

# As small as they seem? An experimental investigation of Italian bare participial sentences

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## **Abstract**

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We present the results of an experimental study designed to investigate the acceptability of bare participial structures in spoken Italian. These sentences, despite

being extremely reduced, have full illocutionary force. For the study, we proposed a technique to elicit grammaticality judgements suitable for structures that, although productive, are not used in the written form of the language. Our aim is to investigate the validity of the structural analysis of these sentences (Cecchetto & Donati 2022) according to which they are generated as small as VPs and they are not elliptical structures, i.e., they are not the result of phonological deletions from full-fledged sentences. The findings globally confirm the predictions of that account, as only require the activation of projections beyond the VP-layer, are rated as fully acceptable. However, the corresponding negative structures and some reduced structures with active transitive predicates received intermediate judgments of acceptability, contrary to the predictions. In the paper, we try to account for these unexpected results and argue that phonological deletion is available as well but is subject to tight constraints; most notably, it is restricted to the top of the tree.

**Keywords:** participial clauses, reduced structures, ellipsis, labeling, acceptability judgements, negation, truncation, experimental syntax

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## 1. Introduction: Bare participial structures in Italian

While most syntactic descriptions and theories focus on the analysis of full-fledged clauses and a complex and articulated structure has been unveiled in the last twenty-five years by the cartographic enterprise (stemming from Belletti 1990, Rizzi 1997, Haegeman & Zanuttini 1991, Cinque 1999 among many others), spontaneous conversations frequently display reduced clausal structures, namely clauses that appear way smaller and simpler than complete ones.

The status of reduced clauses has been and still is at the center of a long and lively debate, opposing on one hand partisans of the hypothesis that all reduced clauses must have a full clause base and are thus elliptical (Morgan 1973; Merchant 2004), and on the other hand those that argue that at least some of the reduced clauses that can be observed are base-generated as such (cf. Barton 1990; Progovac 2013). This latter position has been recently revived within the framework of a general reflection concerning labeling and sentencehood provoked by recent work by Chomsky (2019).

In a paper directly connected to this reflection, Cecchetto & Donati (2022: C&D) propose a new base generated analysis of participial reduced clauses in Italian, that is bare participial structures displaying no auxiliary and no further inflection that are produced in spontaneous conversations and interpreted with full illocutionary force (see Belletti 2017 for a different analysis). The phenomenon comes in a number of variants, illustrated in (1)-(2) in a context of a dialogue between speaker A and B: (1) displays what C&D call bare noun reduced structures, while (2) shows instances of the variant they label dislocated reduced structures<sup>1</sup>.

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<sup>1</sup> C&D discuss also other variants of this participial construction, which we shall ignore here for reasons of space. See the paper for more details.

- (1) a. A: Come va?  
       ‘What’s up?’  
       B: **Nonna guarita!**  
           grandma heal.PTCP.F.SG  
       ‘Granma recovered!’
- b. A: **Libro ritrovato?**  
       book find.PTCP.M.SG  
       ‘Did you find the book?’  
       B: Si, era sotto il letto!  
       ‘Yes, it was under the bed!’
- c. A: Come mai la casa è vuota?  
       ‘How come the house is so empty?’  
       B: **Bambini spediti al mare**  
           children send.PTCP.M.PL to=the sea  
       ‘The children were sent to the seaside’
- (2) a. A: Come stanno i nonni?  
       ‘How are your grandparents?’  
       B: **La nonna, guarita, il nonno ancora no**  
           the grandma heal.PTCP.F.SG, the grandpa yet no  
       ‘Grandma recovered, Grandpa not yet’
- b. A: **Trovato, il libro**  
       find.PTCP.M.SG the book  
       ‘I found the book’  
       B: Meno male!  
       ‘Good!’

(1) and (2) are both reduced structures in that they only contain a participial verb agreeing with its internal argument. Yet, they have full illocutionary force, as they can be questions (1b), exclamatives (1a), assertions (1c, 2a-b). A difference between (1) and (2) is that only (1) is further reduced in that the argument is a bare noun, something that is hardly possible in Italian, where arguments are most generally DPs (as in 2). Another difference is the position of the argument, which is preverbal in (1) but topicalized either preverbally or postverbally in (2).

In principle, these structures can be analyzed in two opposite ways: they can either be derived by phonological deletion of the missing material starting from a full clause, or they can be derived “directly” as base generated structures: this is the analysis put forward by C&D. These two analyses, which we might call the ellipsis analysis and the structural analysis, respectively, are sketched in (3) and (4), for Bare noun reduced structures.

- (3) [CP [TP [DP La nonna] [T’ è [VP guarita t<sub>DP</sub>]]]]?  
 (4) [<sub>PhiP</sub> [NP nonna] [VP guarita t<sub>NP</sub>]]

As C&D observe, a potential problem of an ellipsis analysis as (3) is that the missing material (the auxiliary and the determiner) do not form a constituent. Starting from here, C&D propose that the structure is as simple as in (4): a big VP is formed by merging an unaccusative verb and a bare noun (which being determinerless does not need case in Italian). The bare NP moves to the edge of the clause to agree with the participle (D'Alessandro & Roberts 2008). As a result, Phi-features are shared (gender, number), which can be found by minimal search and thus label the resulting structure<sup>2</sup>. Without going into further details (for which we refer to C&D), C&D capitalize on a recent reflection of Chomsky's (2019) and argue that "labeling by feature sharing", hence through agreement, is how predicational structures are labeled and associated with sentential force at the interface. In a nutshell, participial structures like (1-2), instantiating phi-feature agreement just like full TPs do, share with full clauses their sentencehood despite being as small as VPs. The extreme smallness of the construction, involving neither a vP nor a TP layer nor a left periphery explains a number of restrictions that C&D argue to hold with respect to the distribution of these constructions in Italian: they can only involve a bare noun, because no Case is assigned, unless the internal argument is topicalized (see below); they can only display passives and unaccusative verbs (5), that do not project a vP layer as opposed to transitive and unergative verbs, which select for an external argument sitting in Spec,vP (cf. Hale & Keyser 1993, Chomsky 1995 and Kratzer 1994, 1996, following groundwork laid by Larson 1988); they cannot host focus (6), wh-elements (7-8), or negation: (9), which all require specialized criterial projections that are not available in these small structures (at least, for negation, if the classical analysis stemming from Haegeman & Zanuttini (1991) and Haegeman (1995) positing the presence of a dedicated position (Neg,P) in the upper part of the middle field is adopted: see below, section 3, for a discussion).

- (5) Cecchetto & Donati (2022), exx 34-35

a. A: Come è andata oggi?

'How was it today?'

B: \***Bambino** **pianto**

child cry.PTCP.M.SG

b. A: E la festeggiata?

'What about the birthday girl?'

B: \***Mangiato** **la** **torta**

eat.PTCP.M.SG the cake

- (6) Cecchetto & Donati (2022), exx 24-27

A: La nonna sta bene?

'Is Grandma ok?'

