A Note on the Tension between Silent Elements and Lexical Ambiguity, with Special Reference to Inalienable Possession*

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1. Subtypes of deletion/silence.

Deletion/silence seems to come in (at least) three guises. The most studied is what can be thought of as 'deletion under identity', i.e. deletion that depends on the presence of an antecedent. Some familiar examples are:

- (1) i) VP-deletion (e.g. Mary passed the exam but John didn't)
 - ii) NP-deletion (e.g. *Three students prefer phonology but four prefer syntax*)
 - iii) sluicing (e.g. John is out dancing, but I'm not sure who with)

In all of these, any lexical item can be contained in the deleted phrase, as long as the requisite identity condition is met with respect to the antecedent.

A second type of deletion, well-known but less systematically studied, is one in which the notion of antecedent relevant in (1) is not relevant at all; typically, very specific lexical items are at issue. The following examples of such antecedentless deletion are mostly taken from Kayne (2005). In each example, the italicized part is what is visible/audible in the language in question;² the non-italicized capitalized word (or words) indicates what has arguably been deleted.

- 2) at the age of seven YEAR(S)
- 3) Mary is now seven AT, AGE, YEAR(S)
- 4) Sono le sette ORE (Italian 'are the seven HOURS' = 'it's seven o' clock)
- 5) They won the game with two home runs in the seventh INNING
- 6) They went home early TO³
- 7) They don't have much money AMOUNT
- 8) John is far more intelligent than Bill BY
- 9) Marie est toute petite COMME (French 'Mary is LIKE all small' cf. Marie est petite comme tout)
- 10) *Una volta vistala, Gianni...* AVENDO (Italian 'one time HAVING seen-her, John...' = 'once he saw her, J...'
 - 11) a little sugar BIT

¹For discussion, see Chomsky (1965), and in particular his (p. 181) "what is involved in determining legitimacy of deletion is not identity but rather nondistinctness in the sense of distinctive feature theory"; also much subsequent work by him and by others.

²This list leaves unaddressed for each example the question of what other languages have the deletion in question.

³See Collins (2007).

- 12) The bridge collapsed CAUSE (plus a silent non-agentive causer)4
- 13) They have a seven-year old CHILD
- 14) New York CITY
- 15) the Mississippi RIVER
- 16) It must be five below zero DEGREE(S)
- 17) a red car COLOR
- 18) a small car SIZE
- 19) altro THING (Italian 'other THING')
- 20) Cosa? CHE (Italian 'WHAT thing?')
- 21) a select few PEOPLE
- 22) John is six three FOOT, INCH(ES)
- 23) We would like you to do it FOR
- 24) a number of books GOOD
- 25) three different wines KIND
- 26) that wide MUCH⁵
- 27) enough wine/people MUCH/MANY⁶
- 28) It's ten after three MINUTE, CLOCK
- 29) nel 2010 ANNO (Italian 'in-the YEAR 2010')
- 30) They went there PLACE⁷
- 31) never TIME
- 32) We must away GO⁸
- 2. Toward characterizing deletion/silence that is not antecedent-based.

The challenge is to find a maximally unified theory for deletions of the sort seen in (2)-(32) (and then to ask to what extent the deletions of (2)-(32) can be unified with those of (1)). Van Riemsdijk (2003, 260-261) clearly sets out the task for specified (antecedentless) deletion in these terms:

(33) "...a set of more general questions about specified deletion (or specified ellipsis, or specified zero formatives) whose answers will ultimately constitute a theory of such elements...What is the range of elements that can be represented by empty formatives?...What are the ingredients of Licensing Theory? In particular, what counts as a potential licenser and what are the conditions on the syntactic proximity between the licenser and the licensee?..."

Although van Riemsdijk (2003, 261) takes his silent GO (in Swiss German) to be an instance of a non-functional element, let me take light verbs (and light nouns) to be functional elements, in which case we can consider the following restriction as a first approximation:

⁴Cf. Kayne (2009). Note, in this regard:

i) The flowers are in the kitchen on purpose. with, arguably, a silent CAUSE and a silent agent.

