A progress report on intention reports

1 Introduction

Belief reports like (1a) and desire reports like (1b) are both well studied in formal semantics...

(1) a. John thinks it’s raining.
   b. John wants to go home.

...and their fine-grained similarities and differences have informed our understanding of a wide range of phenomena such as presupposition projection (Heim 1992), mood choice (Farkas 1992; Portner 1997; Giannakidou 1998, 2009; Villalta 2008), NPI licensing (Kadmon and Landman 1993; Giannakidou 1999; von Fintel 1999), modality (Stephenson 2007; Anand and Hacquard 2013), and control (Grano 2015a; Pearson 2016).

Intention reports like (2), by contrast, have received very little attention.

(2) John intends to leave soon.

(3) Goals for this talk:
   a. Empirical: Show that a three-way comparison between intention, belief, and desire reports yields a rich set of data ripe for theorizing.
   b. Theoretical: Develop an analysis of intention reports that elucidates their theoretical relationship both to belief and desire reports as well as to other grammatical phenomena that have to do with intention:

(4) a. John murdered Bill.  INHERENTLY INTENTIONAL VERBS
   b. John intentionally broke the window.  AGENT-ORIENTED ADVERBS
   c. John broke the window in order to get inside.  PURPOSE CLAUSES
   d. Break the window!  IMPERATIVES

(5) Two previous concepts I’ll rely on heavily:
   a. Condoravdi and Lauer’s (2016) EFFECTIVE PREFERENCES
   b. Farkas’s (1988) RESPONSIBILITY)-relation

(6) Central thesis:
\[
[a \text{ intends } p]^w = 1 \text{ iff } \text{RESP}(a, p) \in \text{max}[\text{Effective-Preference}(a, w)]
\]

‘A sentence of the form \( a \text{ intends } p \) denotes true iff the proposition that \( a \) stands in the \( \text{RESP} \)-relation with \( p \) is a member of \( a \)’s maximally ranked effective preferences in the evaluation world.’

(7) Roadmap:
   a. Section 2: The empirical landscape
   b. Section 3: Effective preferences
   c. Section 4: Responsibility
   d. Section 5: Conclusions and outlook
2 The empirical landscape

Preview:

(8) Four ways in which intend patterns like believe and unlike want:
   a. Realism
   b. Conjunction Introduction
   c. Monotonicity
   d. Non-gradability

(9) One way in which intend patterns like want and unlike believe: Anankastic conditionals

(10) One way in which intend patterns unlike both want and believe: Responsibility

2.1 Realism

intend sounds odd with unrealistic or impossible outcomes:

(11) a. #John intends to fly to the moon, even though he knows this is impossible.
    b. #John intends to turn into a unicorn, even though he knows this is impossible.

→ (11a–b) sound contradictory or at the very least portray John as irrational.

Heim (1992) entertains a similar idea for want but also observes counterexamples like (12).

(12) I want this weekend to last forever. (But I know, of course, that it will be over in a few hours.)
    (Heim 1992:199)

Compare:

(13) a. (?)John wants to fly to the moon, even though he knows this is impossible.
    b. (?)John wants to turn into a unicorn, even though he knows this is impossible.

→ (13a–b) portray John as having fanciful desires but are not contradictory and do not portray John as irrational.

In this respect intend patterns unlike want and instead like believe:

(14) a. #John believes he will fly to the moon, even though he knows this is impossible.
    b. #John believes he will turn into a unicorn, even though he knows this is impossible.
2.2 Conjunction Introduction

An attitude predicate \( \text{ATT} \) has the CONJUNCTION INTRODUCTION property if (15) holds for an arbitrary attitude holder \( a \) and arbitrary propositions \( p \) and \( q \):

\[
\begin{align*}
\text{(15)} & \quad \begin{array}{l}
a. \ a \ \text{ATT} \ p \\
b. \ a \ \text{ATT} \ q \\
c. \ a \ \text{ATT} \ [p \land q]
\end{array}
\end{align*}
\]

Condoravdi and Lauer 2016, building on Levinson 2003: There are two kinds of evidence that \textit{intend} does indeed have this property.

