

The hidden side of adverbs*

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Abstract

This paper will address the predicative nature of manner adverb(ial)s and of three types of sentence adverbs (subject-oriented, modal, and evaluative) in Italian. Predication often becomes overt by means of morphological correlates. Is it possible to find any such evidence with invariable adverbs? To unveil their predicative nature, a procedure will be suggested in which two sentences, one with a *-mente* adverb, the other with its cognate adjective (a) share the content morphemes (identity of the *signifiant*) and (b) entail each other (identity of the *signifié* as regards semantic roles). A number of such pairs will be discussed, examples of which include: *Intelligentemente*, *Leo intervenne* ‘Cleverly, Leo intervened’ and *Leo fu intelligente a intervenire* ‘Leo was clever to intervene’. We aim to ascertain if the argument structure of the adjective and the semantic role(s) which it assigns can shed light on the very same properties of the cognate adverb.

1 Introduction

“A dustbin class?”. This is the question which the famous British linguist David Crystal asks in the adverb section of *The Cambridge Encyclopedia of Language*. His query is clearly not meant with any derogatory intent but to efficaciously underline the fact that “[s]ome have linked this class to a dustbin into which grammarians would place any words whose grammatical status was unclear” (Crystal 1987: 92). A variation on this theme is given by Morzycki (2014: 2), who, without quoting Crystal, speaks of a “wastebasket category”. Indeed, adverbs, as is well-known, cover difficult terrain due to their heterogeneity, and they resist any attempt at stable classification or generalization (see Haser/Kortmann 2006: 67).

Bearing in mind Crystal’s words as a caveat, the aim of this paper is to suggest a road map for navigating the convoluted material relating to three types of sentence adverbs in Italian: subject-oriented (e. g. *intelligentemente*), modal (e. g. *ovviamente*), and evaluative adverbs (e. g. *stranamente*). Their relationship with another lexical category – that of adjectives – will be of key importance. That adverbs and adjectives function in close relation to each other is a recognized fact, which is made evident by a number of productive phenomena. An example is the regular morphological relation of pairs such as *loyal/loyally*, *tranquill/tranquilly*. Indeed, it

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is possible with Italian adjectives to form the corresponding adverb¹ by using a derivational suffix and with typical regularity. Also well-recognized by scholars is the possibility of sharing the same interrogative counterpart *come* ‘how’ for adverbial and adjectival phrases². Less fortunate has been another revelatory phenomenon, which is syntactic in nature: that of enallage³, that is the use, on a semantic pair, of the adjective or adverb with the same root: “They are acting strange” (*Both sides now*, Joni Mitchell), “Io scrivo lento” ‘I write slow(ly)’ (*Il giorno della civetta*, Leonardo Sciascia)⁴.

Adjectives are modifiers to which a predicative role is unanimously attributed. They are normally treated as predicates when they function attributively (*the calm man*) and in copular constructs (*The man is calm*). Adverbs are also generally described as modifiers, but very much less common in the literature appear to be studies which are based on the predicative function of adverbs⁵, especially if the approach is mainly syntactic. It is the latter which will instead be foregrounded hereinafter in this work.

A further type of adverb-adjective liaison, which to our knowledge has less frequently been exploited in adverb analyses, is exemplified below:

1. Leo constantly uses his car.
2. Leo makes constant use of his car.

Such pairs of sentences have already been dealt with at great length, commencing with the theoretical framework *Lexique-Grammaire* by Maurice Gross in the 1970s, inspired by Z. S. Harris (see Harris 1981). The syntactic and semantic relationships of pairs such as (1) and (2) above were systematically exemplified, particularly when the verb *faire* ‘do’, ‘make’ was involved (Giry-Schneider 1978).

The proposed sentence pair involves: in (1) a construct which is genuinely transitive; in (2) a clause type with a support (or “light”) verb (see Gross 1981). Similar pairs, of particular interest here because adverb and adjective share a single lexical base (being cognate words, as in enallage), stand out for at least two reasons. The first correlates with the *signifiant*, that is, the sharing of content morphemes (i.e. neither derivational nor inflectional): all those used in (1) are very much present in (2)⁶. The second regards the *signifié* in relation to semantic roles, i.e. the paraphrastic equivalence of the two sentences⁷.

¹ For an account of this phenomenon in French, see Molinier (1992).

² It is well-known that some types of adverb have no interrogative counterparts (see De Gioia 2001: 52).

³ The metalinguistic terms in English and Italian cover quite distinct areas. To date, this phenomenon appears to have received little attention in the literature. See Hummel (2014).

⁴ The translations provided throughout the paper may turn out to be in non idiomatic English. Occasionally, the translation may not render the full meaning of the original sentence.

⁵ This excludes the field of formal semantics. As Lakoff (1973: 2) observed in the 1970s, Donald Davidson (followed soon after by Richard Montague) traced a parallelism between adverbs and adjectives by analyzing both categories as predicates; he attributed to the former the characteristic of being predicates of events. However, it must be remembered how in Davidson’s theory the range considered as predicate is rather wide. For example, prepositional phrases with a clear circumstantial function are considered as equal to predicates. In e. g. *John buttered the bread in the bathroom*, the verb *to butter* is considered as a trivalent predicate (see Glüer 2011: 174). Also Ernst (2002) employs the expression “predicational adverbs”, but in Maienborn and Schäfer’s (2011) opinion these adverbs are again defined according to semantic criteria.

⁶ In La Fauci and Mirto (2003: 45–59), the verb *fare* ‘do’, ‘make’ in sentences such as (2) is analyzed as a zerovalent predicate, as are auxiliaries, whose function is to provide the syntactic finish (La Fauci/Mirto 2003: 11–

In *Lexique-Grammaire*, the paraphrastic relationship between sentences such as *Leo uses his car* and *Leo makes use of his car*⁸ is accounted for by attributing a predicative role to the post-verbal noun (in addition to its being a direct object) at the level of the clause. In (2), for example, the noun *use* licenses the subject *Leo* as well as *his car*. The latter phrase will surface as a prepositional phrase due to the direct object function taken by the predicative noun⁹. Thus, it can be supposed that, in both (1) and (2), that which combines with the predicate licensing the arguments is the morpheme *constant(-)*: in (1) it occurs with the verb *to use* and therefore surfaces as an adverb¹⁰; in (2), it joins to the noun *use*, and as a result it appears as an adjective.

