

# English Partitives and Double Genitives

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## 1 Introduction

This paper explores the properties of the English *double genitive* construction<sup>1</sup> (example (1a)) in comparison with the *partitive construction* (example (1b)).

- (1) a. two books of John's
- b. two of John's books

Barker (1998) shows that the constructions in (1a) and (1b) share a number of properties, and that they differ from the superficially similar *post-nominal genitive* construction in (2).

- (2) friend of John

Barker (1998) proposes that the *of* in (1a) is semantically similar to the *of* in (1b) and different from the *of* in (2). I take this a step further and suggest that the *of* in (1a) is *the same* as the *of* in (1b). I also show that, while the proposal of Barker (1998) requires additional stipulations (Storto (2000)), my proposal correctly predicts some *differences* between the partitive and the double genitive.

Empirical generalizations from Barker (1998) are given in section 2, and the proposal made by Barker (1998) is presented in section 2.5. My proposal is presented in section 3, followed by a discussion of its similarities with Barker (1998) in terms of empirical coverage. Section 4 presents some differences between partitives and double genitives (mostly discussed by Storto (2000)), and shows that my proposal accounts for them more easily than Barker (1998).

## 2 Partitives vs. Double Genitives vs. Post-Nominal Genitives

Barker (1998) shows that double genitives pattern with partitives, and differently from post-nominal genitives, in a number of ways.<sup>2</sup>

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<sup>1</sup>I use this as a standard way of referring to the construction, with no theoretical implications intended.

<sup>2</sup>Barker (1998) cites earlier literature for many of the observations. All the examples in this section are based on Barker (1998).

## 2.1 Anti-Uniqueness Effect

Unlike post-nominal genitives, partitives and double genitives exhibit an *anti-uniqueness effect*. They cannot be combined with a definite determiner without receiving additional modification.

- (3) a. \*Jane met the [one of her lawyer's sons].  
b. Jane met the [[one of her lawyer's sons] who goes to MIT].
- (4) a. \*Jane met the [son of her lawyer's].  
b. Jane met the [[son of her lawyer's] who goes to MIT].
- (5) a. Jane met the [son of her lawyer].  
b. Jane met the [[son of her lawyer] who goes to MIT].

## 2.2 Partitive Constraint

Partitives and double genitives obey the *Partitive Constraint* (Ladusaw (1982) via Barker (1998)), while post-nominal genitives do not.

**Partitive Constraint:** The NP in a partitive phrase always denotes an individual.

This means that (certain types of) QP's cannot be used in the constructions for which the Partitive Constraint applies.

- (6) a. \*one of both friends  
b. \*friend of both men's  
c. friend of both men

## 2.3 Proper Partitivity

Unlike post-nominal genitives, partitives and double genitive require *proper partitivity*. That is, the referent of the whole phrase must be a proper subset of the referent of the embedded phrase. Thus while example (7c) is fine, examples (7a) and (7b) are odd because they convey that the speaker's lawyer has more than two parents.

- (7) a. #I met two of my lawyer's parents (who like golf).  
b. #I met two/the parents of my lawyer's (who like golf).  
c. I met the parents of John (who like golf).

## 2.4 Non-Relational Nouns

Partitives and double genitives can combine with non-relational nouns, while post-nominal genitives cannot.

- (8) a. one of Mary's sticks  
b. sticks of Mary's  
c. \*sticks of Mary

Note that the discussion below focuses on constructions with non-relational nouns. We will not consider how exactly the proposals should handle relational nouns.

## 2.5 Analysis of Barker (1998)

Barker (1998) concludes that the similarities between the post-nominal genitive and the double genitive are superficial. Contra various authors, Barker (1998) analyzes the double genitive as a variant of the partitive construction, and not as a variant of the post-nominal genitive.<sup>3</sup>

For Barker (1998), the work in putting together the semantics of a partitive and of a double genitive is done by *of* ( $\text{of}_{\text{PART}}$  in the former, and  $\text{of}_{\text{POSS-PART}}$  in the latter). Barker (1998) proposes that the partitive example in (9a) has the syntactic structure in (9b) and the semantic structure in (9c).