B: \***No, ZIA** **guarita**

no aunt heal.PTCP.F.SG

<sup>2</sup> Of course, a full-fledged theory of labeling sentential object through feature sharing should involve a deep reflection on the nature of labels at the interface, and on the typology of features that can provide an interpretable label. A small step in this direction was recently undertaken by Donati & Cecchetto (2023), where they show based on Corpus evidence that French bare nouns, which crucially display gender features but no number (this being expressed on the D), cannot enter bare noun reduced constructions in Spoken French.

- (7) A: **\*Guarito**            **chi?**  
          heal.PTCP.M.SG    who
- (8) B: **\*Chi**            **guarito?**  
          who            heal. PTCP.M.SG
- (9) A: Tutto bene?  
       ‘Everything OK?’  
       B: **\*No, problema**            **non risolto**  
          no problem.M.SG            not fix.PTCP.M.SG

The same analysis and the same restrictions are proposed for dislocated reduced structures as (2). For these structures an additional step is required: namely, the topicalization of the internal argument (in this case a full DP) in the left – or right – periphery of VP. The fact that the full DP is a topic exempts it from the Case Filter (for a discussion on the relationship between topichood and structural case we refer to C&D).

C&D base their conclusions on simple impressionistic observations and introspective judgements, which they consider globally pretty clear, with the only exception of negative reduced sentences. After consulting a small number of fellow native speakers, they tentatively conclude that there might be a difference between the core negation *non*, which is deemed impossible in participial reduced structures (9), and the emphatic, lower negation *mica*, which is more or less accepted, at least in dislocated reduced structures.

Although no specific ellipsis approach has been proposed for Bare Noun Reduced and Dislocated Reduced, we can nevertheless anticipate some general predictions that would follow from that type of analysis. First, as pointed out above in (3), these structures cannot be generated by eliding a constituent, differently, say, from the analyses that have been proposed for sluicing or VP-ellipsis. However, an ellipsis analysis could consider Bare Noun Reduced and Dislocated Reduced as instances of telegraphic speech.

A telegraphic speech analysis would not make different predictions depending on the type of predicate. Therefore, no difference between unaccusatives, unergatives and passive or active transitives is expected (unless the ellipsis analysis is supplemented by auxiliary assumptions). In a similar vein, as a marker of telegraphic speech is a general omission of grammatical functors, there should be no differences between the omission of the auxiliary “be” (which in Italian introduces unaccusative and passive predicates) and the auxiliary “have” (which introduces unergatives and active transitives). Finally, in telegraphic speech, negative items are expected to be preserved as they critically determine the meaning to be conveyed.

There is a further ellipsis approach that one can envisage in principle, namely the mechanism of truncation of the top of the syntactic tree proposed for early production in language acquisition (cf. Rizzi 1994) and for subject omission in non-prodrop languages for special registers (cf. Haegeman 1997). This approach predicts that only a subset of the reduced structures in this paper are acceptable, exactly those that can result from top of the tree truncation.

The first aim of this paper is to verify the empirical adequacy of the structural analysis à la C&D and its corollaries, and compare them with those of an ellipsis analysis for participial reduced clauses in Italian. In order to do so, we constructed an acceptability rating task aiming at investigating with a large population of native Italian speakers the acceptability of reduced participial structures that we manipulated according to a number of controlled factors.

By doing so, we aim at verifying empirically with a controlled experiment the introspective judgments on which C&D base their analysis. While the validity of this type of judgments has been amply demonstrated in a series of studies by Sprouse and Almeida in particular (Sprouse and Almeida 2012, 2017. See also Gibson & Fedorenko 2013 for the opposite view and Sprouse, Schütze & Almeida 2013 for a reply), these studies concern judgments on core phenomena of standard written languages. It remains to be seen whether the same stability occurs when introspection is associated with oral, conversational phenomena that are by definition informal and not reinforced by an interiorized norm. Reduced participial structures in Italian, and the strong associated restrictions that C&D attribute to them on the basis of pure introspective judgements, are therefore a good test bed for the validity of this source of data.

The paper is organized as follows: Section 2 introduces the details of the experiment. Section 3 presents the results. Section 4 discusses their relevance, and Section 5 concludes the paper.

## 2. Our study

In order to disentangle between the ellipsis account and the structural account for the analysis of Italian reduced structures, we experimentally investigated the acceptability of reduced participial structures, focusing on the structural constraints imposed by C&D's account.

The research protocol described in details below was approved by the ethical committee of the Department of Psychology of the Milan-Bicocca University (Prot. N. RM-2022-596).

### 2.1. Design and materials

We focused on three structural factors for creating the experimental items:

- 1) *Structure type*: for the experiment we focused on BARE NOUN REDUCED structures and on LEFT DISLOCATED REDUCED structures. C&D's account does not predict any difference between these structure types as for the availability of structural space, with the sole exception of the hanging topic included in the latter.
- 2) *Predicate valency*: we considered transitive/2-argument predicates (both in active and passive form) and intransitive/1-argument predicates (both unergatives and unaccusatives). The valency factor is not predicted to be relevant in modulating the acceptability ratings given C&D's account.
- 3) *Structural layer*: we created items requiring the activation of different structural layers.

- a. VP-layer: affirmative reduced structures with transitive passive and unaccusative predicates. These items are expected to be fully acceptable under C&D's account, as they fulfil all the structural constraints defined by that account.
- b. vP-layer: affirmative reduced structures with transitive active and unergative predicates. Under C&D's account, these items are expected to be unacceptable as these predicates select an external argument and require therefore the activation of a higher projection.
- c. MICA-layer: negative reduced structures with transitive passive and unaccusative predicates with the n-item "mica". Under C&D's account, these items are expected to be acceptable only if "mica" activates a lower projection in the derivation, namely within the VP area.
- d. NON-layer: negative reduced structures with transitive passive and unaccusative predicates with the n-item "non". Under C&D's account, these items are expected to be unacceptable, if "non" activates a higher projection in the middle field of the clause.

On the basis of these factors, with a 2x2x4 design, 16 experimental conditions were determined (see Table 1). We created 6 items for each condition for a total of 96 experimental items.