Given the abovementioned parallelism, and going beyond the analysis proposed in the *Lexique-Grammaire* framework, it can be hypothesized that, as with the adjective *constant* functioning in (2) as a predicate (a role universally recognized), the cognate adverb *constantly* is also integrated in (1) as a predicate. More precisely, it can be purported that what functions as both a modifier and a predicate is the content morpheme *constant(-)*. The outcomes in terms of parts of speech are predictable, according to the lexical category with which *constant(-)* combines.

Thus far, the focus has been on manner adverbs. With the aim of verifying the aforementioned hypothesis on a larger scale, but also as a heuristic tool, we can ask the following: is it possible to extend the line of reasoning to other cases? That is, are there other pairs of sentences formed of a sentence adverb and cognate adjective which could be of interest? We believe that there are indeed such adverbs (often discussed in the relevant literature) and adjectives. In this work they will be analyzed by looking for evidence of their predicative function, conceived of in a syntactic fashion, thus taken together with their argument structures and semantic roles. The latter are conceived of (a) as strictly dependent on syntactic functions; put differently, at the interface between syntax and semantics only a syntactic function can originate a semantic role; and (b) as dependent on the form of the item carrying the syntactic function: we thus obtain cognate semantic roles (see Mirto 2011). As an example, let us consider the semantic roles >disliker< and >dislikee< in the sentence *He instantly disliked the hotel proprietor*. The counterpart with a support verb, *He took an instant dislike to the hotel pro-*

43), that is the appearance of the person and number agreeing with the subject, the grammatical tense etc. The keeping of the same semantic roles in *the constant use of the car by Leo*, in which *fare* is absent, substantiates the analysis of the verb *fare* as a zerovalent predicate. It follows that (1) and (2) should be regarded as sharing the same number of content morphemes (as in active and passive pairs). The support verb may carry nuances related to e. g. aspect or register (see Gross 1998).

⁷ Proof can be obtained by virtue of entailment tests (see Mirto/Trabona 2016: 88–92). The sharing of the same root does not always guarantee a paraphrastic relationship. In *Aldo trattò il cliente amichevolmente* ‘Aldo treated the customer in a friendly way’, the adverb refers to the subject; on the other hand, in *Aldo trattò il cliente da amico* ‘Aldo treated the customer[MS] as a friend[MS]’ the adverbial typically applies to the direct object, as the agreeing elements in the following sentence demonstrate: *Aldo trattò la cliente da amica* ‘Aldo treated the customer[FM] as a friend[FM]’ (see section 2).

⁸ Systematic use of such paraphrastic pairs can be observed in Harris (1981 [1969]: 293–351), under whose direction Maurice Gross studied at the University of Pennsylvania. An application of this method has been developed by Mirto and Trabona (2016: 91–92).

⁹ See La Fauci and Mirto (2003).

¹⁰ “[A]vverbi che paiono intrattenere un rapporto di modificazione con il verbo supporto ma lo intrattengono in realtà con l’intero complesso predicativo” ‘[A]dverbs which seem to establish a modifying relationship with the support verb but in truth it is with the whole predicative nexus’ (La Fauci/Mirto 2003: 57).

prietor, expresses the same semantic roles. The identity is useful to build pairs in which the meaning equivalence is confined only to semantic roles (verbs only can elude the characteristic in (b), as in the examples in (25) below).

This work is organized as follows: section 2 shows a number of ways to reveal the predicative function of an invariable adverb (mainly expressing manner); section 3 describes the methodology, which has recourse to pairs of sentences that are characterized by entailment and by cognate content morphemes; section 4 presents three kinds of sentence adverbs together with their cognate adjectives; section 5 offers a critical review of Lonzi's (1991) classification; and section 6 will conclude the study by summarizing the proposal presented in this paper.

2 Reveal or conceal?

In the sentence *È bella* '(She) is beautiful', the inflectional morpheme of the adjective reveals that the covert subject is singular and feminine. If, however, and referring to the same subject, we say *È felice* '(She) is happy', the inflectional morpheme reveals the number (singular), but nothing regarding the gender. Does this difference mean that the sentences are dissimilar in structure? Such a conclusion, we believe, would be naïve as well as too costly. It does not appear to be reasonable to assert that, by varying the adjective, e. g. from *bella* to *felice*, the structure or the quantity of transferred information changes too. More simply, certain adjectives do not reveal one or more features: some inflect by number and gender, others only by number, and some neither by number nor gender (as in English), as, for example, the adjective *rosa* 'pink' in Italian: *La parete è rosa* 'The wall[fm] is pink', *Il tendaggio è rosa* 'The curtain[ms] is pink', *Le pareti sono rosa* 'The walls[fm] are pink', *I tendaggi sono rosa* 'The curtains[ms] are pink'.

In the presence of an invariable word, the absence of agreement does not necessarily mean a lack of predicative relationships and of feature passing. Shifting our attention to adverbs once again, we can suggest a probable truism: that the absence of agreement with *-mente* adverbs does not indicate an absence of syntactic relationships between a predicate and its argument(s). There are at least two pieces of evidence of such syntactic relationships: first, in relation to selection restrictions, i. e. to semantic constraints a *predicate* can impose on its argument(s) (see La Fauci 2011: 62)¹¹:

3. Il calciatore cadde intenzionalmente.
'The soccer player fell intentionally.'
4. *Il volantino cadde intenzionalmente.
'The leaflet fell intentionally.'

Second, on account of the double function certain *-mente* adverbs perform: the very fact that some can be employed either as manner or sentence adverbs (see below) proves that they establish distinct kinds of syntactic ties with the finite clause.

The predicative nature of *-mente* adverbs can be revealed in other ways. To begin with, consider adverbs such as *reciprocamente* 'reciprocally'/'each other' and *vicendevolmente* 'each

¹¹ Geuder (2002: 106) opposes the unlikely sentence ^{??}*Intelligently, the glass didn't break* with the impeccable *Happily, the glass didn't break*.

other' (as well as their multiword counterparts *l'un l'altro* and *a vicenda*). These adverbs impose a certain number of syntactic constraints on the clause which they modify (Mirto/Trabona 2016: 99):

5. a. Si accusano reciprocamente/vicendevolmente.
'They accuse each other.'
- b. *Accusano reciprocamente/vicendevolmente.
- c. *Si accusa reciprocamente/vicendevolmente.

