the basis of this contrast that a NRRC involves a (null) pronominal rather than a variable (gap) which could be bound by a nominal quantifier.

- (5) a. The doctor gave a lollipop to each child that she examined. RRC
 b. *The doctor gave a lollipop to each child, who she examined. NRRC

This is certainly true of negative quantifiers in Maltese, where we observe the same asymmetry: negative quantifier nominals such as *ħadd* ‘no one’ and *xejn* ‘nothing’ occur as heads of RRCs and not NRRCs (see (6) below).

- (6) a. Ma kien hemm ħadd li ma kon-t-x
 NEG be.PFV.3SGM EXIST no.one COMP NEG be.PFV-1SG-NEG
 n-af-u qabel, il-laqgħa.
 1-know.IMPV.SG-3SGM.ACC before DEF-meeting.SGF
 There was no one that I had not known before, at the meeting. RRC
- b. *Xejn, li x<t>aq-et t-i-sma ma
 nothing COMP want.REFL.PFV-3SGF 3-FRM.VWL-hear.IMPV.SGF NEG
 nt-qal.
 PASS-say.PFV.3SGM
 Nothing, that she wanted to hear, was said. NRRC

For positive universal quantifiers, we do not find the same pattern, however. The native speaker author of this paper finds examples with the determiner quantifier *kull* ‘all’ in the anchor grammatical for both types of relative clause, as illustrated in (7).³

- (7) a. kull tifel, li ġie j-kellim-ni
 every boy COMP come.PFV.3SGM 3-speak.IMPV.SGM-1SG.ACC
 every boy, who came to talk to me NRRC
- b. kull tifel li ġie jkellimni RRC

On the other hand, the nominal quantifiers *kulħadd* ‘everyone’ and *kollox* ‘everything’ show a different pattern. Despite the expectation (based on the behaviour

³It should be noted that a native speaker reviewer reports different judgements here, finding (7a), which involves a NRRC, ungrammatical, parallel to the English example (5b).

of quantifiers in other languages) that these nominal quantifiers will be acceptable in RRCs but not NRRCs, we find that they are excluded as antecedent of either type of RC, as shown in (8). Instead of the RRC, a free relative must be used, as shown in (10).⁴

- (8) a. *kulhadd, li n-af jien
 every.no.one COMP 1-know.IMPV.SG I
 Intended: everyone, that I know NRRC
- b. *kulhadd li n-af jien RRC
- (9) a. *kollox li għid-t-l-ek kien minn-u
 all COMP say.PFV-1SG-DAT-2SG be.PFV.3SGM from-3SGM.ACC
 Intended: everything that I told you was true RRC
- b. *Kollox, li għid-t-l-ek kien minn-u NRRC
- (10) a. Kulmin ma laħħaq-x mad-deadline
 every.who NEG reply.PFV.3SGM-NEG with.DEF-deadline
 ġie eskluż.
 come.PFV.3SGM excluded.PASS.PTCP.SGM
 Whoever did not reply by the deadline was excluded. FRC
- b. Kulma għid-t-l-ek kien minn-u
 all.what say.PFV-1SG-DAT-2SG be.PFV.3SGM from-3SGM.ACC
 All that I told you was true. FRC

A key issue in the analysis of NRRCs is the question of whether they are syntactically independent of the antecedent head noun, as proposed, for example in radical orphanage accounts (Espinal, 1991; Peterson, 2004), or whether they are syntactically integrated Arnold (2007). A number of behaviours are consistent with the idea that NRRC are independent clauses which are not tightly integrated with the anchor in the syntax (but see Arnold (2007) for arguments that these empirical observations are in fact consistent with a syntactically integrated account of NRRCs). Here we briefly discuss the extent to which these properties also distinguish Maltese RRCs from NRRCs.

⁴It should be noted that a native speaker reviewer again reports different judgements here, finding the NRRC example (8a) grammatical in this case.

Consider first the interaction of RRCs and NRRCs with sentential negation, where the behaviour of NRRCs in English is like that of independent clauses. The examples in (11) are both grammatical, while those in (12) are contrasting. The salient reading of (12) has the indefinite scoping inside the negation: thus (12a) is interpreted as saying that it is not the case that Salvu owns a car which has a roof. The oddness of (12b) follows on this scoping, for it involves making a comment about the (non-existing) car. Similar examples with independent clauses are also ungrammatical (see (13)).

- (11) a. Salvu għand-u karozza li għand-ha saqaf.
 Salvu at-3SGM.ACC car.SGF COMP at-3SGF.ACC roof
 Salvu owns a car which has a roof. RRC
- b. Salvu għand-u karozza, li għand-ha saqaf
 Salvu at-3SGM.ACC car.SGF COMP at-3SGF.ACC roof
 Salvu owns a car, which has a roof. NRRC
- (12) a. Salvu m'għand-u-x karozza li għand-ha saqaf.
 Salvu NEG.at-3SGM.ACC-NEG car.SGF COMP at-3SGF.ACC roof
 Salvu doesn't own a car which has a roof. RRC
- b. *Salvu m'għand-u-x karozza, li għand-ha saqaf.
 Salvu NEG.at-3SGM.ACC-NEG car.SGF COMP at-3SGF.ACC roof
 Salvu doesn't own a car, which has a roof. NRRC
- (13) *Salvu m'għand-u-x karozza. Għand-ha sunroof.
 Salvu NEG.at-3SGM.ACC-NEG car. At-3SGF.ACC sunroof
 Lit: Salvu doesn't have a car. It has a sunroof.

As in English, NRRCs are not limited to nominal anchors, allowing a wider range of antecedents. (14) and (15) are perfectly grammatical, but the RRC counterparts would be completely ungrammatical. Again, the behaviour of the NRRC in this regard is similar to that of an independent clause.

- (14) Marija poggie-t kollox f'kamrit-ha, li
 Mary place/put.PFV-3SGF all in.room-3SGF.GEN COMP
 fil-veritá kien l-aħjar post fejn setgħ-et
 in.DEF-truth be.PFV.3SGM DEF-best.COMPAR place where can.PFV-3SGF
 t-a-ħbi-hom.
 3-FRM.VWL-hide.IMPV.SGF-3PL.ACC

Mary put everything in her room, which in all honesty was the best place where she could hide them. NRRC

- (15) Imbagħad Kim beda j-suq
 then K start.PFV.3SGM 3-drive.IMPV.SGM
 j-ghaġġel/bl-addoċċ, li filfatt
 3-hurry.IMPV.SGM/with.DEF-random COMP in.DEF.fact
 n-a-ħseb huwa/kien perikuluz hafna.
 1-FRM.VWL-think.IMPV COP.3SGM/be.PFV.3SGM danger.SGM a.lot
 Then Kim started driving far too fast, which I think is really dangerous.

Given the evidence we have seen so far of the relative independence of the NRRC from its antecedent, we might expect NRRCs to permit split antecedents, as they do in English examples such as *Kim likes muffins, but Sandy prefers scones, which they eat with jam* (Arnold, 2007, 274). The availability of split antecedence is consistent with a pronominal status for the relative pronoun *which* in such cases. Split antecedence is also possible in Maltese NRRCs: in (16) the wh-phrase *liema frott* ‘which fruit’ is anteceded by *it-tuffieħ* ‘apple’ and *il-banana* ‘banana’.⁵

- (16) Marija t-ħobb it-tuffieħ filwaqt li Rita
 Mary 3-love.IMPV.SGF DEF-apple.MASS while COMP Rita
 t-ħobb il-banana, liema frott dejjem
 3-love.IMPV.SGF DEF-banana.MASS, which fruit.MASS always
 j-ieħd-u-h magħ-hom għal-lunch.
 3-take.IMPV-PL-3SGM.ACC with-3PL.ACC for-lunch
 Mary loves apples, while Rita loves banana, which fruit they always take with them for lunch. NRRC

The two types of RCs are also distinct in terms of their interaction with ellipsis, when the relative clause is VP-internal (McCawley, 1982). Here again, this empirical contrast underlines the relative independence of the NRRC (as opposed to the RRC) from its antecedent. In the RRC in (17), the relative clause is understood as forming part of the elided material (given its attachment within the NP). As a consequence the pronoun *-ha* (in the elided material) can be understood as referring to *Marija* or *Rita* (reflecting the distinction between strict and sloppy identity) or as disjoint from both. In (18) on the other hand,

⁵We discuss further this type of ‘internally headed’ NRRC in section 6.

