1. Introduction

Much research has been dedicated to identifying a parallelism between the nominal and verbal domains (e.g. Chomsky 1970, Abney 1987, Szabolcsi 1994, Hiraiwa 2005, Wiltschko 2014, among others).

- Parallelism has been proposed for syntactic structure (e.g. CP-DP parallelism).
- Parallelism has also been proposed for syntactic processes (e.g. Spec-head agreement).

In the verbal domain, restructuring appears to be a fairly common phenomenon cross-linguistically (Wurmbrand 2014, 2015, and many others). So far, however, it has only been identified in relation to the verbal domain.

**Question:** Is there a nominal correlate to verbal restructuring?

**This talk:** Yes: kind-words in English are a likely candidate for “restructuring nouns.”

**Roadmap:**
- **The kind-word generalization:** A kind-word (*kind, type, sort*) and the following noun (N2) must show identical features, provided both have count syntax.
- **Proposal:** The kind-construction can differ in terms of how much functional structure dominates the N2. The matching effect arises from a sharing of number between the kind-word and N2, particularly when N2 is count.
- **Restructuring:** This sharing of number is a restructuring effect. The kind-word combines with an N2 which is smaller than a DP, and the size of the N2 interacts with how number is realized.

2. The empirical basis of the kind-word generalization

The literature has reported a phenomenon of number matching with kind-words (*kind, type, sort*) in English (Carlson 1977: 211; Lehrer 1986: 122; Zamparelli 1998):
(1) Number matching with kind-words (*kind, type, sort*):
   a. This kind of rabbit, this type of car, this sort of rug
   b. These kinds of rabbits, these types of cars, these sorts of rugs
   c. *This kind of rabbits, *this type of cars, *this sort of rugs
   d. *These kinds of rabbit, *these types of car, *these sorts of rug

This section: We’re going to go deeper into this matching effect, and identify the conditions under which it holds. We start from the basic description below:

(2) Kind-word generalization (to be revised): The kind-word (*kind, type, sort*) and its accompanying noun (N2) match in number features.

Empirical domain:
- The study looks at the kind-construction in American English, and makes extensive use of the Corpus of Contemporary American English (Davies 2008). Corpus examples are marked with “COC_A,” followed by the source and year.

Disclaimer: Use of the corpus can only identify common features of the construction, not dialectal variation. Differences among speakers have not been addressed.
- The study is restricted to the three kind-words, *kind, type, and sort*. Other elements with a similar interpretation do not adhere to the kind-word generalization, and have been ignored:

(3) Similar meaning, but no matching effect:
   a. This family of insects is known to feed exclusively on prey. (COCA: AgricResrch 2007)
   b. Over time, this class of drugs increases bone mass and may induce disease remission. (COCA: OrthoNursing 2004)
   c. I teach a couple of classes that deal directly with this genre of films in one way or another. (COCA: NPR_TalkNation 2008)

2.1 When the kind-word and N2 are both count

Numerous examples surface where the kind-word and N2 match in number.

(4) Singular-singular combinations:
   a. What kind of idiot just sits here with that stuff going on? (COCA: FantasySciFi 2012)
   b. Another type of plan CPI Services could set up would involve assuming a customer’s past liabilities to free up funds. (COCA: Inc 1997)
   c. For years he had purchased one sort of shirt and one sort of necktie from the store, and it was obvious that he had plenty of both (COCA: Bk:TooSoontoTell 1995)
Plural-plural combinations:

a. But there are lots of good reasons to eat **both kinds of vegetables**. (COCA: ChildDigest 1998)

b. **What types of authors** do you assign in your courses? (COCA: WestHumRev 2015)

c. No, we made only **the most erudite and sophisticated sorts of mistakes**. (COCA: Atlantic 2012)

To give an indication of the frequency of such combinations, I present the table below:

### Table 1: Frequency of sg-sg, pl-pl combinations in the COCA

<table>
<thead>
<tr>
<th></th>
<th>sg-sg</th>
<th>pl-pl</th>
</tr>
</thead>
<tbody>
<tr>
<td>kind</td>
<td>86209</td>
<td>23449</td>
</tr>
<tr>
<td>type</td>
<td>24667</td>
<td>16720</td>
</tr>
<tr>
<td>sort</td>
<td>10037</td>
<td>4283</td>
</tr>
<tr>
<td>kinds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>types</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sorts</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: False positives have not been excluded. Use of a demonstrative (row 2) helps eliminate false positives like adverbials *sort of, kind of*

Note that many exceptions to the kind-word generalization do seem to exist. This is clear in the table below.

