Speaking of Qualities

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1 Reading 3: A scope paradox in intensional contexts

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4 Alternative analysis as de qualitate

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The classical ambiguity

indefinites in intensional contexts: well-known ambiguity

(1) Adrian wants to find a jacket like Malte’s.
   a. there is a particular jacket which is like Malte’s and Adrian is looking for that particular thing specific
   b. Adrian thinks: “I want to find a jacket like Malte’s!” unspecific
The classical ambiguity

indefinites in intensional contexts: well-known ambiguity

(1) **Adrian wants to find a jacket like Malte’s.**

a. *there is a particular jacket which is like Malte’s and Adrian is looking for that particular thing* specific

b. *Adrian thinks: “I want to find a jacket like Malte’s!”* unspecific

**specific/unspecific:** “is there a particular individual that is being targeted?”
The classical ambiguity

indefinites in intensional contexts: well-known ambiguity

(1) Adrian wants to find a jacket like Malte’s.
   a. there is a particular jacket which is like Malte’s and
      Adrian is looking for that particular thing
   b. Adrian thinks: “I want to find a jacket like Malte’s!”

specific/unspecific: “is there a particular individual that is being targeted?”

independent issue: like Malte’s has to be resolved contextually to
’same brand’/’looks similar’/’suitable for similar purposes’/

(2) I’ve just bought a jacket like Malte’s.
The classical solution (Quine 1960, Montague PTQ)

- indefinites are existential quantifiers
- scopal ambiguity of $\exists$ w.r.t. intensional operator (*want*, *try*,...)
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- scopal ambiguity of $\exists$ w.r.t. intensional operator ($\text{want}, \text{try}, \ldots$)

**specific**: $\exists > \text{want}$

(3) $\exists x [\text{jacket}(x) & \text{like Malte’s jacket}(x) & \text{Adrian wants that he finds } x]$ 

**unspecific**: $\text{want} > \exists$

(4) Adrian wants that $\exists x [\text{jacket}(x) & \text{like Malte’s jacket}(x) & \text{he finds } x]$
Problem for the classical analysis in terms of scope

Fodor (1970) observes a third reading:

(5)  **Adrian wants to buy a jacket like Malte’s.**

\[ \exists > \text{want} \text{ there is a particular jacket sitting in the shop-window, it is like Malte’s, and Adrian wants to buy that particular thing } \]

\[ \text{specific} \]

\[ \text{want} > \exists \text{ Adrian thinks: “I want to buy a jacket like Malte’s!” } \]

\[ \text{unspecific} \]
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∃ > want there is a particular jacket sitting in the shop-window, it is like Malte’s, and Adrian wants to buy that particular thing

want > ∃ Adrian thinks: “I want to buy a jacket like Malte’s!”

Reading 3 what Adrian has in mind: “buy something like this:”
Fodor (1970) observes a third reading: 

(5) **Adrian wants to buy a jacket like Malte’s.**

\[ \exists > \text{want} \] *there is a particular jacket sitting in the shop-window, it is like Malte’s, and Adrian wants to buy that particular thing*  

\[ \text{want} > \exists \] *Adrian thinks: “I want to buy a jacket like Malte’s!”*  

**Reading 3**  *Malte has a green ‘Bench’-jacket. Adrian doesn’t know this, but we do. Adrian is looking for a green Bench jacket.*
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**Reading 3** Malte has a green ‘Bench’-jacket. Adrian doesn’t know this, but we do. Adrian is looking for a green Bench jacket.

No scopal order between a **jacket like Malte’s** and **want** predicts Reading 3.
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*opaque*: restrictor of ∃ is the attitude subject’s description

*transparent*: restrictor of ∃ is “our” description
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Fodor (1970) observes a third reading:

(5) Adrian wants to buy a jacket like Malte’s.

