Case and Clausal Architecture: Evidence from Maltese[*]

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1 Introduction

1.1 Today's Themes

The PERIPHRASTIC CAUSATIVE in Maltese, shown in (1):[1]

(1) …għalhekk **ġiegħel**   lil   kullħadd **jitgħallem**   il-lingwa   Għarbija.
     …thus   **make.3.SG.MASC** DOM everyone **learn.3.SG.MASC** DEF-language Arabic
     "…thus [it/he] made everyone learn Arabic."   (Borg *et al.*, 2012:parl1775)

Basic claims:
  • This construction is involves a *v*P "reduced" clausal complement.
  • *Ġiegħel* is thus like an ECM or Restructuring predicate.
  • This complement must be large enough to host negation.
  • The theory of agreement must allow tense-less clauses with subject agreement.
  • MULTIPLE SPELL-OUT (Chomsky, 2000, *et seq.*) is needed for these cases.

1.2 Language Excursus

The Language of Interest: Maltese (Semitic; Republic of Malta).
  • ~ 400,000 native speakers in Maltese Archipelago.
  • But: more in diaspora communities (including San Francisco & Toronto)
  • A Semitic language, same sub-family as Hebrew/Arabic
  • Most like Moroccan Arabic, but with heavy influence of Italian and English
  • Verbal morphosyntax mostly Semitic-like, though with less nonconcatenativity

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1. In the glosses for Maltese data, I use the following abbreviations: 1 = first person, 2 = second person, 3 = third person, SG = singular number, PL = plural number, NOM = nominative case, ACC = accusative case, DAT = dative case, MASC = masculine gender, FEM = feminine gender, DEF = Semitic definite article, CAUS = causative, COMP = complementizer, DOM = differential object marking, NEG = negation, IMPF = imperfect aspect, and PERF = perfect aspect. All examples without citation of the provenance are from my personal field notes. Data from Borg *et al.* (2011; 2012) is presented with spelling errors corrected but otherwise unaltered. References to data from the corpus are identified by corpus identifier tag for the text they appear in.

Where does the data come from?
- Fieldwork with SF Bay Area Maltese speakers
- Conversations with native-speaker linguists[2]
- The descriptive literature (especially Aquilina, 1959 and Borg & Azzopardi-Alexander, 1997)
- The Maltese Language Resource Server's Korpus Malti v.1.0 & v.2.0 (Borg *et al.*, 2011; 2012) from the University of Malta

1.3 Terminological Excursus

Brief Terminological Excursus: Considering the bolded arguments in (2):[3]

(2) **Lester** made/had/let **McNulty** leak **the story**.

- *Lester* is the Causer = *pro/it* in (1)
- *McNulty* is the Causee = *kullħadd* in (1)
- *The story* is the Theme = *il-lingwa Għarbija* in (1)

Road map:
1. Data supporting a reduced-clause analysis of *giegħel* (§2)
2. What that syntactic analysis must look like (§3)
3. Conclusions, further directions, *etc.* (§4)

2 Clausal Causation in Maltese: The Data

> **Central Claim:** The *giegħel*-causative is a reduced clausal complementation structure.

2.1 Biclausal Properties

Two "biclausal" properties:
1. Binding: The causee acts like a "Subject" for binding (§2.1.1).
2. Negation: There can be two instances of clausal negation (§2.1.2).

2.1.1 Binding

Quick background on binding in Maltese:
- The reflexive in Maltese is *lil*+Pronoun *innif(i)s*+Pronoun.
- *E.g.: lilu innifsu,* "himself;" *lilha innifisha,* "herself."
- C-command is relevant insofar as linear order is not sufficient for binding (Tucker, 2013).

With this in mind, we can observe the binding patterns in (3):
- Causer ⟶ causee binding: OK.
- Causee ⟶ theme binding: OK.

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2. Thanks are due to Maris Camilleri, Ray Fabri, and Michael Spagnol for these conversations.

3. By using these terms, I'm not trying to argue for a θ–role analysis (*e.g.,* Doron, 1999 and Doron, 2003) of causation more generally. See, *e.g.,* Parsons (1990). These terms are employed here simply to help pick out particular argument positions.

- Causer ⟶ theme binding: **Not OK**.