**Table 1.** Number of items for each of the 16 experimental conditions determined by the three factors (2x2x4 design). BN: Bare Noun reduced structures; DR: Dislocated Reduced structures

	Structure type			
	<i>Bare Noun Reduced (BN)</i>		<i>Dislocated Reduced (DR)</i>	
	Valency		Valency	
Structural layer	<i>Intransitives</i>	<i>Transitives</i>	<i>Intransitives</i>	<i>Transitives</i>
VP-layer	6 affirmative BNs with unaccusatives e.g., 'nonna arrivata' – 'grandma arrived'	6 affirmative BNs with passives e.g., 'torta mangiata' – 'cake eaten'	6 affirmative DRs with unaccusatives e.g., 'la nonna, arrivata' – 'the grandma, arrived'	6 affirmative DRs with passives e.g., 'la torta, mangiata' – 'the cake, eaten'
MICA-layer	6 negative (mica) BNs with unaccusatives e.g., 'nonna mica arrivata' – 'grandma not arrived'	6 negative (mica) BNs with passives e.g., 'torta mica mangiata' – 'cake not eaten'	6 negative (mica) DRs with unaccusatives e.g., 'la nonna, mica arrivata' – 'the grandma, not arrived'	6 negative (mica) DRs with passives e.g., 'la torta, mica mangiata' – 'the cake, not eaten'
NON-layer	6 negative (non) BNs with unaccusatives e.g., 'nonna non	6 negative (non) BNs with passives e.g., 'torta non	6 negative (non) DRs with unaccusatives e.g., 'la nonna,	6 negative (non) DRs with passives e.g., 'la torta,

	arrivata' – 'grandma not arrived'	mangiata' – 'cake not eaten'	non arrivata' – 'the grandma, not arrived'	non mangiata' – 'the cake, not eaten'
vP-layer	6 affirmative BNs with unergatives e.g., 'nonna tossito– 'grandma coughed'	6 affirmative BNs with active transitives <sup>3</sup> e.g., 'mangiato la torta – 'eaten the cake'	6 affirmative DRs with unergatives e.g., 'la nonna, tossito– 'the grandma, coughed'	6 affirmative DRs with active transitives e.g., 'I bambini, mangiato la torta – 'the boys, eaten the cake'

To reduce the effect of possible lexical biases, we used the same verbs across the various conditions: in particular we used 6 transitive verbs (both in the active and the passive form), 6 unaccusative verbs and 6 unergative verbs. Grammatical number and gender of the nouns used in the experiment were balanced across the various conditions, and overall, the experiment included the same number of affirmative and negative items and the same number of structures expected to be acceptable and unacceptable.

We also introduced 36 fillers, using three well-described elliptical structures:

- 1) VP-anaphora, as in: 'Maria ha firmato il contratto e anche Carlo lo ha fatto' – 'Maria signed the contract and Carlo did it too'
- 2) Stripping, as in: 'Io ho dormito e Paolo pure' – 'I slept and Paolo too'
- 3) Sluicing, as in: 'Devo incontrare qualcuno ma non so chi' – 'I should meet someone but I don't know who'

For each type of filler, we created three affirmative grammatical sentences, three negative grammatical sentences, three affirmative ungrammatical sentences and three negative ungrammatical sentences. Ungrammatical fillers contained unaccusative predicates with inanimate subjects for VP-anaphora (e.g., '\*The tomatoes grew but the salad did not do it'), inversion for stripping (e.g., '\*John too and I had dinner') and pronoun mismatch for sluicing (e.g., '\*I should take something but I don't know who').

We also inserted attentional control questions throughout the experiment as detailed below.

## 2.2. Participants

The experiment was administered online from March to April 2023 via the Qualtrics® platform. Participants were recruited with a snowball distribution and

<sup>3</sup> In this condition, the "Bare Noun (BN)" label was chosen as a parallel to the other conditions even if in this case the internal object is a DP. This is the most plausible reduced structure among those that (i) display no dislocation, (ii) require the activation of the vP-layer and (iii) have valency 2. The corresponding structure with a bare NP, e.g., 'mangiato mela' (= 'eaten apple'), sounds so ungrammatical that we did not find useful to run an experiment to investigate it.



through the university Sona® managing system for online pools. The participants that undertook the experiment through the Sona® system received 0,2 ECTS while the other participants received no compensation.

Each participant provided their informed consent before undertaking the activity. One-hundred-six individuals accessed the online platform and gave their consent. After the informed consent, a preliminary questionnaire checked for the following inclusion criteria: adult age (>18 years), being an Italian native speaker, absence of language, reading, cognitive or psychiatric disorder. Other demographic characteristics were also collected, such as age, gender, region of origin, level of education.

### 2.3. Administration and setting

As reduced structures belong to spoken informal Italian, developing an ecological but specific task to collect the acceptability judgements was a methodological challenge. To mimic the ordinary context of use of these structures, we presented the stimuli in the form of recorded short dialogs (audio files). For each item, a female voice asked a question and a male voice provided the answer that included the target structure (both for items – see examples (10) and (11) – and for fillers).

#### *Bare Noun Reduced*

- (10) F: Come sta la famiglia?  
F: ‘How is the family?’  
M: Nonna guarita, ora siamo tutti più tranquilli  
M: ‘Grandma recovered, we’re all relieved now’

#### *Dislocated Reduced*

- (11) F: Come stanno i parenti?  
F: ‘How are the relatives?’  
M: Le zie, guarite, ma gli zii no  
M: ‘The aunts recovered, but the uncles didn’t’

Left dislocated reduced structures are more felicitous with a continuation after the target structure, as in (11), which we therefore included. To ensure the maximal plausibility we presented the dislocated reduced structures as contrastive topics (Frascarelli & Hinterholz 2007) in each context. To avoid the possible bias induced by a different presentation of the two structure types, we also included a plausible continuation after bare noun reduced structures (as in 10). For the same reason, all the fillers were presented within the same dialogical frame.

The dialogs were recorded by two independent actors. We informally assessed the naturalness of the prosody of the dialogs and we quantitatively verified the presence of a prosodic pause for these marked structures. In particular, we made sure that for all the stimuli, regardless of their nature, there was a pause of at least 150ms after the target structure (the target structure is marked in bold in the examples (10) and (11)). We also made sure that a pause of at least 75ms occurred between the DP and the past participle in left dislocated reduced structures.

The target structure was also presented in written form, in order to prompt the participant to focus only on that part for their acceptability judgements.

We pseudorandomized the stimuli in 18 blocks so that each block was balanced in terms of number of items and fillers and for the above-mentioned characteristics (grammatical number and gender, polarity and expected acceptability). The Qualtrics platform automatically randomized the order of the items in each block and the order of the blocks for each participant.

We also avoided the repetition of the same predicate within the same block. Moreover, we added an attentional control question (word recognition or comprehension) in each block targeting either an item or a filler.

Participants were asked to perform the task in a quiet environment, possibly with earphones, and to reproduce the audio-files just once. They were however allowed to listen to the audio files a second time in case of any accidental problem occurring during the first reproduction.

After hearing the dialog, each participant was required to rate the acceptability of the written part of the answer, i.e., the target structure, on a 7-point Likert scale going from 1 (totally unacceptable) to 7 (perfectly acceptable). Participants were not allowed to revise their ratings.

The full lists of items, the fillers and the control questions, the audio-files of the dialogs, the database used for the analyses and the Supplement Materials with the additional analyses are available on the [online repository](#).

### 3. Analyses and results

We ran descriptive statistics for the demographic characteristics of the participants and the acceptability ratings of fillers and items. To account for possible interindividual differences in the use of the Likert scale we transformed the raw scores in z scores considering the distribution of ratings for each participant. We adopted a Linear Mixed Effects Model fit by REML estimator to analyze the acceptability ratings of the target structures in the items. We consider as Fixed Factors the three structural factors (structure type, predicate valency and structural layer) and their interactions, while we considered both participants and items as Random components. For the Structural layer factor, the VP-layer was considered as the reference level for the analysis. We also performed post hoc analyses with Bonferroni's correction for each possible comparison between the 16 experimental conditions (see Table 1). All the analysis were performed with the GAMLj module of Jamovi (version 2.3.19) (Gallucci 2019).