∃ > want there is a particular jacket sitting in the shop-window, it is like Malte’s, and Adrian wants to buy that particular thing specific, transparent

want > ∃ Adrian thinks: “I want to buy a jacket like Malte’s!” unspecific, opaque

Reading 3 Malte has a green ‘Bench’-jacket. Adrian doesn’t know this, but we do. Adrian is looking for a green Bench jacket. unspecific, transparent

No scopal order between a jacket like Malte’s and want predicts Reading 3.

opaque: restrictor of ∃ is the attitude subject’s description
transparent: restrictor of ∃ is “our” description
Standard diagnosis: actual jackets

“The restrictor needs to be evaluated at the actual world.”
Standard diagnosis: actual jackets

“The restrictor needs to be evaluated at the actual world.”

- free world variable indexation (standard; Percus 2000)
- scoping out NP; or: semantic reconstruction (Heim & von Fintel 2007)
- presuppositional theory (Geurts 1998, Maier 2006, Romoli & Sudo 2008)
- Hintikka-style quantifiers (Sternefeld 2008)
- split intensionality (Keshet 2008)
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- evaluation of the restrictor at the actual world makes wrong predictions
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- three different cases of “Reading 3”
Standard diagnosis: actual jackets

“The restrictor needs to be evaluated at the actual world.”

- free world variable indexation (standard; Percus 2000)
- scoping out NP; or: semantic reconstruction (Heim & von Fintel 2007)
- presuppositional theory (Geurts 1998, Maier 2006, Romoli & Sudo 2008)
- Hintikka-style quantifiers (Sternefeld 2008)
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In the following:

- evaluation of the restrictor at the actual world makes wrong predictions
- classical analysis as *de qualitate* (higher order *de re*, Cresswell & von Stechow 1982)
- three different cases of “Reading 3”
- a uniform *de qualitate* analysis
Free world variable indexation (standard solution)

- natural language possesses the expressive power of overt quantification over world variables (Cresswell 1990)
- world variables are part of the syntactic representation (covert pronouns), cf. Percus (2000)
- within certain limits, they can be coindexed freely
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(6) **Adrian wants w@ [λw’ [ PRO [to buy w’ [QP a [NP jacket like Malte’s w@ ]]]]]**

- NP-part is evaluated at actual world ⊙ (transparent), ∃ takes narrow scope (unspecific)
Free world variable indexation (standard solution)

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(6) Adrian wants \( w_@ \) \( [\lambda w' \ [ \text{PRO} \ [\text{to buy} \ w'] \ [\exists \ QP \ a \ [\text{NP} \ \text{jacket like Malte's} \ w_@ ]]]]] \)

- NP-part is evaluated at actual world \( @ \) (transparent), \( \exists \) takes narrow scope (unspecific)
Worry: Attitudes w.r.t. particular worlds (1)

- ascription of propositions about particular individuals give rise to double vision problems (cf. Quine 1956)
- the free world variable indexation approach predicts that Adrian has desires that depend on one particular world
Worry: Attitudes w.r.t. particular worlds (1)

- ascription of propositions about particular individuals give rise to double vision problems (cf. Quine 1956)
- the free world variable indexation approach predicts that Adrian has desires that depend on one particular world for exemplification: Hintikka-style \textit{want} as truth at all bouletic alternatives (ignoring \textit{de se}):

\[
(7) \quad \llbracket \text{want} \rrbracket^{c,g} = \lambda w \lambda p \lambda x. \forall w' \in Boul_w(x)[p(w')]
\]
Malte’s jacket is a green Bench jacket; Adrian does not know what jackets Malte has; Adrian wants to buy a green Bench jacket. Adrian wants to buy a jacket like Malte’s.
Worry: Attitudes w.r.t. particular worlds (2)

Malte’s jacket is a green Bench jacket; Adrian does not know what jackets Malte has; Adrian wants to buy a green Bench jacket. Adrian wants to buy a jacket like Malte’s.