### Table 2: Frequency of sg-pl, pl-sg combinations in the COCA

<table>
<thead>
<tr>
<th></th>
<th>sg-pl</th>
<th>pl-sg</th>
</tr>
</thead>
<tbody>
<tr>
<td>kind</td>
<td>8767</td>
<td>6196</td>
</tr>
<tr>
<td>type</td>
<td>1777</td>
<td>7361</td>
</tr>
<tr>
<td>sort</td>
<td>2135</td>
<td>1013</td>
</tr>
<tr>
<td>kinds</td>
<td>6196</td>
<td>1013</td>
</tr>
<tr>
<td>types</td>
<td>7361</td>
<td>1013</td>
</tr>
<tr>
<td>sorts</td>
<td>1013</td>
<td>1013</td>
</tr>
</tbody>
</table>

Note: False positives have not been excluded.

These represent systematic exceptions to the matching effect, which I now address. Note that some data may remain unaccounted for, given that it was not feasible to categorize every example. What I discuss here are the common patterns.

### 2.2 Exception #1: When the N2 is mass or abstract

No matching occurs with mass or abstract nouns:

a. The next morning we motor out on a very different lake, the water surface devoid even of ripples. It’s **the kind of water** that causes havoc for low-flying pilots. (COCA: NaturalHist 2013)

b. And what I like about **this particular type of coffee**, it’s – it’s an arabica blend. (COCA: CBS_Morning 1999)
c. You know, they had the same sort of blood and DNA running through their vocal chords, you know, even though their voices were totally different. (COCA: NPR 2013)

(9) Mass nouns with a plural kind-word:

a. At Suez, some silty kinds of sand adhered to the buckets and were extracted with difficulty. (COCA: October 2003)

b. “They must be trying to make this hospital something else,” Mrs. Rodgers thought, “like the modern world with all those different types of coffee.” (COCA: AntiochRev 2002)


(10) Abstract nouns with a singular kind-word:

a. That’s the kind of love and support that helps you get over something like this. (COCA: Fox_Election 2008)

b. It’s great to see the type of support the Comets have generated and to see where women’s sports have come from and where they are going. (COCA: Houston 1999)

c. Sergeant Todd, I would think, deserves the same sort of respect and recognition that Sergeant Munley has already enjoyed. (COCA: PBS_Newshour 2009)

(11) Abstract nouns with a plural kind-word:

a. That year there was all kinds of talk about Judy Garland. (COCA: Ebony 2000)

b. Its aim is to make explicit the types of thinking and reasoning behind particular skills. (COCA: StudiesInEducation 2014)

c. One generation instructs the next in the sorts of contempt and violence that are acceptable and expected (COCA: WashPost 1992)

Conclusion: Mass and abstract nouns are not subject to the matching effect.

Working hypothesis: Mass and abstract nouns are numberless (cf. Borer 2005, among others). The kind-word generalization does not apply to numberless nouns.

2.3 Exception #2: When the N2 is a massified count noun

Some N2s appear to be count, but do not match in number with the kind-word. Such examples require contextualization for acceptability:

(12) The use of window and whole-house fans can minimize very effectively the heat gain from the sun, lights used in the home, appliances, etc. Both types of fan are very inexpensive. (COCA: MotherEarth 1993)

(13) The facts are that when you look at the 6,000-odd black elected officials in this country – and there are too few of them – there’s a disproportionate number of them under all kinds of investigation. (COCA: ABC_20/20 1990)

(14) She weaves two- and three-rod baskets. They are made of willow, both the coil
and the wrap. Two-rod baskets use two rods of willow in the coil that are then wrapped in strips of willow. Three-rod baskets use three rods in the coil. If the rods are warped in weaving, the wrapping is the weft that holds it together and provides the pattern. The difference between the two types of basket is the tightness of the stitch. Two-rod baskets use a gap stitch, wrapping completely over the previous coil. A three-rod basket doesn’t skip over the previous row, instead weaving between the third rod of the previous row, so it has a tighter weave. (COCA: NewsNativeCA 2010)

**Hypothesis:** These are massified versions of count nouns. They are mass, not count.

**Motivation:** The Universal Grinder (Pelletier 1975) is not the only form of massification that occurs in natural language (see Gillon 1999). It also seems possible to remove the boundedness of an entity as below (note that *lot* only combines with plurals and mass nouns, not singular nouns):

(15) That’s a **lot of house** for a barber. (quote in Homeland, season 5, episode 7, “Oriole”)
(16) Bill got a **lot of house** for $100,000. (Gillon 1999: 58, ex. 21.1)

⇒ Intuitively, the boundedness of the count nouns in (12)-(14) is minimized (might refer to kinds?). I leave the semantics of this effect aside, but propose that it is related to their numberlessness.