(3)a. Marku ġiegħel   **lilu innifsu** jiftaħ   il-bieb.
      Mark   made.3.SG.MASC **himself**   open.3.SG.MASC DEF-door
      "Mark made himself open the door."

    b. Marku ġiegħel   lil   Pietru jara   **lilu innifsu** fil-mera.
       Louis   made.3.SG.MASC DOM Peter see.3.SG.MASC **himself**   in.the-mirror
       "Mark made Peter see himself in the mirror."

    c. *Marija ġiegħlet   lil   Pietru jara   **lilha innifisha** fil-mera.
       Maria made.3.SG.FEM DOM Peter see.3.SG.MASC **herself**   in.the-mirror
       "Maria made Peter see herself in the mirror."

This is the same pattern we observe in English *make/have/let* causatives:

(4)   *The veterinary nurse$_i$ made/let/had the zebra cool **herself**$_i$ in the shade.

Normal interpretation of patterns like these:
- Causer and theme are "too far apart" for binding to take place.
  - The causee could be a SUBJECT in the sense of the Chomsky (1986) Binding Theory.
  - The causer and theme could be in different PHASES (Chomsky, 2000).
  - The causee could be an INTERVENER on a direct relationship between causer and theme.

2.1.2 Negation

Some background on Maltese negation:
- Negation comes in two forms:
  1. Clausal negation: *ma…x* verbal circumfix.
  2. Constituent/nonverbal negation: *m…x* circumfix on a pronominal copula.
- /-x/ portion does not appear when an NPI is present (Haspelmath & Caruana, 1996).
- Only clausal negation can license NEGATIVE POLARITY ITEMS.

The clausal negation can appear on *either* verb in a *ġiegħel*-causative (5):

(5)a. Tano **ma** ġiegħel   lil **ħadd**   jiekol   il-fażola.
      Tano **NEG** made.3.SG.MASC DOM **anyone** eat.3.SG.MASC DEF-beans.
      "Tano did not make anyone eat the beans."

    b. Tano ġiegħel   lil   Xandru **ma** jiekol   lil   **ħadd**.
       Tano made.3.SG.MASC DOM Xander **NEG** eat.3.SG.MASC DOM **anyone**
       "(*lit.*)Tano made Xander not eat anyone."

Normally, negation is *high* in the clause; it appears as the *outermost* morphology on the verb, outside tense, aspect, and object clitics.

2.2 Monoclausal Properties

Four monoclausal properties:
1. MISSING PROJECTIONS: No evidence of independent tense/aspect in the complement.
2. CLITIC PLACEMENT: the causee cliticizes to *ġiegħel*.
3. CASE: The causee is exceptionally case-marked by *ġiegħel*.

2.2.1 Missing Projections

Three projections one needs more generally for the Maltese clause are demonstrably absent: T(ense), M(ood), and Asp(ect) (see Tucker, 2013 for some discussion of these categories).
- Things which realize those heads morphologically cannot appear in the complement.
- Adverbs which require the semantic content of these heads only have *matrix* scope.

Aspect For Aspect, there are two observations to make:
1. Perfect aspect verbal morphology cannot appear on the complement verb (6).
2. Adverbs which require a particular aspectual interpretation (like the perfect) can't have embedded scope (7).

(6)a. Luqa ġiegħl   =u   **jitlaq**   mill-belt.
       Luke made.3.SG.MASC =3.SG.MASC **leave.3.SG.MASC.IMPF** from.the-city

       "Luke made him leave from the city."

    b. *Luqa ġiegħl   =u   **telaq**   mill-belt.
       Luke made.3.SG.MASC =3.SG.MASC **leave.3.SG.MASC.PERF** from.the-city

       "Luke made him leave from the city."

- *Jitlaq* is the imperfect and *telaq* the perfect.[4]
- Imperfect is arguably a morphological default (Benmamoun, 2003).
- Only the former is ever possible in the *ġiegħel* causative.

(7) Pietru kien   ġiegħel   lil   Marku jiekol   l-ikel   **diġà**.
     Peter had.3.SG.MASC made.3.SG.MASC DOM Mark eat.3.SG.MASC DEF-food **already**.

     Impossible: "Peter made Mark already eat the food."

     Only: "Peter already made Mark eat the food."

Tense The same thing is true of the tense and mood positions:

(8)a. *Pietru se   iġiegħel   lil   Marku **se** jiekol   l-ikel.
       Peter will make.3.SG.MASC DOM Mark **will** eat.3.SG.MASC DEF-food

       "Peter will make Mark eat the food (in the future)."

   b. Pietru se   iġiegħel   lil   Marku jiekol   l-ikel.
       Peter will make.3.SG.MASC DOM Mark eat.3.SG.MASC DEF-food

       "Peter will make Mark eat the food (in the future)."