Beyond the differences outlined above, RRCs and NRRC share a number of clear commonalities both in terms of internal structure and in terms of the distribution of different relative clause formation strategies across the two functional types. The full range of grammatical functions are available to relativisation in each type of relative clause, including subject (SUBJ), object (OBJ), recipient/goal indirect object (IOBJ), secondary (theme) object in a double object construction (OBJ2), the object of a preposition (OBL OBJ), oblique, adjunct and the possessor functions (OBL, ADJ and POSS respectively). In the following two sections we look in detail at the internal structure of the relative clause and the two major RC formation strategies, treating RRC and NRRC together and pointing out differences (in the distribution of different morphosyntactic strategies) as appropriate.

3 The complementiser strategy

The relative clauses in the examples above are all introduced by the element *li* ‘that’, which we take to be a cognate of the forms *yalli/alli/illi/lli* found in relative clauses in the modern Arabic dialects.⁷ In very formal speech, the form *illi* may sometimes occur in place of *li*. Diachronically, it may be that *li* has derived from the relative pronoun which persists as *allaḏi* (and paradigmatically related forms) in Modern Standard Arabic (MSA), and indeed several grammars do in fact refer to *li* as a relative pronoun (Sutcliffe (1936, 183), Aquilina (1973, 295)).

One important difference between Maltese and Arabic dialects is that there is no counterpart in Maltese to the Arabic complementiser *?inna* ‘that’ (used in declarative subordinate clauses); Maltese makes use of *li* to correspond both to *yalli/alli/illi/əlli/lli* and *?inna*. In fact there is no good reason for arguing that the *li* used in Maltese RCs is distinct from the *li* used elsewhere in subordinate clauses, which sources agree in treating as a complementiser (or subordinator, as they call it) (Fabri, 1987; Borg, 1991, 1994; Borg and Azzopardi-Alexander, 1997). We therefore treat *li* as a complementiser.⁸ The literature on the modern Arabic dialects takes various positions on the cognate *yalli/alli/illi/əlli*.

⁷Note that the syntactic behaviour of these cognate elements is not necessarily identical across the range of Arabic vernaculars.

⁸While we may want to extend this claim for the use of *li* in free relative clauses as well, we restrict attention here to RRCs and NRRCs, and will leave any claim with respect to free relative clauses for future research.

Brustad (2000:104) refers to it as a complementiser, yet treats it as a relative pronoun in its relative clause use (p. 90). A number of analyses, including Nouhi (1996), Aoun (2000) and Aoun et al. (2010), and Alqurashi (2013) for Moroccan, Lebanese, and Hijazi Arabic respectively, take the corresponding element in relative clauses to be a complementiser.

One significant fact favouring the complementiser over the pronominal analysis is the impossibility of pied-piping a preposition alongside *li*. This is illustrated in the contrast in grammaticality between (21) and (22).⁹

(21) it-tifel li kon-t miegħ-u
 DEF-boy COMP be.PFV-1SG with-3SGM.ACC
 the boy that I was with

(22) *it-tifel ma' li kon-t
 DEF-boy with COMP be.PFV-1SG
 Intended: the boy who I was with

Combinations of a preposition (or other element) with the form *li* are nevertheless found in Maltese, introducing a range of adjunct clauses (Borg and Azzopardi-Alexander, 1997, 38-48). Some examples are provided in (23)-(27), and others include the fused forms *talli* ‘of.li’ (‘since/because’) (mentioned in (Sutcliffe, 1936, 183), *filli* ‘in.li’ (‘sometimes’) and *ħalli* ‘hortative/injunctive *ħa+li*’ (‘so that, let’s’) (Vanhove, 2000, 235).

(23) Itlaq igri [malli t-i-smagħ-ni]!
 leave.IMP.2SG run.IMP.2SG with.LI 2-FRM.VWL-hear.IMPV.SG-1SG.ACC
 Go running as soon as you hear me! BAA: 39

(24) U n-e-rġgħ-u [għalli kon-na qabel l-1964].
 CONJ 1-FRM.VWL-repeat.IMPV.SG for.LI be.PFV-1PL before DEF-1964
 And we go back to how we were before 1964. MLRS

(25) [Billi ma staj-t-x n-i-fhem],
 with/through.LI NEG can.PFV-1SG-NEG 1-FRM.VWL-understand.IMPV.SG
 ma j-fissir-x li jien iblah.
 NEG 3-mean.IMPV.SGM-NEG COMP I ignorant.SGM

⁹Another argument put forward in support of the complementiser analysis of *alladi* (and related inflecting forms) in MSA is the fact that the Case expressed by *alladi* reflects the Case of the antecedent, rather than that assigned within the relative clause (Alqurashi, 2013, 76), (Jassim, 2011, 9). This is not relevant to Maltese.

Even though/if I couldn't understand, it doesn't mean that I am ignorant.

- (26) Aħjar uff milli aħħ.
 better.COMPAR uff(groan) from.LI ahh (moan of hurt)
 Better to groan in discontent rather than moan in pain. (Maltese Proverb)

- (27) t-i-sta' t-waqqaf il-brawżer
 2-FRM.VWL-can.IMPV.SG 2-stop.CAUSE.IMPV.SG DEF-browser.SGM
 tiegħ-ek [milli j-a-għmel]...
 of-2SG.ACC from.LI 3-FRM.VWL-do.IMPV.SG
 you can stop your browser from doing ... MLRS

A plausible hypothesis is that these synchronically fused complementising elements which introduce adjunct clauses have developed diachronically through the lexicalization of PPs (and possibly *li* may have been a *wh*-pronoun at that stage). In section 4 we discuss some similar lexicalisations including prepositional heads, in relation to the *wh*-pronoun strategy for relative clause formation in Maltese.

The complementising element *milli*, which introduces ‘from’ and ‘instead of’ adjunct clauses in (26)-(27), may also introduce RCs: see (28) for a RRC and (29) and (30) for NRRCs.¹⁰ In relation to these relative clause cases we refer to *milli* as a *partitive* complementiser, whose interpretation is derived from a fusion of *minn* ‘from’ with *li*.

- (28) Għoġb-ok xi ktieb milli ġib-t-l-ek?
 like.PFV.3SGM-2SG.ACC some book.SGM from.LI bring.PFV-1SG-DAT-2SG
 Did you like any book from (the ones) that I got you? RRC

- (29) Fadal-l-ek past-i, milli sajjar-t-l-ek jien?
 leave.PFV.3SGM-DAT-2.SG bun-PL from.LI bake.PFV-1SG-DAT-2SG I
 Do you still have (some) buns, from those I baked?
 NRRC: CS 2012a: 7 (fn. 2)

¹⁰Our native speaker reviewer found (29) ungrammatical, while the native speaker author finds it perfectly grammatical. We cannot account for these strongly divergent views. (30) is a further example, from the web – it is abundantly clear from the context that this is a non-restrictive example.

- (30) Għand-ha xi ktieb tar-riċett-i bil-Malti, milli
 at-3SGF.ACC some book of.DEF-recipe-PL with.DEF-Maltese from.COMP
 t-a-ghmel Petra? Thanks. In-selli
 3-FRM.VWL-do.IMPV.SGF Petra? Thanks. 1-send.regards.IMPV.SG
 għal-i-kom.
 for-EPENT.VWL-2PL.ACC
 Does she have a book of recipes in Maltese, from (the ones) which Petra
 does? Thanks. I send greetings to you.

The possibility of using *milli* in RCs is noted in Sutcliffe (1936, 183), who provides the example in (31), but is not mentioned in any subsequent literature. However his example (31) is actually a headless (or free) relative clause, since there is no nominal head external to the RC. A corresponding headed example is (32).

- (31) barra milli għid-na, ...
 out from.LI say.PFV-1PL
 apart from what we said ... Sutcliffe 1936: 183

- (32) barra mill-kliem li għid-na, ...
 out from.DEF-word.PL COMP say.PFV-1PL
 apart from the words which we said, ...

Li occurs as the complementising element in a range of other adjunct clauses as part of expressions such as *waqt li/filwaqt li* ‘while’, *tant li* ‘so much so’, *hekk li* ‘such that’, *apparti li* ‘apart from that’, *once li* ‘once that’, *wara li* ‘after’, *bejn li* ‘between’, *dment li* ‘on condition that’. Additionally, it introduces embedded complements to verbs of thinking and telling (33), noun complements and factive clauses (34), and cleft and focus constructions (35).