**Conclusion:** Massified nouns are not subject to the matching effect.

**Working hypothesis:** Massified nouns are also numberless. The kind-word generalization does not apply to numberless nouns.

### 2.4 Exception #3: When the kind-word is numberless

Many examples occur in which the kind-word appears to be singular, and the N2 plural. Such examples are characterized by a particular set of pre-modifiers:

(17) Plural demonstratives:
   a. …they’re accessible to people in a way that **these kind of images** never were. (COCA: PBS_NewsHour 2012)
   b. Judge Brennan generally avoided **those type of events** whenever he could. (COCA: Bk:Airtight 2013)
   c. And I think there’s a real mean-spiritedness in him, in which **these sort of remarks** come out. (COCA: NPR_Weekend 1995)

(18) Definite article *the*
   a. Well, the **kind of fires** that I’m photographing are quite different than what you’re seeing in California. (COCA: NPR_Sunday 2003)
   b. They were the **sort of women** who remained little girls around their mothers. (COCA: VirginiaQRev 2013)
c. And I had never paddled in the type of conditions I would soon be facing. (COCA: PopMech 2015)

(19) Wh-determiner what:
   a. And who knows what kind of things are going to blow up. (COCA: CBS 2015)
   b. So, what sort of monsters lurk down here? (COCA: FantasySciFi 2014)
   c. There also seems to be a misunderstanding of what type of operations are counted for air traffic purposes. (COCA: Chicago 1997)

(20) Some:
   a. Most communities have some kind of fairs or activities where a club can educate and promote. (COCA: PSAJournal 2006)
   b. Why isn’t somebody doing something to put some type of programs in here for us? (COCA: CBS_Sixty 1993)
   c. Some sort of irregularities must have been present in the universe at the outset. (COCA: Mercury 1992)

(21) Any:
   a. I have never tried any kind of drugs other than beer and cigarettes. (COCA: Houston 2009)
   b. We try to limit any type of pathogens in the product to begin with. (COCA: Denver 2011)
   c. Anybody have any sort of opinions about juxtaposition? (COCA: NBC_Dateline 2009)

(22) Possessives:
   a. Senator Chafee concedes that his kind of Republicans are a distinct minority among… (COCA: NPR_ATC 2004)
   b. They had never seen anyone with her type of injuries recover. (COCA: CBS_48Hours 2001)
   c. I mean this goes to Ana’s point that you’re not going to get your sort of policies through if you can’t actually sit down and work with people in Congress. (COCA: CNN 2012)

Generalization: Pre-modifiers which are morphologically marked for plural or ambiguous for number are permitted when a mismatch occurs.

Hypothesis: The kind-word itself is numberless. Pre-modifiers cannot target the kind-word, so only non-singular pre-modifiers will surface.

Prediction #1: Singular-requiring pre-modifiers are not permitted with a mismatch.

- Examples with number-ambiguous or plural pre-modifiers are numerous:
Table 3: Corpus counts for premodifier kind/type/sort of N<sub>PL</sub>

<table>
<thead>
<tr>
<th>Pre-modifier</th>
<th>Counts (COCA)</th>
<th>kind</th>
<th>type</th>
<th>sort</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>what</td>
<td></td>
<td>2137</td>
<td>156</td>
<td>305</td>
<td>2598</td>
</tr>
<tr>
<td>the</td>
<td></td>
<td>2737</td>
<td>651</td>
<td>566</td>
<td>3954</td>
</tr>
<tr>
<td>some</td>
<td></td>
<td>243</td>
<td>30</td>
<td>162</td>
<td>435</td>
</tr>
<tr>
<td>any</td>
<td></td>
<td>278</td>
<td>47</td>
<td>72</td>
<td>397</td>
</tr>
<tr>
<td>possessives</td>
<td></td>
<td>48</td>
<td>10</td>
<td>11</td>
<td>69</td>
</tr>
<tr>
<td>these / those</td>
<td></td>
<td>1248</td>
<td>270</td>
<td>195</td>
<td>1713</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>6388</td>
<td>1132</td>
<td>1128</td>
<td>9155</td>
</tr>
</tbody>
</table>