**Evidence #1:** If \( p \) and \( q \) contradict each other, it is odd to pair \( a \ \text{ATT} \ p \) with \( a \ \text{ATT} \ q \):

\[
\begin{align*}
\text{(16)} & \quad \begin{array}{l}
\#\text{John \ intends} \ to \ move \ \ \text{in} \ \text{with} \ \text{his} \ \text{girlfriend}, \ \text{but} \ \text{he} \ \text{also \ intends} \ to \ keep \ \text{living} \ \text{alone}.
\end{array}
\end{align*}
\]

**Evidence #2:** It is odd to pair \( a \ \text{ATT} \ p \) and \( a \ \text{ATT} \ q \) with an explicit denial of \( a \ \text{ATT} \ [p \land q] \):

\[
\begin{align*}
\text{(17)} & \quad \begin{array}{l}
\#\text{John \ intends} \ to \ \text{visit} \ \text{Paris} \ \text{this} \ \text{summer}. \ \text{And} \ \text{John \ intends} \ to \ \text{visit} \ \text{Rome} \ \text{this} \ \text{summer}. \ \text{But} \ \text{he} \ \text{doesn’t \ intend} \ to \ \text{visit \ both} \ \text{Paris \ and} \ \text{Rome} \ \text{this} \ \text{summer}.
\end{array}
\end{align*}
\]

In this respect, \textit{intend} patterns unlike \textit{want} . . .

\[
\begin{align*}
\text{(18)} & \quad \begin{array}{l}
\text{John \ wants} \ to \ \text{move} \ \text{in} \ \text{with} \ \text{his} \ \text{girlfriend}, \ \text{but} \ \text{he} \ \text{also \ wants} \ to \ \text{keep} \ \text{living} \ \text{alone}.
\end{array}
\end{align*}
\]

\[
\begin{align*}
\text{(19)} & \quad \begin{array}{l}
\text{John \ wants} \ to \ \text{visit} \ \text{Paris} \ \text{this} \ \text{summer}. \ \text{And} \ \text{John \ wants} \ to \ \text{visit} \ \text{Rome} \ \text{this} \ \text{summer}. \ \text{But} \ \text{he} \ \text{doesn’t \ want} \ to \ \text{visit \ both} \ \text{Paris \ and} \ \text{Rome} \ \text{this} \ \text{summer}.
\end{array}
\end{align*}
\]

. . . and instead like \textit{believe}:

\[
\begin{align*}
\text{(20)} & \quad \begin{array}{l}
\#\text{John \ believes} \ \text{he’ll} \ \text{move} \ \text{in} \ \text{with} \ \text{his} \ \text{girlfriend}, \ \text{but} \ \text{he} \ \text{also \ believes} \ \text{he’ll} \ \text{keep} \ \text{living} \ \text{alone}.
\end{array}
\end{align*}
\]

\[
\begin{align*}
\text{(21)} & \quad \begin{array}{l}
\#\text{John \ believes} \ \text{he’ll} \ \text{visit} \ \text{Paris} \ \text{this} \ \text{summer}. \ \text{And} \ \text{John \ also \ believes} \ \text{he’ll} \ \text{visit} \ \text{Rome} \ \text{this} \ \text{summer}. \ \text{But} \ \text{he} \ \text{doesn’t \ believe} \ \text{he’ll} \ \text{visit \ both} \ \text{Paris \ and} \ \text{Rome} \ \text{this} \ \text{summer}.
\end{array}
\end{align*}
\]

2.3 Monotonicity

An attitude predicate \( \text{ATT} \) is UPWARD-ENTAILING if (22) holds for an arbitrary attitude holder \( a \) and arbitrary propositions \( p \) and \( q \):

\[
\begin{align*}
\text{(22)} & \quad \begin{array}{l}
a. \ a \ \text{ATT} \ p \\
b. \ p \rightarrow q \\
c. \ a \ \text{ATT} \ q
\end{array}
\end{align*}
\]

So if \( p \rightarrow q \) and an attitude predicate is upward-entailing, then \( [\neg [a \ \text{ATT} q] \land [a \ \text{ATT} p]] \) should be contradiction.

