Bounded and Unbounded Adjectives
Guido Vanden Wyngaerd (CRISP/HUB/K.U. Leuven)

1. Introduction
2. (Un)boundedness is encyclopedic
   2.1 Boundedness is in the object
   2.2 Quantity interpretations
3. Why does (un)boundedness appear to play a role in syntax?
   3.1 How?
   3.2 Q-semantics

1. INTRODUCTION

➢ adjectives can be gradable or nongradable. Some nongradable adjectives:

(1) a. a (*very) daily newspaper
   b. (*very) classical ballet
   c. a (*very) pictorial atlas

➢ gradable adjectives are associated with a scale of totally ordered degrees.
➢ gradable adjectives can be divided into bounded and unbounded adjectives

(2) Bounded
   a. The door is open/closed.
   b. The rod is straight/bent.
   c. The bottle is empty/full.

(3) Unbounded
   a. Max is tall/short.
   b. The book is good/bad.
   c. Cindy is happy/sad.

➢ different kinds of degree modifiers:

(4) Modifiers
   a. Bounded (proportional modifiers)
      completely/absolutely/almost/half/mostly
   b. Unbounded
      very/terribly/fairly

(5) Adjectives
   a. Bounded: full, closed, invisible
   b. Unbounded: long, expensive, old, good

Main claim: the distinction between bounded and unbounded adjectives is
cyclopedic, rather than grammatical.
2. BOUNDEDNESS IS ENCYCLOPEDIC

2.1. Boundedness is in the object

- rather than belonging inherently to the adjective scale, (un)boundedness rather depends on the noun, or something related to the noun, that the adjective is predicated of.

- Barbiers (1995): nonverbal modal complements in Dutch only tolerate bounded adjectives.

(6) a. De trossen mogen los.
    The hawsers may loose
    ‘The hawsers may be loosened.’

   b. De fles moet leeg.
    The bottle must empty
    ‘The bottle must be emptied.’

   c. Het raam kan open.
    The window can open
    ‘The window can be opened.’

(7) a. *Het kantoor moet groot.
    The office must big
    ‘The office must be made big.’

   b. *Die wagen kan snel/traag.
    That car can fast/slow
    ‘That car can drive fast/slow.’

   c. *De storm mag hevig.
    The storm may heavy
    ‘The storm may be made heavy.’

- leeg ‘empty’

(8) a. The bottle is empty. → upper bound

   b. That story was very/terribly/fairly empty and hollow. → no upper bd

(9) *Dat verhaal moet leeg.
    that story must empty

- los ‘loose’

(10) a. De trossen zijn los. → upper bound
     ‘The hawsers are loose.’

   b. Zijn stijl van presenteren is los. → no upper bound
     ‘His presentation style is loose.’

(11) *?De stijl van presenteren voor dit programma moet los.
    The style of presenting for this show must loose.
    ‘The presentation style for this show has to be loose.’
(12)  
   a.  De trossen zijn helemaal/*?erg los.
       The hawsers are completely/very loose.
   b.  De moraal is er erg/*helemaal los.
       The morals are there very/completely loose

➤ the looseness scale does not have any inherent boundaries: boundedness is due to some physical property of the object the adjective is predicated of.

➤ open 'open'

(13)  
   a.  The window is completely/half/almost open.
   b.  *The window is very/terribly/fairly open.  → upper bound

(14)  
   a.  a ?completely/*?half/*almost open attitude
   b.  a very/terribly/fairly open attitude  → no upper bound

(15)  ?*Zijn houding moet open.
     His attitude must open.

➤ British National Corpus (BNC) “very open”: 49 hits.

(16)  
   a.  a very open person/process/view/weave
       texture/landscape/texture/intelligence/capital market system/mind
   b.  very open people/questions/gravel flushes

➤ “almost open”: 4 hits
➤ “half open”: 35 hits

(17)  door, gate, mouth, eyes, lid, top, shirt, wings, flaps

➤ Typically, the objects involved move in the way of a window, i.e. they are attached to a solid body by a joint and move along an axis that has a clear physical boundary. This is definitely not a syntactic property of these objects. It is not likely to be a semantic one either. Instead, I claim that it is an encyclopedic property.