The outcomes in (5b) and in (5c) are ill-formed on account of the missing clitic and of the singular form of the verb respectively. In (5a), it is the reciprocal adverb which imposes such syntactic features on the finite clause with which it successfully combines.

Second, a relatively recent use of *bello* 'beautiful' shows the shift of this adjective towards an adverbial use as an intensifier (unrecorded in e. g. the 1968 edition of the *Zingarelli* monolingual dictionary, but also in more recent editions):

6. La minestra è bella calda.
'The soup is pretty hot.'

As (6) shows, in its adverbial use *bello* keeps inflecting, as also is the case with *mezzo* 'half' in (7):

7. la bottiglia mezza vuota.
'the half empty bottle.'

Third, consider the following *-mente* adverbs: *vigliaccamente* 'in a cowardly way', *eroicamente* 'heroically', and *pietosamente* 'pitifully'. They occur in the following sentences as manner adverbs:

8. Lea reagì vigliaccamente.
'Lea responded in a cowardly way.'
9. Loro morirono eroicamente.
'They died heroically.'
10. Balli pietosamente.
'You dance pitifully.'

These one-word adverbs all have analytic counterparts which are built from the same lexical root, i. e. cognate adverbials, as the sentences below illustrate (the segments in bold signal agreeing elements):

11. **Lea** reagì da vigliacca.
'Lea responded like a coward.'
12. **Loro** morirono da eroi.
'They died as heroes.'

13. **Balli** che fai pietà.¹²

‘The way you dance arouses pity.’

The shift from the synthetic adverb to its analytic counterpart does not affect semantic roles, given that the sentences in the pairs (8)–(11), (9)–(12), and (10)–(13) do entail each other. Such pairs propose once again the paraphrastic pattern we have already seen at work in (1) and (2), although with one important difference: instead of finding an adjective (*constant* in (2)), a multiword adverbial occurs. The latter shares its content morpheme with the other member of the pair: on a semantic par, sentence (11) includes a noun (probably derived from an adjective, *da vigliacca – vigliaccamente*), as also does sentence (12) (*da eroi – eroicamente*), whilst (13) displays a subordinate clause (*che fai pietà – pietosamente*). The nouns inflect, thus revealing the argument with which they mandatorily agree. This is illustrated by the sentences from (14) to (16), which are all unacceptable:

14. ***Lea** reagì da vigliacco.

15. ***Loro** morirono da eroe.

16. ***Balli** che fanno pietà./***Balli** che faccio pietà.

In (14), *vigliacco* ‘coward’ is masculine, in (15) *eroe* ‘hero’ is singular, whilst in the two sentences in (16) we find, together with the 2nd person and singular *Balli* ‘You dance’, a plural verb (*fanno*) and a 1st person (*faccio*). Clearly, the subject of the subordinate clause in (13) must be that of the main clause.

The aforementioned sentences provide a good example of the non very common plasticity of the adverbial function, which can surface in a rich variety of forms. Specifically, sentence (13) demonstrates that a manner adverbial may take the shape of a subordinate clause. Also Lonzi (1991: 338) has noticed the phenomenon, though with regard to sentence adverbs in *-mente* that “equivalgono a frasi subordinate [...] *possibilmente, eventualmente, rispettivamente* parafrasabili con: ‘se possibile’, ‘se sarà il caso’” [correspond to subordinate clauses [...] *possibly, in case*, that can be paraphrased by: ‘if possible’ and ‘if this will be the case’]. There are other possibilities, as is demonstrated by the following example, which further illustrates the relationships between adverbs and cognate adjectives:

17. (Naturalmente/Com’è naturale), Ada ha rinunciato.

‘(Obviously), Ada gave up’.

In relation to enallage, we have already noticed that even a simple adjective can fulfill an adverbial function (concerning the expression *vestire elegante*, see Lonzi [1991: 364–365]):

18. Da quando i capi del partito si sono scoperti più patrioti dei patrioti, vestono elegante e frequentano i locali pieni di ricconi. (*Noi saremo tutto*, Valerio Evangelisti)

‘Since when the party leaders found out that they were more patriotic than patriots, they dress elegantly and attend haunts packed with extremely rich people.’

Simple nouns too can fulfill an adverbial function, as the following variant of (12) shows (the noun must be bare, see Mirto and Trabona [2016: 45–47]):

¹² Sentence (13), rather informal in style, belongs to colloquial Italian. As regards the sharing of content morphemes in *pietosamente* and *che fai pietà*, see footnote 6.

19. **Loro** morirono eroi.

‘They died heroically/as heroes.’

The preposition *con* ‘with’, if followed by a bare and invariable noun, permits a further adverbial form, a morphological strategy which in current Italian is rather productive. The indexes in the sentence below illustrate the relation between the subject and the noun which is internal to the adverbial phrase:

20. Paolo_i ha studiato Ungaretti con attenzione_i (= attentamente).

‘Paul studied Ungaretti carefully.’

Such a relation is reminiscent of that found in support verb sentences such as *Paolo ha fatto attenzione* ‘Paolo paid attention’, a sentence in which ‘he who pays attention’ must be *Paolo*, as in (20).

Also an entire noun phrase can realize the adverbial function, as is the case with e.g. cognate objects (see Mirto 2011):

21. a. Leo vive una vita sedentaria.

‘Leo lives a sedentary life.’

b. Leo vive sedentariamente.

‘Leo lives sedentarily.’

Finally, the pairs below illustrate how the semantic value of an adverbial is encapsulated in the cognate verb. In (22), we find the pair formed by *a stento* ‘hardly, with difficulty’ and *stentare* ‘to find something difficult’ (the imperfective aspect may block the entailment relationship, as in *Leo stentava a raggiungerci e ci rinunciò* ‘Leo was having some difficulty in reaching us and gave up’):

22. a. Leo ci raggiunse a stento.

