Three approximators which are 
*almost / more or less / be-gadol* the same\(^1\)

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**Goal of this talk:** Examine and account for a range of similarities and differences between three ‘approximators’:

- *Almost* (and the Hebrew *kimat*)
- *More or less* (and the Hebrew *paxot o yoter*)
- *Be-gadol* (Literally *in-big*, can be translated as "by-and-large" / "basically")

**Main claim:**

- All three approximators share the same basic semantic operation: combining
  - A polar (negative) component: rejecting the prejacent under the current / actual value to a relevant parameter.
  - A proximity (positive) component: indicating that a lower and close alternative to the prejacent, on a relevant scale, holds.
- The difference between the three approximators results from the choice of the *relevant parameter* in the negative (polar) component:
  - Actual world (for *almost*)
  - Current precision standard (for *more or less* and *be-gadol*)
  - Current standard determining what counts as a complete answer to the QUD (for *be-gadol*)
  - Consequentially, the approximators also differ in the scale of alternatives to the prejacent, in the positive (proximity) component.

**Section 1: Data: Similarities and differences between *almost / more or less / be-gadol***

**Similarities**

The three approximators seem to yield a very similar effect in many cases:

1. **A**: Are you there already?  
   **B**: Almost / More or less / be-gadol  
   All imply: B is not 'there', but he is close.

2. **A**: Is the room clean now?  
   **B**: Almost / More or less / be-gadol  
   All imply: The room is not completely clean, but it is not far from being clean either.

- However, there are also interpretational and distributional differences between the three approximators:

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Almost vs. more or less / be-gadol:

Difference # 1: Distance from the limit point:
- Intuitively: Almost p seems 'very close' to p. More or less p just seems 'close' to p (cf. Sauerland & Stateva (2007) for a similar observation)

(3)  
  a. Room 1 is almost clean  
  b. Room 2 is more or less / be-gadol clean  
Implication: Room 1 is cleaner than room 2.  
I.e. the degree of cleanliness of room 1 seems closer to the maximal point than that of room 2.

Difference # 2: Presence / absence of a Directionality effect. (e.g. Sevi (1998), Amaral & del Prete (2010)):
- With numerals, temporal expressions, spatial expressions, etc. almost yields a 'before / less than' effect
- No such directionality effect is present with more or less and be-gadol:

(4)  
  a. John arrived at almost 3  
     Implies: He arrived (shortly) before 3, e.g. at 2.55  
  b. "John arrived at more or less / be-gadol 3"  
     Implies: He arrived (shortly) before or after 3, e.g. at 2.55, or 3.05


(6)  
  A: How many students do you have altogether?  
  B: Almost / more or less / be-gadol 200  
  - If A finds out that B has exactly 200 students.  
    o B's answer with almost will be judged false  
    o But the answer with more or less / be-gadol will be still judged true.

Similarly:
(7) A: Is the room clean?  
    B1: (lo, aval) kim’at – “(No, but) almost”  
    B2: (# lo aval) paxot o yoter / be-gadol - “(#No but) more or less / be-gadol”

Conclusion:  
- Almost p entails not p - it is incompatible with a situation where p is true  
- More or less p / be-gadol p: are compatible with p being true.  
  - Importantly, however, if the speaker knows that it is exactly 3, his utterance of It is more or less 3 would be judged as misleading / false.

Difference # 4: Presence / absence of counterfactual readings:  
Almost can many times yield a 'counterfactual' reading (e.g. Sadock (1981), Penka (2006), Sevi, Amaral & del Prete (2010))  
(8) We almost missed the wedding  
Counterfactual reading: We arrived on time, but we were close to missing it (e.g. We missed the bus to the wedding, and luckily found a taxi which took us there)

(9) We more or less / be-gadol missed the wedding  
    o No counterfactual reading. Instead: We arrived to the last part of the wedding. We didn't completely miss the wedding, but we missed the main / major part.
Until now it seemed that more or less and be-gadol pattern the same, as opposed to almost.

