A Fregean Structure for Assertions*

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Abstract: The following is a study on a class of colloquial constructions from Iberian Spanish and English which seem to be related to what I will loosely call a domain of assertion. The picture that arises from a scrutiny of those constructions is that the structure of declarative clauses must be more complex than it is standardly assumed. The claim is that it is more complex in the sense that it involves features which are typically assumed in a Fregean analysis of statements as claims to truth: declarative clauses involve a feature of assertion and something close to a truth-predicate or an evaluative element. The assertion domain will be shown to have a clausal structure, very much in the line of Ross's proposal of the seventies, the so-called performative hypothesis.

1 The Fregean view of declaratives and speaker oriented adverbs

Frege distinguished different levels of complexity in the semantic analysis of statements¹: at the bottom of the hierarchy laid the notions of thought and truth. Thoughts, according to Frege, are senses of sentences, the abstract propositional content that a sentence expresses. The notion of truth, he took to be a predicate, as its linguistic counterpart true, attributed to the sense of a declarative sentence, the thought it expresses. This predication relation yields a judgement, or a given evaluation of a proposition. Judgements, in turn, are asserted or manifested, through the declarative act of a speaker. The Fregean system therefore distinguishes three levels of complexity in the semantic representation of a declarative sentence (from "Thoughts", p.7):

- (i) the grasp of a thought (or proposition)
- (ii) the acknowledgement of the truth of a thought, the act of judgement
- (iii) the manifestation of this judgement, or the assertion

The Fregean picture provides a nice basis for the classification of the class of adverbs that Jackendoff (1972) called *Speaker Oriented*. A sample of them is given in (1):

(1) Frankly/naturally/fortunately/probably I'm tired

Jackendoff observed that the distributional facts that support the existence of this class correlate with a semantic property: these adverbs express the attitude of the speaker towards the proposition they modify. As has been noticed since (for instance Bellert, 1977) the notion "attitude" must be understood here broadly enough to encompass

very different things, from the speaker's appraisal of the truth of the proposition (probably, fortunately), to his attitude towards the act of assertion itself (given things like frankly, confidentially, or sincerely). The existence of these two subtypes is most apparent in paraphrases of the following sort:

- (2) a. It is probably/unfortunately true that I'm tired
 - b. *It is frankly/sincerely true that I'm tired

Only a subset of speaker oriented adverbs can actually modify linguistic truth. The existence of these two subtypes is naturally accommodated in a Fregean system, where the assertion and the judgement contitute two different acts which can be independently modified. Spanish shows that a third type of speaker oriented adverb must be identified. This is the class of speaker oriented adverbs that can precede a complementizer in a sort of emphatic construction that I discuss more extensively in section 3:

(3) Por supuesto/desde luego/naturalmente que ha venido of course /obviously /naturally that has arrived 'Of course he has arrived!'

Not all speaker oriented adverbs can occur in this configuration:

- (4) a. *Francamente/sinceramente que ha venido frankly /sincerely that has arrived '*Sincerely/frankly that he arrived'
 - b. *Probablemente/afortunadamente que ha venido probably /fortunately that has arrived '*Probably/fortunately that he arrived'

I will claim that this third subtype actually corresponds to the truth predicate in the Fregean view, that is, that some speaker oriented adverbs are actually predicates that denote truth. The claim that a Fregean structure underlies declarative clauses is defended in the following section.

2 Speaker Oriented Adverbs and la verdad constructions

As is well known, speaker oriented adverbs show a more restrictive distribution than other sentential adverbs. They occur typically in matrix sentences (cf. (1)) and in dependents of verbs of saying and epistemic verbs (5), but not in dependents of volitional verbs or verbs of command(6):

- (5) a. John said that confidentially/surprisingly, you should call him today
 - b. John believes that frankly/fortunately/certainly noone will remember him
- (6) *John ordered/desires that confidentially /surprisingly /certainly you call him today

Bellert (1977) notes the additional fact that many speaker oriented adverbs do not have a negative counterpart:

(7) *Insincerely/improbably/unluckily, he left

There is a colloquial construction in Spanish that has exactly those same properties: first, it can be paraphrased by a speaker oriented adverb such as *frankly*; then it cannot occur in dependents of volitional verbs or verbs of command; and finally, it does not retain its adverbial reading under negation. The construction in question is shown in (8).