‘Leo reached us with difficulty.’

b. Leo stentò a raggiungerci.

‘Leo had some difficulty in reaching us.’

Likewise, the adverbial clause *urlando* ‘shouting’ in (23a) is encapsulated in the cognate verb *urlò* in (23b), a clause type Gross (1981) labels “à fusion”:

23. a. La maestra rimproverò gli alunni urlando.

‘The teacher expressed her dismay to her pupils by shouting at them.’

b. La maestra urlò il rimprovero agli alunni.

‘The teacher shouted to scold her pupils.’

3 Methodology

If adverb(ial)s are predicates, they may license argument(s) (one can be a prepositional phrase, see Lonzi 1991: 350). The specific type of argument may be constrained syntactically, if, for example, it can only be a clause, and semantically, if, for example, the adverb(ial) imposes selection restrictions. A predicate is typically characterized with syntactic functions which are paired with semantic roles (in the approach used in this study semantic roles origi-

nate from syntactic functions only). The task then is to understand which syntactic function(s), and which semantic role(s), an adverb(ial) initiates.

The predicative nature of an element in a sentence may appear superficially, thereby becoming perceptible generally by means of morphological correlates. In, for example, *She knows*, the third person agreement on the verb constitutes evidence of the relationships between *she* and *knows*. The argument passes its features to its predicate, which inflects accordingly. Adverbs ending in *-mente* do not inflect, and the predicative relationship is concealed. The question asked at the outset was whether there are ways to disclose syntactic relationships which invariable adverb(ial)s conceal.

We have made use of the cognate adjective – where present – of a given adverb to construct – where possible – paraphrastic pairs in which the two sentences share all the content morphemes (as e. g. with active/passive pairs, see Harris 1981 [1957]: 187–188). One such pair is found in (8), *Lea reagì vigliaccamente* ‘Lea reacted in a cowardly way’, and (11), *Lea reagì da vigliacca* ‘Lea reacted like a coward’. These sentences share all the content morphemes and entail each other. The word *vigliacca* inflects for number and gender, thus providing evidence that the phrase *da vigliacca* works as a predicate. Number and gender features can only come from *Lea*. In our opinion, this should be held as conclusive evidence that *Lea* and *da vigliacca* stand in a predicative relationship. Such a function also surfaces in relation to semantic roles: *Il composto chimico reagì* ‘The chemical compound reacted’ versus **Il composto chimico reagì vigliaccamente* ‘The chemical compound reacted in a cowardly way’. In (11) the subject carries the semantic roles >who_reacts< and >who_is_coward<. Since this also holds true in (8), there are grounds to claim that *Lea* and *vigliaccamente* stand in a parallel predicative relationship, even in the absence of morphological correlates.

Whilst the term “adverb” falls under the category “parts of speech”, the term “predicate” relates to the function which an element performs in a clause. A comparison between the following pairs of sentences (discussed in Mirto/Trabona 2016: 89–90) demonstrates the magnitude of the difference between these metalinguistic terms:

24. a. Love does not come easily.
 b. Love does not come easy.¹³
25. a. He fell silently.
 b. He fell silent.

On the surface, both the pairs in (24) and (25) differ only by the suffix *-ly*. The semantic effects which such a difference elicits are null in (24), and this displays a genuine case of enallage. The pair in (25) tells a different story, inasmuch as the sentence meanings have very little in common: sentence (a) is about someone who falls, whilst sentence (b) is about someone who suddenly stops talking. Externally, that is morphologically, the two pairs of sentences differ in the same way, but the divide between their syntax and semantics could not be greater. The sentences in (24) show a case of free variation, as with the pair in (8)–(11), whilst those in (25) form a minimal pair.

¹³ *Love don't came easy* is a hit by the *White Lion*.

The method outlined above works as follows: in each pair, the sentences differ on the surface by only one element, for instance a single morpheme. However, the common local variation yields opposite outcomes: only in (25) does it bring forth global effects (as with minimal pairs in phonology, see La Fauci 2011: 203, 274–275), and these are to be regarded as radical changes concerning the syntactic functions and the semantic roles assigned.

Also the sentences below entail each other and differ by one feature, i. e. the surface form of the adverb(ial):

26. a. Giulio stuzzicò Lea con intelligenza.
 ‘Giulio teased Lea cleverly.’
 b. Giulio stuzzicò Lea intelligentemente.
 ‘Giulio teased Lea cleverly.’

The content morpheme in *con intelligenza e intelligentemente* remains unvaried¹⁴. In (26) we can observe a local variation with no consequences on meaning, as in (24). Given the mutual entailment, one can safely claim that the semantic roles remain unvaried, which in turn means that the modifiers *con intelligenza* ‘with intelligence’ and *intelligentemente* ‘intelligently’ function in a similar fashion: they are predicates which modify their argument in the same way and assign the same semantic role.

However, the word order (and/or intonation) in (27) plays a crucial role:

27. a. Giulio stuzzicò Lea con intelligenza.
 ‘Giulio teased Lea cleverly.’
 b. Intelligentemente, Giulio stuzzicò Lea.
 ‘Cleverly, Giulio teased Lea.’

Just as in (25), in (27) the content morphemes remain the same, but the sentences no longer entail each other. Here we witness a local variation with global consequences.

4 Sentence adverbs

Lonzi (1991: 387–388) subdivides sentence adverbs into 6 groups; for each she provides semantic reasons and a number of examples. This section addresses three types of such adverbs, which Lonzi places in the following classes: subject-oriented, modal, and evaluative adverbs. Each type will be examined by focusing mainly on a single adverb, which we reckon to be most typical. The three adverbs will be examined in relation to their cognate adjective, so that pairs of sentences can be formed which share all the content morphemes and stand in a relation of mutual entailment.

¹⁴ The difference in the final consonant of the root, *intelligenz-* vs. *intelligent*, depends on the part of speech: the first is typical of a morphological class of nouns (e. g. *clemenza* ‘clemency’, *sapienza* ‘wisdom’, *veemenza* ‘vehemence’), the second of their adjectival counterparts (*clemente* ‘clement’, *sapiente* ‘wise’, *veemente* ‘vehement’).