However, a closer look reveals that more or less and be-gadol also differ:

**More or less vs. be-gadol**

**Difference #1**: be-gadol can have a 'temporal' reading, that more or less lacks:

(10)  
**A**: What did Mary do in the party?  
**B**: She ?more or less / be-gadol danced

- She more or less danced: The way she moved resembled dancing (though could not be considered prototypical dancing)
- She be-gadol danced: Can also have a reading where she (prototypically) danced most of the time (and in the rest she sang / spoke with people, etc.)

**Difference #2**: Be-gadol can have an 'incomplete future commitment' reading, that more or less lacks:

(12)  
**A**: Are you coming to the party tonight?  
**B**: be-gadol ken  
"begadol yes" – I will arrive, unless something unexpected happens  
**B” # paxot o yoter ken. - "#More or less yes"

**Difference #3**: Unlike more or less, Be-gadol p can sometimes be true when if the speaker knows that p is (perfectly / precisely / typically) true:

(13)  
**A**: So what’s happening with John and Mary? Do they love each other?  
**B**: They be-gadol / more or less love each other, but they are still not ready for marriage.

- They be-gadol love each other
  - **Reading 1**: Their degree of love to each other is high, but not maximal, and not enough for getting married.  
    - This reading is found with more or less too.
  - **Reading 2**: Their degree of love to each other is maximal, but “that’s not the whole story” there are other obstacles which prevent them from being married (e.g. they don’t have any money).  
    - This reading is not available with They more or less love each other.

Given this, we can sometimes get cases where be-gadol and almost are felicitous, while more or less is not:

(14)  
(Context: In order to get accepted to the department John has to pass a test. The passing grade is strictly 60)  
**A**: (talking about John): Well, what are the results?  
**B1**: He almost passed the test (e.g. he got 58)  
**B2**: ??He more or less passed the test  
**B3**: He be-gadol passed the test (he got 63), but eventually he didn’t get accepted since there were too many candidates this year.

- Again, the use of be-gadol is felicitous even though the speaker knows that John clearly passed the test.
Summarizing the observations:

- *Almost, more or less, and be-gadol* shows similar behavior in some cases, e.g. with adjectives (*The room is almost / more or less / be-gadol clean*).

- *Almost* differs from *more or less* and *be-gadol* in the following:

<table>
<thead>
<tr>
<th></th>
<th>Almost p</th>
<th>More or less / be-gadol p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance from the limit point</td>
<td>'Very close'</td>
<td>'close'</td>
</tr>
<tr>
<td>Directionality w.r.t. p (with e.g. numbers / temporal adverbials)</td>
<td>Yes (always before / less than p)</td>
<td>No (can be either before/less or after / more p)</td>
</tr>
<tr>
<td>Having a counterfactual reading</td>
<td>possible</td>
<td>Impossible</td>
</tr>
<tr>
<td>Polarity (entails not p)</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

- *More or less* differs from *be-gadol* in the following:

<table>
<thead>
<tr>
<th></th>
<th>More or less p</th>
<th>Be-gadol p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Having an 'imprecision' reading</td>
<td>yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Having a 'temporal' reading</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Having an 'incomplete future commitment' reading</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Being felicitous even if the speaker knows that p (precisely) holds</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

How to account for these differences? How to correctly capture the similarities?
Section 2: Our proposal: A unified schematic operation, with a varying parameter

- We propose that almost / more or less and begadol all have the same basic scalar semantics: containing a negative (polar) and a positive (proximity) component.

\[(15) \text{Approximator: } \lambda p. \neg p \land \exists p' \in S_{\text{ALT}}(p_c) \land p' < p_c \land \text{close}, (p', p_c) \land p' \]

Paraphrase: Approximators combine with a prejacent \( p \).

- Negative component: rejects \( p \) under the current value to a parameter \( c \) (rejects \( p_c \)).
- Positive component: states that an alternative \( p' \) which is a member of the scaled set of alternatives to \( p_c \), lower and close to \( p_c \) on the scale, holds.

- We assume that the associate of the approximator (usually what is focused in \( p \)) contributes to the choice of the relevant scale of alternatives (see Amaral & del Prete (2010) for almost).