- (33) a. N-a-ħseb li n-af-u.
 1-FRM.VWL-think.IMPV.SG COMP 1-know.IMPV.SG-3SGM.ACC
 I think that I know him.
- b. Qal-u-l-i li wasl-u.
 say.PFV.3-PL-DAT-1SG COMP arrive.PFV.3-PL
 They told me that they arrived. CS 2012a: 5

- (34) a. Il-fatt li wasal-na tard ma
 DEF-fact COMP arrive.PFV-1PL late NEG
 j-ħabbat-ni-x.
 3-bother.IMPV.SGM-1SG.ACC-NEG
 The fact that we arrived late does not bother me. CS 2012a: 6
- b. Il-ħolma li fuq din l-għolja
 DEF-dream.SGF COMP on DEM.SGF DEF-hill
 t-i-n-bena belt ġdid-a,
 3-EPENT.VWL-PASS-build.IMPV.SGF city.SGF new-SGF
 fl-aħħar seħħ-et.
 in.DEF-last.COMPAR happen.PFV-3SGF
 The dream that a city would be built on this hill has finally been
 realized. BAA 1997: 32
- (35) Li l-ġimgħa d-diehl-a se t-kun
 COMP DEF-week.SGF DEF-enter.ACT.PTCP-SGF PROSP 3-be.IMPV.SGF
 vaganza hija stqarrija sorprendenti
 holiday COP.3SGF statement.SGF surprising.SGF
 That the coming week will be a holiday is a surprising statement.
 BAA 1997: 30

In the following section, we discuss the distribution of gaps and resumptive pronouns in relative clauses using the complementiser strategy.

3.1 Resumptive Pronouns and Gaps

The complementiser strategy occurs with both resumptive pronouns (RPs) and gaps at the relativised/within-clause position in both RRCs and NRRCS. The personal pronominal forms of Maltese are given in Table 1. The bound forms in the third column, headed ‘Bound DAT/IOBJ’ are typically used for recipients, goals and beneficiaries and other sorts of dative arguments. The strong forms in the final column correspond to both ACC and DAT bound forms. The bound forms in Table 1 and also (in some cases) the strong SUBJ(NOM) forms are used as RPs.¹¹

As noted above, Maltese allows relativisation on a wide range of within clause functions. We illustrate the use of the gap strategy by a simple SUBJ example

¹¹Resumptive pronouns occur in a range of other unbounded dependency constructions, including topicalisation, *tough* constructions, and interrogative constructions but our focus here is solely on relative clauses.

	NOM/SUBJ	Bound ACC/OBJ	Bound DAT/IOBJ	OBJ/IOBJ
1SG	jien	-ni	-l-ni	lili
2SG	int	-(V)k	-l-Vk	lilek
3SGM	hu/huwa	-u/-h/-w	-l-u	lilu
3SGF	hi/hija	-ha	-l-ha	lilha
1PL	aħna	-na	-l-na	lilna
2PL	intom/intkom	-kom	-l-kom	lilkom
3PL	huma	-hom	-l-hom	lilhom

Table 1: Pronominal Forms in Maltese

(36) and the resumptive strategy by an example of relativisation on the object of a preposition in (37), and discuss the range of possible functions below.¹²

(36) it-tifel li ħareġ issa
 DEF-boy COMP go.out.PFV.3SGM now
 the boy that just went out RRC

(37) il-forġ, li ħmej-na l-ħobż fi-h
 DEF-oven COMP bake.PFV-1PL DEF-bread in-3SGM.ACC
 the oven, in which we baked the bread NRRC CS 2012a: 8

As we will see, the RP and gap strategies in Maltese are not in strict complementary distribution, as they may be used interchangeably in some relativised positions. This means that it would be incorrect to characterise resumption as a strategy of last resort (Aoun, 2000) in Maltese relative clauses (and this in turn has ramifications for theoretical analyses, see for example Camilleri and Sadler (2011)). Indeed, if we restrict our attention to the complementiser strategy of relative clause formation, the distribution bears out McCloskey (2011)’s intuition (for Irish) that resumptive and gap are in free variation except where constraints on movement (in his framework) independently rule out the use of a gap.

Relativisation on the highest SUBJ within the relative clause obligatorily involves the gap strategy (in the sense that a NOM pronominal form may not be used) in both RRCs and NRRCs. This indicates that Maltese RPS are subject to an anti-locality condition in the form of the familiar Highest Subject Restriction

¹²For completeness, we note that a reviewer disagrees with our grammatical judgement, finding (37) ungrammatical on the intended NRRC reading. This is orthogonal to the issue of the presence of the resumptive, which is always required for objects of prepositions.

(Borer, 1984; McCloskey, 1990).¹³

In long-distance relativisation, however, both the gap and the RP strategies are grammatical. Contrast (38) with (39).

(38) it-tifel li (*hu) ra-ni lbieraħ
DEF-boy COMP (*he) see.PFV.3SGM-1SG.ACC yesterday
the boy who saw me yesterday RRC CS 2011: 112

(39) it-tifel, li qal-u-l-i li Ø/hu kien
DEF-boy COMP say.PFV.3-PL-DAT-1SG COMP he be.PFV.3SGM
ra-hom ilbieraħ
see.PFV.3SGM-3PL.ACC yesterday
the boy, whom they told me that he had seen them yesterday NRRC CS
2012a: 6

If relativisation targets one conjunct in a coordinated subject a RP is required:

(40) Ir-raġel li Marija u hu għad-hom kemm siefr-u
DEF-man COMP Mary CONJ he still-3PL.ACC how travel.PFV.3-PL
flimkien, j-a-ħdem magħ-ha.
together 3-FRM.VWL-work.IMPV.SGM with-3SGF.ACC
The man that Mary and him have just been abroad together, works with
her.

The distribution of gaps and resumptives for subject relatives is identical to that in a number of Arabic vernaculars, including Moroccan (MA), at least for RRCs (there is no relevant NRRC date available in the literature):

(41) a. l-wlad lli mša l-Hariġ
DEF-boy COMP go.PFV.3SGM to-abroad
the boy that went abroad MA RRC Nouhi 1994: 10

¹³It is possible to have a type of epithetic phrase in the highest subject position in both types of relative clause.

(ii) Ir-raġel, li ja bagħal l'hu rebaħ elf ewro, qas
DEF-man COMP VOC mule COMP.he win.PFV.3SGM thousand euro NEG
ta-ni ewro minn-hom!
give.PFV.3SGM-1SG.ACC euro from-3PL.ACC
The man, i.e. (my husband), who the-ox-he-is won a thousand euros, didn't give me
even a single euro. NRRC

- b. l-wlad li danni-t blli (huwwa) mša
 DEF-boy COMP think.PFV-2SG COMP (he) go.PFV.3SGM
 l-Hariġ
 to-abroad
 the boy that you thought that went abroad MA RRC Nouhi 1994: 10
- c. r-raġal li huwwa u mart-u mša-w l-Hariġ
 DEF-man COMP he CONJ wife-3SGM.GEN go.PFV.3-PL to-abroad
 the man that he and his wife went abroad MA RRC Nouhi 1994: 11

The distribution of RPs in Maltese is not completely identical in RRCs and NRRCs involving object relativisation. RRCs on the OBJ function permit both gap and resumptive in free variation, with one exception: a resumptive is not possible in a short-distance OBJ RRC with a definite or quantified head. (42) and (43) exemplify long relativisation and (44) shows the optional presence of a resumptive in a short-distance RRC with an indefinite head.

- (42) kull tifel li ħsib-t li kellim-t-(u)
 every boy COMP think.PFV-1SG COMP speak.PFV-1SG-(3SGM.ACC)
 lbieraħ
 yesterday
 every boy that I thought I spoke to yesterday RRC CS 2011: 112
- (43) Sab-u speċi t'għadam li j-a-ħsb-u
 find.PFV.3-PL species of.bone.PL COMP 3-FRM.VWL-think-IMPV-PL
 li ħadd ma ddokumenta-(hom) qabel.
 COMP no.one NEG document.PVV.3SGM-(3PL.ACC) before
 They found a species of bones that they think that no one has documented
 before. RRC
- (44) Tifel li n-af-(u) sew għadda
 boy COMP 1-know.IMPV.SG-(3SGM.ACC) well pass.PFV.3SGM
 mill-eżami.
 from.DEF-exam
 A boy that I know well passed the exam. RRC

(44) contrasts with examples involving a definite or quantified head, where only the gap strategy is possible. If some sort of anti-locality condition is responsible for this pattern, it must be one which is sensitive to features of the antecedent.