⁵Cf. Bresnan (1973, 323).

⁶Cf. Jackendoff (1977, 152).

⁷Cf. Katz and Postal (1964, 133).

⁸Cf. van Riemsdijk (2002).

(34) Antecedentless deleted/silent elements are limited to the functional part of the lexicon.

The restriction stated in (34) may seem odd for *inning* in (5) above, since *inning* is, in American English, essentially limited to baseball contexts. However, Jean-Yves Pollock (p.c.) has made an arguably relevant suggestion involving silent PART for the case of:

(35) two thirds of the pie

The idea would be that we have:

(36) two third PARTs of the pie

If so, then two home runs in the seventh might be:

(37) two home runs in the seventh INNING PART

with INNING a modifier of PART, with PART directly satisfying (34), and with INNING itself perhaps counting as functional in a baseball context.

Silent INNING is of additional interest when it comes to the question of characterizing licensing conditions for deleted/silent elements (of the antecedentless type). Consider the following:

- (38) Our baseball team won the game with two home runs in the seventh (inning).
- (39) Our baseball team won the game with two seventh *(inning) home runs.

This contrast might suggest a right-branch vs. left-branch effect. But note:

- (40) Our baseball team won the game with two top of the seventh (inning) home runs. The contrast between (39) and (40) suggests, instead, that what is at issue is whether or not there is a definite article present that immediately precedes *seventh*, as there is in (40) (and in (38)), but not in (39). If so, there may be a link to the Italian-French contrast seen in:
 - (41) Sono le sette. ('are the seven' = (4) = 'it's seven o'clock')
 - (42) Il est sept *(heures).9

by virtue of which Italian, in the context of the definite article le allows silent ORE:

(43) sono le sette ORE

In contrast, French does not allow silent HEURES in (42), which contains no definite article.

As for the question why the presence of a definite article would make a difference in these cases, it might be that the definite article reflects the presence of an additional phase into the Spec of which *inning* and *ore* can move and become silent in the manner of Kayne (2006).

3. Ever silent elements.

A third type of deletion/silence involves elements that, unlike those previously discussed, are associated with no phonology elsewhere, i.e. elements which are never otherwise pronounced. There are two subcases. In the first, the silent element in question is not pronounced anywhere in the language in question, though it may be

i) *II est les sept (heures).

is arguably related via a definiteness effect to the presence of overt expletive *il*. On what definiteness effects might themselves be related to, see Kayne (2019a; to appear).

⁹The fact that French doesn't allow a definite article here:

pronounced in other languages. In the second subcase, the silent element in question is not pronounced in any language at all.

The first subcase is exemplified by the Topic head that is pronounced in Gungbe but not ever pronounced, though present, in Italian (or English), along the lines of Rizzi (1997).¹⁰ The second subcase, perhaps illustrated by little *n*, makes one wonder if the element in question is well-founded (unless a principled reason can be discovered as to why it remains unpronounced in all languages).

4. Inalienable possession with a definite article.

Returning to what is central to this paper, namely to antecedentless deletions/silent elements, let us consider sentences involving inalienable possession, in particular those with a definite article apparently in place of a possessive pronoun, as in:

(44) The ball hit John in the ankle.

(There are a wider range of possibilities for such sentences in French and Italian, probably for reasons (having to do with datives and with reflexive clitics) that are at least partly independent of the definite article question.)

In examples such as (44), it is understood, even though there is no visible possessive pronoun, that the ankle in question is John's, i.e. is a part of John's body. It is therefore natural to think in terms of possessor raising or possessor deletion. ¹¹ But that by itself is not sufficient to account for the following contrast: ¹²

- (45) The ball hit John in the ankle, which is an extremely important part of the human body.
- (46) The ball hit John in his ankle (*?which is an extremely important part of the human body).

When the definite article *the* is present, a non-restrictive relative is allowed that has a kind of generic interpretation. This is much less, if at all, possible in the presence of *his*. The generic interpretation of the relative in (45) is evidently, at first glance surprisingly, compatible with our understanding the ankle in question to be one of John's.