#### 3.1 Participants

One-hundred-six individuals accessed the online platform and provided their consent, however 7 of them did not match the inclusion criteria and 16 did not complete the experiment. Moreover, we excluded one person for insufficient accuracy in the attentional control questions (<80% of correct answers). Another participant was excluded for inconsistent acceptability ratings of the fillers.

A total of 81 participants were included in the analyses. The mean age was 33 ( $\pm 17$ ) years, ranging from 18 to 82, with 79% female and 21% male participants. The majority of them are from the North of Italy (81%, 6% from the Center and 13% from the South and the major Islands). As for the level of formal education, 63% of

the sample reported a university degree, 36% a high-school degree, and 1% a middle-school degree. Since the demographic characteristics were not balanced across the categories and the sample cannot be considered as representative of the Italian population, we did not take into account these features for the analyses.

### 3.2. Fillers

The results of the descriptive analyses of the acceptability ratings for the fillers are reported in Table 2, while the distributions are displayed in Supplementary Figure 1. Considering the raw score, we observed that participants used the whole range of the 7-point Likert scale. The central measures of the scores' distributions were well polarized toward the extreme values of the scale both for grammatical and ungrammatical fillers. Moreover, the variance was small. An unexpected result emerged from the analysis of the fillers' ratings: VP-anaphora sentences with inanimate subjects reported on average slightly higher scores than expected, even if in the bottom half of the scale. Overall, the ratings for the fillers support the reliability of the participants judgements. Therefore, we proceeded with the analyses of the results for the experimental items.

**Table 2.** Descriptive statistics for Fillers' acceptability ratings. Fillers are grouped according to the alleged grammaticality. SD: Standard Deviation; IQR: Inter-Quartile Range

Types of filler	Raw scores		z scores	
	Mean (SD)	Median (IQR)	Mean (SD)	Median (IQR)
Grammatical sentences with sluicing	6.78 (0.78)	7 (7-7)	1.23 (0.49)	1.28 (1.07; 1.51)
Ungrammatical sentences with sluicing	1.51 (1.10)	1 (1-2)	-1.34 (0.66)	-1.42 (-1.69; -1.08)
Grammatical sentences with stripping	6.80 (0.68)	7 (7-7)	1.24 (0.45)	1.28 (1.06; 1.52)
Ungrammatical sentences with stripping	2.12 (1.76)	1 (1-2)	-1.04 (0.91)	-1.19 (-1.59; -0.73)
Grammatical sentences with VP-anaphora	6.59 (0.95)	7 (7-7)	1.14 (0.52)	1.20 (0.89; 1.48)
Ungrammatical sentences with VP-anaphora	3.35 (2.02)	3 (1-5)	-0.40 (0.92)	-0.53 (-1.14; -0.33)

### 3.3. Target structures

The descriptive analyses of raw ratings revealed that participants used all the available scores of Likert scale also in the case of experimental items (Table 4; see Supplementary Figure 2 for the distributions). All the following analyses were based on z-scores. The Linear Mixed Effects Model analysis revealed significant effects for each factor (Structure type, Predicate valency and Structural layer) for the interaction between valency and structural layer and for the three-way interaction (all  $p_s < 0.01$ ). Table 3 indicates, by means of F-tests, whether each predictor gives a significant contribution to the model's fit. Fixed Effects parameter estimates for the full model is reported in Supplementary Table 1. The model with the 3-way interaction showed

the best fit in comparison with the model with only the three 2-way interactions and the model with no interaction (Supplementary Table 3).

**Table 3.** Linear mixed model fit by REML. AIC=14800.301. Conditional R<sup>2</sup>=0.494. Satterthwaite method for degrees of freedom

<b>Fixed Effect Omnibus tests</b>				
	<b>F</b>	<b>Num df</b>	<b>Den df</b>	<b>P</b>
Structure type	7.219	1	80.0	0.009
Predicate valency	18.336	1	80.0	<0.001
Structural layer	81.856	3	80.0	<0.001
Structure * Valency	2.471	1	80.0	0.120
Structure * Layer	0.379	3	80.0	0.768
Valency * Layer	12.983	3	80.0	<0.001
Structure * Valency * Layer	4.261	3	80.0	0.008

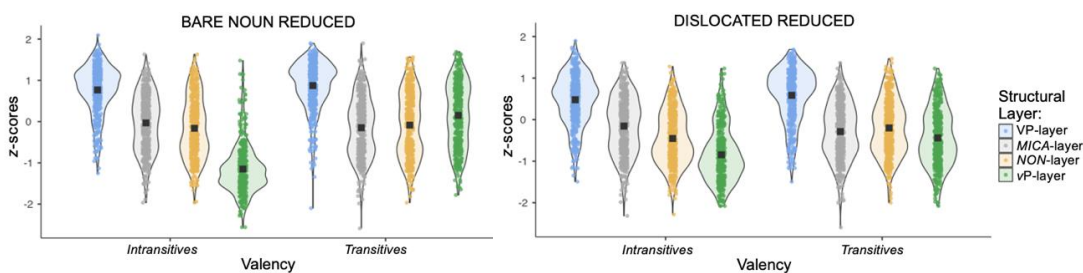
As the interactions among the factor were significant, we performed post hoc analyses to contrast each pair of experimental conditions. Descriptive statistics for each experimental condition are displayed in Table 4; a graphical representation of the ratings distributions is reported in Figure 1 (for the distribution of raw scores, see Supplementary Figure 2). In post hoc analysis, we tested each of the 16 conditions against all the others (Bonferroni's correction for p values); results are available in Supplementary Table 2.

**Table 4.** Descriptive statistics of the acceptability ratings for each experimental condition. BN: Bare Noun reduced structures; DR: Dislocated Reduced structures. SD: Standard Deviation; IQR: Inter-Quartile Range

<b>Structural layer</b>	<b>Condition</b>	<b>Raw scores</b>		<b>z scores</b>	
		<b>Mean (SD)</b>	<b>Median (IQR)</b>	<b>Mean (SD)</b>	<b>Median (IQR)</b>
VP-layer	Affirmative BNs with unaccusatives	5.83 (1.37)	6 (5; 7)	0.767 (0.591)	0.87 (0.50; 1.17)
	Affirmative BNs with passives	6.07 (1.26)	7 (6; 7)	0.874 (0.588)	1.01 (0.60; 1.28)
	Affirmative DRs with unaccusatives	5.31 (1.50)	6 (5; 7)	0.513 (0.608)	0.61 (0.13; 0.96)
	Affirmative DRs with passives	5.54 (1.52)	6 (5; 7)	0.619 (0.631)	0.77 (0.23; 1.12)
MICA-layer	Negative (mica) BNs with unaccusatives	4.16 (1.78)	4 (3; 6)	-0.032 (0.687)	0.01 (-0.59; 0.47)

