ENCODING PROPERTIES: THE CASE OF ENGLISH 'NOMINALIZED' ADJECTIVES

Artemis Alexiadou
University of Stuttgart
artemis@ifla.uni-stuttgart.de

June 29, 2015
Two types of 'nominalized' adjectives in English

• Consider the contrast between (1) and (2):

(1) The pretty are expected to achieve.
(2) The pretty is boring. Glass (2013)

• The two nominal forms are semantically distinct:
  • (1) could be paraphrased as adjective + people
    (predominantly generic interpretation)
  • (2) could be paraphrased as adjective + ness or other
    nominalizing morphology

• Following Glass (2013), I will refer to (1) as the individuated type and to (2) as the mass type.
Not today: other types of de-adjectival nominalizations

(3) \text{The good}_{\text{mass}} \text{ vs. } \text{The goodness}

- Basic intuition: \textit{the good} refers to the abstract entity, while \textit{the goodness} is attributed to people or things.

(4) a. The good is hard to find.
   b. The goodness of John is striking.

- They are not interchangeable:

(5) Goodness is a great virtue/*The good is a great virtue.

- Villalba (2009): The \text{good}_{\text{mass}} refers to kinds of properties, \textit{goodness} refers to kinds of qualities.
Adjectives as nouns: a comparative perspective

• The use of adjectives as nouns is a productive phenomenon cross-linguistically, see also Borer & Roy (2010).

• In e.g. German (and Greek), individuated vs. mass forms are also morphologically distinct:

(6) Die Guten werden siegen. 
the good-pl will win

(7) der Strich, der das Gute vom Bösen trennt... Singular, Neuter
the line that the good from bad divides
Adjectives as nouns: a comparative perspective

• In Luganda, a Bantu language spoken in South Uganda, individuated de-adjectival nouns are formed with class 1/2 affixes, while mass ones are formed with class 14 affixes, Ferrari (2005):

(8) mu-gezi 'clever people' > gezi = clever

(9) bu-bi 'evil' > bi = bad
Adjectives as nouns: a diachronic perspective

• The two types were morphologically distinct in earlier stages of English as well, see e.g. Mustanoja (1960), Hewson (1972), Allen (2010) among others.

• (10-11) are examples from Middle English, from Aschenbrenner (2014: 167):

(10) ... Good and wikkednesse ben two contraries 'Good and evil are two contraries'
(11) þe gode are neuer þe wors to preise 'the good are never the worse to praise'
Issues to be addressed

1. What are the properties of these two types of nominalized adjectives in Present Day English (PDE)?
2. What are the meaning differences between these two types?
3. Why do languages use nominalized adjectives next to nouns to refer to individuals and/or abstract objects? How do adjectives become nouns (or do they)?
4. Why do we have plural agreement in (I), in the absence of plural morphology?
5. How can the historical development of the two types as well as a comparison with e.g. German and Greek help us understand the PDE behavior?
Roadmap

• The properties of individuated vs. mass nominalized adjectives

• Towards an analysis

• Building individuated and mass readings

• Language change

• Conclusion

• Some further issues
The properties of individuated vs. mass: Glass (2013)

### Data summary

<table>
<thead>
<tr>
<th>Test</th>
<th>Individuated reading</th>
<th>Mass reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productive</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Dixon classes</td>
<td>Attested with all</td>
<td>Attested with all</td>
</tr>
<tr>
<td>Agreement</td>
<td>Plural</td>
<td>Singular</td>
</tr>
<tr>
<td>Conceptual construal</td>
<td>Individuals (often humans)</td>
<td>Abstract concept</td>
</tr>
<tr>
<td>Determiners</td>
<td><em>The; some; many</em></td>
<td><em>The; some; much</em></td>
</tr>
<tr>
<td>Plural marking</td>
<td>Marked but attested</td>
<td>Not attested</td>
</tr>
<tr>
<td>Degree modifiers</td>
<td>Attested</td>
<td>Attested</td>
</tr>
<tr>
<td>Comparison</td>
<td>Attested</td>
<td>Attested</td>
</tr>
</tbody>
</table>
Some differences between individuated and mass

• Count vs. Mass Determiners:

(12) Too many rich/few rich are unwilling to share. *individuated*

(13) Too much sweet is bad for you. *mass*

• *Individuated* type marginally ok with plural morphology, see also Smith (2005):

(14) to be down with the youngs..
Some similarities between individuated and mass

• Both accept adjectival modifiers:
  (15) The very rich have been pulling away from the pretty rich.
  (16) The very spicy is extremely nutritious.

• Both can have comparative and superlative forms:
  (17) the cheapest of the cheap...
  (18) Vertical discrimination discriminates between the higher and the lower.