Entailment relations we’ll use to test for upward-entailingness:
(23)  

*want* is well known to (appear to) not be upward-entailing (24), unlike *believe* (25) (see, among others, Stalnaker 1984; Asher 1987; Heim 1992; Giannakidou 1999; von Fintel 1999; Levinson 2003; Villalta 2008; Crnič 2011; Anand and Hacquard 2013; Condoravdi and Lauer 2016).

(24)  
  a. John doesn’t *want* to teach next semester, but (given that he has to,) he *wants* to teach Tuesdays and Thursdays next semester.
  b. John doesn’t *want* to use his voice, but (given that he has to,) he *wants* to sing.

(25)  
  a. #John doesn’t *believe* he’ll teach next semester, but (given that he has to,) he *believes* he’ll teach Tuesdays and Thursdays next semester.
  b. #John doesn’t *believe* he’ll use his voice, but (given that he has to,) he *believes* he’ll sing.

In this respect, *intend* patterns unlike *want* and instead like *believe*:

(26)  
  a. #John doesn’t *intend* to teach next semester, but (given that he has to,) he *intends* to teach Tuesdays and Thursdays next semester.
  b. #John doesn’t *intend* to use his voice, but (given that he has to,) he *intends* to sing.

2.4 Non-gradability

*want* behaves like a gradable predicate (Villalta 2008 and others) whereas *believe* does not:

(27)  
  a. John *wants* to go to Paris more than he *wants* to go to London.
  b. What John *wants* the most is to be happy.
  c. John *wants* very much to leave.

(28)  
  a. ?John *believes* he’ll go to Paris more than he *believes* he’ll go to London.
  b. ?What John *believes* the most is that he’ll be happy.
  c. ?John *believes* very much that he’ll leave.

In this respect, *intend* patterns like *believe*:

(29)  
  a. ?John *intends* to go to Paris more than he *intends* to go to London.
  b. ?What John *intends* the most is to be happy.
  c. ?John *intends* very much to leave.
2.5 Anankastic conditionals

An ANANKASTIC CONDITIONAL is a sentence of the general form in (30) that expresses a necessary condition \( q \) for achieving a specified goal or desire \( p \) (see especially Sæbø 1985, 2001; von Fintel and Iatridou 2005; Huitink 2005, 2008; Nissenbaum 2005; von Stechow, Krasikova, and Penka 2006; Condoravdi and Lauer 2016).

(30) If \( a \) [appropriate embedding predicate] \( p \), [necessity modal] \( q \).

For example:

(31) a. If you want to get good grades, you must study.
    b. \( \approx \) You must study in order to get good grades.

Not all conditionals that match the pattern in (30) are ordinarily read as anankastic conditionals:

(32) a. If you want to get bad grades, you must reexamine your priorities.
    b. \( \not\approx \) You must reexamine your priorities in order to get bad grades.

But whereas want and intend are both COMPATIBLE with an anankastic reading, believe is not:

(33) a. If you intend to get good grades, you must study.
    b. \( \approx \) You must study in order to get good grades.

(34) a. If you believe you’ll get good grades, you must study.
    b. \( \not\approx \) You must study in order to get good grades.

2.6 Responsibility

(35) Semi-formal statement of claim to be defended here: In calculating the truth conditions of an intention report of the form \( a \) intends \( p \), we consider only that subset of \( p \)-worlds in which \( a \) intentionally brings it about that \( p \). Other \( p \)-worlds are ignored. By contrast, in calculating the truth conditions of a belief or desire report of the form \( a \) believes/wants \( p \), we consider all \( p \)-worlds.

2.6.1 The causation effect

Intention reports that do not instantiate syntactic control can generally be paraphrased as control sentences using a causative predicate, whereas belief and desire reports cannot (versions of this observation are found in Perlmutter 1968; Jackendoff 1996; Jackendoff and Culicover 2003; Culicover and Jackendoff 2005, though see Boeckx, Hornstein, and Nunes 2010:232–234 for skepticism).