	Negative (mica) BNs with passives	3.92 (1.76)	4 (3; 5)	-0.148 (0.722)	-0.12 (-0.72; 0.38)
	Negative (mica) DRs with unaccusatives	3.98 (1.72)	4 (3; 5)	-0.121 (0.682)	-0.09 (-0.66; 0.41)
	Negative (mica) DRs with passives	3.71 (1.68)	4 (2; 5)	-0.253 (0.662)	-0.27 (-0.72; 0.25)
NON-layer	Negative (non) BNs with unaccusatives	3.88 (1.84)	4 (2; 5)	-0.162 (0.731)	-0.25 (-0.73; 0.40)
	Negative (non) BNs with passives	4.03 (1.94)	4 (2; 6)	-0.085 (0.778)	-0.09 (-0.72; 0.61)
	Negative (non) DRs with unaccusatives	3.33 (1.67)	3 (2; 5)	-0.419 (0.635)	-0.51 (-0.90; 0.09)
	Negative (non) DRs with passives	3.87 (1.76)	4 (2; 5)	-0.165 (0.657)	-0.21 (-0.68; 0.31)
vP-layer	Affirmative BNs with unergatives	1.82 (1.34)	1 (1; 2)	-1.150 (0.589)	-1.21 (-1.51; -0.90)
	Affirmative BNs with active transitives	4.52 (1.89)	5 (3; 6)	0.151 (0.775)	0.14 (-0.51; 0.81)
	Affirmative DRs with unergatives	2.51 (1.61)	2 (1; 3.75)	-0.811 (0.651)	-0.95 (-1.31; -0.46)
	Affirmative DRs with active transitives	3.35 (1.72)	3 (2; 5)	-0.405 (0.667)	-0.46 (-0.92; 0.11)

**Figure 1.** Distributions of acceptability ratings (z scores) across the experimental conditions



The analyses revealed no significant difference among the conditions associated with the VP-layer (affirmative reduced structure with transitive passive and unaccusative predicates, all  $p_s > 0.05$ ). The VP-layer conditions were the only

ones that displayed a positive mean rating z score higher than 0.5. In particular, each of these conditions reported significantly higher ratings in comparison with all the other experimental conditions (all  $ps < 0.01$ ) with the only exception of affirmative bare noun reduced structure with active transitives (discussed later).

As for MICA-layer and NON-layer, no significant differences were found across the conditions associated with these layers (all  $ps > 0.05$ ). These conditions reported significantly higher ratings in comparison with the two conditions with unergative predicates (all  $ps < 0.01$ ) while no significant differences were found in comparison with the two conditions with active transitive predicates (all  $ps > 0.05$ ).

Within the vP-layer condition, the predicate valency played a significant role ( $p < 0.01$  in the contrast analysis, see parameter estimates in the Supplementary Materials). Bare noun reduced structures with unergatives reported significantly lower scores than all the other conditions (all  $ps < 0.01$ ). Also dislocated reduced structures with unergatives were rated lower than all the others (all  $ps < 0.01$ ) with the exception of dislocated reduced structures with active transitive (no significant difference,  $p = 1.00$ ). This latter condition displayed no significant differences also with bare noun reduced structures with active transitive ( $p = 0.14$ ) and with all the MICA-layer and NON-layer conditions (all  $ps > 0.05$ ). Finally, bare noun reduced structures with active transitive predicates reported significantly lower ratings in comparison with bare noun reduced structures with unaccusatives ( $p = 0.04$ ) and passives ( $p < 0.01$ ), but displayed no difference with the corresponding dislocated reduced structures as well as with all the negative conditions (all  $ps > 0.05$ ).

Considering the distributions of the ratings (Figure 1), we can qualitatively comment that no condition is associated with a bimodal distribution. However, all the negative structures and the bare noun reduced structures with active transitive predicates displayed a higher variability in the ratings without a neat polarization of the central tendency towards an acceptable or unacceptable judgement.

#### 4. Discussion

Our main goal in this paper was to disentangle between two possible approaches to Italian participial reduced structures that despite being very impoverished are interpreted as full sentences, having a declarative, interrogative or exclamative force. As is generally the case with reduced structures, in principle there are two ways to go. The first possible approach is assuming deletion (for example, phonological deletion) of the missing parts starting from an underlying complete structure.

The second way to go is the ‘what you see, what you get’ (or structural) approach, namely assuming that the structure of these utterances is as reduced as it seems. C&D’s approach to Bare Noun Reduced and Dislocated Reduced structures in Italian is an approach of the second type. It makes some clear predictions that the authors claim to be borne out, but were not experimentally tested insofar. In a nutshell, C&D take Bare Noun Reduced and Dislocated Reduced not to extend over the VP level. This reduced structure is given illocutionary force by virtue of the labeling by feature sharing mechanism that is also operative with full sentences: in both cases, a nominal element agrees with a verb and the phi-features that are shared provide a label that is responsible for the sentential interpretation.

In full sentences, the nominal element is the subject and it agrees in person and number with the inflected verb; in reduced participial structures the nominal element is the internal argument and it agrees in gender and number with the participial.

Given this account, no layer above VP (but for the hanging topic in the left periphery of the VP itself in Dislocated Reduced) is projected to begin with. Therefore, the vP and the middle field should not be projected. As C&D note, this means that Bare Noun Reduced and Dislocated Reduced should be ungrammatical with predicates that require an external argument, under the standard assumption that the external argument sits in Spec,vP (cf. Hale & Keyser 1993, Chomsky 1995 and Kratzer 1994, 1996, following groundwork laid by Larson 1988). Similarly, negating Bare Noun Reduced and Dislocated Reduced should lead to a deviant output, at least if sentential negation requires the activation of a dedicated position in the middle field. C&D claim that these predictions are borne out but did not run any empirical investigation. In the case of negation, they acknowledge that judgments are quite subtle, with a possible modulation between the negative items *non* and *mica*.

Experimentally testing Bare Noun Reduced and Dislocated Reduced required a specific approach because these structures, although quite productive in spoken Italian, are rarely written, perhaps banning SMS messages and the like, and seldom described. While the validity of introspective judgments for core grammatical phenomena has been amply demonstrated (Sprouse & Almeida 2012; 2013; 2017, it remains to be verified whether the same stability occurs when introspection is associated with oral, conversational registers. For these reasons we created an experiment including audio files where Bare Noun Reduced and Dislocated Reduced structures were answers to questions in a dialogic conversational format.

We also included fillers with the same conversational form, that had a double function. First, they were meant to exclude participants who had a completely unexpected performance possibly due to distraction and other confounding factors. Only one participant out of 106 was actually excluded based on their unexpected performance on fillers. The second role of fillers was checking whether participants were actually using all rating scores in the Likert Scale and this turned out to be the case. Only one type of fillers elicited an intermediate evaluation, namely VP anaphora cases with an unaccusative predicate and an inanimate subject ('The tomatoes grew but the lettuce did not do that.'). We expected this type of filler sentences to be deviant assuming that 'to do that' requires an animate subject but this semantic anomaly impacted less than expected, possibly because some participants take 'to do that' to be a light verb with weak semantic restrictions<sup>4</sup>.

