

Clitics: Head-movement vs. linearization

Maria Rita Manzini
University of Florence

Diego Pescarini
CNRS, Université Côte d'Azur

Clitics, a widespread phenomenon

- in Indo-European, not only in Romance and Slavic, but also in Albanian (Manzini and Savoia 2007, 2018), in Greek (Mavroyorgos 2010), and in Iranian languages (e.g. Kurdish, Manzini et al. 2015).
 - in the Semitic languages (Borer 1983 on Hebrew, Aoun 1999 on Arabic, Baker and Kramer 2018 on Amharic)
 - in the Bantu languages (Julien 2002, Demuth and De Cat 2008, Riedel 2009)
 - in the Pama-Nyungan languages (e.g. Walpiri, Hale 1972, Legate 2014)
- + descriptions of other linguistic families that adopt alternative terminologies (e.g. 'pronominal affixes')

A new tool: *pair merger*

Chomsky 2001: 18: an asymmetric operation of adjunction, which takes two objects α and β and forms the ordered pair $\langle \alpha, \beta \rangle$, α adjoined to β .

e.g. *I met someone young, happy, eager to go to college, tired of wasting his time,...*

Chomsky 2020 ...We're forming a sequence which begins with some conjunction, and then contains elements, each of which is predicated of something. So we have a sequence of elements that looks like this, with links L_i .

$$\langle \text{CONJ}, \quad \langle S_1, L_1 \rangle, \dots, \langle S_n, L_n \rangle \quad \rangle$$

... notice that **each element of these pairs is inaccessible**. So if you have the phrase *old man*, you can't extract *man* and leave *old*; you can't extract *old* and leave *man*. So the elements of the pairs are inaccessible... this would yield both the coordinate structure and the adjunct island constraints.

Four RQs about clitics

1. Merger: where are clitics pair merged?
2. Ordering: why are clitics rigidly ordered?
3. Incorporation: how are ad-verbal clitics derived? (e.g. Romance)
4. Placement: why clitics move? (e.g. 2P/Wackernagel systems)

We aim to answer 1-4 elaborating on the hypothesis that clitics are pair-merged to functional heads, specifically object clitics are pair-merged to *v*-heads.

- 1. Merger: where are clitics pair merged?**
2. Ordering: why are clitics rigidly ordered?
3. Incorporation: how are ad-verbal clitics derived? (e.g. Romance)
4. Placement: why clitics move? (e.g. 2P/Wackernagel systems)

Our hypothesis

Previous accounts

- Sportiche 1996,
- Clitics are Spell-Outs of Agree (Roberts 2010).

Our proposal (in compliance with Occam's razor):

- arguments are introduced by *v-type* functional heads, each of a different *flavor* (*v*, Voice, HighAppl, LowAppl, etc.)
- object clitics are pair-merged with *v*:

(1) {T {_v <<*glie v*> <*lo v*>> {_v porta}} } (It.)
 to.him/her it fetch
 'He/she fetches him/her it.'

Normal semantics...

- Semantically, NP/clitic arguments and adjuncts are all linked by conjunction (Castañeda 1967):

Jean achète des livres à la FNAC

$\exists e[\text{buying}(e) \ \& \ \text{Agent}(e, \textit{Jean}) \ \& \ \text{Theme}(e, \textit{des livres}) \ \& \ \text{à}(e, \textit{la FNAC})]$

Il les y achète

$\exists e[\text{buying}(e) \ \& \ \text{Agent}(e, \textit{il}) \ \& \ \text{Theme}(e, \textit{les}) \ \& \ \text{Loc}(e, y)]$

...but special syntax

Syntactically, we entertain the hypothesis that pair merge accounts for the *special syntax* of clitics.

- | | | |
|----|--|------------------------------|
| 1) | $\{\text{NP}_{\theta_2} \ \{v \ \{R\}\}$ | NP argument (set merge) |
| 2) | $\{ \langle \text{cl}, v \rangle \ R \}$ | clitic argument (pair merge) |

1) Predicate structure by set merge:

Porta il libro a Paolo/a scuola 's/he brings the book to Paul/to school'

$[\text{AppIP}(\text{Dat/Loc}) \ a \ \text{Paolo/scuola} \ [\ \text{Appl} \ [_{vP} \ \text{il libro} \ [_{RP} \ \text{porta} \ \text{il libro}]]]]$

...but special syntax

2) Predicate structure by pair merge (cliticisation)

[< < **Cl**_{LOC/DAT} v> < **Cl**_{ACC} v> > [_{VP} v porta]]

or

<v **Cl**_{LOC/DAT} >

|

<v **Cl**_{ACC} >

|

{<v porta> {_{RP} porta}}

Pros

- No need of *pro* or movement;
- No need to turn XPs into Xs (no peeling, no big DP, etc.);
- No real difference between full-fledged clitic pronouns and clitic «agreement markers».
- Pair merge can account for inherent clitics with no XP counterparts

(2) **Ce** **la** faccio. (It.)
 there= it.F= I.make
 'I can make/take it.'

1. Merger: where are clitics first merged?
- 2. Ordering: why are clitics rigidly ordered?**
3. Incorporation: how are ad-verbal clitics derived? (e.g. Romance)
4. Placement: why clitics move? (e.g. 2P/Wackernagel systems)

Linearization

Since they belong to “a separate plane” (Chomsky 2001:18) and are interpreted as conjoined items, pair-merged items are linearized independently from the presence/position of set-merged XP arguments

<v **Cl**_{LOC/DAT} >

|

<v **Cl**_{ACC} >

|

{<v porta> {_{RP} porta}}

→ It. **gli**lo / **ce** lo porta.