- This definition is heavily inspired by previous approaches to the semantics of almost e.g. Hitzman (1992), Sevi (1998), Penka (2006), Amaral & del Prete (2010).
  - All of which took almost to involve a polar (negative) and a proximity (positive) component.
  - Notice, though, that this semantics is usually given to almost only.
    - In particular, Wierzvicka (1986) as well as Amaral an el Prete (2010) argue explicitly that it does not suit approximators like more or less or approximately since, unlike almost:
      - They don’t have the polar component – since they are compatible with the truth of \( p \).
      - They are not scalar – i.e. don’t involve a scale with a proximity component (with a lower and close alternative) – since they lack the ‘directionality’ effect found with almost.

In contrast, our definition is supposed to cover all three approximators (almost, more or less and be-gadol),

- We derive the differences between these approximators from the different characterization of the parameter \( c \) in (15):
  - With almost the relevant actual parameter is always the actual world \( w_0 \)
    - (we will see below how this differs from other approaches to almost)
  - With more or less it is always the current precision standard \( p_{\text{rc}} \)
  - With be-gadol it is either \( p_{\text{rc}} \) or the current standard determining what counts as a complete answer to the QUD (ans_\( c_\)).

- Due to this different characterization of the \( c \) parameter - the three approximators differ in the characterization of the alternative which is lower than (and close to) \( p \) in the positive (proximity) component.

3. Accounting for the data

3.1 Almost

- With almost the contextual parameter is the actual world \( w_0 \):
  - Negative component: The truth of \( p \) in \( w_0 \) is negated
  - Positive component: two possibilities:
    - Possibility # 1: The same proposition \( p \) is true in a world \( w_1 \) which is lower but close to \( w_0 \) on the scale of similarity to \( w_0 \)
    - Possibility # 2: A distinct proposition \( q \), lower but close to \( p \) on a salient scale is true in \( w_0 \).
• This differs from previous approach to *almost*:
  o E.g. it is unlike Sevi (1998) and Saurland & Stateve (2007), who propose that *almost*
    may involve scales of precision standards
  o It is unlike Amaral & del Prete (2010) who assume that the proximal alternative is
    always a distinct proposition q (lower than p on a scale), which holds in $w_0$ (i.e. they
    only allow for possibility # 2).

  ➢ We get possibility # 1 with e.g. (16) - counterfactual readings easily arise when *almost*
    associates with a verbal predicate:

  (16) *John almost arrived at 3* (He missed the train which would have enabled him to arrive at 3,
    and eventually arrived at 8)).

  • **Negative component:** $\neg$*John arrived at $3_{w_0}$*
  • **Positive component:** here the alternatives in the scale are propositions in worlds which are
    ordered by similarity to $w_0$
    o **Hence:** *John arrived at $3_{w_1}$*, where $w_1$ is a world which lower than $w_0$ in the scale of
      similarity to $w_0$, but is close to it.

  $\neg I \text{ arrived at } 3_{w_0} = p$ is false in $w_0$
  $I \text{ arrived at } 3_{w_1} = p$ is true in $w_1$

  We get possibility #2 with e.g. (17):

  (17) *John arrived at almost 3*
    • **Negative component:** $\neg$*John arrived at $3_{w_0}$* (just as in possibility # 1)
    • **Positive component:** *Almost* associates with ‘3’, and hence the alternatives in the scale in this
      case are propositions of the form *John arrived at t*.
      o Thus we get: *John arrived at some time before and close to 3*.$w_0$
      o E.g. *John arrived at 2.55*.$w_0$.

  $\neg I \text{ arrived at } 3_{w_0} = p$ is false in $w_0$
  $I \text{ arrived at } 2.55_{w_0} = q$ is true in $w_0$

  • This immediately explains:
    ✓ **Directionality:** John must arrive at a time lower than / before 3
    ✓ **Polarity:** truth of *John arrived at 3* is negated in $w_0$
    ✓ **Distance from the limit point:** the positive alternative has to be close to 3 (in possibility # 2)
    ✓ **Counterfactual reading:** As in possibility # 2
3.2 More or less:

- With **more or less** the relevant contextual parameter is the **current standard of precision** $pre_c$.
  - **Negative component:** we reject $p$ under the current standard of precision $pre_c$.
  - **Positive component:** $p$ under a lower (more relaxed) but close precision standard $pre_1$ holds.

But what does rejection / affirmation of a sentence under a certain precision standard amount to?