My proposal will adopt a familiar sort of idea, namely that (45) contains a deleted/silent *his*. ¹³ Yet I will crucially take this silent *his* not to be part of the head of the non-restrictive. This is shown for (45) in the following (with capitals again indicating silence/deletion):

(47) the ball hit John in HIS TOKEN OF the ankle, which is an extremely important part of the human body.

In (47), the 'head' of the non-restrictive relative is the phrase *the ankle*. ¹⁴ There is a silent/deleted HIS present in (47), but that HIS is the possessor not of pronounced

¹⁰On Topic heads from a partially different perspective, see Kayne (2016, sect. 13).

¹¹Cf. Landau (1999), among many others.

¹²Cf. Kayne (1975, chap.2, note 119).

¹³The discussion of inalienable possession in Kayne (1975, sect. 2.15) didn't follow this approach, while prematurely rejecting those of Langacker (1968) and Fillmore (1968, 67ff.).

¹⁴With what would seem to be a non-expletive *the*, contrary, if transposed to French, to Vergnaud & Zubizarreta (1992, 615).

ankle, but rather of silent TOKEN (or INSTANCE or COPY, with a possible link to classifiers). 15

The analysis in (47) provides an account of certain facts having to do with number. Consider the following contrast:

- (48) The bees were biting them on the hands/*heads.
- (49) The bees were biting them on their hands/heads.

With the definite article in (48), *hands* is possible but not *heads* (unless one allows for two-headed beings). Whereas in (49), with possessive *their*, plural *heads* is fine (even with one head per person). Given (47), the contrast in (48) reduces to the contrast seen in the following (cf. Vergnaud & Zubizarreta (1992, 619)):

- (50) The hands/*heads are an extremely important part of the human body.
 - This is so as follows. In (48) with *hands*, we have:
- (51) The bees were biting them on THEIR TOKENS OF the hands. This is well-formed, and could be extended with a non-restrictive relative of the sort seen above in (45), yielding the sentence:
- (52) The bees were biting them on the hands, which are an extremely important part of the human body.
- which is in turn associated with:
- (53) The bees were biting them on THEIR TOKENS OF the hands, which are an extremely important part of the human body.

However, the version of (48) with *heads* would correspond to the ill-formed:

- (54) *The bees were biting them on THEIR TOKENS OF the heads, which are an extremely important part of the human body.
- whose ill-formedness rests on that of:
- (55) *The heads are an extremely important part of the human body. (As before, strictly speaking, (55) is (irrelevantly) well-formed, but requires that human bodies have more than one head.)

Possible, on the other hand, in contrast to (48), is:

- (56) The bees were biting them on the head.
- with singular *head*, and with the analysis:

(57) The bees were biting them on THEIR TOKEN(S) OF the head. 16

The analysis suggested in (47) also provides an account of the restriction concerning adjectives seen in:

- (58) The bees were biting him on his (sunburned) nose.
- (59) The bees were biting him on the (*sunburned) nose.

i) Would you mind picking up the arm that's lying on the floor?

On the long-term question of the choice between TOKEN, INSTANCE and COPY, cf. Kayne (2014, sect. 14) on the choice between MEANT, EXPECTED and SUPPOSED.

On classifiers in European languages, cf. Cinque and Krapova (2007).

¹⁶On the question whether or not to take silent TOKEN to be plural, see Kayne (2003) on YEAR(S).

¹⁵On 'token', cf. Vergnaud & Zubizarreta (1992), although the present use of 'token' is more syntactic than theirs, and does not involve lexical ambiguity, or require recourse to L-structure; in particular I take there to be a possessor present (e.g. a statue) even in sentences like:

With the definite article, a non-restrictive adjective is not possible, ¹⁷ in a way that now reduces to the impossibility of such non-restrictive adjectives in generic sentences of the sort seen in:

- (60) The (*sunburned) nose is an extremely important part of the human body.
- On the other hand, restrictive adjectives like *left, right, upper, lower* are possible with *the*. as in:
 - (61) The bees bit him on the left arm.