→ Fr. Il **le** lui / **l'**y emmène.

Problems

- Properties of Chomsky's pair merge:
 - a) pair merge sequences involve <predicate, Link> pairs;
 - b) it yields unbounded sequences, e.g. *I met someone young, happy, eager to go to college, tired of wasting his time...*
- Problem1: How to extend pair merge to clitic arguments?
- Problem 2: How do clitics form a bounded sequence?
- Problem3: Why set merge doesn't apply to / suffice for clitics?

Tentative answers

- Problem1: Clitics can be arguments
- Hypothesis: also Adjs can be interpreted as arguments, e.g. *the American invasion*, possessives with relational Ns, linkers, etc.
- Problem 2: Clitics are a bounded sequence.
- Hypothesis: they belong to a closed class
- Problem 3: Why set merge doesn't apply to / suffice for clitics?
- Hypothesis: set-merger is for phases.

1. Merger: where are clitics first merged?
2. Ordering: why are clitics rigidly ordered?
- 3. Incorporation: how are ad-verbal clitics derived? (e.g. Romance)**
4. Placement: why clitics move? (e.g. 2P/Wackernagel systems)

Ad-verbal vs (2)P clitics

	in C	in I	in <i>v</i>
Incorporated into V	(1) old It, old Fr., old Cat. (Benincà 1995; Ledgeway 2019)	(3) Most present- day Romance languages (Kayne 1975; etc.)	(5) Piedmontese dialects (Parry 1993; Manzini & Savoia 2005)
Non-incorporated → “interpolation”	(2) old Sp, old Port, western Ib-Rom dialects (Martins 1994ff)	(4) Cosentino, Triestino (Ledgeway & Lombardi 2005)	(6) East. Pied. dialects (e.g. Borgomanerese) (Tortora 2014; Manzini & Savoia 2005)

Further variables

(not taken into consideration here)

- Enclisis vs proclisis
(e.g. Tobler&Mussafia Law in early Romance and present-day western Ibero-Romance)
- Climbing in restructuring environments
- Asymmetries between simple and compound tenses

In C

(1) [_C Dove **ne** *vuó'* [_I *tu* *ire?*]] (o.It.)

Where *there=* want you to.go

‘Where do you want to go?’

(2) [_C Sy [_I *el* *físico* *la* *bien* *connosçe*]] (o.Sp.)

if the physician it.F= well knows

‘If the physician knows it well’

In I

- (3) *Gianni **mi** conosce già.*
Gianni me= knows already
'Gianni already knows me.'

- (4) a. *Gianni ggià **mi** canuscia.* (Cosentino; Ledgeway & Lombardi 2005)
Gianni already me= knows
- b. *Gianni **mi** ggià canuscia.*
Gianni me= already knows
- c. *Gianni **mi** canuscia ggià.*
Gianni me= knows already
'Gianni already knows me.'

In v

(5) *I an rangiò -la.* (Cair.; Piedm.; Parry 2005)

They= have fixed =it.F

‘They fixed it.’

(6) *I o vüst piö -lla.* (Borg.; east.Piedm.; Tortora 2014)

I= have seen no.more -her

‘I haven’t seen her any more.’

Incorporation 1: the clitic group

Sequences built via pair merge are inaccessible (Chomsky 2020).
The same inaccessibility holds of clitic chains:

- (6) a. *Gianni vi vuole mostrarli.
 Gianni to.you wants show-them
 b. *Gianni li vuole mostrarvi.
 Gianni them wants how-to.you
 ‘Gianni wants to show them to you’ (Kayne 2000: 48)

This is no longer an explanandum, but automatically follows.

Incorporation 2: subject clitics

... with the sole exception of subject vs. object clitics.

- (7) a. Le lui donnent-ils?
 it to.him give-they
 ‘Do they give it to him?’
- b. i tfama-lu sempri Borgomanero (Piedmont)
 they call-him always
 ‘They always call him’

Hypothesis: different phases, different pair merge link

Incorporation 3: cl-v

- incorporation (i.e. adverbial clitics) is accounted straightforwardly by a pair-merge model:
- the verb (v , Root) is part of the clitic sequence.

Two problems:

- Partial independence of the verb and the (object) clitic group can be seen with adverbial clitics in **proclisis/enclisis alternations**. Proclisis can be accounted for in terms of clitic-verb incorporation. Logically speaking, enclisis again must result from the verb not being part of the clitic sequence.
- Non-adverbial clitics represent the case to be explained. The logic of the system we are building requires the pair merge sequence to include the clitics but not the verb (or, at least, the Root).

1. Merger: where are clitics first merged?
2. Ordering: why are clitics rigidly ordered?
3. Incorporation: how are ad-verbal clitics derived? (e.g. Romance)
4. **Placement: how and why clitics move? (e.g. 2P/Wackernagel systems)**

Head movement

- Head movement is empirically motivated, but problematic for more than one reason, certainly if executed in set merge modality.
- Here we execute it as pair merge. The fact that pair merge depends on Links and Links coincide with phase heads yields the important result that known head positions are not scattered with a given phase, but coincide with the head(s) of the phase.

Placement: phases

- If head of phase positions are the only positions where heads or head sequences can be positioned, then the trigger issue is severely reduced. Raising to I is raising/pronunciation in the higher phase head.
- The triggering issue:
 - (i) The choice is acquired and freely alternates with low positioning
 - (ii) The choice depends on discourse features

Climbing

Climbing is essentially illusory – in the spirit perhaps of Cinque (2006), but with a different execution.

In essence clitics are first merged (as part of a sequence) on the auxiliary, restructuring v

The auxiliary v does not necessarily coincide with the categorizing v that is (set) merged with the Root.

Thank you