(36) a. John intends (for) Bill to leave.
    b. \( \approx \) John intends to bring it about that Bill leave.

(37) a. John believes Bill will leave.
    b. \( \not\approx \) John believes he’ll bring it about that Bill leave.
(38)  a. John wants Bill to leave.
    b. \( \not\exists \) John wants to bring it about that Bill leave.

2.6.2 Interaction with (un)intentionally

Embedding un-intentionally or intentionally into the complement of ‘intend’ gives a somewhat odd result, unlike what happens with ‘want’ or ‘believe’.

(39)  a. \( \#\)John intends to break the window un-intentionally.
    b. John believes he’ll break the window un-intentionally.
    c. John wants to break the window un-intentionally.

(40)  a. \( \#\)John intends to break the window in-tentionally.
    b. John believes he’ll break the window in-tentionally.
    c. John wants to break the window in-tentionally.

2.6.3 Uncontrollable outcomes

Intention reports are odd with outcomes not under the control of the attitude holder, unlike what we find for desire or belief reports:

(41)  a. \( \#\)John intends to go through puberty next year.
    b. \( \#\)John intends to snore while he is asleep tonight.
    c. \( \#\)John intends to resemble his father.
    d. \( \#\)John intends to be tall.

(42)  a. John wants to go through puberty next year.
    b. John wants to snore while he is asleep tonight.
    c. John wants to resemble his father.
    d. John wants to be tall.

(43)  a. John believes he’ll go through puberty next year.
    b. John believes he’ll snore while he is asleep tonight.
    c. John believes he’ll resemble his father.
    d. John believes he’ll be tall.

2.7 Summary of the data

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<th>believe</th>
<th>want</th>
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<td>2. Conjunction Introduction</td>
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</tr>
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<td>3. Monotonicity</td>
<td>✓</td>
<td>✓</td>
</tr>
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<td>4. Non-gradability</td>
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<td>✓</td>
</tr>
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<td>5. Anankastic conditionals</td>
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<td>*</td>
</tr>
<tr>
<td>unique property</td>
<td>7. Responsibility</td>
<td>✓</td>
<td>*</td>
</tr>
</tbody>
</table>
3 Analysis pt. 1: *intend* as an effective preference predicate

3.1 Background on Condoravdi and Lauer 2016

Condoravdi and Lauer 2016 (henceforth CL16), building on Davis 1984; Levinson 2003:

(44) Do you *want* to play tennis?
    a. I *want* to, but I have to teach.
    b. No [= I don’t *want* to], I have to teach.

CL16:22–23:

For an agent who has to decide between alternative courses of action, the decision is driven by two factors. On the one hand, he has certain beliefs, including beliefs about which actions are available, and what their consequences are. On the other hand, he has certain preferences for how the world turns out to be, relative to outcomes over which he might have some influence. But not all desires or preferences that the agent has as a matter of psychological fact need to count among the preferences that guide action choice. He might simply fail to take some of his desires into account, or a more important preference might defeat a less important one. We call the preferences that the agent takes into account when choosing actions his *effective preferences*.

Modeling preferences (CL16:29):

(45) Given a set of worlds $W$, a *preference structure* is a pair $\langle P, \prec \rangle$, where $P \subseteq P(W)$ and $\prec$ is a strict partial order on $P$.

A function for picking out maximally ranked preferences (CL16:30):

(46) $\text{max}[\langle P, \prec \rangle] := \{ p \in P \mid \nexists q \in P: p \prec q \}$

An agent at a world has a set of preference structures corresponding to her various sources of preferences: desires, personal moral codes, obligations, etc.