This can now be seen to be tied to:

- (62) The left arm is an extremely important part of the human body.
- The adjective *left* in (61) need not be stressed. In this respect, (61) contrasts with:
- (63) The bees bit him on the broken arm.
- where to my ear *broken* must be stressed, suggesting that the use of *the* in (63) is not quite the same as in (61) or (56), as it must not be, given:
- (64) *The broken arm is an extremely important part of the human body.

Rather there must be, in a way that remains to be spelled out, a link to:

- (65) The bees bit him on the arm that was broken/*left/*right/*upper/*lower. and/or to (in a hospital context):
- (66) We'll have to operate on the arm first.
- with (63) perhaps not involving TOKEN.

5. Ringo

The proposal of the previous section, exemplified in (47), repeated here:

- (67) the ball hit John in HIS TOKEN OF the ankle, which is an extremely important part of the human body.
- elucidates the apparent ambiguity concerning ankle found in:
- (68) The ball hit John in the ankle, which is an important part of the human body. Rather than thinking that *ankle* in such sentences is ambiguous in the sense of simultaneously being generic and specific, we can now, following (47)/(67), take *ankle* itself in such sentences to be neither generic nor specific. The generic facet of such sentences depends on the *the* that is present preceding *ankle*, and the specific facet on the silent HIS TOKEN. In effect, if (47)/(67) is on the right track, the apparent ambiguity in question is to be attributed to different parts of the associated syntactic structure.

It may be that a similar approach is called for in sentences of the sort studied by Jackendoff (1992), e.g.:

- (69) ?All of sudden Ringo stumbled and crashed into himself. in which *himself* is understood as a statue of Ringo. Jackendoff notes the interesting contrast with the reverse case illustrated in:
- (70) *Ringo toppled over and fell on himself. which is impossible if *Ringo* is the statue and *himself* the person. Sense can arguably be made of this contrast, if we take (69) to contain a silent STATUE/COPY, as in:
- (71) ?Ringo stumbled and crashed into THE STATUE/COPY OF himself From this perspective, (70) would be possible only if the following were possible:
 - (72) *THE STATUE/COPY OF Ringo toppled over and fell on himself.

¹⁷Cf. Authier (1988).

The key difference is that in (69)/(71) *Ringo* c-commands *himself*, whereas in (70)/(72) *Ringo* does not c-command *himself*. Thus *himself* in (69) meets the demands of Condition A of Binding Theory, whereas *himself* in (71), despite appearances, does not.

6. book

The initially paradoxical character of (68), in which *ankle* seems simultaneously generic and specific, has a partial counterpart in sentences like:

(73) Mary's latest book, which took her almost a year to write, weighs more than two pounds in hardcover.

in which *book* appears to simultaneously be both concrete (in weighing more than two pounds) and abstract (in taking almost a year to write).¹⁸

In the spirit of the analysis of (68) suggested in (67), we can take (73) to be analyzable as:

(74) A TOKEN/COPY OF Mary's latest book, which took her almost a year to write, weighs more than two pounds in hardcover.

In (73)/(74), then, the non-restrictive relative has as its 'head' the phrase *Mary's latest book*. At the same time, the VP headed by *weighs* has as its subject the larger, distinct phrase *A TOKEN/COPY OF Mary's latest book*. The content facet of *book* in (73) is associated with the phrase *Mary's latest book*; the physical object facet, on the other hand, is associated with the distinct phrase *A TOKEN/COPY OF Mary's latest book*.

If this proposal is on the right track, then there is no need to attribute ambiguity of the content vs. physical object type to the noun *book* itself.

In effect, as in all the antecedentless deletion examples of (2)-(32) above, the presence of silent elements (whose cross-linguistic licensing conditions, needless to say, need to be looked into in much more detail) simplifies the interpretation, in the sense that the interpretive component can now read, in a direct way, more off the syntax than it could have in the absence of those silent elements.

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¹⁸Cf. Chomsky's (1995, 236) less syntactic approach in terms of "semantic properties...of a broad range of nominal expressions, perhaps all". The exact range of the text proposal here, formulated in partially syntactic terms, using TOKEN/COPY, remains to be determined.

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