- (9) a. (two) of John's tools  
b. (two)  $\emptyset_N$  [ $\text{of}_{\text{PART}}$  [John's tools]]  
c.  $[[\text{of}_{\text{PART}}]([\text{John's tools}])](\emptyset_N)$

For Barker (1998), *John's tools* denotes a plural individual, i.e. all of John's (relevant) tools.<sup>4</sup>  $\emptyset_N$  simply maps an individual to **true**, with the following denotation given by Barker (1998).

$$(10) \quad [[\emptyset_N]] = \lambda x . x = x$$

The meaning of the partitive phrase as a whole is put together by  $\text{of}_{\text{PART}}$ , whose denotation is given in (11). The notation “ $y < x$ ” indicates that the individual denoted by  $y$  is contained in the individual denoted by  $x$ .

$$(11) \quad [[\text{of}_{\text{PART}}]] = \lambda x . \lambda P . \lambda y . P(y) \text{ and } y < x$$

The following denotation is thus obtained for the partitive *of John's tools*.

$$(12) \quad [[\emptyset_N \text{ of}_{\text{PART}} \text{ John's tools}]] = [[\text{of}_{\text{PART}}]([\text{John's tools}])](\emptyset_N) = \\ [\lambda x . \lambda P . \lambda y . P(y) \text{ and } y < x](\mathbf{John's-tools})([\lambda x . x = x]) = \\ [\lambda y . [y = y] \text{ and } y < \mathbf{John's-tools}] \approx [\lambda y . y < \mathbf{John's-tools}]$$

The structure Barker (1998) assigns to double genitives (example in (13a)) is shown in (13b) (syntactic) and (13c) (semantic).

<sup>3</sup>We will not discuss the semantics of post-nominal genitives here.

<sup>4</sup>I will use the terms “individual” and “set” interchangeably.

- (13) a. tools of John's  
b. tools [of<sub>POSS-PART</sub> John's]  
c. [[of<sub>POSS-PART</sub>](**[John's]**)(**[tools]**)

The denotation for *of* in double genitive constructions is different from the denotation in partitives.

- (14) [[of<sub>POSS-PART</sub>]] =  $\lambda \mathcal{D} \lambda P \lambda y . P(y)$  and  $y < \mathcal{D}(P)$

The following denotation is thus obtained for the double genitive *tools of John's*.

- (15) [[tools of John's]] = [[of<sub>POSS-PART</sub>](**[John's]**)(**[tools]**) =  
[ $\lambda P . \lambda y . P(y)$  and  $y < \mathbf{[John's]}(P)$ ](**[tools]**) =  
[ $\lambda y . \mathbf{tools}(y)$  and  $y < \mathbf{John's-tools}$ ]  $\approx$  [ $\lambda y . y < \mathbf{John's-tools}$ ]

Assuming that an individual is always the same as itself, and that John's tools have to be tools, the denotation of the double genitive is equivalent to the denotation of the partitive.

- (16) [[of John's tools]] = [[tools of John's]] =  $\lambda y . y < \mathbf{John's-tools}$

### 3 Alternate Analysis

My analysis is based on Barker (1998), but is in some ways simpler. I propose that there is only one partitive *of*, not two. The denotation of this of<sub>PART</sub> is given in (17). I use the notation “ $y \cap z$ ” for the maximal (possibly plural) individual included in both  $y$  and  $z$ .

- (17) [[of<sub>PART</sub>]] =  $\lambda x . \lambda P . \lambda z . z < [x \cap D_{\text{DEF}}(P)]$

$D_{\text{DEF}}(P)$  is a definite determiner that is built into the denotation of of<sub>PART</sub>. It converts a property into the unique maximal individual satisfying that property.