(45) Iltqaj-t mat-tifel li
meet.PFV-1SG with.DEF-boy COMP
kellem/*kellm-u ilbieraħ.
speak.PFV.3SGM/*speak.PFV.3SGM-3SGM.ACC yesterday
I met with the boy he spoke to yesterday. RRC CS 2011: 112

(46) Ra-t 'l kull tifel li
see.PFV-3SGF ACC all boy COMP
t-af/*t-af-u Mary.
3-know.IMPV.SGF/*3-know.IMPV.SGF-3SGM.ACC Mary
She saw every boy Mary knows. RRC

Turning now to NRRCs, long-distance object relativisation allows both the gap and the RP strategy, just as the RRCs do. NRRCs do not show the restriction on the distribution of RPs in short-distance (object) NRRCs seen in (45)-(46): they occur freely irrespective of the nature of the anchor. A resumptive is required in (short-distance) relativisation if the antecedent is a proper noun referring to a human (presumably for reasons connected to some sort of pragmatic salience), as the contrast between (49) and (50) illustrates.

(47) it-tifel, li (ħsib-t li) raj-t-(u)
DEF-boy COMP (think.PFV-1SG COMP) see.PFV-(1SG-3SGM.ACC)
ilbieraħ
yesterday
the boy, who I (think that I) saw yesterday NRRC

(48) qed n-i-stenna tifel, li sikwit
PROG 1-EPENT.VWL-wait.IMPV.SG boy COMP often
(semmej-t-l-ek li) n-a-ra-(h)
mention.PFV-1SG-DAT-2SG COMP 1-FRM.VWL-see.IMPV.SG-(3SGM.ACC)
dan-naħ-at
DEM.DEF-area-PL
I am waiting for a boy, who I frequently (mention to you that I) see in
these areas NRRC

(49) Marija, li n-af-*(ha) sew
Mary COMP 1-know.IMPV.SG-3SGF.ACC well
Mary, who I know very well NRRC CS 2012a: 7

- (50) Marija, li għid-t-l-ek li n-af-(ha)
 Mary, COMP say.PFV-1SG-DAT-2SG COMP 1-know.IMPV.SG-(3SGF.ACC)
 sew
 well
 Mary, whom I told you that I know very well NRRRC CS 2012a: 7

The material is not available in the literature to compare the Maltese pattern of distribution in NRRCs with that of any Arabic vernacular, but some comparison is possible in the case of RRCs. Both Nouhi (1996) (for Moroccan Arabic) and Alqurashi (2013) (for Hijazi Arabic) report a relationship between definiteness and the distribution of gaps in short-distance relative dependencies on the OBJ. A RP is necessary in all relativised long-distance OBJ positions, irrespective of the antecedent's definiteness, but in short-distance relativisation involving the highest OBJ a gap is optionally available when the antecedent is definite, while a RP is obligatory when the antecedent is indefinite. The examples (51)-(53) illustrate.

- (51) l-ktab lli danni-t blli nsit-i-h
 DEF-book COMP think.PFV-2SG COMP forget.PFV-1SG-3SGM.ACC
 f-l-qsam
 in-DEF-class
 the book that you thought you forgot in class MA RRC Nouhi 1994: 11
- (52) ġbar-t l-ktab lli nsi-ti-(h) f-l-qsam
 find.PFV-1SG DEF-book COMP forget.PFV-1SG-(3SGM.ACC) in-DEF-class
 I found the book that I forgot in class MA RRC Nouhi 1994: 10
- (53) ġbar-t wahd l-ktab lli nsi-ti-h
 find.PFV-1SG one DEF-book COMP forget.PFV-1SG-3SGM.ACC
 f-l-qsam
 in-DEF-class
 I found a book that I forgot in class MA RRC Nouhi 1994: 12

Relativising upon the recipient or goal/indirect object in-clause function in Maltese involves a further difference between RRCs and NRRCs concerning the distribution of gaps and RPs. In Standard Maltese, relativisation on the recipient or goal/indirect object function always involves a RP, in both RRCs and NRRCs, and in cases of both short-distance and long-distance relativisation.

- (54) Pawlu, li bġhat-nie*(-l-u) l-ittra
 Paul COMP send.PFV-1PL-DAT-3SGM DEF-letter
 Paul, who we sent the letter to NRRRC CS 2012a: 8
- (55) Ir-raġel li kien-u qed j-a-ħsb-u li
 DEF-man COMP be.PFV.3-PL PROG 3-FRM.VWL-think.IMPV-PL COMP
 ma baġħt-u-l-u-x l-ittra, wegib-ni.
 NEG send.PFV.3-PL-DAT-3SGM-NEG DEF-letter reply.PFV.3SGM-1SG.ACC
 The man that they had thought that they hadn't sent him the letter,
 replied. RRC

In the non-Standard variety, on the other hand, a minor difference emerges between RRCs and NRRRCs, as it is possible to have a gap in short-distance RRCs.¹⁴

As mentioned above, Maltese allows relativisation on a wide range of functions, including the OPREP (see (37) above and (56)), the POSS within NP (57) and the secondary object in a double object construction (58). While the OPREP and POSS in-clause GFS require the obligatory presence of a RP, as in other Arabic dialects, relativisation on the secondary object in a double object construction obligatorily involves a gap. Example (59) shows that the same is true of MA.¹⁵

- (56) il-flus li kulhadd j-a-ħdem
 DEF-money COMP every.no.one 3-FRM.VWL-work.IMPV.SGM
 għal-i-hom
 for-EPENT.VWL-3PL.ACC
 the money that everyone works for
- (57) it-tarbija, li n-af 'l omm-ha
 DEF-baby COMP 1-know.IMPV.SG ACC mother-3SGF.GEN
 the baby, whose mother I know NRRRC CS 2012a: 8
- (58) il-grammatika li għid-t-l-i għallim-t-hom
 DEF-grammar COMP say.PFV-1SG-DAT-2SG teach.PFV-1SG-3PL.ACC
 the grammar that I told you I taught them RRC CS 2011: 112

¹⁴As we proceed, we will note in passing a number of other differences between the Standard and dialectal Maltese varieties.

¹⁵Brustad (2000, 108-109) presents (59) as a case of OBJ relativisation, but since the recipient is expressed by means of the object pronominal affix *-ni* we analyze this as a double object construction.

(59) dīk l-bastīyyāt lli ʔti-tī-ni dīk n-nhār
 DEM DEF-pill.PL REL give.PFV-2SG-1SG.ACC DEM DEF-day
 those pills you gave me the other day MA RRC Brustad 2000: 109

The following summarises the pattern of distribution of RP and gap pattern for *li* RRCs and NRRCs in short-distance and long-distance relativisation.¹⁶

GF	RRC		NRRC	
	Short Dist	Long Dist	Short Dist	Long Dist
SUBJ	GAP	GAP/RP	GAP	GAP/RP
ProprN OBJ			RP	GAP/RP
Def/Quant OBJ	GAP	GAP/RP	GAP/RP	GAP/RP
Indef OBJ	GAP/RP	GAP/RP	GAP/RP	GAP/RP
OBJ2	GAP	GAP	GAP	GAP
IOBJ	GAP/RP†	RP	RP	RP
OPREP	RP	RP	RP	RP
POSS	RP	RP	RP	RP

†: A gap is permitted only in dialectal Maltese

Table 2: The distribution of GAPS and RPs in RRCs and NRRCs in Maltese

For purposes of cross-dialectal comparison, we provide an additional table providing a comparison of the distribution of RP and gap in Maltese RRCs with that in Moroccan Arabic RRCs, drawing primarily on Nouhi (1996) and Brustad (2000). This shows an identical pattern of gap/RP distribution in non-direct object functions, while the gap strategy extends further into types of direct object function in Maltese than it does in Moroccan Arabic.

GF	MT RRC		MA RRC	
	Short Dist	Long Dist	Short Dist	Long Dist
SUBJ	GAP	GAP/RP	GAP	GAP/RP
Def OBJ	GAP	GAP/RP	GAP/RP	RP
Indef OBJ	GAP/RP	GAP/RP	RP	RP
OBJ2	GAP	GAP	GAP	
OPREP	RP	RP	RP	RP
POSS	RP	RP	RP	RP

Table 3: The distribution of GAPS and RPs in RRCs in MT and MA

Where relevant examples are given, a distributional pattern similar to that of MA is reported in Alqurashi (2013) for Hijazi Arabic. However, strict complementarity is reported for the distribution of gap/RP in some other Arabic

¹⁶Note that we use IOBJ to refer to the (dative-marked) recipient or goal function and OBJ2 for the theme object of a double object construction.

dialects, including Latakian Syrian Arabic (Shaheen, 2012, 61) and Iraqi Arabic (Jassim, 2011).