➤ “completely open”: 21 hits

(18)  a completely open
       person/window/road/market/platform/mind/situation/way/product range

(19)  a.  #The line is completely straight, but it could be straighter.
   b.  I’m completely uninterested in finances, but Bob is even less interested. (Kennedy & McNally 1999: n 1)

➤ hard ‘hard’

(20)  a.  De cement is almost/half/completely hard.  → upper bound
   b.  Their attitude towards violent crime is very/terribly/fairly hard.
(21)  a. Voor we verder kunnen weken, moet de cement eerst hard.
    ‘Before we can go on working, the cement must First be hard.’
    b. *De houding van de politie moet hard.
    ‘The attitidue of the polive must be hard.’

➢ **lang** ‘long’

(22)  a. een (*half)lange tafel.  (M. De Belder, p.c.)
    ‘a (half)long table’
    b. een halflange rok
    a half.long skirt
    ‘a mid-length skirt’

2.2. Quantity interpretations

(23)  a. ??Milk is completely white.  (Kennedy & McNally 2005:365)
    b. His suit was completely white.

➢ (23): all of the milk is white: odd, because milk has only one colour.
All of the suit is white makes sense, because suit may have different parts in
different colours. World knowledge is clearly involved here.

➢ interpretations as in (23b) are **quantity interpretations**: the bounded scale
introduced by the noun is interpreted as a (bounded) quantity scale, with the
proportional modifier indicating the quantity of the object over which the adjective
is true.

➢ examples ambiguous between a quality and a quantity reading (Kennedy & McNally
2005:366):

(24)  a. The meat is half cooked
    b. The crops are partially frozen.

➢ quantity readings depend on encyclopaedic properties:

(25)  a. Het meisje is (*?half) stil.  (M. De Belder, p.c.)
    The girl is (half) silent.
    b. De zaal is half stil.
    the room is half quiet
    ‘Half of the room (i.e. audience) is quiet.’

(26)  a. *?Het meisje moet helemaal stil.
    ‘The girl must be completely silent.’
    b. De zaal moet helemaal stil.
    ‘The room must be completely silent.’
note that adjectives like stil ‘silent’ are otherwise typical unbounded adjectives. If a quantity interpretation can be obtained, they can easily shift to the bounded class.

wet/dry (Kennedy & McNally 2005:371)

(27) a. a very/fairly wet climate → no upper bound  
b. a half/completely wet towel/handkerchief → upper bound

(28) a. This region of the country is very dry.  
b. The glasses are completely dry.

(29) a. #The towel is completely dry.  
b. ??The glasses are completely wet.

function or social convention plays a role: it is the purpose of a towel to become wet, and it is part of the usage conventions surrounding a glass that it is cleaned after use and dried before being stored.

3. Why does (Un)boundedness play a role in Syntax?

3.1. How?

Adjectival modifiers  
Nonverbal modal complements in Dutch  
Resultatives: Vanden Wyngaerd (2001) argues that predicates of resultative small clauses must denote bounded scales (see also Wechsler 2005).

(30) a. Martin heeft zijn brommer *snel/kapot gesleuteld.  
    ‘Martin wrenched his moped fast/broken.’  
b. Frank heeft de ballon *groot/aan stukken geblazen.  
    ‘Frank blew the balloon big/to pieces.’  
c. Het drukke verkeer heeft de sporen *diep/plat gereden.  
    ‘Heavy traffic drove the tracks deep/flat’  
d. Van zong zich *slaperig/bewusteloos.  
    ‘Van sang himself sleepy/unconscious.’

Possible explanations:

(Un)boundedness is encyclopedic: no  
(Un)boundedness is syntactic: [±bounded]: no  
(Un)boundedness is LF-semantic: no  
(Un)boundedness is Q-Semantic: yes
3.2. Q-semantics

(31) **Ontology of Quantities**

<table>
<thead>
<tr>
<th>Nouns</th>
<th>homogeneous/ cumulative</th>
<th>quantized</th>
</tr>
</thead>
<tbody>
<tr>
<td>mass</td>
<td></td>
<td>count</td>
</tr>
<tr>
<td>Verbs</td>
<td>atelic</td>
<td>telic</td>
</tr>
<tr>
<td>Adjectives</td>
<td>unbounded</td>
<td>bounded</td>
</tr>
</tbody>
</table>

Q-semantics wants **coherent interpretations**.

(32) a. much ??dog/chicken  
b. many books

(33) a. Max knitted a sweater in three days/??for three days.  
b. Max knitted sweaters ??in three days/for three days.

- Vanden Wyngaerd (2001): the resultative must be bounded because its function is aspectual, viz. to provide a measure for the verbal activity. An unbounded measure would be a contradiction in terms.

**References**