- (18) [[D<sub>DEF</sub>]] =  $\lambda P .$  the unique maximal individual  $x$  such that  $P(x)$  is true

Consider what happens when  $D_{\text{DEF}}$  is applied to a trivial property like the  $\emptyset_N$  of Barker (1998), which for me will actually be a  $\emptyset_{\text{NP}}$  with the trivial denotation of type  $\langle e,t \rangle$  given in (19).

- (19) [[ $\emptyset_{\text{NP}}$ ]] =  $\lambda x . \mathbf{true}$

- (20) [[D<sub>DEF</sub>](**[ $\emptyset_{\text{NP}}$ ]])] = [ $\lambda P .$  the unique maximal individual  $x$  s.t.  $P(x)$  is true]( $\lambda x . \mathbf{true}$ )  
= [the unique maximal individual  $x$  s.t. **true**] = the unique maximal individual**

For convenience, I will call the unique maximal individual **things**; this is in no way meant to exclude abstract concepts, etc. The partitive in (21a) has the structure given in (21b) and the denotation given in (21c).

- (21) a. (two) of John's tools  
 b. (two)  $\emptyset_{NP}$  [of<sub>PART</sub> [John's tools]]  
 c.  $\llbracket$ of John's tools $\rrbracket = \llbracket$ of<sub>PART</sub> $\rrbracket(\llbracket$ John's tools $\rrbracket)(\llbracket$  $\emptyset_{NP}$  $\rrbracket) =$   
 $[\lambda x . \lambda P . \lambda z . z < [x \cap D_{DEF}(P)]](\mathbf{John's-tools})(\lambda x . \mathbf{true}) =$   
 $[\lambda z . z < \mathbf{John's-tools} \cap \mathbf{things}] \approx [\lambda z . z < \mathbf{John's-tools}]$

We have thus derived essentially the same meaning as Barker (1998) for the partitive construction, using a similar set of assumptions about its structure. I will now show that there is no need for a separate denotation for *of* in double genitive constructions. I propose that, like the partitive, the double genitive contains a null nominal.

- (22) a. (two)  $\emptyset_{NP}$  [of<sub>PART</sub> [John's tools]] (partitive)  
 b. tools [of<sub>PART</sub> [John's  $\emptyset_{NP}$ ]] (double genitive)

The denotation of [John's  $\emptyset_{NP}$ ] will be discussed in more detail in the section 4, but for now it suffices to say that it [John's  $\emptyset_{NP}$ ] denotes the set of things that are John's. (As above, the word "things" is not intended to bear any semantic weight.) The semantics I propose for the double genitive in (23a), with the structure in (23b), is given in (23c).

- (23) a. tools of John's  
 b. tools [of<sub>PART</sub> [John's  $\emptyset_{NP}$ ]]  
 c.  $\llbracket$ tools of John's $\rrbracket = \llbracket$ of<sub>PART</sub> $\rrbracket(\llbracket$ John's  $\emptyset_{NP}$  $\rrbracket)(\llbracket$ tools $\rrbracket) =$   
 $[\lambda x . \lambda y . \lambda P . z < [x \cap D_{DEF}(P)]](\mathbf{John's-things})(\llbracket$ tools $\rrbracket) =$   
 $[\lambda z . z < \mathbf{John's-things} \cap \mathbf{tools}] \approx [\lambda z . z < \mathbf{John's-tools}]$

Assuming that John's things that are tools are John's tools, we find that at a first approximation, my account yields the same denotation for the partitive and the double genitive. This is also the denotation derived by Barker (1998).

- (24)  $\llbracket$ of John's tools $\rrbracket = \llbracket$ tools of John's $\rrbracket = \lambda y . y < \mathbf{John's-tools}$

The denotation of the partitive and the double genitive under my proposal are thus essentially the same, and also essentially the same as the denotation derived by Barker (1998). The obvious benefit of the new proposal is that only one denotation for partitive *of* is required. This of<sub>PART</sub> bears slightly more semantic weight than the of<sub>PART</sub> proposed by Barker (1998), as its denotation includes D<sub>DEF</sub>. Another difference between the proposals is that my version of the double genitive contains a null nominal. There is no reason to assume that such a nominal would be present in partitives (as Barker (1998) requires) but not in double genitives.