Kien in T normally combines with verbs to form complex tense expressions.
- *Kien* is impossible in the complement of *ġiegħel* (9).

(9) *Pietru ġiegħel lil   Marku **kien** jiekol l-ikel.
     Peter made   DOM Mark **had** ate   DEF-food

     Intended: "Peter made Mark have been eating the food."

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4. *Ġiegħel* itself can appear in either the perfect (*ġiegħel*) or imperfect (*iġiegħel*), depending upon the tense and aspect of the matrix clause.

Similarly, temporal adverbs such as *il-bieraħ*, "yesterday" are impossible w/ embedded scope (10).

(10) Marju ġiegħel lil Mattew jiekol l-ikel tiegħ = u **il-bieraħ**.
      Mario made DOM Matthew eat DEF-food of = him **the-yesterday**

Possible: "Yesterday, Mario made Matthew eat his food."

Impossible: "Mario made Matthew eat his food yesterday."

2.2.2 Clitic Placement

Clitics in Maltese attach to the verb which immediately c-commands them *provided that there is no intervening complementizer*.

(11) *Irrid   = **ek** li t-ħobb l-għalliem il-ġdid.
     want.1.SG = **2.SG** COMP 2.SG-love DEF-teacher DEF-new

"(*lit.*) I want that you love the new teacher."

(based upon Haspelmath & Caruana, 2000:(6b))

In *ġiegħel* causatives, there are two cliticizations of note:
1. Any internal arguments of the embedded verb cliticize to it (12a–b).
2. The causee cliticizes to *ġiegħel* (12a,c).

(12)a. Louis ġiegħl = **u**   jiekol = **ha**.
        Louis made = **3.SG.MASC.ACC** eat   = **3.SG.FEM.ACC**

"Louis made him eat it."

   b. *Louis ġiegħl = **u**   = **(l)ha**   jiekol.
      Louis made   = **3.SG.MASC.ACC** = **3.SG.FEM** eat

Intended: "Louis made him eat it."

   c. *Louis ġiegħel jiekol = **u**   = **(l)ha**.
      Louis made   eat   = **3.SG.MASC.ACC** = **3.SG.FEM**

Intended: "Louis made him eat it."

2.2.3 Case

Normally, Maltese verbs don't allow more than one accusative-marked argument (13):[5]

(13)a. Fausto bagħat **ktieb lill-kmandant**.
        Fausto sent   book to.the-commander

"Fausto sent a book to the commander. "

   b.[??] Fausto bagħat **(lill)-kmandant ktieb**.
         Fausto sent   to.the-commander book

"Fausto sent a book to the commander. "
Comment: "Sounds like the speaker also knows English."

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5. I say "normally" here because there is a rather unprincipled exception involving five or so high-frequency verbs. See Comrie & Borg (1985) and Ch. 4 of the dissertation, or feel free to ask me about this in the Q&A. Also, the double question mark diacritic is used instead of * because as the theme gets heavier, the word order in (13b) becomes more acceptable.

Despite this, the causee is demonstrably *accusative* in these constructions (14):

(14) Louis ġiegħl   =**u**/*=**lu**   jiekol   il-għaġin.
       Louis made.3.SG.MASC =**3.SG.MASC.ACC**/=**3.SG.MASC.DAT** eat.3.SG.MASC DEF-pasta
       "Louis made him eat the pasta."

- The bolded clitic *u* is an accusative object clitic.
- Can't be any other case (*e.g.,* nominative or dative)

The most reasonable interpretation here is that this accusative comes from *ġiegħel*. We understand this and the cliticization as analogous to English Exceptional Case-Marking (ECM):

(15) Picard wanted **her** to be on the away team.

3 A Restructuring-like Analysis

> **Central Claim:** We can understand most of this if *ġiegħel* embeds a polarity projection.

Auxiliary Ideas:
- This projection also needs to host subject agreement φ–features.
- The polarity head itself embeds a vP of the normal kind.
- Case and agreement need to be dissociated — the embedded verb has agreement.

3.1 The Selectional Architecture

Starting point: vP-internal subject hypothesis as implemented in Kratzer (1996).
- This means that both *ġiegħel* and the embedded verb project a vP.
- I will call the v of *ġiegħel* v_{caus} and the embedded one v_{ag}.
- This already accounts for the binding facts:
    - Causer and theme are in different vPs, separated by the causee in [Spec,v_{ag}]
    - Causer and theme are thus in different PHASES (Chomsky, 2000; 2001; 2008).