4.1 The cognates *intelligentemente* - *intelligente*

The adverb *intelligentemente* ‘cleverly’ can perform at least two functions, which can be distinguished by the adverb’s linear position, by intonation, or by both. The first function concerns adverbs of manner, as in sentence (28) below:

28. Ada intervenne intelligentemente.
‘Ada intervened cleverly.’

The second function regards subject-oriented sentence adverbs, as in (27b) and (29):

29. Intelligentemente, Ada intervenne.
‘Cleverly, Ada intervened.’

The two uses of the adverb can be formally set apart by means of negative sentences such as the following ones¹⁵:

30. Ada non intervenne intelligentemente.
‘Ada did not intervene cleverly.’
31. Intelligentemente, Ada non intervenne.
‘Cleverly, Ada did not intervene.’

The difference between (30) and (31) is plain: in the former sentence Ada intervenes, in the latter she does not.

In order to shed light on the syntactic relationships in (29), we can turn our attention to the following pair of complex sentences, recently proposed by Nunzio La Fauci (Rosen/La Fauci 2017: 35):

32. Arrivato da Zurigo, Pio diede una svolta alla serata.
arrived from Zurich Pio gave a turn to the evening
‘After arriving from Zurich, Pio made sure the evening would take a different turn.’
33. Arrivato Pio da Zurigo, la serata ebbe una svolta.
arrived Pio from Zurich the evening had a turn
‘After Pio had arrived from Zurich, the evening took a different turn.’

The difference between sentences (32) and (33) lies in the type of syntactic relationship which the participle clause establishes with the main one. The subordinate clause in sentence (32) does not explicitly say ‘who arrived’, unlike (33). Nevertheless, the person arriving in (32) is normally interpreted as *Pio*. Such an interpretation derives precisely from the syntactic rela-

¹⁵ Concerning the difference between manner and sentence adverbs, of particular interest is the following pair of Japanese sentences by Matsui (on line):

- i) a. John-wa orokani odotta.
John-TOP stupidly danced
‘John danced stupidly.’
- b. John-wa orokani-mo odotta.
John-TOP stupidly-PRT danced
Stupidly, John danced.’

According to Matsui, the adverb *orokani* derives from the adjective *orokana* ‘stupid’, and the particle *-mo* turns the manner adverb into a sentence adverb (see also Kubota 2015).

tionship between the participle and the matrix clauses: they share the same argument, that is, *Pio*. For sentences such as (32), **La Fauci** used the term “congiunto” ‘conjunct’:

the participle construct [(32)] gives rise to an elaborate series of relationships with the finite clause, but such relationships all rest on a single argument. The latter is covert in the participle construct and overt in the clause with a finite verb. The participle construct in [(32)] is to be considered as non-absolute or, with an equivalent label, a conjunct participle construct.¹⁶

(La Fauci/Rosen 2017: 37)

Moreover, La Fauci clarifies that there is an analogous contrast with adjectival predicates, as the following pair of sentences illustrates (La Fauci/Rosen 2017: 37–38):

34. Una volta ubriaco, a Ugo riuscì finalmente di andare a dormire.

‘As soon as he had got drunk, Ugo finally managed to get to sleep.’

35. Una volta ubriaco Teo, a Ugo riuscì finalmente di andare a dormire.

‘As soon as Teo was drunk, Ugo finally managed to get to sleep.’

The reader is invited to review sentence (29) above, repeated below for convenience, bearing in mind an interpretive property which clearly emerges by virtue of its paraphrase (36)¹⁷. These sentences share the content morphemes and entail each other:

29. *Intelligentemente*, Ada intervenne.

‘Cleverly, Ada intervened.’

36. Ada fu *intelligente* a intervenire.

‘Ada was clever to intervene.’

Sentences (29) and (36) are a parallel example to those mentioned in the introduction in (1) and (2), with an important difference: *intelligentemente* ‘cleverly’ is used as a *sentence* adverb instead of an adverb of manner. In (36), *Ada* is the argument of the adjective *intelligente* ‘clever’, from which *Ada* derives its syntactic role and corresponding semantic role. Given the paraphrastic relationship between (29) and (36), the hypothesis can be formulated that in (29) *Ada* is the argument not only of *intervenire* ‘intervened’ but also of *intelligentemente* ‘cleverly’. This is parallel to that which occurs in sentence (34) where *Ugo* is interpretable as the covert argument of *ubriaco* ‘drunk’ and the overt one of *riuscì* ‘managed’.

Within the outlined hypothesis, which sees the adverb *intelligentemente* ‘cleverly’ work predicatively just as its cognate adjective *intelligente* ‘clever’, the unacceptability of sentences such as (37) should be ascribed to the semantic constraints the predicate imposes on its argument, i.e. to selection restrictions:

37. **Intelligentemente*, il vaso cadde.¹⁸

‘Cleverly, the vase fell.’

¹⁶ “[I]l costruito participiale [(32)] costituisce una complessa serie di relazioni con la proposizione finita, ma tali relazioni sono esattamente incardinate intorno a un elemento argomentale, presente in modo latente nel costruito participiale e patente nella proposizione finita. Il costruito participiale di [(32)] è quindi da considerare e da definire un costruito non-assoluto o, con designazione equivalente, congiunto” (our translation).

¹⁷ The author would like to thank Nunzio La Fauci for suggesting the paraphrase in (36).

¹⁸ As in the examples provided by Geuder (2002: 106). See footnote 11.

Sentence (37) can be usefully compared with the unexceptionable ones in (38), which therefore cannot be subject-oriented adverbs:

38. *Curiosamente/Stranamente/Improvvisamente/Tecnicamente*, il vaso cadde.
 ‘Curiously/Oddly/Suddenly/Technically, the vase fell.’

It should also be added that the adverb *intelligentemente* can occur with the passive (see Lonzi 1991: 370–371, Geuder 2002: 106). In such a case, the shared argument is devoid of any surface realization:

39. *Intelligentemente*, il vaso fu fatto cadere.
 ‘Cleverly, someone made the vase fall down.’