An underspecified semantics for *want* (CL16:30):

(47) $[a \text{ wants}_{PB} p]^w = 1$ iff $p \in \text{max}[PB(a,w)]$

where $PB$ is a contextually specified preferential background (function from individuals and worlds to preference structures)

CL16 propose that **effective preference structures** have at least two special properties:

(48) **Consistency**
A preference structure $\langle P, \prec \rangle$ is *consistent* with respect to an information state $B$ iff for any $X \subseteq P$, if $B \cap \bigcap X = \emptyset$, there are $p, q \in X$ such that $p < q$. (CL16:29)

(49) **Realism**
A preference structure $\langle P, \prec \rangle$ is *realistic*, relative to an information state $B$, iff for all $p \in P$: $p \cap B \neq \emptyset$. (CL16:29)
3.2 Back to intend

(50) **Hypothesis (to be revised):**

\[ [\text{a intends } p]^w = 1 \text{ iff } p \in \text{max}[\text{Effective-Preference}(a,w)] \]

Revisiting the six properties:

(51) **REALISM**

a. #John **intends** to fly to the moon, even though he knows this is impossible.

b. → Follows from requirement that effective preference structures obey Realism.

(52) **CONJUNCTION INTRODUCTION, pt. 1**

a. #John **intends** to move in with his girlfriend, but he also **intends** to keep living alone.

b. → Follows from requirement that effective preference structures obey Consistency.

(53) **CONJUNCTION INTRODUCTION, pt. 2**

a. #John **intends** visit Paris this summer. And John **intends** to visit Rome this summer. But he doesn’t **intend** to visit both Paris and Rome this summer.

b. → Does not follow from anything!

(54) **MONOTONICITY**

a. #John doesn’t **intend** to teach next semester, but (given that he has to,) he **intends** to teach Tuesdays and Thursdays next semester.

b. → Does not follow from anything!

**Option 1:** Impose two additional requirements on effective preference structures:

(55) **Closure under conjunction**

A preference structure \( \langle P, \prec \rangle \) is closed under conjunction iff for all \( p, q, \) if \( p \in \text{max}[\langle P, \prec \rangle] \) and \( q \in \text{max}[\langle P, \prec \rangle] \), then \( p \land q \in \text{max}[\langle P, \prec \rangle] \)

(56) **Closure under entailment**

A preference structure \( \langle P, \prec \rangle \) is closed under entailment iff for all \( p, q, \) if \( p \in \text{max}[\langle P, \prec \rangle] \) and \( p \rightarrow q, \) then \( q \in \text{max}[\langle P, \prec \rangle] \)

**Option 2:** Go Hintikkan:

(57) \[ [a \text{ intends } p]^w = 1 \text{ iff } \forall w' [w' \in \bigcap \text{max}[\text{Effective-Preference}(a,w)] \rightarrow p(w')] \]

**CONJUNCTION INTRODUCTION** is now guaranteed in virtue of the same logic that guarantees that All dogs are mammals and All dogs are quadrupeds together entail All dogs are quadruped mammals (set-theoretically, for any sets A, B, and C, if \( A \subseteq B \) and \( A \subseteq C \), then \( A \subseteq (B \cap C) \)).

**MONOTONICITY** is now guaranteed in virtue of the same logic that guarantees that All dogs are mammals and All mammals are animals together entail All dogs are animals (set-theoretically, this is just the transitive property of the subset relation).

In what follows I’ll assume Option 1 for concreteness, but nothing crucial will ride on this choice.
Interim conclusion: Realism, Conjunction Introduction, and Monotonicity all follow from the special constraints on effective preference structures.

NON-GRADABILITY
a. ?John intends to go to Paris more than he intends to go to London.
b. → Follows from fact that intend targets maximally ranked preferences only.
c. But CL16’s semantics for want needs to be revised to account for its gradability (cf. Villalta 2008; Lassiter 2011; Rubinstein 2012; Anand and Hacquard 2013).

ANANKASTIC CONDITIONALS
a. If you intend to get good grades, you must study.
b. → Follows from CL16’s approach to anankastic conditionals.

RESPONSIBILITY
a. John intends (for) Bill to leave. ≈ John intends to bring it about that Bill leave.
b. #John intends to break the window unintentionally.
c. #John intends to break the window intentionally.
d. #John intends to go through puberty next year.
e. → Does not follow from anything!

It is tempting to think that there is a natural connection between effective preferences and responsibility. If an agent’s preference for some outcome p is to guide the agent’s action, then shouldn’t p be something that a has control over? We will revisit this question below.

