When subjects do not agree: A semantic perspective[1]

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Abstract. In this paper we examine a number of constructions that show lack of agreement between the subject and either the verb or some constituent within the predicate. We focus on Non-Agreeing Degree constructions (Mendia and Espinal, 2024), which we compare with so-called Pancake Sentences (Enger, 2004; Wechsler, 2011; Haugen and Enger, 2019) and Topic Categorical Sentences (Britto, 2000). All three constructions show a non-standard agreement pattern that nevertheless signals some form of semantic shift in interpretation. We argue that, despite surface similarities, these constructions do not belong to the same category.

Keywords: semantic agreement, degree expressions, copular clauses

1. Introduction

1.1. Varieties of agreement mismatch

Number agreement is a form of grammatical dependency whereby the morphological form of a word varies depending on the properties of some other word in a given syntactic context. In the examples below, the form of the target of agreement (the copula) depends on the form of the subject of the sentence (the controller).

(1) **Syntactic agreement**

a. *Singular*

(i) $[_{DP[\phi_{SG}]}$ Part of the residents] **has**.SG opposed the plan.

(ii) $[_{DP[\phi_{SG}]}$ The committee] **has**.SG decided on the issue.

(iii) $[_{DP[\phi_{SG}]}$ Each of us] **thinks**.SG that we can win the nomination.

b. *Plural*

(i) $[_{DP[\phi_{PL}]}$ Parts of the residents] **have**.PL opposed the plan.

(ii) $[_{DP[\phi_{PL}]}$ The committees] **have**.PL decided on the issue.

(iii) $[_{DP[\phi_{PL}]}$ All of us] **think**.PL that we can win the nomination.

In this respect agreement is traditionally viewed as involving the interaction between two areas of grammar, morphology and syntax. There are cases however where this "standard" dependency is disrupted: a number of agreement patterns have been argued to involve so-called meaning-based shifts. For instance, in contraposition to the examples in (1), the variants in (2) involve a seemingly defective mismatch between the ϕ-features on the controller and its target (examples from Danon 2013, Landau 2016, and Rullman 2010 respectively).

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(2) **Semantic agreement**
a. $[_{DP[\phi_{SG}]}$ Part of the residents] **have**.PL opposed the plan.
b. $[_{DP[\phi_{SG}]}$ The committee] **have**.PL decided on the issue.
c. $[_{DP[\phi_{SG}]}$ Each of us] **think**.PL that we can win the nomination.

According to Corbett (2006: 155–157), this so-called "semantic agreement" is consistent with the meaning of the controller, whereas "syntactic agreement" is consistent with its form. The fact that this divergent agreement pattern is somehow related to the semantic content of the expressions in subject position is what sets these constructions apart from other forms of defective agreement patterns, such as *unagreement*,[3] and *hyperagreement*, illustrated below: (3a)/(4a) show the expected ordinary agreement patterns whereas (3b)/(4b) show the unagreeing and hyperagreeing variants, respectively:

(3) **Unagreement**
a. Me **faltan** $[_{DP[\phi_{PL}]}$ varias piezas del puzzle].
PR.DAT.1SG lack.3PL several.F.PL piece.F.PL of.the puzzle
'I am missing several pieces of the puzzle.'
b. Me **falta** $[_{DP[\phi_{PL}]}$ varias piezas del puzzle].
PR.DAT.1SG lack.3SG several.F.PL piece.F.PL of.the puzzle
'I am missing several pieces of the puzzle.'

(Villa-García, 2010: 255)

(4) **Hyperagreement**
a. Me **encanta** $[_{DP[\phi_{SG}]}$ hacer planes].
PR.DAT.1SG love.3SG make.INF plans
'I love making plans.'
b. Me **encantan** $[_{DP[\phi_{SG}]}$ hacer planes].
PR.DAT.1SG love.3PL make.INF plans
'I love making plans.'

(Fernández-Serrano, 2022: 2)

The main difference between the patterns in (2) and (3)/(4) is the role played by the lexical semantics of the subjects in (2) *vis-à-vis* the lack of such effects in (3)/(4). In other words, while the pattern in (1)/(2) seems to be semantically driven—at some level at least—patterns like (3)/(4) seem to be optional (see discussions in e.g. Danon 2013 and Landau 2016 for (2) and Fernández-Serrano 2022 for (3)/(4)).

It is important to note at this point that even in the case of "semantic agreement" cases illustrated by the pattern in (2), the purported semantic interpretations of the two relevant variants—i.e. with ordinary (singular) agreement in (1) and with plural "semantic agreement" in (2)—are semantically equivalent. In other words, despite being semantically driven, these non-standard forms of agreement do not affect the overall interpretations of the sentences, and so the sentences in (2) are truth-conditionally equivalent to those in (1).