• In sum, both types show mixed nominal-adjectival properties; type (1) behaves like a count noun, while type (2) like a mass noun.
Towards an analysis

• Two families of approaches, which mostly focus on type (1) in individual languages, the mass one being mentioned in passing (see also Marchand (1969) and Aschenbrenner's (2014) recent comprehensive overview of the English and German literature on this topic):

  • The cases at hand involve:

    1. nominalization/substantivization of an adjective, see e.g. Giannakidou & Stavrou (1999), Glass (2013), without considering their internal nominal structure, but cf. Sleeman (2013) for Dutch.

Attributive adjectives modifying pro


\begin{equation}
\text{DP } \text{pro}_1 \quad \text{[+human, +generic, + plural] } \text{individuated}
\end{equation}

\begin{equation}
\text{the } \text{FP } \text{pro}_2 \quad \text{[-human, +mass] } \text{mass}
\end{equation}

\begin{equation}
\text{AP } \text{rich } \text{NP } \text{pro}
\end{equation}
Arguments against *pro*

- In Kester's analysis, and those following her, pro₁ is inherently specified as human.
- But:

(20) New Swarm Theory: The Weak Can Lead the Strong
[topic: insects]

(21) Latest shiny thing, new tech, doesn't matter. If you don't have a goal serving both creator and user, attention is misguided. However, the shiny are distracting for a reason. [shiny devices]

Glass (2013)
Arguments against ellipsis

• Difference in interpretation, see Quirk & al. (1985), Aschenbrenner (2014): *no generic interpretation when N is present*; note that the string in (22b) is ambiguous between a restrictive and a non-restrictive interpretation for the A.

\[(22)\]  
\[\begin{align*}
\text{a. } & \text{the clever} \\
\text{b. the clever people}
\end{align*}\]

• Especially for the mass reading, it is often difficult to think of an appropriate noun that could have been elided:

\[(23)\]  
\[\text{the evil [principle]} (?)\]
Arguments against ellipsis

• Evidence from Dutch (Sleeman 2013): the affix –e
  • Participles ending in -en attributive position cannot bear –e; however, in the individuated reading they appear with –e:

  (24)   a. de verlaten(*e) echtgenote
         the abandoned spouse

               b. de verlatene
              the abandoned

• Evidence from Greek and German: the mass reading is invariably neuter suggesting nominalization.
Arguments in favor of nominalization

• Presence of plural morphology on type (1), e.g. the youngs, points to nominalization; see also Smith's (2005) findings on the basis of BNC corpus data (e.g. the crazies, the faithfuls).

• The historical development of (1) and (2) also suggests nominalization, presence of plural vs. singular morphology in earlier stages.
Arguments in favor of nominalization

• In e.g. German (and earlier English), a wider range of determiners (indefinite, quantifiers) are possible, suggesting a nominal core and not an inherently specified pro.

(25) Ein Guter  (26) jemand Guter
     a good       some   good

• Conclusion: both types involve adjectives that become nouns.
Building individuated and mass readings

(27)

```
DP
  the
  QuantityP
  ClassP (individuation)
    +count
    nP
    DegreeP
      aP
      √ good
```

Borer (2005): ClassP is the locus of plural morphology.
Building individuated and mass readings

• The structure in (27) explains
  • the presence of D and nominal properties (n, ClassP).
  • the modification and comparison (DegreeP, aP) data.

• (27) also accounts for the semantics of the two types, as described by Glass (2013):
  • Adjectives denote properties.
  • Lexicalization of properties as nouns is common in other language families.
  • In English *the rich* denotes
    • A set of individuals instantiating the property *(individuated)*
    • The property itself, conceptualized as an abstract mass *(mass)*
Building individuated readings: ClassP

• Count vs. Mass:
  the difference in meaning between the two types arises via
  the presence vs. absence of ClassP:

(28) \[ \text{DP} \left[ \text{QuantityP} \left[ \text{ClassP} + \text{count}/\text{IND} \left[ \text{nP} \left[ \text{DegP} \left[ \text{aP} \left[ \sqrt{\text{rich}} \right] \right] \right] \right] \right] \right] \]

• Sharvy (1979), Krifka (1995), Borer (2005), Bale & Barner (2009), Alexiadou & Gengel (2012) and others:
  • All nouns enter the derivation as mass, and become count in the syntax, via ClassP, which introduces Bale & Barner's (2009) IND function; IND gives individuated readings.
Lexicalization of properties

• Property concepts are lexicalized as adjectives in languages that have this category.

• English provides evidence that properties can be encoded as abstract mass substances, even without (overt) nominalizing morphology.

• In other words, property concepts can be encoded as adjectives or nouns.

• The latter strategy is common in other language families.
Lexicalization of properties

(29)  

a. Alberto pan-ka  
Alberto stick-KA  
‘Alberto’s stick’

b. Yang as-ki-na minisih-ka.  
ISING shirt-ISING dirty-KA  
‘My shirt is dirty.’