4 Analysis pt. 2: intend as a RESP-inducing predicate

4.1 Background on Farkas 1988

Farkas (1988) defines a two-place relation RESP, which holds...

between an individual i and a situation s just in case i brings s about, i.e., just in case s is the result of some act performed by i with the intention of bringing s about. Thus, if RESP(i,s) holds, i is seen as both initiating and controlling s, i.e., the realization of s crucially depends on i. (Farkas 1988:36)

Phenomena Farkas points to as evidence for the linguistic relevance of RESP:

PURPOSE CLAUSES
a. John read ‘Anna Karenina’ in order to impress Mary.
b. The shopwindow has a big sale sign in it in order to attract customers.
c. #John resembles his father in order to annoy his grandmother.
d. #The weather has been good lately in order to please the tourists. (Farkas 1988:36)

IMPERATIVES
a. Be polite!
b. #Be tall!
c. #Resemble your father! (Farkas 1988:39)
(64)  *intentionally*
   a. John hurt Mary intentionally.
   b. John fell off the ladder intentionally.
   c. #John resembles his father intentionally.
   d. #John is tall intentionally.  
      (Farkas 1988:39)

(65)  **OBJECT CONTROL VERBS**
   a. #John {convinced/persuaded/requested/ordered/required} Pete to resemble Bill.
   b. #John {convinced/persuaded/requested/ordered/required} Pete to be tall.
   c. #John {convinced/persuaded/requested/ordered/required} Pete to be blue-eyed.

(66)  **some SUBJECT CONTROL VERBS**
   a. #John {promised/agreed/decided/intended} to resemble Bill.
   b. #John {promised/agreed/decided/intended} to be tall.
   c. #John {promised/agreed/decided/intended} to be blue-eyed.

Farkas:  \textit{RESP} \neq \textit{AGENT}:

**Reason #1:** The individual standing in the \textit{RESP}-relation need not be syntactically represented as an argument in the clause that names the relevant situation:

(67)   a.  [The shopwindow has a big sale sign in it] in order to attract customers.
   b.  It was intentional on John’s part [that the children were in bed by 8].
   c.  John promised Mary [that the children will be in bed by 8].

(68)  [Che venga anche lui]!
      that  come also he
      ‘(See to it that) he comes as well.’ (Italian: Zanuttini, Pak, and Portner 2012)

**Reason #2:** Some cases where we would plausibly want to invoke the \textit{AGENT} relation do not involve the \textit{RESP}-relation:

(69)  John (unintentionally) broke the window.
4.2 Back to intend

Baking RESP into the semantics of intention reports:

(70) **Hypothesis (to be revised):**

\[ [a \text{ intends } p]^w = 1 \text{ iff } p \in \text{max}[\text{Effective-Preference}(a,w)] \]

(71) **Hypothesis (final):**

\[ [a \text{ intends } p]^w = 1 \text{ iff } \text{RESP}(a,p) \in \text{max}[\text{Effective-Preference}(a,w)] \]

Some rough-and-ready meta-language/object-language equivalences:

(72) \[ \text{RESP}(a,p) \approx \text{it is intentional on } a\text{’s part that } p \]

\[ \approx a \text{ intentionally brings it about that } p \]

(73) \[ \text{RESP}(a,f(a)) \approx a \text{ intentionally } f \]

**The causation effect revisited:**

(74) a. John intends (for) Bill to leave.
   b. \approx John intends to bring it about that Bill leave.

(75) \[ [\text{John intends (for) Bill to leave}]^w = 1 \text{ iff } \text{RESP}(j,[[\text{Bill leave}]) \in \text{max}[\text{Effective-Preference}(j,w)] \]

‘John’s maximally ranked effective preferences include the proposition that John intentionally brings it about that Bill leave.’

**Interaction with (un)intentionally and uncontrollable outcomes revisited:**

(76) a. #John intends to break the window unintentionally.
   b. #John intends to break the window intentionally.
   c. #John intends to resemble his father.