[3]Note that unagreement may also involve person as well as number ϕ-features; see e.g. Höhn (2016).

1.2. Semantic effects

In this paper we aim to contribute to this body of non-standard constructions by looking into a family of examples where the contrast between standard and non-standard agreeing patterns is indeed semantically noticeable. In particular, we focus on examples involving a morphologically plural subject that fails to control plural agreement on the verb, delivering not only a grammatical sentence but one diverging in truth-conditions from its standard agreeing counterpart.

Consider example (5b) below in contrast to (5a), which we will refer to as illustrating non-agreeing degree constructions (NAD, for short; see Mendia and Espinal 2024):

(5) **Non-Agreeing Degree Constructions**

a. $[_{DP[\phi_{PL}]}$ Cuatro pizzas] **son** { suficiente**s** / demasiada**s** }.
four pizzas are enough.PL too much.PL
'Four pizzas are enough.'

b. $[_{DP[\phi_{PL}]}$ Cuatro pizzas] **es** { suficiente / demasiado }.
four pizzas is enough.SG enough.SG
'Four pizzas is enough.'

Examples like (5a) are unremarkable in that they do not involve any form of agreement disruption; semantically, they constitute an ordinary instance of predication whereby the subject *four pizzas* are said to be such and such. In this particular case, (5a) states that a plurality of four pizzas is sufficient for (or exceeds) some threshold of quantity of pizzas. Example (5b) on the other hand, in addition to being fully grammatical, is not semantically equivalent to (5a). What counts as too much in this second case is largely underspecified: it could be virtually *any* property that may be sensibly predicated of its subject, *four pizzas*. For instance, (5b) could refer to the fact that eating or cooking four pizzas is too much (to meet certain criteria), that the weight of four pizzas exceeds some contextually relevant limitation (e.g., they are too big to heat in a small kitchen oven), that the height of a stack of four pizzas would be too much (to carry on the delivery motorbike), etc. The contrast between these two interpretations is what sets patterns like (5) apart from (1)/(2) and (3)/(4).

NAD constructions are not alone is displaying a form of non-standard agreement with noticeable semantic effects. For instance, as Selkirk (1977) originally noted, agreement differences in pseudo-partitive constructions often lead to noticeable differences in interpretation.

(6) **Object/Quantity ambiguity**

a. A bunch of flowers **was** thrown out of the window *object*

b. A bunch of flowers **were** thrown out of the window *quantity*

(Selkirk, 1977: 311)

More interestingly, NAD constructions resemble as well so-called Pancake Sentences in Scandinavian languages (after Enger, 2004), a construction which shares a similar non-standard agreement pattern. The following examples illustrate the phenomenon in Norwegian.

(7) **Pancake Sentences**

a. Pannekakene er gode
pancake.F.DEF.PL be.PRS good.F.PL

'The pancakes are good.'

b. Pannekaker er godt
pancake.F.INDEF.PL be.PRS good.N.SG
'Pancakes are good.'

(Haugen and Enger, 2019: 532–533, exs. (6), (4))

The point of connection between such pancake sentences and NADs is their heavy semantic underspecification. As Faarlund (1977) already observed, (7b) may be paraphrased by appealing to situations involving pancakes which are are good (e.g., eating, cooking pancakes), and thus, like the NAD in (5b) above, (7b) is not about particular pancakes, but about situations involving any individual pancake.

The last construction we consider here is a variant of NAD constructions involving a left dislocated topic constituent and a neuter pronoun in subject position; we refer to them as Topic Categorical Sentences. We illustrate the construction in French:

(8) **Topic Categorical Sentences**

a. Quatre pizzas, c'est suffisant.
four pizzas PR.N is enough
'Four pizzas is enough.'

b. *Quatre pizzas, ce sont suffisantes.
four pizzas PR.N are enough

c. *Quatre pizzas est suffisant.

d. *Quatre pizzas sont suffisantes.

The only interpretation available to (8a) is that of a NAD construction, whereby what counts as sufficient is heavily underspecified, as it could be any aspect vaguely related to such an amount of pizzas (i.e. eating them, cooking them, carrying them, etc.). Remarkably, French only allows left dislocated topic constructions in such contexts, as the ungrammaticality of the (b) through (d) examples show in (8).[4]

Given that all three types of constructions share semantic underspecification as one of their signature properties, a couple of questions arise naturally: are the three of them variants of the same construction? Do the three of them share a common underlying semantic procedure? In this paper we argue that NAD constructions must be distinguished from both pancake sentences and topic categorical sentences, as the three of them have sufficiently distinct distributions.[5]

[4]We found variation in acceptability across-speakers for (8c), with some speakers being a bit more lax about its judgments. At any rate, we found no speaker for whom (8c) was fully acceptable, hence our choice of marking it with a star.