• But examples with singular-requiring pre-modifiers are extremely rare:

Table 4: Corpus counts for premodifier kind/type/sort of N<sub>PL</sub>

<table>
<thead>
<tr>
<th>Pre-modifier</th>
<th>Counts (COCA)</th>
<th>kind</th>
<th>type</th>
<th>sort</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>one</td>
<td></td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>every</td>
<td></td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>single</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>another</td>
<td></td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>each</td>
<td></td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>12</td>
<td>6</td>
<td>3</td>
<td>21</td>
</tr>
</tbody>
</table>

• Similarly, such examples are generally ungrammatical:

Singular-requiring pre-modifiers:

a. *[A (single) / one / every / each / another] kind of things are/is going to blow up.

b. *[A (single) / one / every / each / another] type of operations are/is counted for air traffic purposes.

c. *[A (single) / one / every / each / another] sort of monsters lurk(s) down there.

• Though a few rare (science-related?) exceptions seem to occur:

One kind of parents sent their kids to Dr. Lassiter. (COCA: BkSF:DownRabbit Hole 2006)

Participants’ scores of modeling advantage in each kind of teachers ranged

---

1 I do not include the indefinite article or singular demonstrative. Both have too many false positives to make a count worthwhile. Indefinites, for example, also appear in the “approximator” construction (Keizer 2007, Simone and Massini 2014), see (i), and kind and sort can function as adverbials (Keizer 2007), see (ii). Other false positives include (iii), and (iv) with its apparent ungrammaticality (my intuition).

i. He slapped Jim on the shoulder, a kind of congratulations or thanks (COCA: Atlantic 1994)

ii. So this kind of levels the playing field. (COCA: NPR 2013)

iii. This kind of grass-roots organizing could alienate some of the very lawmakers it aims to persuade (COCA: CSMonitor 2009)

iv. ...the camera is not allowed to broadcast this type of things at all. (COCA: NPR_Weekend 1995)
from 8 to 56. (COCA: Adolescence 2008)

(28) Don’t stop at baking just one kind of cookies. 
(www.holidayinsights.com/other/bakecookiesday.htm)
(29) Birds are a kind of dinosaurs. (COCA: CNN_SunMorn 2005)

Prediction #2: Verbal agreement cannot target the kind-word.

- This generally holds true, and many such examples exist:

(30) Agreement past kind-words:
   a. Well, the kind of fires that I’m photographing are/is quite different than 
      what you’re seeing in California. (COCA: NPR_Sunday 2003)
   b. But the truth is those type of novelties are/is far overrated. (COCA: 
      LiteraryRev 2006)
   c. So, what sort of monsters lurk(s) down here? (COCA: FantasySciFi 2014)

- Though some rare (possibly grammatical) exceptions occur:

(31) The latter type of laws requires… (COCA: Church&State 1991)
(32) A common and important type of rules has… (COCA: Communications 2011)
(33) Each type of biosolids was mixed with… (COCA: BioCycle 1997)
(34) The first type of benefits involves… (COCA: Education 2009)

⇒ If the kind-word is numberless, it is not an intervener for agreement.

Conclusion: No number matching occurs when kind-words are numberless.

Working hypothesis: The kind-words in these examples are numberless. The kind-word 
generalization does not apply to numberless nouns.

2.5 Revising the kind-word generalization

The following patterns have been identified:

- Mass and abstract noun N2s are not subject to a matching effect.
- Massified count noun N2s are not subject to a matching effect.
- Numberless kind-words are not subject to a matching effect.
- Count nouns are subject to a matching effect.

Assuming that each of these cases involves a numberless noun (which structurally 
would lack a #P (number phrase)), numberless nouns do not induce a matching effect.

Implication: Both the kind-word and N2 must be count for a matching effect to occur.

Kind-word generalization (revised): When both the kind-word and N2 are count, they 
must bear identical number features.
3. Accounting for the kind-word generalization

3.1 Gist of the proposal

Claim #1: The matching effect arises from a **sharing of number** between the kind-word and the N2. If the kind-word or N2 lacks number, no sharing effect can emerge (there is no number to share).