The whole of this discussion thus far, and the basic distribution of gaps and RPs summarised in Table 2, abstracts away from contexts in which other factors intervene and require the use of RPs. The most notable cases where gaps are systematically excluded are of course the island constraints. Resumptive pronouns are used in syntactic islands in Maltese. (60) and (61) illustrate the fully grammatical use of an RP in relation to the Complex NP Constraint and the Wh-Island Constraint respectively.¹⁷

- (60) Ir-raġel li n-af il-mara li
 DEF-man COMP 1-know.IMPV.SG DEF-woman COMP
 t-ħobb-u, j-ism-u Mario.
 3-love.IMPV.SGF-3SGM.ACC 3-name.IMPV.SGM-3SGM.ACC
 The man who I know the woman that loves (him), is named Mario.

- (61) il-mara li int rid-t t-kun t-af
 DEF-woman COMP you want.PFV-2SG 2-be.IMPV.SG 2-know.IMPV.SG
 min ra-ha
 who see.PFV.3SGM-3SGF.ACC
 the woman that you wanted to know who saw her

A further context where a resumptive is required, even when it would otherwise be excluded, is when the relativised position is *also* the target of clause-internal topicalisation. Discussion of this aspect of Maltese syntax itself would take us too far afield, but the interaction with RCs is illustrated in (62), a relative clause where otherwise we would expect a gap, given that the antecedent is associated with the highest definite (quantified) OBJ.

- (62) kull mara li lilha ma ta-w-ħie-x riġal
 every woman COMP her NEG give.PFV.3-PL-3SGF.ACC-NEG present
 every woman that (as for her) they didn't give (her) a present

¹⁷A reviewer disagrees with the grammaticality judgement in (60), which we find extremely puzzling.

4 The *wh*-pronoun strategy

In this section we outline the characteristics of the *wh*-pronoun strategy for RCs in Maltese, a strategy which has been largely ignored in the previous literature.¹⁸ The major contemporary descriptive grammar of Maltese (Borg and Azzopardi-Alexander, 1997) makes no mention of the use of *wh*-pronouns in relativisation, while the earlier grammars of Aquilina (1973, 295,337) and Sutcliffe (1936, 183) allude briefly to *ma* ‘what’ and *min* ‘who’ as relative pronouns (Sutcliffe refers in passing to *ma* as the ‘neuter relative’ pronoun (p. 183)).

We start by considering the distribution of this *wh*-strategy in Standard Maltese. At first sight the *wh*-strategy appears to be used only in examples involving relativisation on the object of a preposition. The prepositional phrase may function as an oblique or as an adjunct, in both RRCs and NRRCs. (63) and (64) have the *wh*-pronoun *min* ‘who’, because the antecedent/anchor is human. In all of the following examples, the fronted material within the relative clause is shown in boldface.

- (63) (ir)-raġel **ma’/fejn/għand min** ħsib-t li
 (DEF)-man with/near/at who think.PFV-1SG COMP
 raj-t-ek
 see.PFV-1SG-2SG.ACC
 the/a man with/near/next to whom I thought I saw you
 RRC CS 2011: 114

- (64) Franco u Carl, **ħdejn min** spjegaj-t-l-i li
 Franco CONJ Carl near who explain.PFV-2SG-DAT-1SG COMP
 poġġej-t
 sit.PFV-2SG
 Franco and Carl, next to whom you explained to me that you sat
 NRRC CS 2012a: 11

Equivalent examples are found with the *wh*-item *xieq* ‘what’ and non-human antecedents, also involving relativisation on the OBJ within a prepositional oblique or adjunct, in both RRCs and NRRCs.

¹⁸Although see Camilleri and Sadler (2011) and Camilleri and Sadler (2012a) for some discussion.

Note however that, as we will see below, this picture as it stands will turn out to be over-simplified.

Although most Arabic vernaculars do not make use of a *wh*-strategy in headed RRCs and NRRCs, the use of the *wh*-strategy with obliques and adjuncts in the standard variety of Maltese finds a striking parallel with the Western dialects of Moroccan Arabic (MA) and Algerian Arabic (AA). According to Harrell (1962, 162) for MA, the non-human OBJ *wh*-pronoun *aš*, which is also an indefinite specific marker (as in Maltese), is found together with the preposition *f* ‘in’ or *b* ‘with, by means of’. (71a) illustrates this use of the *wh*-strategy as an alternative to the non-*wh*-pronoun strategy, shown in (71b). Similar data for Algerian Arabic (AA) is given in Guella (2010, 104): as well as the prepositions *b* ‘with’ and *f* ‘in’ preceding *aš*, the preposition *flā* ‘on’ also occurs in a fronted *wh*-phrase, as illustrated in (72a). Again, the complementiser with RP strategy is an alternative, shown in (72b).

- (71) a. le-mkoḥla **b-aš** qtel-t s-sbeḥ
 DEF-rifle with-what kill.PFV-1SG DEF-lion
 the rifle that I killed the lion with
- b. ha le-mkoḥla **lli** qtel-t bi-**ha** s-sbeḥ
 here’s DEF-rifle.SGF COMP kill.PFV-1SG with-3SGF.ACC DEF-lion
 Here’s the rifle that I killed the lion with. MA Harrell 1962: 164
- (72) a. el-metraḥ **flāš** neḥs-ū kbīr
 DEF-mattress.SGM on-what sleep.PFV.3-PL large.SGM
 The mattress they slept on is big.
- b. el-metraḥ **elli** neḥs-ū **flī-h** kbīr
 DEF-mattress.SGM COMP sleep.PFV.3-PL on-3SGM.ACC large.SGM
 The mattress they slept on is big. AA Guella 2010: 104

Brustad (2000: 106) states that the *wh*-pronoun relativisation strategy in MA is limited to ‘oblique objects of low individuation whose semantic role is generally locative or temporal’. However, this claim is challenged by data such as (73) from MA, with the human *wh*-pronoun *mn* ‘who’ (Nouhi, 1996, 11) (compare the similar Maltese example in (63) above). Again, the alternative *lli* and RP strategy is equally possible. Parallel examples for AA are given in (74).

- (73) a. ir-raġal **mfa mn** mši-t
 DEF-man with who walk.PFV-1SG
 the man with whom I walked
- b. ir-raġal **lli** mši-t **mfa-h**
 1DEF-man COMP walk.PFV-1SG with-3SGM.ACC
 the man that I walked with MA Nouhi 1994: 11

- (74) a. el-wlād **mfa-men** ddābz-u
 DEF-boy.PL with-who fight.PFV.3-PL
 the boys with whom they fought
- b. el-wlād **elli** ddābz-u **mfa-hum**
 DEF-boy.PL COMP fight.PFV.3-PL with-3PL.ACC
 the boys who they fought with AA Guella 2010: 105

Examples (68)-(69) above illustrate the *wh*-strategy with *fejn* ‘where’. This usage is also found in the Western dialects of MA and AA. Brustad (2000, 108) refers to the use of the ‘interrogative particle’ *fīn* in MA providing the relative clause example in (75), and Guella (2010, 105) gives examples of the use of the *wh*-pronoun *-āyēn* ‘where, which’ in AA, occurring with a variety of prepositions (and giving rise to reduced/unreduced pairs such as *f-āyēn* - *f-īn* ‘in what/where’ and *mn-āyēn* - *mn-īn* ‘from what/where’).

- (75) w yətkəbb-lu ʕla l-blāša **fīn** gāls hūwa w
 CONJ he-threw-up on DEF-place where sit.ACT.PRT.SGM he CONJ
 l-mra dyālu w wlād-u
 DEF-wife of-his CONJ children-his
 ... and threw up on the place where he’s sitting, he and his wife and
 children MA Brustad 2000:108

- (76) a. el-bāb **mn-āyēn** duxl-u ždīd
 DEF-door.SGM from-which enter.PFV.3-PL new.SGM
 The door through which they entered is new.
- b. el-bāb **elli** duxl-u menn-u ždīd
 DEF-door COMP enter.PFV.3-PL from-3SGM.ACC new.SGM
 The door through which they entered is new. AA Guella 2010: 105

(77) el-ħammām **f-āyeni** mšā-w bħīd
 DEF-baths in-where go.PFV.3-PL far

The baths where they went is far.