### 3.1 Empirical Coverage

Barker (1998) argues that his proposal captures the empirical generalizations discussed above. In this section, I briefly go over his reasoning, which applies equally well to my proposal.

Recall that under both proposals we have (approximately) the following denotation for the partitive and the double genitive.

$$(25) \quad \llbracket \text{of John's tools} \rrbracket = \llbracket \text{tools of John's} \rrbracket = \lambda y . y < \mathbf{John's-tools}$$

**Anti-Uniqueness Effect:**  $\llbracket (\text{One}) \text{ of John's tools} \rrbracket / \llbracket \text{tool of John's} \rrbracket$  is true of a proper subset of John's tools. This proper subset cannot be uniquely determined without further specification. The partitive and the double genitive cannot denote the unique maximal set of John's tools.

**Partitive Constraint:** The denotation above requires the DP (such as *John's tools*/*John's*  $\emptyset_{\text{NP}}$ ) inside the possessor construction to be an individual. See Barker (1998) for more detailed discussion.

**Proper Partitivity:** Proper partitivity is obtained because by assumption  $\llbracket (\text{One}) \text{ of John's tools} \rrbracket / \llbracket \text{tool of John's} \rrbracket$  is only satisfied by an individual that is a proper subset ( $<$ , not  $\leq$ ) of John's tools.

**Non-Relational Nouns:** The denotational above are based on pre-nominal possessives, which do not require the possessee to be a relational noun (*John's tools*, *Mary's stick*, etc.).

In the next section, I highlight the differences between the two proposals.

## 4 Differences between Partitives and Double Genitives

We have so far focused on the similarities between partitives and double genitives, but it turns out that there are some differences as well.<sup>5</sup> Differences between the two constructions are discussed by Storto (2000). The analysis of Storto (2000) is based on Barker (1998) and (as the author admits in the paper) requires some stipulations; I will not present it here (see Storto (2000) for details).

### 4.1 Possessor-Possessee Relationship

Storto (2000) shows that the conditions on the relationship between the possessor and the possessed nominal differ for partitives and double genitives.

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<sup>5</sup>One difference between the two constructions is illustrated in (i).

- (i) a. I read (two) books of John's.  
b. I read \*(two) of John's books.

I will not discuss it here.

- (26) Yesterday John and Paul were attacked by (different) groups of dogs. (Storto (2000) (3))
- a. ... Unfortunately, some of John's dogs were pit bulls.
  - b. #... Unfortunately, some dogs of John's were pit bulls.

Storto (2000) points out that in the partitive example in (26a) the possessor can stand in the *attacked-by* relationship to the possessee. In the double genitive example in (26b), however, only the ownership relationship between the possessor and the possessee is available.

We now need to take a brief detour and discuss good old pre-nominal possessor constructions, the denotations of which are part of the partitive and double genitive denotations above. Analyses of such constructions (Partee and Borschev (2003), Vikner and Jensen (2002), etc.) commonly include a free relation variable. Thus, setting aside questions about compositional derivation, *John's dogs* is argued to have the following denotation, where R is a relationship variable.

- (27)  $\llbracket \text{John's dogs} \rrbracket = \lambda x . \text{dogs}(x) \text{ and } R(\text{John})(x)$

There are some restrictions on the values that can be assigned to the relationship variable. For example, as pointed out in Barker (2008), while the possessee can denote a part of the possessor, a possessor cannot in general denote a part of the possessee.

- (28) a. a dog's tail  
b. #a tail's dog

Now, recall the denotations of partitives and of double genitives derived under my analysis.

- (29) a.  $\llbracket \text{of John's dogs} \rrbracket = \lambda z . z < \mathbf{John's-dogs} \cap \mathbf{things}$  (partitive)  
b.  $\llbracket \text{dogs of John's} \rrbracket = \lambda z . z < \mathbf{John's-things} \cap \mathbf{dogs}$  (double genitive)

For the partitive construction, we expect the relation between *John* and *dogs* to be able to take on the full range of values available to the relation variable in the plain possessive construction *John's dogs*. In the context given, the *attacked-by* relation is available for the pre-nominal possessive construction, and thus for the partitive construction.