[5]The list of constructions where non-standard agreement patterns lead to semantic effects is not exhaustive. For instance, Greenberg (2008) discusses the use of the pronominal copula in Hebrew (homophonous to a demonstrative or impersonal pronoun), which never agrees with the subject but has similar semantic effects to those of pancake sentences. For instance, about (i) below Danon (2012: 86) writes that it "means that something related to little children, such as raising them or dealing with them, is hard work—not that children themselves are hard work."

(i) yeladim ktanim ze avoda kaša.
children.M.PL little.M.PL ze.M.SG work.F.SG hard.F.SG
'(Raising/dealing with) little children is hard work.'

Similarly, Martin et al. (2021: 179) mention that (iia) below can be paraphrased as "selling steroids is big business," and report that the choice of number ϕ-features in (iib) is also meaningful: while the plural variant is

We focus on the distributional differences between the three constructions and discuss different ways of accounting for their semantic underspecification, which we take to be tentative evidence in favor of the need for separate analyses in each case.

2. Syntactic distribution of NADs

In this section we summarize the main properties that we take to be characteristic of NAD constructions.[6] We focus exclusively on NAD constructions involving expressions of sufficiency and excess, as illustrated in (5), leaving other types for a future occasion. What we find is that from a distributional point of view NAD constructions involve four main ingredients:

- A quantificational phrase in subject position that is interpreted as a non-conventional unit of measurement.
- A copula BE.
- A degree expression of some form in predicative position.
- A nominal complement to the degree expression.[7]

In what follows we elaborate on each of these points.

2.1. Subjects

The first of the distributional properties of NAD constructions that deserves attention concerns the form of the subject. As we saw above, cardinal numerals make good NAD subjects; the same is true of modified cardinal number phrases.

(9) { Más de / Menos de / Unas } cuatro pizzas es demasiado.
more than less than some four pizzas is too much
'{More than / Less than / Some } four pizzas is too much.'

In contrast, other indefinite quantifiers (10a) and extensional definite descriptions (10b) of various sorts may not be subjects of NAD constructions:

(10) a. *{ Varias / Muchas / Pocas / Algunas / Unas } pizzas es demasiado.
several many few some sm pizzas is too much
b. *{ Las / Éstas / Aquellas } pizzas es demasiado.
the these those pizzas is too much

claimed to be about eggs themselves, the singular variant states that "making, preparing, etc. scrambled eggs is what makes a good breakfast."

(ii) a. Steroids is big business.
b. Scrambled eggs make(s) a good breakfast.

[6]For a broader discussion and more related data, see Mendia and Espinal (2024).

[7]This is true of NAD constructions such as those in (5). More syntactically contrived NADs, such as those involving comparative or superlative constructions do not require nominal complements.

2.2. Copula

NAD constructions are strictly limited to predicational copular constructions. We can probe this limitation by looking into copular constructions that, due to the lexical semantics of the nominal predicate they involve, have semantically equivalent lexical verb counterparts. Consider:

(11) a. Cuatro pizzas es demasiado peso (para llevar en la mano).
four pizzas is too much weight to carry in the hand
'Four pizzas is too much weight to carry in your hand.'
b. Cuatro pizzas { *pesa / pesan } demasiado (para llevar en la mano).
four pizzas weighs weigh too much to carry in the hand
'Four pizzas weigh too much to carry in your hand.'

One would imagine that the meaning conveyed by the NAD in (11a) with a copular predicate *be too much weight to carry* could be expressed by the semantically equivalent predicate *weigh too much to carry*. And while this is the case, the verbal predicate *pesar* "weigh" requires its standard agreement relation with the subject of the sentence, in sharp contrast with the NAD construction in (11a). It is not difficult to find similar cases. For instance, in discussing whether we have time to cook four pizzas one might suggest that in fact we do not have enough time, since cooking four pizzas may take too long. A NAD construction like (12a) is perfectly acceptable in this context, but its verbal counterpart (12b) is not.

(12) a. Cuatro pizzas es demasiado tiempo (para cocinar ahora).
four pizzas is too much time to cook now
'Four pizzas is too much time to cook now.'
b. Cuatro pizzas { *lleva / llevan } demasiado tiempo (para cocinar).
four pizzas carries carry too much time to cook
'Four pizzas take too long to cook now.'