Turning to experimental items for the target structures, individual raw ratings covered all the possible scores of the Likert scale (from 1 to 7) too. To account for possible interindividual differences in the use of the scale we transformed raw scores in z scores, so that negative scores corresponded to items rated as unacceptable, positive scores corresponded to items rated as acceptable, and scores around the value 0 corresponded to items with an intermediate level of acceptability.

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<sup>4</sup> This unexpected result might simply suggest that agentivity is not the real factor driving the acceptability of VP anaphora in Italian, in line with what described for Spanish (Zagona 2002), where eventivity only appears to be at play. See Mac Donald (2023) for a recent discussion.

Let us focus first on affirmative sentences. We included transitive verbs in active and passive voice, unergatives and unaccusatives. C&D's predictions are clear: predicates that require the activation of vP due to the presence of the external argument (transitives and unergatives) should be unacceptable, while passives and unaccusatives, which do not project the vP layer, should be acceptable<sup>5</sup>. On the other hand, valency should not impact on acceptability because the compatibility with a single or double argument for a given verb is not a factor by itself in C&D's analysis.

These predictions are largely born out: passives and unaccusatives (all the VP-layer conditions in the results section) are the only conditions that were rated as fully acceptable (positive z scores) and reported significantly higher ratings than the other conditions, regardless of the Structure Type (Bare Noun or Dislocated Reduced) or Valency factors.

A qualitative comparison of the acceptability ratings of these conditions with those of the fully grammatical fillers might reveal a slight difference. However, it is important to consider that the structures used in the fillers are also attested in written Italian, whereas the target structures are exclusively used in spoken Italian. This diamesic difference could have influenced the acceptability judgments, with the grammatical and possibly written fillers being associated with better ratings. More importantly, the medians of the raw scores for the structures associated with the VP-layer are always between 6 and 7, at the upper end of the Likert scale, confirming their full acceptability (see Table 4).

All the vP-layer conditions (unergative and active transitive predicates) reported significantly lower ratings and they were judged as unacceptable (the average of z scores is negative), with a single exception: Bare Noun Reduced structures with active transitive predicates reported intermediate acceptability ratings, as the average z scores for this condition are slightly above 0. Although these results are clearly incompatible with an analysis in terms of telegraphic speech, the unexpected result concerning Bare Noun Reduced structures with active transitive predicates is interesting in the light of our general research question concerning the ellipsis analysis vs. structural analysis.

Let us consider a concrete example. The judgment was about the part in bold in (12).

- (12) E lo studente? **Risolto**                      **i problemi**, è            molto bravo  
       and the student? solve.PTCP.M.SG the problems is            very good  
 in matematica  
 in mathematics

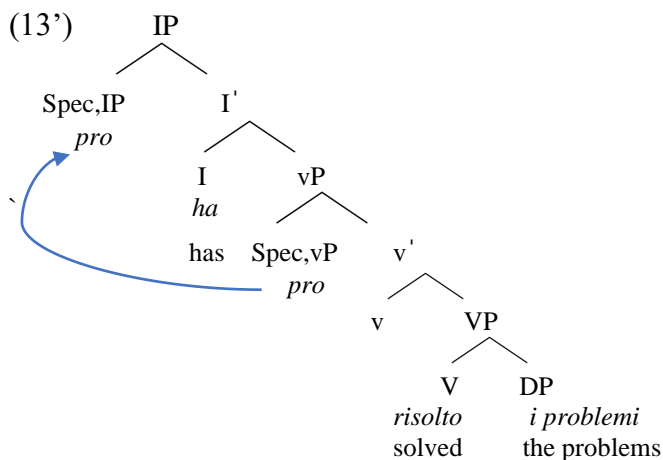
‘What about the student? He solved the problems, he’s very good with math’

Notice that the expression *risolto i problemi* cannot be interpreted either as a Bare Noun Reduced or as Dislocated Reduced for various reasons, most notably because the past participle and the internal argument do not agree. An alternative analysis is suggested by looking at the simplified representation of the complete sentence corresponding to (12) namely (13).

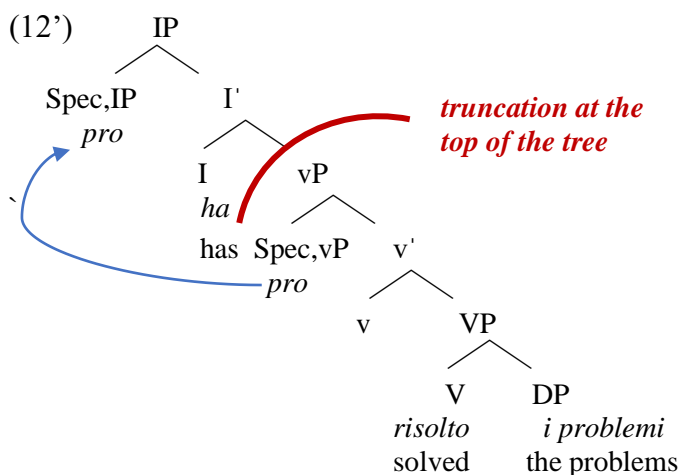
<sup>5</sup> In the smuggling analysis for the English passive (cf. Collins 2005) the external argument occupies the same underlying position as the external argument in an active sentence. Although we cannot develop the point any further, we notice that the smuggling analysis does not seem to be compatible with C&D's approach.



- (13) Ha risolto i problemi  
has solved the problems  
'He solved the problems



It is natural to assume that (12) can be derived from (13) by a mechanism of truncation of the top of the tree, given that a similar mechanism has been independently proposed, most notably in early phases of language development (Rizzi 1994) and for subject omission in special registers in non-drop languages (cf. Haegeman 1997).<sup>6</sup>

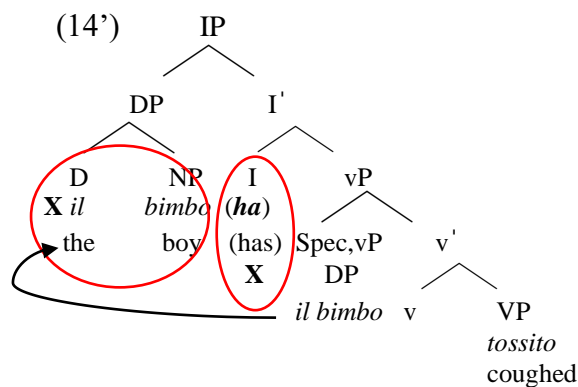


<sup>6</sup> Notwithstanding the analogy with the analysis in terms of truncation for subject omission in non-prodrop languages, some caution is needed. According to that type of analysis, truncation of CP turns the specifier of IP into the highest specifier of the clause and an empty category is allowed, being the specifier of the root. In the case of (12) truncation takes place a step down. Another point is that in diary registers article omission is allowed clause internally (Haegeman & Ihsane 2001), a fact that is not immediately compatible with truncation at the top of the tree. In this respect, the Italian phenomenon illustrated by (12) is more similar to informal speech described by Thrasher (1977). In this variety of English (article) omission is restricted to the initial position in the sentence.