AA Guella 2010: 105

Several P+*wh*-pronoun combinations have become lexicalised in Maltese to the extent that we might consider them synchronically to be single words.²⁰ An exhaustive list of these elements is given in (78). These (fused) words to function as *wh*-forms in both interrogative and relative constructions, corresponding to OBLIQUE and ADJUNCTIVAL functions. Three further forms (which all mean ‘why’) occur as interrogative *wh*-elements but do not introduce RCS: *għalxiex* lit ‘for what’; *għalfejn* lit: ‘for where’ and the Southern dialectal form *għalfiex* lit: ‘for in what’, which diachronically seems to have fused two Ps along with the original *wh*-pronoun.²¹

(78) *fuqhiex* > *fuq xiex* ‘on what’
fiex > *f’xiex* ‘in what’
biex > *b’xiex* ‘with what’
mniex > *minn xiex* ‘from what’
għalxiex ‘for what’
mnejn > *minn fejn* ‘from where’

Standard and dialectal Maltese share the use of the forms in (78), the *wh*-pronoun *fejn* ‘where’ used for locative obliques and adjuncts (ADJS), and the use of *wh*-pronouns *xiex* and *min* as objects of prepositions (in cases of relativisation on OPREP functions), all of which are illustrated above.

Dialectal varieties such as North-Eastern *Naxxari* differ markedly from standard Maltese in extending the use of the *wh*-pronoun strategy to relativisation on direct (term) grammatical functions, provided that the antecedent is definite or specific. This includes a very restricted use of *ma* ‘what’ (in RRCs only) and fully productive use of *min* ‘who’ and *l min* ‘who.ACC’. The use of *ma* in RRCs is as far as we are aware limited to fixed phrases such as the one in (79), which is a dialectal form and in which the antecedent is always *hekk*.

²⁰The same might also be true of the MA *bāš* and *fāš*, and the AA counterparts and other such pronominal combinations.

²¹Note that the fused forms (on the left in (78)) are to be distinguished from the forms on the right such as *b’xiex* ‘with.what’. Although Borg and Azzopardi-Alexander (1997, 23) label *b’xiex* as an ‘instrument question-word’ (our emphasis), a form such as this involves procliticisation of the preposition *bi* ‘with’ onto the *wh*-pronoun *xiex* and the combination is still syntactically transparent. The fused forms on the right, on the other hand, are syntactically opaque.

- (79) Hekk ma ġara.
 like.this what happen.PFV.3SGM
 It's this that happened.

Borg and Azzopardi-Alexander (1997, 36) mention the availability of the ‘element *ma*’ instead of *li* in ‘the case of some (largely fixed) expressions’, and give the examples in (80), from Standard Maltese (and also found in dialectal Maltese). However we would analyse these differently, as one of a number of uses of *ma* in which it does not correspond to a *wh*-pronoun in a vanilla RRC or NRRC. We consider that phrases such as *ma ra* (‘MA see.PFV.3SGM’) and *ma telaq* (‘MA leave.PFV.3SGM’) in (80) are probably best analysed as free relatives, aligning ourselves with the discussion of *?awwalu mā* ‘the first of what’ in MSA in Badawi et al. (2003, 254).²² (Note that this use of *ma* is also present in a number of Arabic vernaculars Brustad (2000, 90).) Apart from examples such as (80), *ma* is also found in the quantified pronominal *kulma* ‘all that’ introducing free relatives. *Ma* is not however part of the synchronic inventory of interrogative pronouns.

- (80) a. L-ewwel ma ra kien-u l-kart-i
 DEF-first MA see.PFV.3SGM be.PFV.3-PL DEF-paper-PL
 m-qallb-in.
 PASS.PTCP-overtured-PL
 The first thing he saw were the overturned papers.
- b. L-aħħar ma telaq kien il-kaptan.
 DEF-last MA leave.PFV.3SGM be.PFV DEF-captain
 The last to leave was the captain. BAA 1997: 36

Two other uses of *ma* (in both Standard and dialect) may be related to the pronominal form *ma* (see Badawi et al. (2003, 521-538) for extensive discussion of the related MSA forms). The first is what Badawi et al. (2003) take to be ‘subordinating conjunctions’ with *mā*. The relevant forms in Maltese involve *ma* with the prepositions *qabel* ‘before’ (81a), *sa* ‘until’, and *bħal* (81b). Borg (1994) also considers these cases to be derived from a *wh*-pronoun use, while synchronically *ma* simply introduces an embedded clausal argument to the preposition, just as *li* does in similar contexts, e.g. *wara li* ‘after’. Parallel

²²This is distinct from the ‘temporal’ *mā* in *?awwala mā* ‘the first time’, which is not found in Maltese.

Unlike *ma* ‘what’ (which is restricted to one fixed phrase), the *wh*-pronoun *min*/*’l min* ‘who/who.ACC’ is productively used as a relative pronoun in dialectal Maltese. The (dialect) examples in (85)-(88) illustrate relativisation on direct functions (SUBJ and OBJ) using the *wh*-pronoun strategy, where the antecedent is definite/specific. As shown from the contrast between (88)-(89), relativisation on the POSS is only possible if the containing NP is pied-piped.

- (85) ir-raġel/*raġel **min** għid-t-l-ek fetaħ-l-i
 DEF-man/*man who say.PFV-1SG-DAT-2SG open.PFV.3SGM-DAT-1SG
 il-bieb
 DEF-door
 the man who I told you opened the door for me RRC CS 2011:5
- (86) Pawlu, **’l min** kellim-t
 Paul, ACC.who speak.PFV-1SG
 Paul, who I spoke to NRRC CS 2012a:9
- (87) it-tifel/tifel, **’l min** n-a-ħseb li bġhat-t
 DEF-boy/*boy ACC.who 1-FRM.VWL-think.IMPV.SG COMP send.PFV-1SG
 l-ittra
 DEF-letter
 the boy, who I sent the letter to NRRC CS 2012a:10
- (88) It-tifla/*tifla **id min** qbad-t, j-isim-ha
 DEF-girl/*girl hand who grab.PFV-1SG 3-name.IMPV.SGM-3SGF.ACC
 Marija.
 Mary
 The girl whose hand I grabbed is named Mary. RRC
- (89) *it-tifel **’l min** n-af lil omm-u
 DEF-boy ACC.who 1-know.IMPV.SG ACC mother-3SGM.GEN
 the boy whose mother I know RRC

Although the *wh*- gap strategy is possible for relativisation on direct functions when the antecedent is human and definite/specific, it is not available for relativisation upon either the SUBJ or the OBJ functions with an inanimate antecedent, irrespective of whether this is definite or indefinite. The non-human *wh*-pronoun *xieq* ‘what’ is only available when the relativised position is the OPREP ((65) - (66) above) and the reduced form *x’/xi* ‘what’ is equally ungrammatical.

(90) *Smaj-t l-aħbar xiex/xi/x'għaġb-it-ha.
 hear.PFV-1SG DEF-news.SGF what surprise.PFV-3SGF-3SGF.ACC
 Intended: I heard the news which surprised her

(91) *Xtraj-t (il-)karozza xiex/xi/x'kien qed i-biġh.
 buy.PFV-1SG (DEF)-car.SGF what be.PFV.3SGM PROG 3-sell.PFV.3SGM
 Intended: I bought the/a car which he was selling.

To summarise, there is a clear divergence between Standard and dialectal Maltese concerning the distribution of the *wh*-strategy for relative clause formation. The use of the *wh*-strategy for non-term functions is productive in all varieties of Maltese. In addition, dialectal variants show fully productive use of the *wh*-pronouns *min/l min* ‘who’ (but not *xiex/x'/xi* (‘what’)) in relativisation on direct (term) grammatical function, while the *wh*-strategy is restricted to non-term functions in standard Maltese. The use of *ma* ‘what’ (which is not found as a *wh*-interrogative pronoun, is highly restricted.

Despite the fact that *xiex/x'/xi* is systematically ungrammatical in relative clauses such as (90) and (91) there is one relative construction in which *x'/xi* does occur in direct relativisation, in both standard and dialectal Maltese. In (grammatical) examples such as (92)-(94), the matrix predicate can only be some form of existential and the predicate of the relative clause must be imperfective in form. These examples are rather reminiscent of Modal Existential free relative clauses Grosu (2004); Šimík (2011) which are subject to the same constraints, and we believe they constitute examples of a further, distinct subtype of RRC.