Claim #2: This sharing effect is the result of restructuring in the nominal domain and can be considered a “restructuring effect.” The kind-word combines with an N2 which is smaller than a full DP. The amount of functional structure dominating the N2 determines whether number sharing will or will not occur.

3.2 Structural considerations

**Syntactic structure:** I adopt an exoskeletal approach to DP structure (cf. Borer 2005, de Belder 2008, 2011, and many others). I assume an English DP allows for minimally the following projections:

- **DP:** definiteness, or determiner phrase (Lyons 1999), the locus of D-material
- **QP:** quantifier phrase, the locus of numerals and quantifiers (Q-material)
- **#P:** number phrase (Ritter 1991, 1992, a.o.), the locus of singularity / plurality
- **SizeP:** size phrase (de Belder 2008, 2011), provides boundedness to the interpretation of the root, necessary for a count interpretation (requires a #P)
- **Root:** the lexical root

(35) Basic structure of an English count noun:

```
DP
  D
  QP
    Q
    #P
      #
      SizeP
        Size
        √root
```

(36) Basic structure of an English numberless (e.g. mass, abstract, massified) noun:

```
DP
  D
  QP
    Q
    √root
```
The structure of an N2 in the kind-construction lacks the top two layers: DP and QP. We see this in the fact that D-level and Q-level material is not permitted there:

(37) D-level material:  
   a. *This { kind/type/sort } of { the/this/that } dog  
   b. *These { kinds/types/sorts } of { the/these/those } dogs  
   c. *This { kind/type/sort } of { me/them/her/you/Paris/Maartje }  
   d. *These { kinds/types/sorts } of { me/him/them/us/Paris/Maartje }  
   e. *This { kind/type/sort } of { each / every / some } dog

(38) Q-level material:  
   a. *These { kinds/types/sorts } of { many / a few } dogs  
   b. *This { kind/type/sort } of one dog  
   c. *These { kinds/types/sorts } of { two / three / a hundred } dogs  
   d. *This { kind/type/sort } of { a lot / a ton / a bunch } of coffee  
   e. *These { kinds/types/sorts } of { a lot / a ton / a bunch } of dogs

With one exception that I return to:

(39) This { kind/type/sort } of a dog

Implication: N2s are maximally #Ps (to be qualified).

3.3 Implementation

3.3.1 When the N2 is a bare root (mass, abstract, massified)

Finding: No number matching occurs with mass, abstract, and massified nouns.

Proposal: Mass nouns, abstract nouns, and massified nouns share the property that they lack both SizeP and #P (which relates to their interpretation as mass/abstract). They combine directly with the kind-word (upper parts of structure omitted):

(40) ... #P  
    # SizeP  
    \[ \text{Size} \] \[ \sqrt{P} \] = kind-word  
    \[ \sqrt{\text{kind/type/sort}} \] \[ \sqrt{N2} \] = numberless N2

The N2 has no SizeP or #P and hence cannot interact with number on the kind-word. No number matching effect emerges in this configuration.

3.3.2 When the N2 is a SizeP (count)

Finding: When count, both the kind-word and N2 must show the same number.
Proposal: Count nouns in the kind-construction are usually only SizePs, not #Ps. Because no #P is projected between the kind-word and the N2, the Size-head (which is dependent on #) shares the #P above the kind-word.

(41) … #P
    #  SizeP
      Size  \(\sqrt{P}\) = kind-word
         \(\sqrt{\text{kind/type/sort}}\) SizeP
            Size  \(\sqrt{N2}\) = count N2

This creates a number matching effect, which is realized via the morphological expression of the same number on the kind-word and the N2.

In short, the kind-word generalization is the result of there being one #P for two SizePs.

3.4 Predictions:

If number matching follows from there being a SizeP without its own #P, then cases in which the N2 projects up to a #P are predicted not to show a matching effect. There are two such cases: *pluralia tantum* nouns and singular indefinites.

3.4.1 When the N2 is *pluralia tantum*

Issue #1: Finding *pluralia tantum* nouns in the corpus cannot be done automatically, and such examples require searches for individual words.

Issue #2: In order to exclude the possibility that the kind-word is numberless, a singular-requiring pre-modifier is necessary in sg-pl mismatches.

Given these two issues, finding relevant examples is difficult. In this, I made use of Acquaviva (2008) and those nouns he indicates as *pluralia tantum* candidates.