In Italian, adverbs such as *intelligentemente* go by the name of “avverbi di soggetto” (see Lonzi 1991: 388). Their counterparts in English are normally referred to as “subject-oriented adverbs” (see Morzycki 2014: 4). In the vein of the analysis propounded here, this metalinguistic use of “subject” appears to be suitable provided that it refers to the subject as the shared argument of a conjunct construct.

Below, sentence (40) contains two adverbs, the second of which expresses manner. Worth of note is the fact that *intelligentemente* can be used in the same sentence with one of its antonyms, e.g. *stupidamente* ‘stupidly’ or *sciocamente* ‘foolishly’, both used as manner adverbs, without giving rise to an oxymoron (cf. Morzycki 2014: 28, and references therein), and regardless of the diathesis:

40. *Intelligentemente*, Ada intervenne *stupidamente*.
 ‘Cleverly, Ada intervened in a stupid way.’
41. *Intelligentemente*, il vaso fu riparato *sciocamente*.
 ‘Cleverly, the vase was repaired in a foolish way.’

4.2 The cognates *ovviamente* – *ovvio*

The adverb *ovviamente* ‘obviously’ is normally classified as a “modal” sentence adverb (see Lonzi 1991: 387). This adverb establishes a relationship with the cognate adjective *ovvio* ‘obvious’ to generate such pairs of sentences as the following one¹⁹:

42. *Ovviamente*, Ada ha risposto.
 ‘Obviously, Ada replied.’
43. È *ovvio* che Ada ha risposto.²⁰
 ‘It is obvious that Ada replied.’

¹⁹ The Eagles group (The EAGLES Lexicon Interest Group, Adverbs, online) exemplifies epistemic and evidential adverbs with the following pairs:

- i) a. Evidently, Sam baked a cake in the kitchen yesterday.
 b. It is evident that Sam baked a cake in the kitchen yesterday.
- ii) a. Probably, Sam will bake a cake tomorrow.
 b. It is probable that Sam will bake a cake tomorrow.

According to the authors, such adverbs “share *semantic* representation with their adjectival forms which take complements” (our emphasis).

²⁰ Needless to say, unlike *constant* in (2), in (43) the adjective does not work as a modifier.

These sentences share the same content morphemes. The items which do not occur in sentence (42), namely the copula *essere* ‘to be’ and *che* ‘that’, are function morphemes. Moreover, there exists a relationship of mutual paraphrase and thus entailment between the two sentences: sentence (42) cannot be asserted without negating sentence (43) and *vice versa*²¹.

We believe the scholars’ opinion is unanimous regarding the difference between sentence adverbs such as *ovviamente* ‘obviously’ and *intelligentemente* ‘cleverly’. This diversity is made evident by the attempt to paraphrase (42) as we did above with *Intelligentemente, Ada intervenne* (= (29)) and *Ada fu intelligente a intervenire* (= (36)). The result is as follows:

44. [!]Ada fu ovvia nel rispondere.
 ‘Ada was obvious when she replied.’

This operation generates an acceptable but unlikely sentence (as the exclamation marks signal). Indeed, (44) is unusual because *ovvio* preferably combines with a *that*-clause. Its meaning differs from that of sentence (42), a fact which suggests treating *ovviamente* ‘obviously’ and *intelligentemente* ‘cleverly’ as sentence adverbs distinct in nature.

As in the previous section, it is useful to start with the syntactic relations the adjective establishes in the sentence. In sentence (43), the analysis is simple: the adjectival predicate *ovvio* ‘obvious’ licenses an argument. Specifically, it licenses a finite clause (thus [-Animate]), as the sentence subject²². This is unlike sentence (44), where the adjective takes *Ada* ([+Human]) as its only argument (the subject). This is evident because in (44), less common than (43), the adjective *ovvia* is feminine and singular as *Ada* is.

The semantic equivalence between sentences (42) and (43) permits us to re-test the hypothesis presented in the introduction: the clauses share the same predicate elements, elements sharing identical content morphemes. Such predicates assign the same syntactic and semantic roles. Semantic equivalence would thus appear to have its origins in this sharing. Within this hypothesis, *ovviamente* ‘obviously’ also functions as a predicate, which, as with *ovvio* ‘obvious’, combines with a finite clause. The surface differences between the pairs of sentences (42) and (43) should thus be regarded by taking into account the following correlations:

- If the clausal argument of the content morpheme *ovvi-* is realized as a subject clause, then the morpheme surfaces as an adjective;
- If the clausal argument of *ovvi-* is realized as the main clause, then the morpheme surfaces as an adverb.

In conclusion, at least two observations can be made regarding the adverb *ovviamente* ‘obviously’: (a) that it establishes syntactic relationships with the clause with which it combines, even if such relationships are hidden because they do not have any morphological counter-

²¹ With modal adverbs too the sharing of the content morpheme does not guarantee mutual entailment. In the sentence *Certamente, Ada ha risposto* ‘Undoubtedly, Ada answered’, if compared with *È certo che Ada ha risposto* ‘It is certain that Ada answered’, the adverb *certamente* could pragmatically take the value of a wish expressed by the speaker more than of absolute certainty (the author thanks the participants to the workshop for raising this issue). See Benveniste (1971: 102).

²² It is beyond the scope of this paper to provide the reasons for analyzing adjectives as uniformly unaccusative predicates (Mirto 2008). This creates mismatches such as the following one: in the sentences *Guidare in città stressa* and *Guidare in città è stressante*, both meaning roughly ‘Driving in town is stressful’, the psych-verb licenses *guidare in città* as a subject, the adjective as a direct object. The semantic role remains constant.

parts; and (b) that these relationships are those which the adjective *ovvio* ‘obvious’ establishes. The outside appearance of the sentences changes, the lexical categories change, but not the predications, the functions, and the semantic roles assigned.

Differently from sentence (36) (*Ada fu intelligente a intervenire* ‘Ada was clever to intervene’), the adjective in sentence (43) (*È ovvio che Ada ha risposto* ‘It is obvious that Ada replied’) licenses the clause, not one of its arguments. Unlike sentence (29) (*Intelligentemente, Ada intervenne* ‘Cleverly, Ada intervened’), the adverb in (42) (*Ovviamente, Ada ha risposto* ‘Obviously, Ada replied’) establishes a relation with the whole clause. Thus, the parallelism with the participle constructs discussed by La Fauci becomes evident: on the one hand, sentence (29), in which *Ada* is a shared argument, can be held to be analogous to the conjunct participle construct which is illustrated in (32) and (34) above; on the other hand, the predicative relationship in sentence (42) is with the entire clause, and in this regard the sentence is to be considered as analogous to the absolute participle construct in (33) and (35).