(77) a. 1 iff \text{RESP}(j,[[\text{John break the window unintentionally}])] \in \text{max}[\text{Effective-Preference}(j,w)]
   ‘John’s maximally ranked effective preferences include the proposition that John intentionally breaks the window unintentionally.’

b. 1 iff \text{RESP}(j,[[\text{John break the window intentionally}])] \in \text{max}[\text{Effective-Preference}(j,w)]
   ‘John’s maximally ranked effective preferences include the proposition that John intentionally breaks the window intentionally.’

b. 1 iff \text{RESP}(j,[[\text{John resemble his father}])] \in \text{max}[\text{Effective-Preference}(j,w)]
   ‘John’s maximally ranked effective preferences include the proposition that John intentionally resembles his father.’

Compare:

(78) a. #John intentionally broke the window unintentionally.
   b. #John intentionally broke the window intentionally.
   c. #John intentionally resembled his father.
5 Conclusions and outlook

The take-home message: intend has…

a. want-like properties, stemming from its being built on preference structures
b. believe-like properties, stemming from special constraints on effective preference structures
c. responsibility-related properties, stemming from the RESP-relation

Toward a typology of attitude predicates: One way of summarizing this study…

<table>
<thead>
<tr>
<th>Preference structure?</th>
<th>want</th>
<th>intend</th>
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<tbody>
<tr>
<td>underspecified</td>
<td></td>
<td>effective</td>
</tr>
<tr>
<td>no</td>
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</tr>
<tr>
<td>yes</td>
<td></td>
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</tr>
</tbody>
</table>

Presumably the way these three properties cluster is not entirely accidental.

Evidence that effective preferences always associate with the RESP-relation: Anankastic use of want (which forces an effective preference interpretation) triggers responsibility effects!

a. If you want your daughter to get good grades, you have to tutor her.

b. ≈ If you want to bring it about that your daughter gets good grades, you have to tutor her.

a. If you want your daughter to get bad grades, you have to reexamine your approach to parenting.

b. ≈ If you want to bring it about that your daughter gets bad grades, you have to reexamine your approach to parenting.

Evidence that effective preferences tend to reject gradability:

a. ?If you want very much to get good grades, you have to study.

b. ?If you want to get good grades more than you want to have fun, you have to study.

→ All this points toward the conclusion that the clustering of properties in (80) is not accidental.

On the other hand… Consider count on:

a. If you count on getting good grades, you have to study.

b. ≈ You have to study in order to get good grades.

→ count on is compatible with effective preference readings.

a. #John counts on turning into a unicorn, even though he knows this is impossible.

b. #John counts on staying at home tonight but he also counts on going out tonight.

c. #John counts on teaching Tuesdays and Thursdays next semester, but he doesn’t count on teaching next semester.

→ count on is compatible ONLY with effective preference readings.
(86)  
  a. John **counts on** Bill leaving.  
  b. \( \not= \) John **counts on** bringing it about that Bill leave.

(87)  
  a. John **counts on** breaking the window unintentionally.  
  b. John **counts on** breaking the window intentionally.  
  c. John **counts on** going through puberty next year.

→ **count on** does not give rise to responsibility effects!

Updating the table:

<table>
<thead>
<tr>
<th></th>
<th>want</th>
<th>intend</th>
<th>count on</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. preference structure?</td>
<td>underspecified</td>
<td>effective</td>
<td>effective</td>
</tr>
<tr>
<td>b. RESP-inducing?</td>
<td>no</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>c. gradable?</td>
<td>yes</td>
<td>no</td>
<td>?</td>
</tr>
</tbody>
</table>

Beyond **intend** (cf. Sag and Pollard 1991; Jackendoff and Culicover 2003; Grano 2015b):

(89)  
  a. verbs of private commitment: **aim**, **choose**, **decide**, **endeavor**, **intend**, **plan**, **try**  
  b. verbs of public commitment: **agree**, **offer**, **pledge**, **promise**, **swear**, **threaten**  
  c. verbs of influence (object control): **advise**, **beg**, **command**, **order**, **persuade**, **urge**

**Topic for future work:** To what extent do the predicates in (89) share the same properties as **intend**?

**Download the full paper** “The logic of intention reports” from: pages.iu.edu/~tgrano

**References**


