**Encoding equation through two types of selection**

**Intro**: Recent work in the study of comparatives has shown that degree heads establish a comparison between degrees by selecting either for an implicit degree argument or for an overt standard of comparison (i.a. Alrenga et al. 2012). Relatively little work has examined the selectional properties of **equatives**, however. The modifier *same* informs this discussion by elucidating an identical selectional alternation found in expressions of **individual equation** outside the adjectival domain. In both equatives and comparatives, selection of an implicit argument leads to anaphora, while selection of an overt standard obviates the need for an antecedent. Based on this empirical parallel, I propose that the syntactic frame involved in degree expressions is a **general selection strategy** for establishing a relation between syntactic objects. Expressions involving degree comparison and individual equation both make use of a common syntax – one that involves a Deg head that selects either for an **implicit argument**, giving rise to an anaphoric interpretation of identity to some antecedent, or an ***as*-clause**, which introduces the standard of comparison/equation overtly. I also show that this analysis lays the foundation for understanding a wider class of equative expressions.

**Puzzle**: Expressions involving the so-called 'external' use of *same* (cf. 'internal' *same*, i.a. Barker (2007)) involve anaphora to some antecedent, as in (1). While such expressions are necessarily anaphoric, *same* may also occur without any antecedent if an *as*-clause is present instead, as in (2).

(1) Mary recently watched *an award-winning film*. I watched the the **same** film last night.

(2) Last night I watched the **same** film *as Mary did recently*.

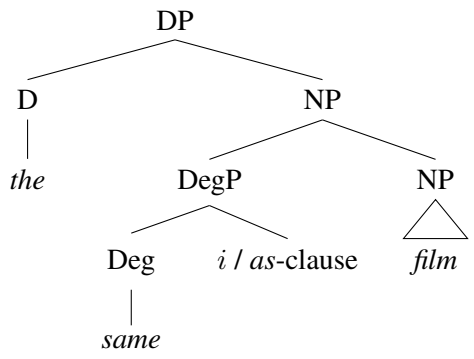
The puzzle arising from these data is if and how these two uses of *same* are related. Importantly, the alternation between anaphoric readings and non-anaphoric readings in the presence of a selected clause are attested elsewhere – namely, for comparative *-er* (Alrenga et al. 2012) – which alternates between an anaphoric and non-anaphoric degree reading. Consider (3) and (4), modified from Alrenga et al. (2012), who argue that (3) involves the selection of an implicit degree argument with which *-er* establishes a comparison, while the *than*-clause in (4) is an overt *standard of comparison*:

(3) Rod A is *long*, but Rod B is a **longer** one. (4) Rod B is a **longer** rod *than A is*.

I propose an analysis that gives (1-2) the same structure as these degree expressions, in which an equative degree head must select either for an implicit argument or an overt *standard of equation*.

**Proposal**: Kennedy (1999) proposes that comparatives are headed by Deg, which selects for an adjectival complement as well as one of the two types of specifier mentioned above. I argue that *nominal equatives* (1-2) likewise have a syntax in which a degree head, overtly realized by *same* (cf. Alrenga 2007; Oxford 2010), obligatorily selects for one of these specifiers. Following Kennedy, Deg in (5) heads a phrase that is an adjunct to the NP it modifies; modifying Alrenga et al.'s (2012) proposal for comparatives, Deg selects for one of two specifiers. In anaphora (1), Deg's specifier is an implicit argument. In non-anaphoric uses (2), the specifier is an overt standard introduced by *as*, (which is extraposed to derive the correct word order, following standard assumptions (Guéron & May 1984)). The main difference between equatives inolving *same* and comparatives is that the former establishes a relation between individuals, and the latter between degrees. To

(5)



capture this distinction, (6) gives the meaning of *same* (building on Matushansky 2010), which takes two individual arguments and places them in a relationship of equation (cf. Charnavel 2015).

(6) [[***same***]]: $\lambda x \lambda y[y = x]$

In anaphora, *same* selects for an implicit individual argument in its specifier, which saturates the first argument of *same* and returns the property of being identical to the referent picked out by that index, i.e. the property of being anaphoric (7a). After this meaning undergoes predicate modification with the property denoted by the noun (7b), the result is a definite description containing an unbound variable that establishes an anaphoric connection to some antecedent (7c), whose meaning is resolved via an assignment function, giving rise to anaphora (i.a. Elbourne 2005; Schwarz 2009).

(7) a. [[***same***]]: $\lambda x \lambda y[y = x]$ ([[**i**]]$^g$: g(i)) = $\lambda y[y = g(i)]$

b. [[**same** $i$ **film**]]$^g$: $\lambda y[y = g(i)]$ ([[**film**]]: $\lambda z[\text{film}(z)]$) = $\lambda y[\text{film}(y) \wedge y = g(i)]$

c. [[**the same** $i$ **film**]]$^g$: $\iota y[\text{film}(y) \wedge y = g(i)]$

In the case of an overt standard, I follow Rett's (2013) proposal for adjectival equatives (e.g. *as tall as*) that the embedded clause in such expressions is property-denoting, abstracting over a gap in the selected clause. I propose however that this property undergoes the IOTA type-shift (Partee 1987):

(8) a. [[**as Mary did**]]: $\lambda z[\text{saw}(\text{Mary}, z)] =_{\text{IOTA-SHIFT}} \iota z[\text{saw}(\text{Mary}, z)]$

As such, it can saturate the first argument of *same* much in the way that the implicit argument does in instances where no clausal standard is overt, resulting in the individual film that Mary also saw:

(9) a. [[**same**]] ([[**as Mary did**]]): $\lambda y[y = \iota z[\text{saw}(\text{Mary}, z)]]$

b. [[**same film as Mary did**]]: $\lambda x[\text{film}(x) \wedge x = \iota y[\text{saw}(\text{Mary}, y)]]$

c. [[**the same film as Mary did**]]: $\iota x[\text{film}(x) \wedge x = \iota y[\text{saw}(\text{Mary}, y)]]$

The specifier is always of type e, whether it's an implicit argument giving rise to anaphora, or a selected *as*-clause. Both establish a relationship of equation between two referents in the discourse.

**Bigger picture**: The alternation between an implicit argument and the selection of an *as*-clause appears to comprise a larger, cohesive class of expressions involving equation, even those that do not establish a relation between degrees directly. A related alternation has been proposed by Anderson and Morzycki (2015), who argue that *such* introduces equation of *kinds* (see also Carlson 1977), as in (10); a similar observation has been made for true *degree* uses by Landman 2006 (11):

(10) a. A lot of *academics* came to the party last night. I find **such** people fun to talk to.

b. I find **such** people *as came to the party* fun to talk to. *kind equation*

(11) a. Mike is *30 years old*, and Bill is just **as young**.

b. Bill is just **as young** *as Mike is*. *degree equation*

The present proposal provides a general syntactic frame for understanding the selectional properties of Deg in such constructions, which may establish a relation of equation across ontological types. *Same* itself has been shown to have a gradable use (Alrenga 2007), lending support to this claim.

**Conclusion**: The proposal relates the selectional properties of *same* to those of comparatives by arguing that *same* realizes an equation-encoding degree head. The proposal contributes to work on selection by showing that equative structures give rise to equation in the same way that comparatives give rise to comparison – either by: i) selection of an implicit argument, giving rise to anaphora, or ii) selection of an *as*-clause, establishing identity via an embedded clause. Finally, this proposal opens the door to understanding grammatical equation of various semantic types.

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