- (30) Yesterday John and Paul were attacked by (different) groups of dogs. Unfortunately, John's dogs were pit bulls. (Storto (2000) (9))

In the double genitive construction, on the other hand, we expect the relationship variable to take on the range of values available to the relation variable in the possessive construction *John's things* (or something like it). Even in the given context, the *attacked-by* relationship will not be a possible relationship between John and his things. The possession relation seems to be the most salient, though others may also be possible.

- (31) John's things  $\neq$  things John was attacked by

The difference between partitives and double genitives is thus immediately accounted for: the partitive refers to a subset of *John's dogs*, which may denote dogs that attacked John, while the double genitive refers to a subset of *John's things*, which may not denote things that attacked John.

Note that if the *attacked-by* relationship between *John* and *things* is made salient, the contrast between partitives and double genitives seems to disappear (though admittedly the examples in (32) are odd to begin with).

- (32) Yesterday John and Paul were attacked by various entities.
- a. ... Unfortunately, some of John's entities were clouds of mosquitoes.
  - b. ... Unfortunately, some entities of John's were clouds of mosquitoes.

The analysis proposed by Barker (1998) does not account the facts presented by Storto (2000) without further assumptions, as for Barker (1998) both the partitive and the double genitive refer to subsets of *John's dogs*.

- (33) Barker (1998)
- a.  $\llbracket \text{of John's dogs} \rrbracket = \lambda y . [y=y] \text{ and } y < \mathbf{John's-dogs}$  (partitive)
  - b.  $\llbracket \text{dogs of John's} \rrbracket = \lambda y . \text{dogs}(y) \text{ and } y < \mathbf{John's-dogs}$  (double genitive)

## 4.2 Numerals

Another contrast between partitives and double genitives is shown in (34).<sup>6</sup>

- (34) a. two of John's four dogs (Storto (2000) (14))  
b. \* two dogs of John's four

Under my account, we have the following denotations.

- (35) a.  $\llbracket \text{of John's four dogs} \rrbracket = \lambda z . z < \mathbf{John's-four-dogs} \cap \mathbf{things}$  (partitive)  
b.  $\llbracket \text{dogs of John's four} \rrbracket = \lambda z . z < \mathbf{John's-four-things} \cap \mathbf{dogs}$  (double genitive)

Consider the possessives that are part of the two denotations in (35).

- (36) a. John's four dogs  
b. #John's four things

Assume that the relevant relationship between the possessor and the possessee is ownership. (Other relations are possible but this is not relevant for the discussion at hand.) Then (36a) conveys that

<sup>6</sup>Another contrast presented by Storto (2000):

- (i) a. two of every child's dogs (Storto (2000) (14))  
b. \*two dogs of every child's

Two avoid having to go into quantifier semantics, I will not discuss this contrast.

John owns (exactly) four dogs, and (36b) conveys that John owns (exactly) four things. Note that (36b) sounds quite odd, as it is reasonable to suppose that most people have more than four “things”. A pre-nominal possessive construction is generally used as a definite expression, and a special context would be required for four things belonging to John to be uniquely determined. The oddness of (36a) makes *two dogs of John’s four* odd as well.