Result: It seems possible for *pluralia tantum* nouns to combine with both singular and plural kind-words (this result needs further corroboration through more judgments).

(42) This kind/type/sort of jeans rips easily.
(43) These kinds/types sorts of jeans rip easily.
(44) *Pluralia tantum* nouns with singular kind-words (COCA)
    a. It’s something to be said for that kind of -- that kind of courage, that kind of strength and that kind of guts. (COCA: Fox_Susteren 2010)
b. Is part of this you kind of blame that kind of activity, that kind of feelings... (COCA: ABC_Nightline 2008)

c. People are always surprised to find out that -- that that kind of quality and that type of goods are made in southern Louisiana. (COCA: CBS_SunMorn 1995)

(45) *Pluralia tantum* nouns with plural kind-words (COCA)

a. So, I spent an hour trying on all the different kinds of jeans - button fly, zipper fly - that were available - stone-washed, distressed. (COCA: NPR_ATC 2011)

b. Ten years ago we were focused on what types of jeans people wanted. (COCA: USAToday 2004)

c. When thinking quiets down and sensory input is at a minimum, very different sorts of feelings can arise, some of which are extraordinarily unlike normal waking consciousness. (COCA: Humanist 2002)

**Proposal:** *Pluralia tantum* nouns project up to a #P. Their SizeP has its own #P, so no number matching effect emerges.

(46) \[ \begin{array}{c}
\ldots \quad \#P \\
\quad \# \quad \text{SizeP} \\
\quad \text{Size} \quad \sqrt{P} \\
\quad \sqrt{\text{kind/type/sort}} \quad \#P \\
\quad \# \quad \text{SizeP} \\
\quad \text{Size} \quad \sqrt{N2} \\
\end{array} = \text{pluralia tantum} \ N2 \]

*Pluralia tantum* nouns appear to confirm the prediction.

**3.4.2 When the N2 is marked by an indefinite article**

An indefinite article is permitted within the kind-construction:

(47) Indefinite article in the kind-construction:

a. It’s not research, like Dr. Lantos was talking about, but it’s a moral experiment for the parents in this kind of a situation. (COCA: CNN_King 1990)

b. We wish there was no need for this type of a camp but the reality is there is a need. (COCA: OrangeCR 2013)

c. I don’t think there’s any evidence that there’s any sort of a bandwagon effect based on who’s ahead (COCA: NPR_Science 2004)
Proposal: Suppose the indefinite article is hosted in #P, not DP (Lyons 1999, Borer 2005, sle Bruyn 2010). This allows for the possibility that the indefinite article can surface in the kind-construction, but not D-material.

Implication: Examples with an indefinite also project to a #P.

(48) … #P
    #
    SizeP
    Size
    √P
    √kind/type/sort
    #P
    a(n)
    SizeP
    Size
    √N2 = singular indefinite N2

Prediction: Both singular and plural kind-words should be permitted when the kind-word has an indefinite article. The SizeP of the N2 has its own #P, and hence should not interact with the #P of the kind-word.

Result: This prediction is not fulfilled. Plural kind-words are ungrammatical:

(49) Ungrammaticality of a plural kind-word:
   a. *These kinds of a rabbit
   b. *These types of a car
   c. *These sorts of a rug

Hypothesis: Such examples violate “mutual exclusivity”, i.e. the inability of a single entity to instantiate multiple subkinds. This is discussed in Carlson (1977).

(50) There are two kinds of cars in the world: cars that run right, and Fords (Carlson 1977: 213)

⇒ Cars in the set of “cars that run right” cannot also be members of the set of “Fords”, implying that “Fords” “do not run right.” This is mutual exclusivity.

Given the enough context, it appears that mutual exclusivity can be circumvented. When this happens, a plural kind-word can surface with an indefinite singular N2 (though not all speakers accept this).

(51) I was interested in portraying that a sexual life for a woman isn’t necessarily compartmentalized; it flows in and out of the other kinds of a woman that she is -- a worker, a lover, a mother, a daughter, a friend -- all those dimensions are woven into one another. (COCA: America 1994)
Thus, the predication is fulfilled, provided we assume mutual exclusivity.

3.4.3 An unfulfilled prediction

The logic of the system predicts that if an N2 projects to #P, no matching effect will occur. In principle, this should allow for examples in which the N2 corresponds to a plural #P, not a SizeP, and hence, is independent of the kind-word.

This would imply a singular kind-word with a plural #P N2. The prediction fails.