- (8) La verdad es que estoy cansado

 the truth is that I-am tired

 'The truth of the matter is that I am tired'
- (8) is actually ambiguous between two readings: on one reading, the sentence means that there is a single truth, namely that I am tired. In that reading, the sentence constitutes an answer to the question "what's the truth?". On another reading, the one I am interested in, the speaker expresses an attitude towards his being tired and the sentence constitutes an appropriate answer to a question like "how are you?". In this sense, the sentence can be paraphrased by something like "frankly, I am tired". This reading is highlighted by the parenthetical use of *la verdad*, as in (9). I will call this reading *attitudinal*.²
- (9) Estoy cansado, la verdad I-am tired the truth

This use of "the truth" can be captured in English, I think, by the also colloquial expression the truth of the matter:

(10) The truth of the matter is that I am tired

The attitudinal reading is preserved in dependents of verbs of saying and epistemic verbs(11a), but not in dependents of volitional verbs or verbs of command (11b):

- (11) a. Pedro dice que la verdad es que esta cansado

 Pedro says that the truth is that is tired

 'Pedro says that the truth of the matter is that he is tired'
 - b. Pedro quiere/ordena que la verdad sea que esta cansado Pedro wants/orders that the truth be that is tired 'Pedro orders that the truth (*of the matter) be that he is tired'

The same effect is found with the parenthetical version of la verdad:

- (12) a. Pedro dice que la verdad, esta cansado Pedro says that the truth he-is tired 'Pedro says that frankly, he is tired'
 - b. Pedro quiere/ordena que (*la verdad) estes preparado Pedro wants/orders that the truth are-SUBJ ready

Moreover, the attitudinal reading disappears with matrix negation:

(13) La verdad no es que estoy cansado

the truth not is that I-am tired

'The truth is not that I am tired (the truth is something else)'

There is another domain of comparison that further suggests that speaker-oriented adverbs and these *la verdad* constructions should be treated alike. They behave in the same way with regard to extraction: speaker-oriented adverbs block the extraction of certain adjuncts. Only referential expressions (in the sense of Rizzi,1990) can move across them (14a-d) and *la verdad* constructions (15a-d):

- (14) a. Que (lugar)/a quien dices que francamente, nunca visitarias t? what(place/to-whom you-say that frankly, never you-would-visit 'What(place)/who do you say that frankly, you would never visit?'
 - b. ?Cuando dicen que francamente, no se puede ir alli t ? When they-say that frankly not REFL can go there '?When do they say that frankly, one cannot go there?'
 - c. ?Donde dices que francamente, no se puede pedir vino t? where you-say that frankly not REFL can order wine 'Where do you say that frankly you cannot order wine?'
 - d. *porque/como dices que francamente, canto anoche t?

 why /how you-say that frankly (s)he-sang yesterday

 '*Why/how do you say that frankly (s)he sang yesterday?'
- (15) a. A quien dices que la verdad es que no invitarias t?

 to-whom you-say that the truth is that not invite-INFL

 'Who do you say that the truth of the matter is that you would not invite?'
 - b. ?Cuando dices que la verdad es que no irias t?

 when you-say that the truth is that not would-go

 '?When do you say that the truth of the matter is that you wouldn't go?'
 - c. ?Donde dices que la verdad es que no irias t?

 where you-say that the truth is that not go-INFL

 '?Where do you say that the truth of the matter is that you wouldn't go?'

d. *Porque/como dicen que la verdad es que canto anoche t?

why /how they-say that the truth is that sang yesterday

'Why/how do they say that the truth of the matter is that they sang

(why/how)?'

Based on this set of similarities, I conclude that the underlying structure of *la* verdad/the truth of the matter constructions and that of propositional dependents in (2) and (14a-d) is the same.