Crucially, we can show that this mechanism nicely explains why other items involving a vP-layer are valued as totally unacceptable. For example, Bare Noun reduced structures with unergative predicates reported on average very low ratings (significantly lower scores in comparison with all the other conditions). Take an actual example from the experimental data set: the part in bold in (14).

- (14) A: Cosa è successo?  
 what is happened  
 ‘What happened?’  
 B: **Bimbo** **tossito**, avrà l’=influenza.  
 boy.M.SG cough.PTCP.M.SG will=have.3SG the=flu  
 ‘The boy coughed, he may have the flu’

It should be apparent that the root truncation mechanism cannot produce the structure in (14) out of the corresponding complete sentence, since, as shown in (14’), what would need to be elided (namely the auxiliary), does not correspond to the top of the tree.



All in all, what emerges is that Italian participial structures pattern as predicted by C&D’s structural analysis. Yet, deletion out of a complete structure is indeed operative in Italian as well, but (i) its output is a structure with an intermediate acceptability status (as opposed to being fully grammatical) and (ii) it is positionally constrained, in the case at hand it is restricted at the top at tree.<sup>7,8</sup> On the

<sup>7</sup> We say ‘in the case at hand’ because we do not want to take position on other reduced structures that are not discussed in this paper. For example, sluicing has been argued (cf. Merchant (2001) and much following work) to be phonological deletion of the complement of the COMP layer. This can be seen as a case of truncation of the bottom of the tree. So, it is possible that both truncation at the top and at the bottom are operative in Italian, while deletion of a category surrounded by materials that remain unaffected by it as in (14’) is not possible. We do not discuss gapping cases in this paper (‘some ate pizza, and others pasta’) but acknowledge that they might be candidate of the latter type of deletion, subject to constraints like a contrast between two alternatives.

<sup>8</sup> If this interpretation is correct, other structures that are predicted to be unacceptable by the original C&D’s account should have an intermediate status instead. For example, the structures that are called Fully Reduced by C&D should have an intermediate status when they contain unergative predicates (cf. ‘Cosa ha fatto il bambino? – **Tossito**’), as they can be

other hand, elliptical sentences that are as small as VPs get very high acceptability rating. It is important to stress that these fully acceptable sentences (as small as VPs) cannot be derived by a truncation account for the reason outlined in (14): in all these cases the copula of the corresponding fully-fledge sentence, which is lacking in the reduced structure, is not “at the top of the tree”.

Let us move now to the second set of results that need to be commented. This is negative Bare Noun Reduced and Dislocated Reduced sentences. We included only passive and unaccusative predicates as they were expected to be fully acceptable in the affirmative form and, therefore, they were the best environment to detect an effect of negation (if any).

Two types of negative elements were considered: ‘non’, the standard sentential negation particle and ‘mica’, an adverbial element that in some varieties co-occurs with ‘non’ in negative concord contexts while in other varieties can determine alone the negative force of the sentence. In this respect, ‘mica’ is the Italian counterpart of the more famous French negative adverb ‘pas’.

- (15) Leo non ha (mica) mangiato  
 Leo not has mica eaten  
 ‘Leo did not eat’

C&D claim that negative radically reduced structures are degraded but that (some) informants found ‘mica’ to be more acceptable than ‘non’. All in all, its status in reduced structures was worth an investigation, alongside the standard negation ‘non’.

Our informants did not display any difference between Bare Noun Reduced and Dislocated Reduced with ‘non’ or with ‘mica’ (no significant differences among NegNON-level and NonMICA-level conditions, regardless of Structure Type or Valency Factors), suggesting that whatever factor differentiates the two negative items in full sentences is not operative in reduced sentences. For this reason, from now we comment on the status of negative sentences in general without distinguishing between ‘mica’ sentences and ‘non’ sentences.

The acceptability status of negative sentences is uniformly in the middle of the Likert scale and this intermediate status is fully confirmed after ratings were transformed in z-scores as the average z scores for these conditions are slightly below 0. Furthermore, we observed no sign of bimodal distribution. Participants tend to agree that negative reduced structures are not so good (or not so bad).

Given this finding, it is a priori difficult to decide whether they are indeed grammatical but some factor impacts on their acceptability or the other way around (they are ungrammatical but some factor drives an accommodation process). In order to progress on this slippery terrain, we propose the following operative concept of grammaticality, that is good enough in the present context: a structure is grammatical if it is the output of a licit syntactic derivation. In the case at hand, the derivation is the one that leads to full acceptability in case of affirmative passive and unaccusative Noun Reduced and Dislocated Reduced sentences.

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the result of truncation at the top of the tree. Although this seems plausible on the basis of our own introspective judgements, it has not been experimentally tested.

Given this premise, our interpretation of the facts depends heavily on the syntactic analysis of negation that is adopted. As we mentioned in the introduction, a well-established line of research stemming from Haegeman & Zanuttini (1991) and Haegeman (1995) posits the presence of a dedicated position (Neg,P) in the upper part of the middle field. The negative item ‘non’ is taken to be the head of Neg,P. If this analysis of negation is assumed, Noun Reduced and Dislocated Reduced sentences should not be derivable to begin with, since we assumed that they are as simple as a VP. However, more recently a different approach to the syntax of negation has been developed (cf. Zeijlstra 2023 and Manzini & Pescarini 2023) which dispenses with a dedicated Neg,P position.

For concreteness, we follow Manzini & Pescarini’s (2023) proposal, but nothing substantial hinges on the specifics of their analysis. In a nutshell, they argue for a uniform approach to probing in which it is always phase heads qua phase heads that are given unvalued features that must be checked/valued. These features are checked by probing a category in the c-command domain of the phase head. This holds for negation as for any other feature. For example, in case of negative concord the negative feature which must be checked or valued by an n-item is assigned to the head of the vP phase or to the head of the CP phase, alongside other features (phi-features, Q-features etc.). So, a dedicated position Neg,P can be dispensed with.