(52) *This kind of rabbits, *this type of cars, *this sort of rugs

Rather, it appears that count nouns which are not pluralia tantum must surface as SizePs. Possibly, there is a requirement that what kind-words combine with is “as small as possible.” Pluralia tantum nouns are lexically plural and thus, exempt. Ideas welcome!

3.5 What is ‘of’?

Observation: The English kind-construction requires of regardless of whether what it combines with is a #P, SizeP, or root:

(53) *This kind water, *this type soap, *this sort sand root
(54) *This kind rabbit, *this type car, *this sort rug root + SizeP
(55) *This kind a rabbit, *this type a car, *this sort a rug root + SizeP + #P

Proposal: Of is not a preposition here, but a marker of nominality, which surfaces when two noun-like elements occur within a particular domain.

Wurmbrand (1998) notes that verbal marker to appears both with TPs and things that are smaller than TPs in restructuring contexts, and suggests it cannot occur in T. Instead, to seems to be some type of marker of verbality. English of seems similar in this respect.

Notice that not all languages require a particle here, e.g. Dutch:

(56) Twee soorten mensen
    Two kinds people
    ‘Two kinds of people’

This is consistent with the status of of as a marker of nominality, on the assumption that English requires noun-like things to be marked overtly, and Dutch does not (see also Doetjes 1997).

4. Conclusion

• English kind-words are characterized by a matching effect, such that when both the kind-word and N2 are count, they match in number features. This has been
illustrated using data from the COCA.

- I proposed that this follows from the sharing of number, where the N2, which has a SizeP but no #P, shares number with the kind-word, resulting in identity.
- Number sharing is itself an effect of restructuring. Kind-words combine with N2s which are smaller than a DP. Depending on the size of the N2, there may or may not be a matching effect. If the N2 is a bare root or #P, no matching occurs (because there is no SizeP, or SizeP has its own #P). If the N2 is a SizeP, matching occurs.

4.1 Comparison to verbal restructuring

**Structural configuration:** Restructuring verbs combine with verbs of different sizes (VP, vP, TP, CP) (Wurmbrand 2014, 2015). Kind-words also combine with nouns of different sizes (root, SizeP, #P).

**Sharing:** Some verbal restructuring configurations have been shown share tense:

(57)  
Leo tried to tame an elephant (*tomorrow). (Wurmbrand 2015, ex. 4b)

Kind-words share number:

(58)  
Number matching with kind-words (kind, type, sort):

a. This kind of rabbit, this type of car, this sort of rug  
   sg-sg

b. These kinds of rabbits, these types of cars, these sorts of rugs  
   pl-pl

c. *This kind of rabbits, *this type of cars, *this sort of rugs  
   *sg-pl

d. *These kinds of rabbit, *these types of car, *these sorts of rug  
   *pl-sg

- Notice that the morphological expression of number is a difference from verbal restructuring: the same number appears on both nouns, but the same tense does not appear on both verbs.

These effects are symptoms of the transparency of the lower noun or verb, which lacks a full functional structure. If it can be said that not being a full CP or DP is the core of restructuring, then kind-words qualify as restructuring nouns.

5. References


de Belder, M. (2011). Roots and Affixes: Eliminating lexical categories from syntax. PhD
Dissertation, Utrecht University.
Doetjes, J. (1997). Quantifiers and Selection: On the distribution of quantifying expressions in
French, Dutch and English. LOT dissertation series.
PhD Dissertation, MIT.
Cambridge: Cambridge University Press.
Rothstein (Ed.), Syntax and Semantics vol. 25: Perspectives on phrase structure: Heads
Linguistics, 37, 197 - 218.
Classes: Nature, typology and representations (Current issues in linguistic theory 332)
(pp. 51-73). Amsterdam: John Benjamins.
Szabolcsi, A. (1994). The noun phrase. In F. Kiefer, & K. É. Kiss (Eds.), The Syntactic
Structure of Hungarian. Syntax and Semantics 27 (pp. 179-274). San Diego: Academic
Press.
Cambridge: Cambridge University Press.
(Ed.), Complex Visibles Out There: Proceedings of the Olomouc Linguistics Colloquium
University.
Proceedings of the North Eastern Linguistics Society Annual Meeting 45 (pp. 227-240).
Amherst, MA: GLSA.
& C. Wilder (Eds.), Possessors, Predicates and Movement in the Determiner Phrase (pp.