Question: Where is negation?
- Following Laka (1994), I assume polarity is hosted in a ΣP.
- *Claim:* there is a polarity projection in the complement of *ġiegħel*.
- Embedded verb undergoes HEAD MOVEMENT to Σ for affixal purposes.
- Preliminary vP structure shown in Figure 1, without head movement.

Observation: This account already predicts several of the documented properties:
- MISSING PROJECTIONS (C, T, Asp, M) are simply not selected by *ġiegħel*.
- ECM-like properties of causee are a result of v_{caus} being the only head with which the causee can AGREE, given that the causee is in the domain of v_{caus}.

3.2 Agreement and Finiteness

Question: How does agreement work in this construction?
- *Ġiegħel* agrees with the causer.
- There is no object agreement, so the theme does not trigger overt agreement.
- *The causee obligatorily controls subject agreement on the embedded verb* (16):
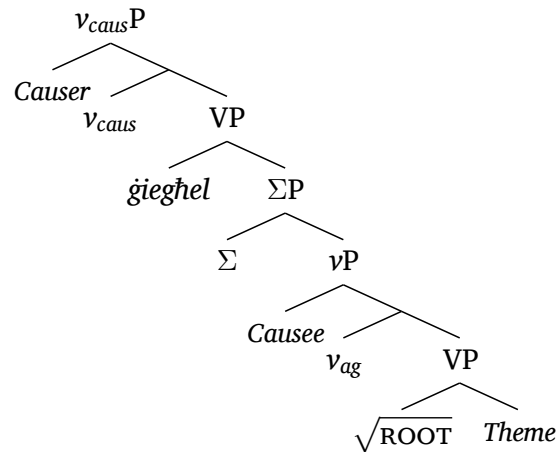
Figure 1: vP Level for *Ġiegħel* Causatives

(16)a.   Louis   ġiegħel   lit-tfal   **jieklu**   fażola.
           Louis   made.3.SG.MASC   DOM.DEF-children   **eat.3.PL**   beans

           "Louis made the children eat the beans."

    b. *Louis   ġiegħel   lit-tfal   **jiekol**   fażola.
           Louis   made.3.SG.MASC   DOM.DEF-children   **eat.3.SG.MASC**   beans

           "Louis made the children eat the beans."

Challenge: This is difficult for theories which take case and agreement to be inexorably linked.[6]
- Normally, these theories take accusative case to tie to *object* agreement.
- Subject agreement and *nominative* case are taken to be linked.
- Cashed out theoretically by AGREE from T valuing both.
- **BUT:** there is no embedded T or nominative case, yet there is subject agreement!

> **Proposal:** Case and agreement are computed separately.

Components of the proposal:[7]
- ΣP hosts a set of φ–features which can probe.
- Agreement is split:
    1. T agrees with causer, triggering subject agreement on *ġiegħel*.
    2. v_{caus} agrees with causee, valuing case, *but not agreement features*.
    3. *Proposal:* Σ provides φ–features for embedded subject agreement.
- Complete relations inside v_{caus}P shown in Figure 2.[8]

3.3   M-Case

Question: what about case in the *ġiegħel*-causatives?

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6. The modern implementation of this idea which I have in mind is that proposed in Chomsky (1995), but the idea predates the Minimalist Program.
7. For other approaches which separate subject agreement from nominative case assignment, see McFadden (2004), Bobaljik (2008), McFadden & Sundaresan (2011), Bhatt & Walkow (To Appear), and references therein.
8. In this tree: (1) I abstract away from head movement of the verb, (2) I denote the base site of movement with *t* for simplicity only — I am not assuming that traces exist, (3) dotted lines represent AGREE relations which value φ-features only, (4) dashed lines represent AGREE relations which provide structural Case, and (5) solid lines represent AGREE relations which involve both.
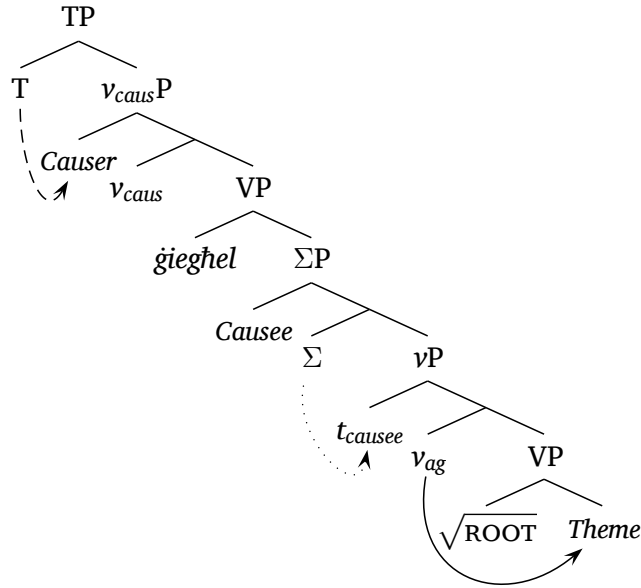
Figure 2: vP Level AGREE Relations