This intuition can be made more precise. With the plural individual ontology we’ve been assuming (following Barker (1998)), the denotation of *four* could reasonably be supposed to be the following.

$$(37) \quad \llbracket \text{four} \rrbracket = \lambda x . |x| \geq 4$$

The denotation of *four N* and *John’s four N* is shown in (38).

$$(38) \quad \begin{array}{l} \text{a. } \llbracket \text{four N} \rrbracket = \lambda x . N(x) \text{ and } |x| \geq 4 \\ \text{b. } \llbracket \text{John’s four N} \rrbracket = \lambda x . N(x) \text{ and } |x| \geq 4 \text{ and } R(\text{John})(x) \end{array}$$

If we assume that the individual required as part of the denotation of a double genitive is obtained from the description such as that in (38b) by use of a definite determiner, we obtain the following more precisely spelled out denotations.

$$(39) \quad \begin{array}{l} \text{a. } \llbracket \text{of John’s four dogs} \rrbracket = \lambda z . z < [\text{the unique maximal individual } x \text{ s.t. } \text{dogs}(x) \text{ and } |x| \geq 4 \text{ and } R(\text{John})(x)] \cap \mathbf{things} \quad (\text{partitive}) \\ \text{b. } \llbracket \text{dogs of John’s four} \rrbracket = \lambda z . z < [\text{the unique maximal individual } x \text{ s.t. } \text{things}(x) \text{ and } |x| \geq 4 \text{ and } R(\text{John})(x)] \cap \mathbf{dogs} \quad (\text{double genitive}) \end{array}$$

Barring the pragmatically very odd possibility that John only has four things, the unique maximal individual described in the denotation of the double genitive will have (significantly) more than four atoms. However, the use of *four N* conveys a strong implicature that there are *exactly* four N’s. This makes the double genitive construction under discussion sufficiently odd to be judged ungrammatical. No problem arises for the partitive, as the possibility of John having exactly four dogs is pragmatically reasonable, and is indeed conveyed to hold by the use of the partitive construction discussed.

If this account of the ungrammaticality of *two dogs of John’s four* is correct, we expect the expression to be much improved when it is pragmatically plausible that John only had four things. I am not sure what exactly the judgments are, but the examples to be considered are along the lines of (40) and (41).

$$(40) \quad \begin{array}{l} \text{John owns just four things.} \\ \text{a. } ? \dots \text{Two of John’s four things are from his grandfather.} \\ \text{b. } ?? \dots \text{Two things of John’s four are from his grandfather.} \end{array}$$

- (41) John owns just four things in the whole world, and they are all shirts.  
a. ... Two of John's four shirts are from his grandfather.  
b. ?... Two shirts of John's four are from his grandfather.

Unfortunately, there is a confounding factor in (41) (and (40) as well), as the mention of, e.g., shirts might make elision possible.

- (42) John owns four shirts. Two shirts of John's four ~~shirts~~ are from his grandfather.

More detailed investigation is necessary in order to determine whether the badness of example (34b) should indeed be attributed to pragmatic oddness.

Under the account of Barker (1998), no relevant distinction between partitives and double genitives is made.

- (43) Barker (1998)  
a.  $\llbracket \text{of John's four dogs} \rrbracket = \lambda y . [y=y] \text{ and } y < \mathbf{John's-four-dogs}$  (partitive)  
b.  $\llbracket \text{dogs of John's four} \rrbracket = \lambda y . \text{dogs}(y) \text{ and } y < \mathbf{John's-four-dogs}$  (double genitive)

### 4.3 Reference

Storto (2000) proposes that the embedded DP in the double genitive construction is “indefinite” and that double genitives are consequently “non-specific,” citing evidence like the following.

- (44) Some of John's dogs and some of Peter's dogs got loose in the street yesterday.  
a. ... Unfortunately, two of John's dogs were hit by a passing car.  
b. %... Unfortunately, two dogs of John's were hit by a passing car.

Speakers apparently disagree as to whether the dogs in (44b) could be subset of the dogs described in the first sentence. Under my account, the variable judgments for (44b) can be explained if we suppose that for some speakers (but perhaps not for other speakers) (44a) is in Gricean competition with (44b). The relevant denotations are repeated from above.