Manzini & Pescarini’s approach is meant to account for negative concord in complete sentences, therefore they assume that the n-feature is assigned to v or C, but its main insight, namely that the locus of the negative feature to be valued is the phase head, can be extended to negative reduced sentences, modulo some important qualifications. In particular, while C&D do not postulate any phase head above the reduced VP structure and they explicitly deny that the middle field and the articulated left periphery is activated, they stress that Bare Noun Reduced and Dislocated Reduced are full sentences and have an illocutionary force, being declarative, interrogative or exclamative.<sup>9</sup> But claiming that these reduced structures can be uttered in isolation and can be fully interpreted amounts to saying that they are phases. As such, they can be assigned a negative feature in line with what assumed by Manzini & Pescarini for phases in full sentences. This negative feature looks for a matching Goal in its c-command domain and finds it in the negative items ‘non’ or ‘mica’, which we take to be adjoined to VP.<sup>10</sup>

If this analysis is on the right track, Bare Noun Reduced and Dislocated Reduced are to be considered grammatical under the operative definition of grammaticality given above, namely they are the output of a legitimate syntactic derivation. But, if so, why are they judged in the middle range of the Likert scale

<sup>9</sup> Bare Noun Reduced and Dislocated Reduced cannot be imperative. C&D do not discuss why it is so but it is likely that this has to do with the fact an imperative requires an external argument (the doer of the action to be done) and external arguments are not allowed in these structures, given the absence of the vP layer.

<sup>10</sup> This is at least the spirit of the account we shall pursue here, which is not without technical problems. In particular, Manzini & Pescarini’s proposal crucially relies on phase heads being endowed with negative features. But given C&D, these structures, being labeled by feature sharing, are typically exocentric, so that there is no head that can be assigned such a feature, which should be this assigned to the label itself. We leave this problem to future research.

rather than being fully acceptable? We think that ultimately this has to do with a semantic clash between negation and perfectivity, as we now explain.

As a starting point, we follow standard practice and define ‘perfective marker’ any morphological device indicating that the event described by the predicate to which it applies is a ‘completed event’. For example, in the case of a cake-eating event, a completed event is one that includes both the process through which the cake is being eaten and the culmination of that process. On the other hand, with the term *perfect* (not to be confused with *perfective*) one means a construction in which a tense is combined with some anteriority operator to the effect that the event described by the predicate is placed at a time that precedes the time referred to by the tense. For example, the present perfect sentence “John has eaten a cake”, uttered now, means that the event of eating a cake has culminated before the time referred to by the present form has. Given these definitions, it is uncontroversial that the Italian past participle is a perfective marker, as it conveys the information that the eventuality denoted by the predicate had a culmination, regardless of temporal reference. Importantly, reduced structures have no tense, so Bare Noun Reduced and Dislocated Reduced are perfective (not perfect!) constructions.

The second assumption we need to explain the degraded status of negative reduced structures is assuming that only predicates which include a culmination can be perfective, as the perfective implies completion.<sup>11</sup>

The final ingredient to address the puzzle of why negated participial structures are marginal is that, when negation is applied to a predicate, it converts culminating predicates in non-culminating ones: for example, the negation of the predicate ‘building a house’ (namely ‘not building a house’) cannot have a completion, unlike its positive counterpart. It follows that negated predicates cannot be perfective. We think that this is the source of the degraded status of negated Dislocated Reduced and Bare Noun Reduced.

A *prima facie* objection to this account is that full negative sentences with a predicate that does not have a completion can be fully acceptable, cf. “the bridge has not collapsed”. However, what happens with this type of sentences is that the negation interacts with the anteriority operator that locates the event at a time prior to the time referred to by the present tense. Crucially, the negation does not apply directly to the non-culminating predicate: the sentence “the bridge has not collapsed” means that it is not true that an event of bridge collapsing occurred before the time referred to by the present tense. That the negation does not apply directly to the non-culminating predicate is confirmed by sentences like “the bridge has not collapsed yet”, in which the culminating event of bridge collapsing is anticipated to take place but not before the time referred to by the present tense.

To take stock, we propose that negative reduced structures are in the middle range of the Likert scale because they are syntactically OK but are semantically anomalous. This semantic approach makes some predictions that we hope to explore in future work. As discussed by Moens & Stedman (1988), the incompatibility

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<sup>11</sup> This in line with Krifka (1986;1992), who proposes that the perfective combines only with quantized events, where a quantized predicate is defined as one which, when it is true of an event, is false of any of its subevents. For example, a predicate like ‘draw a circle’ is quantized as no completed event of drawing a circle is a proper subevent of another one. On the other hand, a predicate like ‘being tall’ is not quantized as a stage of being tall is a subevent of another state of being tall.

between perfective aspect and non-culminating predicates can be circumvented, for example by modifying the predicate with a temporal adverb. This is so because the negation can interact with this adverb, rather than applying to the non-culminating predicate directly. For example, a Bare Noun Reduced like ‘casa mica crollata da molto’ (‘the house did not collapse long ago’) should be better than the Bare Noun Reduced ‘casa mica crollata’ (‘the house did not collapse’), as negation can negate the adverb in this structure. We did not run an experiment on this specific aspect, so we cannot tell for sure but our intuition is that this might be the case.

Focusing on methodological aspects, our experimental setup might raise some concerns, as we considered multiple contrasts that were not exactly minimal across conditions. In particular, to preserve the dialogical context, we added a contrastive topic continuation in the utterances with dislocated reduced structure and a more general continuation for the items with bare noun reduced structures. Moreover, to maximize the naturality of each dialog we made the lexical choices that were more functional for the specific items. As a result, the items across the 16 experimental conditions do not display minimal contrasts but a broader variation. However, we think that such degree of variability was necessary to address multiple comparison in a single experiment, as it is extremely difficult, if not impossible, to set fixed dialogical contexts that are always natural regardless of the target of structure and of the target predicate. We cannot exclude that the acceptability of Italian bare participial sentences, although subject to the structural constraints we highlighted, is also influenced by lexical and pragmatic factors that we could not control and are beyond the scope of the present study. Comparing altogether several factors allowed us to highlight the most relevant differences that should be further investigated with a simpler experimental design and with minimal contrasts. These future experiments would increase the power of the analyses and control for the potential biases induced by lexical or pragmatic variability.

Finally, we believe that the present work contributes to highlight that understanding the nature of lesser studied linguistic phenomena (such as spoken structures, marginally acceptable utterances, and accommodation strategies) is crucial for advancing our understanding of general syntactic mechanisms (cf. Manetta 2020).

## 5. Conclusion

Let us take stock: we took a set of Italian participial reduced constructions as a case study to investigate the general question of the source of reduced structures. We experimentally tested the view that these constructions are structurally very reduced, as advocated by C&D. The result of the investigation is that they are indeed so but there are two unexpected findings that required some important qualifications. First, in addition to structures that are generated as small as they appear and are fully acceptable, there are superficially very similar structures that are the result of a top of the tree truncation. This truncation mechanism comes with a cost, though, since the resulting structures are not considered fully acceptable. Second, negation is a serious challenge to the idea that structures as small as VPs can be sentential. Still, we discussed a possible way to reconcile the observed pattern with that idea.

We are aware that this study is just a tiny contribution to a general understanding of reduced sentences. Still, we hope to have shown that this investigation, to be achieved with controlled methods if the data are tricky enough to require them, is urgent: colloquial reduced structures are a productive way to convey sentential meaning but they have been understudied in formal linguistics due to the bias of studying forms that are used in the written language. This contribution is also methodological: by addressing oral informal phenomena, this study contributes to the general enterprise inaugurated about ten years ago, aiming at testing experimentally the validity of introspective judgements.

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