4.3 The cognates *stranamente* - *strano*

With the adverb *stranamente* ‘strangely’, as is the case with *intelligentemente* ‘cleverly’, two uses are common: one as an adverb of manner, as illustrated in (45), and the other as a sentence adverb, exemplified in (46):

45. *Ada ha risposto stranamente.*

‘Ada replied strangely.’

46. *Stranamente, Ada ha risposto.*

‘Strangely, Ada replied.’

Once again, in parallel with *intelligentemente*, the negation with *non* distinguishes the adverb of manner from the sentence adverb²³:

47. *Ada non ha risposto stranamente* (this implies that Ada replied).

‘Ada did not reply strangely.’

48. *Stranamente, Ada non ha risposto* (this implies that Ada did not reply).

‘Strangely, Ada did not reply.’

²³ The sentences below prove that the analogies between *intelligentemente* ‘cleverly’ and *stranamente* ‘strangely’ go further. With (29), i. e. *Intelligentemente, Ada intervenne* ‘Cleverly, Ada intervened’, a paraphrase obtains in which (a) the verb in its gerund form is used as a subordinate clause, and (b) the cognate adjective modifies the most inclusive nominal hypernym *cosa* ‘thing’ (speech act and domain adverbs do not permit it):

i) *Intervenendo, Ada fece una cosa intelligente.*

intervening Ada did a thing clever

‘By intervening, Ada did a clever thing’

With (45), the same manipulation also yields a paraphrase, as (ii) illustrates (nonetheless, the sentence is ambiguous):

ii) *Rispondendo, Ada fece una cosa strana.*

answering Ada did a thing strange

By answering, Ada did a strange thing.’

Besides, we find the following contrast in relation to answers to yes/no questions: *Era colpevole?* ‘Was he guilty?’, (*Ovviamente* + *Sinceramente* + *Stranamente* + *Tecnicamente*) *si* ‘(Obviously, Sincerely, Oddly, Technically,) he was’ versus **Intelligentemente, si* ‘Cleverly, he was’.

In line with preceding studies, Lonzi (1991: 387) places *stranamente* ‘strangely’ in a class which is different from modal adverbs such as *ovviamente* ‘obviously’. She labels the class as *avverbi di valutazione* ‘evaluative adverbs’. However, together with *ovviamente*, the adverb *stranamente* shares the capability of generating paraphrastic pairs of sentences by using the cognate adjective. This can be seen by comparing sentence (46) with (49)²⁴:

49. È strano che Ada abbia risposto.
‘It is strange that Ada replied.’

Both (46) and (49) implicitly convey an evaluation, a judgment by the speaker, which can be expressed as (50) does below:

50. Ritengo strano che Ada abbia risposto.
‘I think it strange that Ada replied.’

Lonzi’s classification is organized on a semantic basis: “Dal valore semantico dell’avverbio derivano le sue caratteristiche sintattiche” ‘The syntactic features of the adverb derive from its semantic value’ (Lonzi 1991: 384). Here emphasis is placed on syntax. From this viewpoint, in sentences (49) and (50) the adjectival predicate *strano* ‘strange’ licenses the *that*-clause ‘Ada replied’ as its sole argument. The two sentences differ as follows: in the former, this argument is a subject clause (see footnote 22), whilst in the latter it is a direct object clause. The difference between (49) and (50) lies in a sort of ellipsis, in the former, of evaluation verbs such as *ritenere* ‘to think’ or *reputare* ‘to consider’ and, consequently, of the understood subject *io* ‘I’ licensed by such verbs²⁵. It is worth noting that the modal adjective *ovvio* ‘obvious’ also follows this pattern:

51. Ritengo ovvio che Ada abbia risposto. (= Ovviamente, Ada ha risposto.)
‘I think it obvious that Ada replied. (= Obviously, Ada replied)’

The existence of such pairs as (46) and (49) poses a problem relating to Lonzi’s classification. If *ovviamente* ‘obviously’ and *stranamente* ‘strangely’ are assigned to distinct classes, it can be expected that their syntactic features, if pertinent, will also be different. The empirical data suggest the opposite, since they show a link between modal and evaluative adverbs. This is so because at least one of the adverbs by which Lonzi exemplifies evaluative adverbs permits the construction of paraphrastic pairs of sentences with a cognate adjective. In such pairs, the syntactic relationship the adjective establishes with the subordinate clause belongs to an “absolute” type, that is, without the sharing of an argument. The paraphrastic relationship and the sharing of lexical material suggest that also the cognate adverb establishes an “absolute” syntactic relationship with the sentence. The following section gives evidence of paraphrastic relationships with other types of sentence adverbs.

²⁴ The difference between the indicative or the subjunctive in the subordinate subjects of (46) and (49) will be disregarded.

²⁵ The ellipsis of verb and subject of the main clause also occurs in the following exchange, where the omitted part is: *Tu mi chiedi* ‘You ask me’:

- i) Sai pilotare?
‘Can you fly a plane?’
- ii) Se so pilotare?
‘if I know how to fly a plane?’

5 Classifying adverbs

Excluding those adverbs Lonzi (1991: 387–388) terms “di atto linguistico”, that is speech-act adverbs (group 5, illustrated by the Italian counterparts of *approximately*, *frankly*, *personally*, and others), at least one of the adverbs used to exemplify the remaining groups follows the paraphrastic pattern comprising a pair of sentences sharing all the lexical material, one of which contains a sentence adverb and the other its cognate adjective. The pair with modal adverbs, Lonzi’s group 1, has already been illustrated by examples (42) and (43), reproduced below as (52) and (53):

Group 1: “avverbi modali”

52. Ovviamente, Ada ha risposto. (= (42))

53. È ovvio che Ada ha risposto. (= (43))

The same operation has also been performed for evaluative adverbs – group 2 – with sentences (46) and (49) from section 4.3, reproduced below as (54) and (55):

Group 2: “avverbi valutativi”

54. Stranamente, Ada ha risposto. (= (46))

55. È strano che Ada abbia risposto. (= (49))

Also one of the examples from group 3, which includes adverbs ‘of happening or event’, tends to follow the paraphrastic pattern, as displayed by the following sentences:

Group 3: “avverbi di accadimento o evento”

56. Raramente il Ministero dà una risposta.
‘The Ministry rarely gives a reply.’

57. È raro che il Ministero dia una risposta.
‘It is rare for the Ministry to give a reply.’