- (45) a.  $\llbracket \text{of John's dogs} \rrbracket = \lambda z . z < \mathbf{John's-dogs} \cap \mathbf{things}$  (partitive)  
b.  $\llbracket \text{dogs of John's} \rrbracket = \lambda z . z < \mathbf{John's-things} \cap \mathbf{dogs}$  (double genitive)

In the partitive construction, the contextually salient referent of **John's-dogs** will be the set of John's dogs that got loose on the street yesterday. Thus, as is appropriate in the context, (44a) says that two of John's dogs that got loose on the street yesterday were hit by a passing car. On the other hand, the context does not restrict **John's-things** in the denotation in (45b), so that the double genitive construction simply says that two of John's dogs were hit by a passing car. These two dogs could be, but don't have to be, in the set of dogs that got out loose. If there is Gricean competition between the partitive and the double genitive, the Maxim of Quantity would specify

that only the partitive can appropriately be used in the given situations; this explains the oddness of the double genitive for some speakers. For other speakers, apparently there is no competition between the two constructions, so that both are possible.

Under the account of Barker (1998), one would need to say something further to account for the data in this section. (See Storto (2000) for a suggestion.)

- (46) Barker (1998)
- a.  $\llbracket \text{of John's dogs} \rrbracket = \lambda y . [y=y]$  and  $y < \mathbf{John's-dogs}$  (partitive)
  - b.  $\llbracket \text{dogs of John's} \rrbracket = \lambda y . \text{dogs}(y)$  and  $y < \mathbf{John's-dogs}$  (double genitive)

#### 4.4 Presuppositionality

Finally, I want to point out another difference between partitives and double genitives that has a similar flavor. It turns out that a partitive construction like *of John's dogs* presupposes the existence of John's dogs, while the corresponding double genitive construction does not have such a presupposition. To show this, I use an example based on a test proposed by von Stechow (1998), which embeds the relevant construction in an environment where presuppositions project but there is no automatic presupposition of existence.

First note that an example like (47a) does not presuppose the existence of the subject of the *if* clause, while the definite article in (47b) triggers such a presupposition.

- (47) I don't know whether unicorns exist, but it will be great...
- a. if a unicorn is found.
  - b. #if the unicorn is found.

Now consider what happens when we embed partitives and double genitives in a similar construction.

- (48) I don't know whether John has any porn magazines, but there will be trouble...
- a. #if any of John's porn magazines are found.
  - b. if any porn magazines of John's are found.

The use of the partitive is odd when a presupposition of existence of John's porn magazines is explicitly denied, while the double genitive expression is fine. My proposal predicts this contrast: the denotation of the partitive *of John's porn magazines* includes the individual **John's-porn-magazines**, while the denotation of the double genitive does not.

- (49)
- a.  $\llbracket \text{of John's porn magazines} \rrbracket = \lambda z . z < \mathbf{John's-porn-magazines} \cap \mathbf{things}$  (partitive)
  - b.  $\llbracket \text{porn magazines of John's} \rrbracket = \lambda z . z < \mathbf{John's-things} \cap \mathbf{porn-magazines}$  (double genitive)

The double genitive presupposes the existence of John's things and of porn magazines, but not the

existence of porn magazines belonging to John, and is thus compatible with the above context.

Again, Barker (1998) does not capture this difference.

(50) Barker (1998)

- a.  $\llbracket \text{of John's porn magazines} \rrbracket = \lambda y . [y=y]$  and  $y < \mathbf{John's-porn-magazines}$
- b.  $\llbracket \text{porn magazines of John's} \rrbracket = \lambda y . \text{porn-magazines}(y)$  and  $y < \mathbf{John's-porn-magazines}$

On the account of Barker (1998), both the partitive and the double genitive presuppose the existence of John's porn magazines, and thus both are predicted to be bad in the context given.

## 5 Conclusion

In this paper, I have discussed the English partitive and double genitive constructions. I proposed a semantics for them (based on the proposal of Barker (1998)) that captures their similarities, as well as their differences. The two constructions include an identical denotation for  $\text{of}_{\text{PART}}$ , and are thus semantically very similar. However, because in partitives the possessor combines with a semantically meaningful NP, while in double genitives it combines with  $\emptyset_{\text{NP}}$ , various attested differences between the two constructions fall out of the account.

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