- Precision standards have been modeled in various ways:
  - finer / coarser granularities (Sauerland & Stateva 2007)
  - Truth in more / less precisifications (supervaluation theories)
  - Distance from the precise point in the pragmatic halo (Lasersohn 1999)
  - size of the set of alternatives (Morzycki’s 2011 formalization of Lasersohn’s approach).

- Using Morzycki’s approach we take expressions interpreted under (lower) standards of precision to denote (larger) sets of alternatives:

For example:

(18) $\text{tel aviv}^1 = \{\text{tel aviv}\}$
    $\text{tel aviv}^{0.95} = \{\text{tel aviv, yafo.}\}$
    $\text{tel aviv}^{0.9} = \{\text{tel aviv, yafo, givatayim, bat yam}\}$
    $\text{tel aviv}^{0.6} = \{\text{tel aviv, yafo, givatayim, bat yam, xolon, rishon, bney brak, herzeliya}\}$

- We further propose that a sentence interpreted under a degree of precision $d$ is true if the speaker is certain / there is commitment that one of the alternatives in the corresponding set is true.
  - I.e. standards of precision are **metalinguistic operators:** They do not directly determine truth (of one of the alternatives), but only or commitments / certainty w.r.t. truth (of one of the alternatives)
    - For example $\text{John lives in Tel Aviv}^{0.95}$ will be true if it the speaker is certain / there is commitment that John lives in tel Aviv or Yafo.

- Crucially, then, negation will have a metalinguistic effect as well:
  - $\neg \text{John lives in Tel Aviv}^{0.95}$ : There is no certainty / commitment that John lives in Tel Aviv or in Yafo (he may live in other places)

- Back to **more or less**

(19) **John arrived at more or less 3**

- The **negative component:** $\neg \text{John arrived at } 3_{prC}$
  - Suppose $pre_c = 0.9$
    - $3^{0.9} = \{2.57, 2.58, 2.59, 3.00, 3.01, 3.02, 3.03\}$
    - Thus, there is no certainty / commitment that John arrived at one of the times in this set

- The **positive component:** There is a lower and close degree of precision $pre_1$, under which $p$ holds.
  - Suppose $pre_1 = 0.8$
    - $3^{0.8} = \{2.50, 2.51, 2.52, 2.53, 2.54, 2.55, 2.56, 2.57, 2.58, 2.59, 3.00, 3.01, 3.02, 3.03, 3.04, 3.05, 3.06, 3.07, 3.08, 3.09, 3.10\}$
    - Thus, there is certainty / commitment to the truth of one of the alternatives in this larger set.
I arrived at 3
\(preC\) = No commitment to any of the alternatives in
\(\{2.55 \ldots 3 \ldots 3.05\}\)
I arrived at \(pre1\) = Commitment to one of the alternatives in:
\(\{2.10 \ldots 3 \ldots 3.10\}\)