(92) Ma sib-t-x ktieb tajjeb
 NEG find.PFV-1SG-NEG book.SGM good.SGM
 x'(n-i-sta') n-a-ġra.
 what.1-FRM.VWL-can.IMPV.SG 1-FRM.VWL-read.IMPV.SG
 I didn't find a good book which I can read.

(93) Fadal xi xogħol x'i-sir?
 remain.PFV.3SGM some work.SGM what.3-become.IMPV.SGM
 Lit: Remain some work what becomes?
 Is there any work left to be done?

(94) M'hemm xejn x'in-ti-k.
 NEG.EXIST nothing what.1-give.IMPV.SG-2SG.ACC

There is nothing that I can give you.

These existential constructions are also possible with the *wh*-pronoun *min* ‘who’ in both standard and dialectal Maltese, although as outlined above, the *wh*-pronoun *min* ‘who’ does not otherwise occur in cases of relativisation on direct argument functions in standard Maltese. An example is given in (95), while (96) is also grammatical in dialectal Maltese.²³

(95) M-ghand-i 'l hadd 'l min n-afda
 NEG-at-1SG.GEN ACC no.one ACC who I-trust.IMPV.SG
 I don't have anyone to trust/I trust.

(96) Hemm xi hadd min j-i-sta' j-ghin-ek
 EXIST some no.one who 3-can-IMPV.SGM 3-help.IMPV-2SG.ACC
 There is someone to help you.

Laying these existential RCs to one side, the following summarises the basic distribution of the *wh*-pronoun relativisation strategy in Standard and dialectal Maltese. Except where an intervening factor (such as an island constraint) forces the use of a resumptive, *wh*-relativisation involves the obligatory use of the gap strategy.²⁴

Antecedents	function		Prn type	
DEF + Human	SUBJ	Gap	<i>min</i>	dialect only
DEF + Human	OBJ	Gap	'l <i>min</i>	dialect only
DEF + Human	IOBJ	Gap	'l <i>min</i>	dialect only
Human	OPREP	Gap	P + <i>min</i>	
Non-Human	OPREP	Gap	P + <i>xiex</i>	
Non-Human	OBL	Gap	Fused P + <i>xiex</i>	
Human	ADJ	Gap	P + <i>min</i>	
Non-Human	ADJ	Gap	P + <i>xiex</i> , Fused P + <i>xiex</i>	
Locative	OBL ADJ	Gap	<i>fejn</i> , P + <i>fejn</i> , <i>mnejn</i>	

Table 4: Distribution of *wh*-relatives

²³We have found no discussion of this construction in **the** existing literature, and leave the development of an analysis of these cases for future research.

²⁴If the target of relativisation is a non-selected dative encoding a beneficiary, maleficiary, possessor and or affected experiencer a resumptive pronoun is obligatory, see Camilleri and Sadler (2012b) for discussion of such non-selected arguments.

- (102) *tifel n-i-l<t>aqa' miegħ-u kuljum
 boy 1-EPENT.VWL-meet.RECIP.IMPV.SG with-3SGM.ACC everyday
 Intended: a boy I meet every day

Secondly, the verbal predicate (if there is one), must be imperfective in form in this construction - the contrasts in (103) and (104) show that the perfective verb-form is systematically excluded. This is in contrast to Arabic dialects, which do not limit the 'bare' strategy to imperfective forms, as shown in (105) for Tripoli Libyan Arabic (TLA) and (106) for Iraqi Arabic (IA).²⁵

- (103) a. Tifel j-o-qtol il-qtates mhux se
 boy 3-FRM.VWL-kill.IMPV.SGM DEF-cat.PL NEG PROSP
 j-i-bża' minn ġurdien.
 3-FRM.VWL-be.afraid.IMPV.SGM from mouse
 A boy who kills cats will not be afraid of a mouse. BAA 1997: 35
- b. *Tifel qatel il-qtates mhux se
 boy kill.PFV.SGM DEF-cat.PL NEG PROSP
 j-i-bża' minn ġurdien
 3-FRM.VWL-be.afraid.IMPV.SGM from mouse
 Intended: A boy who killed cats will not be afraid of a mouse.

- (104) a. tifel n-af lil omm-u
 boy 1-know.IMPV.SG ACC mother-3SGM.GEN
 a boy whose mother I know
- b. *tifel kon-t n-af lil omm-u
 boy be.PFV-1SG 1-know.IMPV.SG ACC mother-3SGM.GEN
 Intended: a boy whose mother I knew

²⁵We note in passing that adjunctival (circumstantial) clauses are also limited to imperfective verb-forms in Maltese, as they are in Arabic.

- ((ii) a. Telaq lura d-dar j-ghaġġel kemm j-i-flaħ
 leave.PFV.3SGM back DEF-home 3-hurry.IMPV.SGM how 3-FRM.VWL-strength.SGM
 Lit: He left back to the house he hurries how he has strength
 He went back home hurrying as much as he could.
- b. Marr-et fejn-hom t-ghajjat u t-i-bki
 go.PFV-3SGF near-3PL.ACC 3-shout.IMPV.SGF CONJ 3-FRM.VWL-cry.IMPV.SGF
 She went near them shouting and crying.
- (iii) jalasa l-rajulu yataħaddaθu
 sit.3SGM DEF-man.NOM talks.3SGM
 The man sat talking. MSA Badawi et al. 2004: 489

(105) t-kəlləm-t mʕa wʕld
 RECIP-talk.PFV-1SG with boy
 mā-fhəm-nī-š
 NEG-understand.PFV.3SGM-1SG.ACC-NEG
 I spoke with a boy who didn't understand me. TLA Pereira 2008: 279

(106) eštere-t ketab hətšet ʕan-ah hwaya
 buy.PFV-1SG book.SGM talk.PFV-2SG about-3SGM.ACC a.lot
 I bought a book which you talked about a lot. IA Jassim 2011: 9

It seems that predicate in the modifying phrase may also be adjectival in nature as in (107) and (108). We give these examples for completeness, although of course it is in principle an open question whether they are also best analysed as a type of relative clause. Note that if the antecedent is definite, as in (109) and (110), the bare strategy is no longer available.

(107) Daħl-u f'dar sid-ha m-siefer
 enter.PFV.3-PL in.house.SGF owner-3SGF.ACC PASS.PTCP-abroad.SGM
 They entered a house whose owner is abroad. Aquilina 1973: 338

(108) Ra-w tfajla xagħar-ha aħdar
 see.PFV.3-PL young.girl hair.SGM-3SGF.GEN green.SGM
 They saw a girl whose hair is green.

(109) Daħl-u fid-dar li sid-ha
 enter.PFV.3-PL in.DEF-house.SGF COMP owner-3SGF.GEN
 m-siefer u serq-u kollox
 PASS.PTCP-abroad.SGM CONJ steal.PFV.3-PL everything
 They entered a house whose owner is abroad and stole everything.

(110) Ma ħalle-w-x lit-tiffa li għand-ha
 NEG leave/allow/permit.PFV.3-PL ACC.DEF-girl COMP at-3SGF.ACC
 xagħar-ha aħdar milli t-i-dħol l-iskola
 hair-3SGF.GEN green from.COMP 3-FRM.VWL-enter.IMPV.SGF DEF-school
 They didn't allow/let the girl whose hair is green to enter the school.

6 Internally-headed RCs

In this section we discuss two other types of non-restrictive relative clauses. Apart from a brief mention in Camilleri and Sadler (2012b) (where they are

referred to ‘internally headed’) these constructions are not addressed in the literature as far as we are aware. Both types involve an ‘additional internal head’ (de Vries, 2006), or an ‘epithetic relative phrase’.²⁶ An example of the first type is (111), with the *wh*-pronoun *liema* ‘which’ in specifier position. This is similar to the English and Italian examples given in (112) and (113).