3 The Structure of *la verdad* constructions

The underlying structure of these *la verdad* constructions, I will argue, must be as follows:

(16)
$$\left[_{CP} C^0 \right]_{TP} \text{ es } \left[_{CP} \text{ que } \left[_{SC} \text{ IP la verdad} \right] \right] \right]$$

(16) is a raising structure built on a predication relation between the finite embedded clause and the Speaker Oriented Adverb *la verdad* (in a structure very similar to one proposed by Uriagereka(95)). *La verdad* raises by *Spell Out* to the Spec of TP, yielding the surface order. (16) contains a Small Clause whose subject is the embedded IP and whose predicate is the speaker oriented adverb (SOA) *la verdad*. The predicate of the small clause in (16) is an attribute of truth, which I identify with the corresponding Fregean category. This predication relation yields a *judgement*, a given evaluation of an event from the point of view of the speaker, in this case.

Evidence supporting the idea that *la verdad* is a predicate in these cases comes from a general restriction on predicative Determiner Phrases (DPs): Higgins (1973) showed that there are two different copular constructions which he called *predicational* and *specificational*. In predicative constructions, a property is predicated of the subject of the copular construction; in the specificational constructions, an identity statement is made. Copular constructions with a DP in predicative position take on a specificational reading when they are modified. Consider (17a) and (b):

- (17) a. Juan es el carnicero 'Juan is the butcher'
 - b. Juan es el brillante carnicero 'Juan is the brilliant butcher'

Whereas (17a) can be understood as ascribing a property to the subject of the copular construction, (17b) is necessarily an identity statement, making clear who is who. Only in (17a) is the DP predicational, which accounts for why it can be the predicate of a pseudocleft:

- (18) a. Lo que Juan es es el carnicero what that Juan is is the butcher 'What Juan is, is the butcher'
 - b. *Lo que Juan es es el brillante carnicero
 what that Juan is is the brilliant butcher
 '*What Juan is, is the brilliant butcher'

Or the predicate of a small clause:

- (19) a. Declaro a Juan el presidente declare to Juan the president 'I declare Juan the president'
 - b. *Declaro a Juan el gran presidente declare to Juan the great president
 '*I declare Juan the great president'

This makes a prediction concerning our cases of *la verdad*: if *la verdad* is predicational in the sense of Higgins (1973) we expect that it cannot be modified, and it cannot (with the attitudinal, or SOA reading):³

(20) La sorprendente/unica verdad es que estoy cansado the surprising /only truth is that I-am tired '*The surprising/only truth of the matter is that I am tired'

Again, these cases should be compared to the parenthetical ones:

(21) Estoy cansado, *la sorprendente/pura verdad

The structure in (16) accounts for two otherwise striking properties of these constructions:

- (i) the fact that the adverbial/attitudinal reading disappears if we target the string que + IP for raising:
- (22) Que estoy cansado es la verdad that I-am tired is the truth 'That I am tired is the truth (*of the matter)'

This string does not correspond to any constituent in (16).

(ii) The fact that these constructions cannot be conjoined at the CP level without losing the adverbial/attitudinal reading (the star corresponds to the impossibility of an attitudinal reading):

La verdad es que nadie quiere ir (23)y (*que) se van a mosquear the truth is that nobody wants to-go and that REFL.go to get-angry 'The truth of the matter is that nobody wants to go and (*that) they will get angry'

Let us consider these cases carefully. I assume the structure given in (16), and repeated below:

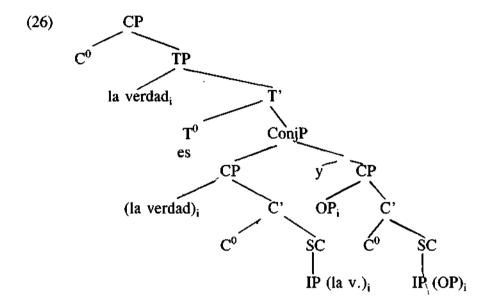
(16) $\left[_{CP} C^0 \right]_{TP}$ la verdad $\left[_{T'} \text{ es } \left[_{CP} \text{ que } \left[_{SC} \text{ IP (la verdad)} \right] \right] \right]$

Conjunction at the CP level yields (24):

But then we are forced to treat extraction of la verdad as a case of Across The Board (ATB) extraction. That is, extraction of la verdad here is parallel to extraction of what in (25):

- (25)What did John sell t and Peter bought t? a.
 - b. *What did John sell a bycicle and Peter bought t?