- Together, the positive and negative components of (29) explain the following facts:
  - **No directionality:** Given the positive component, there is certainty / commitment that \(John\) arrived at \(t\) for some time in the interval surrounding 3 i.e. possibly (slightly) after 3
    - This is in contrast to \(almost\) where the proximal alternative is a proposition lower than \(John\) arrived at 3\(_{o}^{}\) and hence entails that \(John\) arrived before 3.
  - **No Polarity:**
    - Negation with \(more\ or\ less\) is metalinguistic: we reject the certainty of / commitment to one of the alternatives determined by the correct precision standard.
    - Moreover, given the positive component there is certainty / commitment to the truth of one of the alternatives in a larger set / a wider temporal interval.
      - Since one of the members of this set / interval contains is the time 3.00 itself, \(John\) arrived at \(more\ or\ less\ 3\) is compatible with a situation where \(John\) actually arrived at \(precisely\ 3\).
      - Again, this is unlike what happens with \(almost\), where the negative component reject the truth of \(p\) in \(w_{0}\)
    - **Knowing that \(p\) is (precisely) true leads to a polarity effect with \(more\ or\ less\):**
      - E.g. If the speaker knows that \(John\) arrived at 3.00, his utterance of \(John\) arrived at \(more\ or\ less\ 3\) will be considered false / misleading
        - This is because in such a case the negative component in the semantics of \(more\ or\ less\) cannot hold:
  (20) - **John arrived at 3\(_{prec}\)**
    - (30) says that we are not committed to any of the alternatives in the set \(\{2.59, 3, 3.01\}\)
    - But if a speaker knows that \(John\) arrived at 3.00, then he is committed to one of the alternatives - hence this negative component cannot hold.
  - **Distance from the limit in \(John\) arrived at \(more\ or\ less\ 3\)**
    - Negative component: What is rejected is the commitment to one of the alternatives in the set dictated by the current precision standard \(preC\).
      - But remember that \(preC\) can be one which is not maximally precise to start with (e.g. set dictated by \(John\) arrived at 3\(_{0.9}\))
    - Positive component: An alternative involving an even lower (more relaxed) precision standard holds, e.g. 3\(_{0.8}\)
      - Thus, the time where \(John\) actually arrived can be even farther away from the precise point (3).
- In contrast, with \(almost\) the proximal alternative is relativize to \(John\) arrived at 3, and hence must involve an alternative time close to 3.
- Hence, comparing \(almost\ 3\) and \(more\ or\ less\ 3\) implies that the former yields a time closer to 3 than the latter.
✓ No counterfactual reading: *more or less* only involves scales of \( p \) under different precision standards, not of ordering between worlds.

✓ Infelicity of *more or less* with non vague expressions:

(21) ??John more or less passed the test (where the pass test is strictly 60)

- Here the ‘current precision standard’ must be maximal. Relaxing the precision standard, would mean that John got less than 60 (e.g. 58)
- But then the positive component (saying that *John passed* under a more relaxed standard) cannot hold (John cannot be considered as passing).
  - More generally, with non-vague predicates, \( p \) cannot be both negated on a certain precision standard, an affirmed on a lower precision standard

3.3 *be-gadol* (work in progress):

- *be-gadol* can use the same ‘relevant parameter’ proposed for *more or less*, namely, the ‘current precision standard’.

- This accounts for all the cases where *be-gadol* has an ‘imprecision’ reading, like *more or less*:
  (22) John arrived at more or less / *be-gadol* 3
  (23) We more or less / *be-gadol* missed the wedding
  (24) The room is more or less / *be-gadol* clean

- On this reading *be-gadol* \( p \), just like *more or less* \( p \), rejects the prejacent under the current precision standard, and accepts the prejacent under a lower precision standard

\[ I \text{ arrived at } 3_{\text{p} \text{rec}} = \text{No commitment to any of the alternatives in} \]
\[ \{2.55,3,3.05\} \]
\[ I \text{ arrived at } 3_{\text{p} \text{rel}} = \text{Commitment to one of the alternatives in:} \]
\[ \{2.10,3,3.10\} \]

- However, above we saw that *be-gadol* is also felicitous in cases where the speaker knows that \( p \) is ‘precisely’ true (i.e. true under the current precision standard):

(25) A: What did rina do in the party?
    B: *She be-gadol danced* (she typically danced most of the time)

(26) Context: In order to get accepted to the department John has to pass a test. The passing grade is 60
    A: (talking about John): Well, what are the results?
    B: *He begadol passed the test* (he got 63), but eventually he didn’t get accepted since there were unexpectedly too many candidates this year.

- In addition, with *be-gadol* we can also get a ‘reduced future commitment’ reading:

(27) A: Are you coming to the party?
B: be-gadol yes

What do these examples share? How can we characterize the effect of begadol in them?

- We propose that the relevant parameter in these cases, the negative and positive components of be-gadol, can also be the current level of completeness of answerhood to the QUD, represented as ans_c.
- Intuitively, in all of the examples above, the presence of be-gadol indicates that the prejacent, although (completely) true, is an incomplete answer to the current Question Under Discussion (the QUD (Roberts 1996)).

We propose that the relevant parameter in these cases is the current level of completeness of answerhood to the QUD, represented as ans_c.