(Ulwa, Koontz-Garboden & Francez 2010)

• The data in (29a) show that –ka marks the third person singular form of the possessive relation.

• The data in (29b), by contrast, show that –ka also appears on words naming “property concept states”.

Lexicalization of properties

- Property nouns which occur in possessed properties pattern with mass nouns, see Baglini (2013).

- English deadjectival nominals, as we saw, and Wolof possessed properties, as discussed in Baglini, can co-occur with degree modifiers.

(30)  *Awa am na-∅ xel* (lool)

  *Awa have FN-3s wit* (very)

- As is well known, nominals are not compatible with degree modifiers.

- This supports the syntactic analysis offered here, according to which nominalization of an adjective/state is involved.
Lexicalization of properties

• Cross-linguistic variation in encoding of properties relates to the elements available in a language to lexicalize properties.

• Nominal morphosyntax is an alternative that is used productively across languages.
Building individuated readings: ClassP

• **Question**: if the individuated type is count, why is it necessarily plural, i.e. why is a singular interpretation not available?

• In German and earlier English, such an interpretation is/was available:

(31) a. der Gute 'the good-sg'

   b. The povere is bore as is the riche

   'The poor person is born the same way as the rich person'

   *Middle English*, from Aschenbrenner (2014: 168)

• Processes of language change come into play.
Language change: Allen's (2010) observation

The (generic) plural type is the most common in all periods of English. It becomes the default.
Language change

• The loss of (gender and number) inflection leads to the disappearance of the singular individuated type.

• It is no longer possible in PDE to morphologically distinguish between the rich (people) as opposed to the rich (person), as is the case in German.

• The language chooses the default interpretation for the individuated type, i.e. plural (frequency effect?).
Language change

• Moreover, in PDE, overt plural on 'de-adjectival nouns' often gives rise to idiosyncratic interpretations, e.g. the goods, the roughs.

• Acquaviva (2008), and Alexiadou (2011) argue that this type of plural is a nominalizer.

• In German, all these three types are morphologically distinct (the good\textsubscript{ind/mass} vs. the goods; der Gute vs. die Guten vs. die Güter).
Subject-Verb Agreement

• S(ubject)-V Agreement involves Agreement between properties of ClassP and the predicate.
• ClassP is + count (plural).
• PDE preserves the default Middle English pattern of agreement, namely plural.
• Singular vs. Plural verb agreement is the only way to disambiguate between individuated and abstract/mass interpretations in PDE.
Conclusion

(1) The pretty are expected to achieve.
(2) The pretty is boring.

• While both (1) and (2) are de-adjectival nouns, their semantic and grammatical differences relate to the fact that (1) includes ClassP, while (2) does not.

• Two-way (individuated vs. mass) distinction in English as opposed to three-way (individuated $_{pl/sg}$ vs. mass) distinction in e.g. German due to loss of inflection to avoid ambiguity.

• Plural agreement in (1) reflects the default interpretation of type (1).
Conclusion

• The study of these two patterns provides evidence that

  • Meaning is assembled in the syntax.
  • The building blocks of meaning involve the combination, via Merge, of functional elements, bearing distinct syntactic and semantic functions, with a category unspecified core (root).
Some further issues

(1) The pretty are expected to achieve.

i. (1) can have a kind interpretation.

- However, in PDE a kind interpretation is associated with bare plurals only, in contrast to German, where definite plurals can also have a kind interpretation, see e.g. Dayal (2004) for some cross-linguistic discussion.
- Difference between singular kind vs. plural kind in languages that have both: plural kind denotes members of the species (Dayal 1992).
Some further issues

• Lyons (1999): plural definite generics are possible in English with a limited set of nouns, e.g. the Danes, the vertebrates.

• Kaluza (1981):
  • definite + plural can be used for generic use only with some types of nouns, such as family names, nominalized adjectives, or names of nationality.
  • It often refers to personal entities and shows them as one homogenous part, e.g. the Stuarts, the poor, the Swiss.

• The analysis predicts that in Earlier English plural definite generics were possible.

• Van Linden & Davidse (2012): plural definite generics in Late Modern English data:

(2) But it is not only necessary that the flowers should keep their honey for the insects.... (1879)
Some further issues

• Generalization of zero (Epstein 1993):

  • In Old English, the generic plural occurs with the definite article.
  • In Middle English, the articleless use gains ground steadily (Mustanoja 1960).

  • What other properties does this correlate with?
Some further issues

ii. (1) is count, but while other determiners such as *some* and *your* are possible, numerals are not:

(3) *Three rich came in.

- Numerals in English require overt plurality.

- As Borer (2005: 114) argues, in English cardinals other than *one* are plural taking, i.e. *three boys, several meats* etc.
References

Aschenbrenner, A. 2014. Adjectives as nouns, mainly as attested in Boethius translations from Old to Modern English and in Modern German. Herbert Utz Verlag.
References