I will assume, following Munn (1993) and Kayne (1994), that ATB extractions are instances of parasitic gap constructions. But parasitic gaps are not licensed by movement to an A-position. Under the assumption that Spec of TP is an A-position in Spanish, the impossibility of conjunction at this level follows naturally: *la verdad* raises to an A-position (Spec of TP) and cannot license a parasitic gap in the second term of the conjunction, assuming Munn's treatment of ATB cases. In a null-operator analysis of parasitic gaps (as in Chomsky, 1986), the relevant configuration would be as in (26). Identical indexing indicates *chain composition*.⁴



The ungrammaticality of (26), where (26) corresponds to the attitudinal reading, shold be treated on a par with other impossible parasitic gap configurations such as (27), with the parasitic gap embedded in a subject position to avoid Case-mismatch (Kiss, 1985; Horvath, 1992):

(27) * The paper, was filed t_i after I saw was e_i read e_i

This analysis makes the prediction that conjunction at the Small Clause level should be possible: conjunction at this level leaves the first Comp projection free to move to. As this is an A'-position, the parasitic chain in the second conjunct can be licensed. The prediction is borne out by the facts, as an attitudinal reading is possible in the complementizerless version of (23).

Interestingly also, conjunction at the CP level is possible when these constructions have an interrogative or exclamatory force. In these cases, the copula is dropped:⁵

(27) a. verdad que salio y que luego volvio?

true that left and that later came-back

'Isn't it true that he left and then came back?'

b. La verdad que los Gomez son encantadores y que se desviven! the truth that the Gomez are nice and that REFL take-care 'Truly the Gomez are nice and take care of us!'

La verdad patterns here together with a subset of speaker oriented adverbs which can also have exclamatory force:

(28) Desde luego/naturalmente que salio y que luego volvio!

of course /naturally that left and that later came-back
'Of course that he left and that later he came back!'

These cases suggest the involvement of a further Comp projection above the TP in the copular construction, as proposed in (16). Under this assumption, the possibility of conjunction again follows naturally.

The parallel behavior of these *la verdad* constructions and speaker oriented adverbs supports the claim that a same structure underlies both. Furthermore, in the light of the syntax of *la verdad* we are forced to conclude that the set of speaker oriented adverbs that can occur preceding the complementizer in emphatic constructions must be identified as predicates, since they undergo raising.

4 The domain of assertion

If (16) is the right structure of *la verdad* constructions, a natural question to ask is which kind of clausal projection is involved here such that the attitude denoting expression has to raise to it. If we take the copula to be related to a lexical element, as a general property of (non-identificational) copulas, we want to know what relevant lexical feature is involved in this clausal projection. There is some reason to think that the clause the attitudinal expression raises to is an "extended projection" (in the sense of Grimshaw, 1991) of a feature of assertion.

Consider the following contrast:

- (29) a. Como no ha venido todavia! how-come not has arrived yet 'How come he didn't arrive yet!'
 - b. Como que no ha venido todavia!
 how-come that not has arrived yet
 'What do you mean he didn't arrive yet!'

Both are emphatic constructions involving the spanish counterpart of English how come, so no true questions. We can consider como as an attitudinal expression, one that denotes surprise on the side of the speaker. There is a subtle but substantial difference in the use of (a) and (b). (a) can be uttered out-of-the-blue; (b) cannot.