Thus, "be-gadol p" using ans_c:
- Negative component: ¬p ans_c : p does not reach the standard dictated by the context to be considered a complete answer to the QUD.
- Positive component: \( \exists p' \in S_{ALT}(p_{ans_c}) \land p' \leq_s p_{ans_c} \land close,(p', p_{ans_c}) \land p' \): Using a lower and close the degree required for an answer to be considered complete - p will be considered a complete answer to the QUD.
- Since be-gadol operates here on a meta linguistic level, the negation in the definition doesn't affect truth value at all, hence p can be true.

We distinguish two cases where be-gadol operates with this parameter ans_c:

Case# 1: Degrees of completeness of answer can be lined on a scale where all alternatives are answers to the same question:
- The top of the scale is the most complete answer possible, and the lower an alternative is on the scale, the less complete it is.
- The context determines for each question a standard of what counts as a "complete answer".
- This standard can be different in different contexts, even without hedges:

(28) A: What did Rina do today?
B: She studied for the test

For example, If B is a detective giving an account of Rina's activities, his answer may be considered incomplete answer, while for a regular conversation between two friends the same answer will be considered complete:

We can derive the potential variation in what counts as a complete answer from the maxim of quantity, which dictates the speaker give the maximal amount of relevant information:
- What counts as ‘relevant’ can change from context to context,
Hence, what counts as ‘maximal amount of information’ can change from context to context.

- The use of \textit{be-gadol} thus indicates that p does not reach the contextual standard for being a complete answer to a QUD Q,
  - But it counts as a complete answer to this same QUD if we lower the standard.

\begin{itemize}
  \item (29) A: What did Rina do in the party?
    B: \textit{She be-gadol danced}
\end{itemize}

\begin{itemize}
  \item (30) A: Are you coming to the party?
    B: \textit{be-gadol yes}
\end{itemize}

\textbf{Case # 2:}
\begin{itemize}
  \item p is considered a complete answer to the \textit{explicit} question,
  \item However - it is an \textit{incomplete} answer to a salient super-question of this explicit question, which is what is \textit{really} under discussion (and which can be itself explicit or implicit).
\end{itemize}

\begin{itemize}
  \item For example:
\end{itemize}

\begin{itemize}
  \item (31) Scenario: to get accepted to the English department one has to pass a test
    \begin{itemize}
      \item A: \textit{How did John do? Did he pass the test?}
        B: \textit{He begadol passed, but it turns out that there are too many candidates this year, so it is not clear yet whether he will be accepted.}
    \end{itemize}
\end{itemize}

\begin{itemize}
  \item In B’s utterance the prejacent “He passed” is a complete answer to the explicit question “Did he pass?”
  \item However, B’s use of \textit{be-gadol} in this case indicates that this is not a complete answer to the ‘real’ question under discussion in this context, namely – will John be accepted?
\end{itemize}
(See also Roberts (2011) for other strategies that a speaker may use to indicate that \( p \) is not an answer to the explicit question, but to another, sometimes implicit question.)

Thus, the question *Did he pass?* is a subquestion of the real question *Will he get accepted?* Hence we reject \( p \) as a complete answer under the current answerhood standard \( \text{ans}_c \),

- But we accept \( p \) as a complete answer to a subquestion of this question, thus, accepting it as a complete answer under a lower answerhood standard \( \text{ans}_l \)
- Since *Did he pass?* is an ‘important’ subquestion: (Under normal circumstances passing the test predicts being accepted) \( \text{pans}_l \) can be considered not only ‘lower’ than \( \text{pans}_c \), but also ‘close’ to it.

The same seems to hold also with (32):

(32) *A: So what’s happening with John and Mary? Do they love each other?*

*B': They be-gadol / more or less love each other, but they are still not ready for marriage.*

- More research is needed here to model the different types of ‘completeness of answerhood’ more precisely.

### 4. Summary and directions for further research

- We have looked at a range differences between *almost*, *more or less* and *be-gadol*, e.g. in terms of
  - Polarity
  - Directionality
  - Distance from the limit point
  - Ability to get various readings:
    - ‘counterfactual’ / ‘temporal’ / ‘incomplete future commitment’ / imprecision / incomplete answerhood, etc.