- (111) Pawlu u Salvu, liema rġiel it-tellgħ-u l-Qorti
 Paul and Salvu which men PASS-raise.PFV.3-PL DEF-court
 Paul and Salvu, which men were taken to Court CS 2012a: 26
- (112) There were only thirteen senators present, which number was too few for
 a quorum. Arnold 2007: 289
- (113) Ha raggiunto la fama con *Il giardino dei Finzi-Contini*, il quale
 has reached the fame with *il giardino dei Finzi-Contini* the which
 romanzo ha poi anche avuto una riduzione cinematografica.
 novel has then also had an edition cinematographic
 He became famous with *Il giardino dei Finzi-Contini*, which novel was
 then also made into a film. ITALIAN Cinque 2008: 105

Liema ‘which’ is only mentioned in previous literature with respect to its function as an interrogative *wh*-pronoun, but it is certainly productive in the appropriate register (typically that of more formal reported language, particularly in journalistic prose) in these sorts of NRRCS. (114) illustrates a long-distance SUBJ dependency using *liema rġiel* (with no obvious resumptive), while (115) and (116) involve fronted (prepositional) adjuncts (and no resumptive).

- (114) Pawlu u Salvu, liema rġiel qal-u li t-tellgħ-u
 Paul and Salvu which men say.PFV.3-PL COMP PASS-raise.PFV.3-PL
 l-Qorti
 DEF-Court
 Paul and Salvu, which men they said that were taken to Court
 CS 2012a: 26

²⁶It is hardly surprising that these constructions are NRRCS, since otherwise the relative clause itself contains an additional nominal which would be problematic given reasonable assumptions about semantic composition. The existence of these structures of course constitutes a further difference between RRCS and NRRCS in Maltese.

(115) il-martell, b'liema biċċa għodda
 DEF-hammer.SGM with.which piece.SGF tool.SGF
 rnexxie-li
 succeed.PFV.3SGM-DAT-1SG
 the hammer, with which tool I managed CS 2012a: 27

(116) il-Palazz, f'liema post t-laqqgħ-u l-mistedn-in
 DEF-palace in.which place PASS-gather.PFV.3-PL DEF-guest-PL
 the palace, in which place the guests were gathered CS 2012a: 27

Since *liema* is a *wh*-item, we might expect it not to occur with a resumptive, given that this is the pattern we observe elsewhere. However we find that there are examples in which it does co-occur with a resumptive in cases of object relativisation. The distribution of the gap/RP for the relative-clause internal OBJ is quite complex. A Google search on newspaper sources reveals that, at least for definite antecedents, if the SUBJ is pro-dropped, then the relativised position is obligatorily marked with an RP (117), but if the SUBJ is a lexical NP the relativised position (OBJ) is normally a gap, though a RP may occur in speech (118). For indefinite antecedents, both a gap and RP appear to be equally available (119), providing us with another case in which gaps and RPs are not in complementary distribution.

(117) Pawlu u Salvu, liema rġiel raj-t*(-hom) ilbieraħ
 Paul and Salvu which men see.PFV-1SG-3PL.ACC yesterday
 Paul and Salvu, which men I saw yesterday CS 2012a: 26

(118) Pawlu u Salvu, liema rġiel xi nies ra-w(-hom)
 Paul and Salvu which men some people see.PFV-3PL(-3PL.ACC)
 ilbieraħ
 yesterday
 Paul and Salvu, which men some people saw yesterday CS 2012a: 26

(119) Sikkina, liema oġġett wieħed j-uża-(h) ta'
 knife.SGF which object.SGM one 3-uses.IMPV.SGM-(3SGM.ACC) of
 kuljum, t-i-sta'/j-i-sta'
 every.day 3-FRM.VWL-can.IMPV.SGF/3-FRM.VWL-can.IMPV.SGM
 j-kun/t-kun sors ta' periklu.
 3-be.IMPV.SGF/3-be.IMPV.SGF source of danger
 A knife [generic], which object one uses daily, can be a source of danger.

For (indirect) recipient objects, there is at least a marked preference for a RP.

- (120) Pawlu, liema mistieden ma bġhatt-nie-l-u-x invit
 Paul which guest.SGM NEG send.PFV-1PL-DAT-3SGM-NEG invitation
 formali
 formal
 Paul, which guest we did not send a formal invitation to CS 2012a: 26

The other type of ‘internally-headed’ NRRC combines the complementiser strategy with a fronted epithetic phrase such as *ħaġa bħal din* ‘something like this’ (as in (121)). Although a gap is possible, a RP is strongly preferred. Note that the antecedent and the epithetic phrase functioning as an ‘internal-head’ do not have to match in terms of agreement features (see (119) and (121)). A long-distance example is given in (122).

- (121) l-qtil tat-tifel, li ħaġa bħal din ma
 DEF-killing.SGM of.DEF-boy COMP thing.SGF like this.SGF not
 stennej-ni-(ha) qatt
 expect.PFV-1PL-3SGF.ACC never
 the death of the boy, the sort of thing we never expected CS 2012a: 25

- (122) l-ikla li kien kapaċi j-sajjar u
 DEF-meal.SGF COMP be.PFV.3SGM able 3-cook.IMPV.SGM CONJ
 j-organizza Mario, li ħaġa bħal din ħadd
 3-organize.IMPV.SGM Mario COMP thing.SGF like DEM.SGF no.one
 min-na ma kien qatt basar li
 from-1PL.ACC NEG be.PFV.3SGM never guess.PFV.3SGM COMP
 seta’
 able.PFV.3SGM
 j-a-ġħmel/j-a-ġħmil-ha ...
 3-FRM.VWL-do.IMPV.3SGM/3-FRM.VWL-do.IMPV.3SGM-3SGF.ACC
 the meal that Mario was capable of cooking and organising, which (some-
 thing like this) not one of us ever guessed that he could do ...

7 Conclusion

In this paper we have provided a comprehensive description of the range of different restrictive and non-restrictive relative clauses found in Maltese, highlighting a number of semantic and syntactic differences between the two types. Two

strategies are each found to exist in only one type of relative clause: internally-headed relatives are found only non-restrictively (as they are in Italian and English) and bare relatives are always restrictive. Our discussion has provided detailed description of the overall distribution of gaps and resumptive pronouns in Maltese relatives. We have seen that the overall distribution is very different in the two major constructions. In relative clauses using the complementiser strategy, gap and resumptive are very often in free variation in positions which permit ‘extraction’, and hence resumption should not be viewed as a strategy of ‘last resort’. The picture in *wh*-relatives is quite different, however, and resumptives are found only when gaps are systematically excluded by other intervening constraints and conditions. The existence of two quite different distributional patterns within the same language argues against any approach based on the setting of a single simple parameter.

Our discussion of *wh*-relatives in Maltese has outlined a number of important differences between the range of the strategy in standard and dialectal Maltese. In particular, we see an extension of the *wh*-strategy in dialectal Maltese to relativisation on direct (term) functions with human, definite antecedents. Our discussion of *wh*-relatives has also identified a distinct type of headed *wh*-relative clause, in both standard and dialectal Maltese, found in the complement of a class of existential predicates and bearing a strong resemblance to modal existential free relatives. As far as we are aware, this type of relative clause is not previously discussed in the literature on Maltese.

Our discussion of both the complementiser strategy and the *wh*-strategy has shown the strong parallels between Maltese and (in particular) Western dialects of Arabic. In relation to the complementiser strategy, we see a strong similarity to Western dialects in which gaps and resumptives are often in free variation. The connection between Maltese and the Western dialects is particularly striking in the light of the data we provide from Moroccan and Algerian Arabic, showing the use of the *wh*-strategy with obliques and adjuncts. Comparison of the Maltese bare strategy to the distribution of this strategy in standard and dialectal Arabic shows that, while the strategy exists in Maltese, it is more highly constrained. Whereas in Arabic, it is found with indefinite antecedents, in Maltese it is also subject to relative clause internal restrictions, requiring the relativised position to be subject or possessor and the verb (if present) to be imperfective in form.

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Abbreviations

AA	Algerian Arabic
ACC	accusative
ACT.PTCP	active participle
BAA	Borg and Azzopardi-Alexander
COMP	complementizer
COMPAR	comparative
CONJ	conjunction
COP	copula
CS	Camilleri and Sadler
DAT	dative
DEM	demonstrative
DIM	diminutive
EPENT.VWL	epenthetic vowel
DEF	definite
F	feminine
FRM.VWL	formative vowel
IA	Iraqi Arabic
IMPV	imperfective
M	masculine
MA	Moroccan Arabic
MASS	mass noun
MLRS	Maltese Language Resource Server
MSA	Modern Standard Arabic
NEG	negative
NRRC	non-restrictive relative clause
PASS	passive
PFV	perfective
PL	plural
PRN	pronoun
PROSP	prospective aspect
RECIP	reciprocal
REFL	reflexive
RRC	restrictive relative clause
RP	resumptive pronoun
SG	singular
TLA	Tripoli Libyan Arabic