2.3. Degree heads

Not any copular construction may form a good NAD construction. The main limitation we find in this respect is that NAD constructions, as their name suggests, are first and foremost degree constructions, and thus require some form of degree expression in post-copular position. The form of the actual degree expression involved in NAD constructions is inconsequential, as long as there is one. Thus, in addition to the degree expressions of excess and sufficiency in (5), we also find NADs in comparative, superlative, equative and proportional constructions:

(13) a. Cuatro pizzas { es / ?son } más de lo que necesitamos.
four pizzas is are more of the what need
'Four pizzas is more than we need.'
b. Cuatro pizzas { es / *son } lo más que he comido nunca.
four pizzas is are the most that AUX eaten ever
'Four pizzas is the most I have ever eaten.'
c. Cuatro pizzas { es / son } lo mismo que siete hamburguesas.
four pizzas is are the same as seven burgers
'Four pizzas is the same as seven burgers .'

d. Cuatro pizzas { es / ?son } { mucho / bastante / poco }.
four pizzas is are much quite-a-bit little
'Four pizzas is {a lot / little}.'

Note that even in the absence of an overt degree expression, as in (14), the only interpretation available is one where an amount of four pizzas is said to count as *a lot of* food, to be *very* expensive, or to be *very* involved too cook, etc, for instance:

(14) Cuatro pizzas es { comida / dinero / tiempo / ...}.
four pizzas is food money time
'Four pizzas is a lot of { food / money / time }.'

This kind of interpretation survives even in the presence of negation:

(15) Cuatro pizzas no es comida.
four pizzas is not food
'Four pizzas is not a lot of food.'

2.4. Nominal complements

Any nominal in predicative position may be part of a NAD construction like those in (5). However, NADs of sufficiency and excess with *demasiado*/*suficiente* 'too much'/'enough' are strictly limited to nominal complements. These nominal complements then help determine some scale on the fly along which the NAD construction is then interpreted. In (11) and (12) we saw how verbal predicates may not form NADs. The same is true of other types of predicates, such as adjectives, despite being themselves expressions of degree. For instance, in (14) one may not simply exchange an adjective for a semantically related nominal, as shown bellow:

(16) a. Cuatro pizzas es { *caro / dinero }.
four pizzas is expensive money
'Four pizzas is { expensive / too much money }.'
b. Cuatro pizzas es { *pesado / peso }.
four pizzas is heavy weight
'Four pizzas is { heavy / too much weight }.'

In short, like we saw in the previous section, despite the semantic similarity between some nominal/adjectival predicative pairs, NAD are only possible with nominal predicates.

Summing up, the distribution of NAD constructions is limited, broadly speaking, to numeral indefinites in subject position that provide the sole argument of a predicational copular sentence with a degree expression taking a nominal complement. In the next section we further elaborate on the overall semantic consequences of such configurations for the interpretation of the whole sentence.

3. Pinpointing the semantic effect of nonstandard agreement in NADs

Recall that our initial intuition was that the contrast in (5), repeated below, follows from the fact that unlike (5a), (5b) is not in fact a statement about pizza. Instead, we suggest that determining what (5b) is about depends highly on the context: for a restaurant guest it may be about food, for a cook it may be a measure of work, for a delivery person it may be about size, etc. These interpretations are all ruled out in the standard agreeing variant in (5a).

(5) a. $[_{DP[\phi_{PL}]}$ Cuatro pizzas] **son** { suficiente**s** / demasiada**s** }.
four pizzas are enough.PL too much.PL
'Four pizzas are enough.'

b. $[_{DP[\phi_{PL}]}$ Cuatro pizzas] **es** { suficiente / demasiado }.
four pizzas is enough.SG too much.SG
'Four pizzas is enough.'

For concreteness, we suggest the following as the interpretation of (5a):[8]

(17) $\exists x[^{*}pizza'(x) \wedge |x| = 4 \wedge 4 \geq TH^{C}_{\{min/max\}}(|pizza'|)]$

This interpretation states that a plurality of four pizzas reaches/exceeds a context dependent threshold of pizza cardinalities. While intuitively correct for (5a), this result is clearly inadequate as an analysis of (5b), since it cannot account for its semantic underspecification. The guiding intuition that we pursued in Mendia and Espinal (2024) is that the semantic role of the subject *cuatro pizzas* in (5b) is analogous to that of measure phrases such as *three kilos* in sentences of the form *three kilos is too much weight*. Take for instance the case in which (5b) is uttered in a context where four pizzas are said to exceed some context dependent weight threshold:

(18) Four pizzas is too much weight.

Because (18) is not about any one pizza—and in fact (18) does not commit us to the existence of any actual pizza—we suggest to interpret the subject intensionally, by applying a general nominalizing operator "$^{\downarrow}$" (Chierchia, 1985; McNally, 1997).