- unnaturally fine-grained

\[ w_1 \approx w_2 \; \text{modulo} \ldots : \]

\( w_1 \): Adrian buys green Bench jacket \( a \),
\( w_2 \): Adrian buys green Bench jacket \( b \)

\( \circ \): \( a \) is a green Bench jacket (like Malte’s),
\( b \) is a red Bench jacket (unlike Malte’s)
Worry: Attitudes w.r.t. particular worlds (2)

Malte’s jacket is a green Bench jacket; Adrian does not know what jackets Malte has; Adrian wants to buy a green Bench jacket. Adrian wants to buy a jacket like Malte’s.

- unnaturally fine-grained
  \[ w_1 \approx w_2 \text{ modulo...} \]

  \( w_1 \): Adrian buys green Bench jacket \( a \),
  \( w_2 \): Adrian buys green Bench jacket \( b \)

  \( @ \): \( a \) is a green Bench jacket (like Malte’s),
  \( \bar{a} \) is a red Bench jacket (unlike Malte’s)

  \( \Rightarrow \) \( w_1 \), but not \( w_2 \) is a bouletic alternative
Worry: Attitudes w.r.t. particular worlds (2)

*Malte’s jacket is a green Bench jacket; Adrian does not know what jackets Malte has; Adrian wants to buy a green Bench jacket. Adrian wants to buy a jacket like Malte’s.*

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\[ w_1 \approx w_2 \text{ modulo } \ldots : \]

- \( w_1 \): Adrian buys green Bench jacket \( a \),
- \( w_2 \): Adrian buys green Bench jacket \( b \)

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- \( b \) is a red Bench jacket (unlike Malte’s)

\( \mathbb{B} \quad w_1 \), but not \( w_2 \) is a bouletic alternative

\text{but}: Adrian has no means to distinguish \( w_1 \) and \( w_2/a \) and \( b \)
Worry: Attitudes w.r.t. particular worlds (2)

Malte’s jacket is a green Bench jacket; Adrian does not know what jackets Malte has; Adrian wants to buy a green Bench jacket. Adrian wants to buy a jacket like Malte’s.

- unnaturally fine-grained
- unintuitively unselective
Worry: Attitudes w.r.t. particular worlds (2)

Malte’s jacket is a green Bench jacket; Adrian does not know what jackets Malte has; Adrian wants to buy a green Bench jacket. Adrian wants to buy a jacket like Malte’s.

- unnaturally fine-grained
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\[ w_1 \approx w_3 \text{ modulo:} \]

\[ w_1: \ a \text{ is a green Bench jacket,} \]
\[ w_3: \ a \text{ is a red Bench jacket} \]
\[ w_1 \text{ and } w_3: \text{ Adrian buys } a \]
\[ @: \ a \text{ is a green Bench jacket (like Malte’s) } \]
Worry: Attitudes w.r.t. particular worlds (2)

Malte’s jacket is a green Bench jacket; Adrian does not know what jackets Malte has; Adrian wants to buy a green Bench jacket. Adrian wants to buy a jacket like Malte’s.

- unnaturally fine-grained
- unintuitively unselective

\[ w_1 \approx w_3 \text{ modulo:} \]

- \( w_1: a \) is a green Bench jacket,
- \( w_3: a \) is a red Bench jacket

\( w_1 \) and \( w_3 \): Adrian buys \( a \)

\[ \modal: a \text{ is a green Bench jacket (like Malte’s)} \]

\( \triangleright \) truth conditions are compatible with \( w_3 \) being a bouletic alternative for Adrian

(8) Adrian wants to buy a green Bench jacket.

[true de dicto]
The Burj Dubai-Problem (1)

scenario: Mary is looking at the Burj Dubai, which has 191 floors and is currently the highest building in the world. Also, no other building has more floors. Mary doesn't know this. She also doesn't know how many floors Burj Dubai has. She thinks: "Wow, I want to buy a building that’s even one floor higher!"