Imagine the following situation: you had an appointment with someone in a bar. You arrive ten minutes later and look around to find that person. As you are surprised because that person is not there, you utter (a). But you cannot utter (b) similarly. In order to utter (b), where the speaker oriented adverb precedes the complementizer, you need a linguistic antecedent. Someone must tell you: "the person you are trying to find didn't arrive yet". Then you can utter (b). I take this to show that in (29b) the speaker oriented adverb has been raised to a position which takes scope over a feature of assertion. As shown by (29a), raising to the clausal domain that introduces the complementizer is necessary for such a reading. Scoping over an assertion feature is thus contingent on raising. The facts can be naturally accomodated if we take the clausal domain to which these atitudinal expressions raise to be the extended projection of a feature of assertion. Accordingly, I modify (16) into the more complex (30), where X⁰ is whatever head sustains the assertion feature.

(30)
$$\left[_{CP} C^0 \right]_{TP}$$
 la verdad $\left[_{T'} \text{ es } \left[_{XP} X^0 \right]_{CP}$ que $\left[_{SC} \text{ IP (la verdad)} \right] \right] \right]$

The structure in (30) provides a syntactic basis for the different syntactic and semantic properties of speaker oriented adverbs. Some speaker oriented adverbs, such as frankly, confidentially, modify the assertion, and are thus related to X^0 , perhaps as manner adverbs, as proposed by Ross, (1970), Schreiber (1972), Sadock (1974) and others in the context of the performative hypothesis. Another subtype of speaker oriented adverbs is related to the (Fregean) judgement. These are typically those which can modify a truth-predicate (cf.(2a)): fortunately, probably, possibly, happily, among others. Finally, there is a third subtype which occupies the place of la verdad in the attitudinal construction we have discussed. These are the adverbs which undergo raising to the domain of assertion in cases of emphasis: typically, of course, and how come in English, and por supuesto, desde luego, naturalmente (as counterparts of English of course) and como, in Spanish.

Footnotes

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^{1.} The Fregean picture intended here is a (hopefully accurate) interpretation of Frege's views as expressed in "Sense and Reference" (1892), and in two of the articles of his *Logical Investigations*: "Thoughts" (1918) and "Negation" (1918).

- 2. This attitudinal construction is actually one in a family of cases in Spanish with a similar flavor: et caso (es) que..., et hecho (es) que..., es que.... These constructions have been noted long time ago and have been of some concern to traditional grammars of Spanish, such as Bello's (1925) and Beinhauer's (1963).
- 3. Interestingly, some modifications are possible in *both* predicative DPs and attitudinal instances of *la verdad*. These are cases of non-restrictive modification, where the adjective denotes some characteristic property of the noun (as in *the sad truth of the matter*), or some empathic assessment of the property denoted by the noun:
 - (i) Juan es el puto carnicero 'Juan is the fucking butcher'
 - (ii) La puta verdad es que estoy cansado the fucking truth is that I-am tired 'To tell you the fucking truth, I am tired'

Also in the parenthetical version:

- (iii) Estoy cansado, la puta verdad 'I am tired, the fucking truth'
- 4. This is not the actual structure proposed by Munn (1993). Munn argued that the structure of conjuncts is asymmetric, with the second conjunct (including the coordinating head) adjoined to the first conjunct. Kayne (1994) suggests a different alternative, where the coordinator is a head whose specifier is the first conjunct, along the lines of the original proposal by Munn (1987). An asymmetric structure may be crucial for a parasitic gap analysis of ATB extraction. For the sake of simplicity, I stick to the more traditional symmetric view of conjunctions.
- 5. An extremely interesting correlation arises from a parasitic gap analysis of these ATB extractions: movement of *la verdad* to the higher Comp would have to proceed through the Spec of the copula, an A-position. This configuration, however, can not license parasitic gaps, as shown by (I):
 - (i) * which paper was filed t after you read e?

where passivization precedes wh-movement. Precisely in that case where a parasitic gap analysis would collapse, because of the presence of an intervening A-position licensed by the copula, the copula disappears. It is not clear to me, however, how we should treat these cases. A tentative analysis would take the absence of overt copula to be related to inversion (Hendrick, (81) for a similar analysis of some inversion contexts which do not show overt copula), and would claim that whatever relevant checking relation is established between *la verdad* and the copula in the normal cases, it can also be established in the target position of inversion.

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