(19) $[\![\text{cuatro pizzas}]\!] = {}^{\downarrow}(\lambda x_e.{}^{*}pizza'(x) \wedge |x| = 4)$

The result is the entity correlate of the property of being four pizzas, a spatio-temporally discontinuous abstract entity (much like, but different from, kinds). We then may feed this entity correlate to the main degree predicate, with a very different result from (17): we now obtain a degree d as the result of applying a measuring function μ—set to some contextually determined dimension DIM—to the entity correlate of the property *four pizzas*. Then, this d is said to reach/exceed some context dependent threshold on DIM, $TH^{C}_{\{min/max\}}(\text{DIM})$. We thus obtain (20) as the general interpretation of the NAD constructions in (5b):[9]

(20) $\mu_{\text{DIM}}({}^{\downarrow}(\lambda x_e.{}^{*}pizza'(x) \wedge |x| = 4)) = d \wedge d \geq TH^{C}_{\{min/max\}}(\text{DIM})$

[8]Reaching this analysis compositionally is straightforward using run-of-the-mill tool offered by degree semantics. For one such analysis, we refer the reader to Mendia and Espinal (2024).

[9]This is a simplified version of the analysis we defend in Mendia and Espinal (2024).

In the absence of an overt nominal such as *weight* in (18), as is the case with our original (5b) example, the dimension that the measuring function is defined on must also be retrieved in the context, thereby capturing the large semantic underspecification of NAD constructions.

4. NADs vs Pancakes

As we suggested earlier, one might hypothesize that NADS are simply a variant of so-called Pancake Sentences (PS, from now on) in Scandinavian languages, given the noticeable similarities among the two types of constructions. In this section we review these similarities, as well as their differences, and conclude that they do not constitute the same construction.

Prototypical PS constructions are illustrated in (7b) above and (21) below, which most characteristically show an indefinite plural or a mass noun in what looks like a pre-sentential subject position and a neuter singular adjective in predicate position:

(21) Konjakk er sunt.
cognac.M.INDEF.SG be.PRS healthy.N.SG
'Cognac is healthy.'

(Haugen and Enger, 2019: 532, ex (5))

In the light of the properties characteristic of NAD constructions presented in Section 2, we observe that the following similarities between PS and NADs are quite prominent.

4.1. Similarities between NADs and PS

4.1.1. Subjects

Subjects of NAD and PS constructions share the following properties. We first observe that in neither construction is the subject specified for definiteness.[10] Second, the subject of the two constructions is usually specified for plural number, unless it is a mass noun. Third, the subject of the two constructions may be a non-finite clause. This is illustrated for PS in (22).

(22) Å ete pannekaker er godt
to eat pancakes is good.N.SG

(Enger, 2004: 7, ex. (9))

NAD constructions in Spanish share the same property:[11]

(23) Cocinar y comer cuatro pizzas es demasiado
to cook and to eat four pizzas is too much

Fourth, sometimes, the subject can be interpreted as referring to a proposition. In fact, syntactic

[10] Although, in contrast to NADs, the subject of PS can be indefinite, as illustrated in (21).

[11] Note that the standard agreement pattern of conjoined non-finite clauses would typically involve plural agreement:

(i) Cocinar y comer cuatro pizzas { *es / son } dos cosas diferentes
to cook and to eat four pizzas is are two different things

analyses of PS as the one in Faarlund (1977) have postulated that the subject of PS like (7b) and (21) above is underlyingly the object of a verb that has been deleted (i.e. in a construction such as (22) above).

Fifth, PS can be paraphrased by the use of *med* 'with' constructions (Faarlund 1977, Faarlund et al. 1997). Compare (21) above with (24) below:

(24) Det er sunt med vodka.
it is healthy.N.SG with vodka.M.SG
(Enger, 2004: 15, ex. (44))

Interestingly, the Spanish preposition *con* 'with' can be used to rescue NAD constructions that otherwise would be ungrammatical (for details see Mendia and Espinal 2023).

(25) *(Con) algunas pizzas será suficiente (para la comida).
with some pizzas be.FUT enough for the meal
'With some pizzas is enough (for the meal).'

And finally, semantically, the subject receives a non-extensional reading. Haugen and Enger (2019) refer to subjects of PS as constituents that denote unbounded processes; in this respect they claim that the subjects of PS quite often look like entities that are metonymic for the eventuality that involves them: they are metonymic for the process in which they are understood to be participants.[12] As mentioned in Section 2, subjects of NADs also share an intensional reading, which we captured in Section 3 by appealing to a nominalization process.