- Previous theories took such differences to indicate that *almost* and *more or less* have distinct semantic operations
- In contrast, we proposed a unified schema for all three approximators (heavily inspired by the proposed semantics of *almost*) - capturing the intuitive similarity between them:

  (33) **Approximator:** \( \lambda p . \neg p_c \land \exists p' \in S_{alt}(p,c) \land p' < p_c \land \text{close}, (p', p_c) \land p' \)

  **Paraphrase:** Approximators combine with a prejacent \( p \).
  - **Negative component:** Rejecting under a the current value to a parameter \( c \) (rejects \( p_c \)).
  - **Positive component:** Stating that an alternative \( p' \) holds, which is a member of the scaled set of alternatives to \( p_c \), lower and close to \( p_c \) on the scale.

- And derived the range of differences between them from a minimal varying component:
o I.e. from whether the ‘relevant parameter (‘c’) in the definition is a world ($w_0$), a precision standard ($prec$) or a completeness standard of answerhood to the QUD ($anse$).
Open questions and Directions for further research

- How to model better and more precisely ‘degrees of answerhood’?
- Can the proposal here cover all approximators?
- What is ‘at issue’ and what is ‘not at issue’ in the semantics of approximators?
- What are the association with focus properties of approximators?
- What happens with L(owr)-closed adjectives?

Let’s consider these questions in more detail:

- How to model better and more precisely ‘degrees of answerhood’? What other types of ‘completeness of answerhood’ are there?

  - How can Robert’s model of questions be improved so it can capture the types of ‘answerhood degrees’ discussed above?
    - In Roberts’ theory, an incomplete (partial) answer to a QUD is one which assigns a truth value to at least one element in the alternative in the question.
    - Thus, this theory may be able to take an answer q as more complete than p, if q assigns values to more alternatives (e.g. *Rina ate pizza and salad* is a more complete answer than *Rina ate pizza* to the question“What did Rina eat?”)
    - However, there are other kinds of ‘degrees of completeness’ of answerhood, which are not always ‘quantity-based’,
      - E.g. significance-based (a more ‘significant answer is considered more complete” (as in the examples above).

In addition, consider (34):

(34)  A: *What do you study in semantics?*
    B: *Begadol, about the meanings of expressions in the language*

    - The use of *be-gadol* seems to indicate this answer, although true, is too general. A more detailed answer would be considered more complete.
    - Can this type of ‘incompleteness’ be covered by the two cases discussed above?
    - Do we actually have here some type of ‘imprecision’, instead of incomplete answer?

- Work in progress to examine whether the proposal here can cover all approximators.
  - For example, do ‘epistemic approximators’ (Saurland & Stateva …) have the same schematic operation suggested above?
  - If yes, what is the ‘relevant parameter’ with them (degrees of speaker's commitment?)
  - What other parameters differentiate different approximators cross linguistically?

- What is ‘at issue’ and what is ‘not at issue’ in the semantics of approximators?
  - Roberts 2011: the negative (polar) component is not at issue
  - However, this component CAN be rejected:

(35)  A: *The room is almost clean*
    B: *Your’e wrong. It is (perfectly) clean!*
• What are the association with focus properties of approximators (given e.g. Beaver & Clark 2008 or Roberts 2011)?

• What happens with L(ow)-closed adjectives?
  o Usually, sentences of the form more or less p are compatible with a situation where p is precisely true (see the discussion of John arrived at more or less 3).
  o But this is not always the case. Consider (36) and (37):

    (36) John is more or less running
    (37) The room is more or less clean

  ➢ If a listener of (36) and (37) finds out that John was running in the most typical / wonderful way, or that the room is perfectly clean, she will consider () and (0), respectively, as false
    ▪ Why is that? What explains the difference between John arrived at more or less 3 / John is more or less 1.80 and sentences like (36) and (37)?

• Almost / begadol / more or less are all much better with U(pper) closed than with L(ower) closed adjectives (using the terminology of Kennedy & McNally 2005):

    (38) The room is almost / more or less / be-gadol dirty
    (39) The room is #almost / ??more or less / ?be-gadol dirty

  ❖ Nonetheless it seems that paxot o yoter and be-gadol are better than kim’at with such adjectives. How can that be derived from the theory proposed above?
  ❖ It seems that stress on almost in (39) renders its presence with dirty better. Why is that?

Thank you!

References