- Here we need to augment the theory with MULTIPLE SPELL-OUT and disjunctive case assignment Marantz (1991).[9]
- Crucially, we can assume vP to be a phase (solid lines in Figure 3).
- Then the causee in these constructions is simultaneously part of two case domains:
    1. It is in the complement domain because it is inside v_{ag}P.
    2. But the specifier of that v_{ag}P is not in the spell-out domain (SOD) of that phase, meaning that this nominal is still visible at the higher v_{caus}P phase (dashed lines in Figure 3).
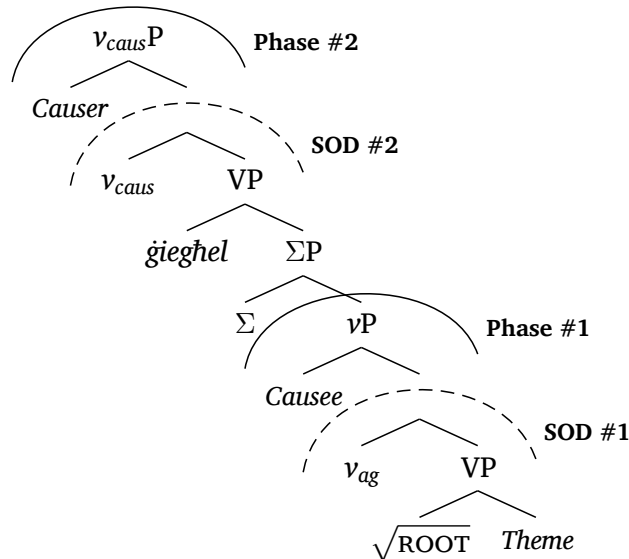
Figure 3: Cyclic Domains in $\dot{G}ieg\hbar el$ Causatives

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9. See the papers by Chomsky (2000; 2001; 2008) for initial discussion of this approach.

In this theory, accusative is assigned by a principle like (17):

(17) Accusative case is assigned to a nominal α when a distinct position β in the same phase as α not marked by lexical case. In this instance, assign the lower of $\{\alpha, \beta\}$ accusative case.

(18) **Louis** ġiegħel $\quad$ = **u** $\qquad$ jiekol $\qquad$ **il-għaġin**.
$\quad$ **Louis** made.3.SG.MASC = **3.SG.MASC.ACC** eat.3.SG.MASC **DEF-pasta**

$\quad$ "Louis made him eat the pasta."

- The theme appears in a vP with a nominal not assigned lexical case (u).
- It therefore qualifies for and receives dependent case.
- At the v_{caus} phase, there are still two nominals without lexical case (*Louis* and u).
- The lower of the two (u) qualifies for and receives accusative.
- The higher of the two (*Louis*) receives unmarked nominative.

4   Conclusions

These proposals give an understanding of Maltese causation without causative-specific derivations.
- This is in contrast to early work on causatives which posited lexical derivations or causative-specific transformations (*e.g.*, Aissen, 1979, among many others).
- This is possible because of the way the reduced clausal structure interacts with universal properties of AGREE and their determination of case and agreement morphology.
- The resulting picture is one where the causative shares analytical similarities with modern treatments of infinitives and restructuring predicates (Wurmbrand, 2001).

If we admit that there are no null T's/M's/C's/Asp's in Maltese, then there are consequences for the theory of agreement:
- The agreement in the complement of Maltese causatives is problematic for theories which make case and agreement morphology two sides of the same coin.
- The most minimal change is to simply separate case from agreement.
- Case and agreement are thus only related insofar as both are computed by the same relation (AGREE), but do not bundle together in that operation.

Future Directions:
- Do causatives in closely-related Arabic varieties behave similarly?
- How does the formation of these causatives relate to morphological causatives in Maltese?
- What are the ramifications of treating case and agreement as separate derivational entities?

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