4.1.2. Predicates

When it comes to the types of predicates that appear in each construction we find two main similarities. On the one hand, the verb in both NADs and PS is always a copula, as extensively argued for NADs in Section 2 and as reported in the literature on PS (Faarlund 1977, Enger 2004, Wechsler 2011, Haugen and Enger 2019, a.o.). On the other hand, the two share non-standard subject-predicate agreement. The two patterns show however slight differences. Whereas in PS the copula has the same form *er* no matter whether the subject is singular or plural (see the examples in (7b) and (21)) and the adjective in predicate position must be N.SG, in NADs the copular verb can show a default SG number, as well as an plural agreement pattern between the subject and the copula, as in (26). Importantly, however, the resulting construction with the plural copula remains a NAD as long as the degree predicate is still in singular, corresponding still to a non-standard agreement pattern.

(26) $[_{DP[\phi_{PL}]}$ Cuatro pizzas] **son** { suficiente / demasiado }.
four pizzas are enough.SG enough.SG
'Four pizzas is enough.'

[12] More specifically, Enger (2004: 27) claims that subject of PS refer to kind entities, not to specific individual objects.

4.2. Differences between NADs and PS

So far we have highlighted the main points of connection between NADs and PS from a descriptive standpoint. But there exist important differences as well, enough to make a case in favor of considering them distinct constructions altogether.

4.2.1. Subjects

When it comes to the form of the subjects allowed in NAD *vis-à-vis* PS, the main difference involves the ability of PS subjects to be proper names, whereas this is never the case in NADs.[13]

(27) Skogbygda kunne være fint.
Skogbygda could be fine.N.SG
(Enger, 2004: 12, ex. (28))

4.2.2. Predicates

The predicate of a PS is an adjective that standardly expresses a relation between an (extensional) individual and a degree along some conventionally determined dimension. By contrast, the predicate of a NAD is always a noun and thus NADs as a whole involve degree predicates that introduce a non-conventional dimension.[14]

Given this distinction, NADs only admit the copula *ser*, whereas the corresponding PS follow ordinary copular patterns and thus require the use of both *ser* and *estar*.

(28) **PS in Spanish**
a. Los pancakes son buenos.
the pancakes are good
b. El coñac está delicioso.
the cognac is delicious

Notice too that while the predicate of PS allows a demonstrative pronoun subject in a neuter form preceded by a left-dislocated topic constituent (see below the examples in (29a), predicates of NADs only allow a QP subject that is ultimately moved to Spec,TP. There is no place for demonstrative neuter pronouns in NAD constructions, (30).

(29) a. Pannekaker, det er godt.
pancake.F.INDEF.PL it.N be.PRS good.N.SG
'Pancakes are good.'
b. Konjakk, det er sunt.
cognac.M.INDEF.SG it.N be.PRS healthy.N.SG
'Cognac is healthy.' (Enger, 2004: 19, exs. (52), (53))

[13] Other types of restrictions, such as the inability of NADs to have bare plurals/singulars, follow from independent restrictions in Spanish and thus will not be considered here.

[14] By "non-conventional" we mean that, unlike adjectives, whose associated dimensions are fully conventionalized, scales build upon the dimensions introduced by the nominal in NAD constructions are not so. E.g., in *Four pizzas is too much effort*, there is no convention about quantities of pizzas constituting units of effort, and thus this must be resolved in context.

(30) *Cuatro pizzas, ello es suficiente.
four pizzas it.N is enough

Because of the inability of Spanish to host left dislocated topics with a neuter pronoun, we believe that these constructions cannot be counted among bona fide NAD constructions.

5. Topic categorical sentences

The Scandinavian PS illustrated at the end of Section 4 show a phenomenon that is widely spread among natural languages and corresponds to an instance of so-called categorical judgments (Kuroda 1972). A "categorical" judgment, as opposed to a "thetic" judgment, conforms to the traditional and philosophical structure of a subject and a predicate. The categorical vs. thetic opposition is expected to correlate with the presuppositional nature of the subject of a categorical judgment, as opposed to the existential entailment of the subject, if any, of a thetic judgment. And this is so because, by default, the subject of a categorical judgment is associated with a speaker presupposition of existence, which means that prototypically categorical judgments combine a strong subject with a generic predicate.

We provide below some examples of categorical judgments from Brazilian Portuguese. Notice that the sentences in (31) have a left-dislocated topic, interpreted as the logical subject of the sentence, followed by a predicate that introduces an assertion about this subject. The logical predicate has a sentential structure with a subject pronoun and a generic sentence.