As for group 4, the adverb *ufficialmente* ‘officially’, which Lonzi uses to exemplify domain adverbs, also enters the paraphrastic pattern; this is illustrated below:

Group 4: “avverbi di inquadramento”

58. Ufficialmente, il Ministero ha dato una risposta.
‘Officially, the Ministry gave a reply.’

59. È ufficiale che il Ministero ha dato una risposta.
‘It is official that the Ministry gave a reply.’

Lastly, even one of the adverbs in group 6, that of a “subject”, like *intelligentemente* ‘cleverly’, follows the paraphrastic pattern:

Group 6: “avverbi di soggetto”

60. Correttamente, il Ministero ha dato una risposta.
‘Correctly, the Ministry gave a reply.’

61. È corretto che il Ministero abbia dato una risposta.
‘It is correct that the Ministry gave a reply.’

As mentioned above, in Lonzi's group 5, i. e. adverbs concerning a "linguistic act", there are no examples compatible with the above paraphrastic pattern. This group is characterized by adverbs being in reality, *en cachette*, adverbs of manner. This has on occasion been reported in the literature: in the words of Morzycki: "speech act adverbs support paraphrases involving manner modification of a verb of speaking" (2014: 36). The author provides the following pair of sentences:

62. Frankly, you really shouldn't talk to Floyd.

63. I hereby say to you frankly that you really shouldn't talk to Floyd.

The reason for excluding group 5, therefore, could simply lie in the fact that adverbs of manner do not permit the constructing of the paraphrastic pattern with the copula and the cognate adjective. As we have seen in the introduction, manner adverbs allow for a different pattern, in which one member of the pair is a support verb sentence. **Takuya Nakamura** has written about this in a study relating adverbs and adjectives:

Le fait que ces Adv[erbes de phrase] ne trouvent pas d'Adj[ectifs] correspondants dans une phrase à V[erbe] sup[port] est une conséquence naturelle du fait qu'ils portent sur la phrase entière, et non pas sur le procès exprimé par le verbe ou sur une partie de ce procès (par exemple portée sur le sujet ou sur l'objet)

(Nakamura 2009: 268)

Thus a new hypothesis arises, the existence of **two** paraphrastic patterns, which can be observed thus: one involving a sentence adverb (if the sentence with the adjective is copulative) and the other involving an adverb of manner (if the sentence with the adjective is with other support verbs).

In tackling the classifying of adverbs, not only in Italian, it can be useful to turn one's attention to other parts of speech. If, before a certain intransitive verb, it is necessary to specify whether the verb is unergative or unaccusative, we have at our disposal a certain number of empirical tests. By applying these tests to the said, intransitive verb, we will know with a fair degree of precision how to classify it. If one wishes to know whether another verb can perform a support function, a battery of tests is again readily available.

For similar classifications, trusting one's own intuition is generally held to be less reliable. This suggestion has been scientifically held to be correct by many: the test can be falsified, intuition – on the other hand – much less so.

Returning to adverbs, are there available today useful tests for classifying them? Most definitely, yes. They are indeed common and often resort to syntactic manipulations. However, it can be noted that the aforementioned taxonomy of verbs produces bipartitions *devoid of* superimpositions. These bipartitions produce disjointed sets: if a test states that the verb is unergative, it must generate results which exclude, in the same context, unaccusative verbs (with some structural ambiguity, for example: *Leo trasalì* 'Leo startled', see La Fauci (2011: 154–155)). So, if the question becomes: "Do the tests at our disposal avoid superimpositions?", an answer which is invariably affirmative would appear this time to be less of a certainty. Thus, whilst appreciating the efforts of those, like Lonzi, who propose taxonomies which do not create disjointed sets, it would appear to be reasonable to repeat Morzycki's (2014: 5) words

(even if stretching his meaning), that is, that these sets serve “as a reasonable first approximation”.

6 Concluding remarks

The analysis carried out in this paper is based on syntax. Our stance is that adverbs work as predicates that license a certain number of arguments, to which they assign cognate semantic roles, regardless of whether the adverb(ial) inflects or is invariable. To many, such predicative nature may appear obvious and widespread, but, as mentioned in the introduction, syntactic analyses of adverb(ial)s focusing on their argument structure and on the relationship between arguments and semantic roles are not easy to find, at least in our experience. We have concentrated our efforts on finding ways to disclose syntactic features and thus gather evidence of syntactic liaisons or interdependencies which an invariable adverb establishes with the finite clause with which it combines. In our view, cognate adjectives (e. g. *intelligentemente/intelligente; ovviamente/ovvio*) can be exploited. However, whilst following this path one must not forget that an adjective is permitted to form a finite sentence, albeit normally with the assistance of a syntactic finish; such a possibility is normally denied to the adverb. Cognate adverbials can also be exploited (e. g. *vigliaccamente/da vigliacco*), if, as with cognate adjectives, they permit the creation of pairs of sentences which share their content morphemes and entail each other. By observing the morphological behavior of the cognate adjective or adverbial, one can arrive at dependable deductions, which are based on similarity and concern the syntactic behavior of the invariable adverb. Attention has been first paid on manner adverbs and later on three kinds of sentence adverbs, typically allocated in distinct semantic classes. Each kind has been tested on a single adverb, which we selected because it was considered to be prototypical of the syntactic class. Analogies with participle clauses have been identified, as have two distinct paraphrastic patterns: the latter depend on (a) the type of adverb, either manner or sentence adverbs, (b) the type of support verb, *be*-like or *make/do*-like, and – probably – (c) the type of adjective. Hopefully, additional and systematic evidence will be found to corroborate this proposed procedure.

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