(31) a. [A população neotrentina]$_i$ ela$_i$ é meio flutuante (...).
the population neotrentian it is half floating
'The neotrentian population is relatively unstable (...).'
b. [Esses rapazes]$_i$ eles$_i$ são muito bonitos.
these guys they are very handsome.PL
'These guys are very handsome.'
c. [Um homem comum]$_i$ ele$_i$ tem um conforto compatível com (. . .).
a man common he has a comfort compatible with
'A common man has comfort compatible with (. . .).'
(Britto, 2000: 200, exs. (8a), (1), (9))

This notwithstanding, when we look at the data we very often find examples of categorical judgments with a logical subject–predicate division where the subject is a left-dislocated topic that may be either definite or indefinite.[15]

[15] See Cyrino and Espinal (2015) for an analysis of preverbal bare nominals in Brazilian Portuguese in terms of subjects of categorical judgments. Consider the data in (i), where *ele/eles* may alternate with a null resumptive pronoun, which correspond to their examples in (42).

(i) a. Brasileiro ele é trabalhador.
Brazilian he is hardworking
b. Brasileiro eles são trabalhadores.
Brazilian they are hardworking.PL
'Brazilians are hardworking.'
c. Brasileiro *pro* é trabalhador.
Brazilian is hardworking

According to these authors, in (a) these preverbal bare nominals are instantiations of logical subjects of categorical

The examples in (32) illustrate this claim for French.

(32) a. Les/des enfants, c'est chouette.
the.PL/des children it is fun.M.SG
'Doing something with children (having them, playing with them, raising them, and so on) is cool/fun.'

b. Les/des animaux de compagnie, c'est compliqué.
the.PL/des animal.PL of company it is complicated.M.SG
'Having domestic animals, caring for them, etc. is complicated.'

(Martin et al., 2021: 140, exs. (3), (11b))

Interestingly, when native speakers of French are asked to provide the translations of our NAD constructions, examples similar to those in (32) are provided. These are examples like (8), repeated below for convenience, to which we add the variations in (33).

(8) a. Quatre pizzas, c'est suffisant.
four pizzas PR.N is enough
'Four pizzas is enough.'

b. *Quatre pizzas, ce sont suffisantes.
four pizzas PR.N are enough

c. *Quatre pizzas est suffisant.

d. *Quatre pizzas sont suffisantes.

(33) a. Quatre pizzas, { c'est / *ce sont } suffisamment de nourriture.
four pizzas it is it are enough of food
'Four pizzas is enough food.'

b. Quatre pizzas { ??est / *sont } suffisamment de nourriture.
four pizzas is are enough of food

These examples involve, we believe, a left-dislocated topic, interpreted as the logical subject of a categorical judgment, followed by an assertion about that subject. Syntactically, the left-dislocated topic is followed by a sentence with its own pronominal subject, the demonstrative neuter pronoun *ce* 'that', followed by a copula that must be in singular form. As a consequence, we contend that, although PS have a variant with left-dislocated topics and NAD constructions

judgments; in (b) however, these logical subjects are not syntactic subjects, but are DPs in a left Topic position, necessarily linked by means of a syntactic chain to a resumptive pronoun in subject internal position, in order to comply with argumenthood requirements on DPs; and, finally, (c) in the case where no overt third person pronoun is present (see (ic)), a null pronoun (*pro*) must be postulated in subject position.

Likewise, this pattern has been postulated for definitional generic sentences (Seres and Espinal 2019) in Russian, a language without articles. Definitional generic sentences of the form *NP1 èto NP2* (see (iia)) consist of a presentential NP1 (a kind of aboutness topic merged in Spec,TopP), while the rest of the sentence *èto* 'that' NP2 corresponds to the logical predicate (with *èto* being merged in Spec,PredP, BE being the head of Pred, and its complement NP2). Consider the structure in (iib).

(ii) a. Gippopotam– èto begemot.
gippopotam.NOM.M.SG that hippopotamus.NOM.M.SG
'The/a gippopotam is the/a hippopotamus.'

(Seres and Espinal, 2019: 1, ex. (1a))

b. $[_{\text{TopP}}\ [\text{NP}_1] \ldots [_{\text{PredP}}\ [\text{èto}]\ [_{\text{Pred'}}\ [\ \text{BE}\ ]\ [\text{NP}_2]]]]$

(Seres and Espinal, 2019: 3, ex. (3))

are translated as topic categorical sentences in some languages, NADs, PS and topic categorical sentences are different constructions.

6. Conclusions

In this paper we have explored the semantic consequences of non-standard agreement patterns in copular constructions. Drawing data from a number of languages, we have argued for the need to distinguish at least three kinds of constructions: Pancake Sentences (e.g. Wechsler 2011), Topic Categorical Sentences (e.g. Britto 2000) and Non-Agreeing Degree constructions (Mendia and Espinal 2024). What brings all three constructions together is the fact that, in addition to the non-standard agreement pattern between subject and copula, the observed semantic effects influence subjects especially. In all three constructions subjects must be interpreted non-extensionally, i.e. as referring not to entities in the actual evaluation world but to any one such entity, to an abstract one (such as kinds or nominalized properties) that those entities would realize, or to situations involving such entities (similar to cases of logical metonymy). We leave open for future research a full compositional semantic account of the interpretive isomorphism of the three constructions that nevertheless accounts for their underlying distinct syntactic structures.

References

Britto, H. (2000). Syntactic codification of categorical and thetic judgments in Brazilian Portuguese. In M. Kato and E. Vailati (Eds.), *Brazilian Portuguese and the Null Subject Parameter*, pp. 195–222. Madrid: Iberoamericana.

Chierchia, G. (1985). Formal semantics and the grammar of predication. *Linguistic Inquiry 16*(3), 417–443.

Corbett, G. G. (2006). *Agreement*. Cambridge: Cambridge University Press.

Cyrino, S. and M. T. Espinal (2015). Bare nominals in Brazilian Portuguese: more on the DP/NP analysis. *Natural Language and Linguistic Theory 33*, 471–521.

Danon, G. (2012). Nothing to agree on: non-agreeing subjects of copular clauses in Hebrew. *Acta Linguistica Hungarica 59*(1–2), 85–108.

Danon, G. (2013). Agreement alternations with quantified nominals in Modern Hebrew. *Journal of Linguistics 49*, 55–92.

Enger, H.-O. (2004). Scandinavian Pancake Sentences as semantic agreement. *Nordic Journal of Linguistics 27*(1), 5–34.

Faarlund, J. T. (1977). Embedded clause reduction and Scandinavian gender agreement. *Journal of Linguistics 13*, 239–257.

Faarlund, J. T., S. Lie, and K. I. Vannebo (1997). *Norsk referansegrammatikk (Norwegian reference grammar)*. Oslo: Universitetsforlaget.

Fernández-Serrano, I. (2022). *Agreement and optionality: evidence from Spanish variation*. Ph. D. thesis, Universitat Autònoma de Barcelona.

Greenberg, Y. (2008). Predication and equation in Hebrew (nonpseudocleft) copular sentences. In S. Armon-Lotem, G. Danon, and S. Rothstein (Eds.), *Current Issues in Generative Hebrew*

Linguistics, pp. 161–196. John Benjamins.

Haugen, T. A. and H.-O. Enger (2019). The semantics of Scandinavian pancake constructions. *Linguistics 57*(3), 531–557.

Höhn, G. F. K. (2016). Unagreement is an illusion. Apparent person mismatches and nominal structure. *Natural Language and Linguistic Theory 34*, 543–592.

Kuroda, S.-Y. (1972). The categorical and the thetic judgment: evidence from Japanese syntax. *Foundations of language 9*(2), 153–185.

Landau, I. (2016). DP-internal semantic agreement: A configurational analysis. *Natural Language and Linguistic Theory 34*, 975–1020.

Martin, F., J. Carvalho, and A. Alexiadou (2021). Predicates of Personal Taste and Pancake Sentences in Brazilian Portuguese and French. In *Disentangling Bare Nouns and Nominals Introduced by a Partitive Article*, pp. 140–186. Brill.

McNally, L. (1997). *A semantics of the English existential construction*. New York: Garland Press.

Mendia, J. A. and M. T. Espinal (2023). A note on sufficiency predicates. In S.-Y. Lam and S. Ozaki (Eds.), *Proceedings of the Fifty-Third Annual Meeting of the North East Lingusitic Society*, pp. 199–209.

Mendia, J. A. and M. T. Espinal (2024). Non-Agreeing Degree Constructions. To appear in *Journal of Linguistics*. Ms. Universitat Autònoma de Barcelona.

Rullman, H. (2010). Number, person and bound variables. Slides for a talk given at Radboud Universiteit, Nijmegen.

Selkirk, E. (1977). Some remarks on Noun Phrase structure. In P. W. Culicover, T. Wasow, and A. Akmajian (Eds.), *MSSB-UB Irvine Conference on the Formal Syntax of Natural Languages*, pp. 225–245. New York: Academic Press.

Seres, D. and M. T. Espinal (2019). Russian definitional generic sentences. *Glossa 4*(1), 1–30.

Villa-García, J. (2010). To Agree or not to Agree: beyond quintessentially syntactic agreement in Spanish. In S. Colina, A. Olarrea, and A. M. Carvalho (Eds.), *Romance Linguistics 2009: Selected papers from the 30th Linguistics Symposium on Romance Languages (LSRL)*, pp. 249–266.

Wechsler, S. (2011). Mixed agreement, the person feature and the index/concord distinction. *Natural Language and Linguistic Theory 29*, 999–1031.