The Burj Dubai. Courtesy of orbit_77 on Flickr.
The Burj Dubai-Problem (1)

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Mary wants to buy a building with at least 192 floors

The Burj Dubai. Courtesy of orbit_77 on Flickr.
The Burj Dubai-Problem (2)

free world variable analysis:

(9) \[ [\text{Mary wants } w_@ [\lambda w' \ [ \text{to PRO buy } w' [ \ a \ [ \text{building with 192 floors} \ w_@ ] ] ] ] ] \circ_{g,c} = 1 \text{ iff } \] 
\[ \forall w \in Boul_{@}(\text{Mary}) \] 
\[ [\exists x [[\text{building with 192 floors}]_{@}(x) \& \text{buy}_w(\text{Mary}, x)]] \]
free world variable analysis:

\[(9) \quad [\text{Mary wants } w@ [\lambda w' \mid \text{to PRO buy } w' \mid \text{a [ building with 192 floors } w@ ] ] ] g,c = 1 \text{ iff }\]

\[\forall w \in Boul@ (\text{Mary})
\quad [\exists x[[\text{building with 192 floors}]@ (x) \& \text{buy}_w (\text{Mary}, x)]]\]

\[\text{but: } [\text{building with 192 floors}] (@) = \emptyset.\]
free world variable analysis:

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(9) \quad \llbracket \text{Mary wants } w_\@ \llbracket \lambda w' \ [ \text{to PRO buy } w' \ [ \text{a [ building with 192 floors } w_\@ \ ] } ] \rrbracket \rrbracket^{g,c} = 1 \ \text{iff} \ \forall w \in Boul_\@(\text{Mary}) \\
\exists x[\llbracket \text{building with 192 floors} \rrbracket_\@(x) \ & \ \text{buy}_w(\text{Mary}, x)]
\]

but: \llbracket \text{building with 192 floors} \rrbracket(\@) = \emptyset.

Mary’s bouletic alternatives are empty (contrary to intuitions)
other things in the actual world might have 192 floors (beehives,...):

\[(10) \quad [\text{building}](w) \cap [\text{with 192 floors}](\@) = \{x \mid x \text{ is a building in } w \& x \text{ has 192 floors in the actual world } \@\}\]
other things in the actual world might have 192 floors (beehives,...):

\[(10) \quad \text{[building]}(w) \cap \text{[with 192 floors]}(\@) = \{x \mid x \text{ is a building in } w \text{ & } x \text{ has 192 floors in the actual world } \@\}\]

- cross-world identity of buildings?
other things in the actual world might have 192 floors (beehives, . . .):

\[(10) \quad [\text{building}] (w) \cap [\text{with 192 floors}] (@) = \{ x \mid x \text{ is a building in } w \& x \text{ has 192 floors in the actual world } @ \}\]

- cross-world identity of buildings?

- Intersective Predicate Generalization (Keshet 2008) modifiers (adjectives, PPs, . . .) and host NP have to be evaluated at same index (caveat: relative clauses):

\[(11) \quad \# \text{Mary thinks Peter is a [ bachelor [ with a wife ] ]}\]
Repair strategy “partly transparent”? (2: “192”)

- transparent-specific (de re) w.r.t. only 192
- problematic if embedded more deeply, e.g. German:

  (12) ein hundertzweiundneunzigstöckiges
  a 192-levely
  Gebäude
  building
  ‘a building with 192 floors’

- Mary need not know that it is a building, by Intersective Predicate Generalization, PP has to be transparent, too

Burj Dubai...

...is a problem for evaluation at the actual world @
How actual are the Bench jackets?

(13) **Adrian wants to buy a jacket like Malte’s.**

standard assumption: the truth conditions for Reading 3 of (13) depend on the actual extension - but compare:

(14) **Adrian wants to buy one of the green Bench jackets.**
How actual are the Bench jackets?

(13) Adrian wants to buy a jacket like Malte’s.

standard assumption: the truth conditions for Reading 3 of (13) depend on the actual extension - but compare:

(14) Adrian wants to buy one of the green Bench jackets.
(15) Adrian is planning to order a piano like your grandmother’s.
    ... “I will order a Fazioli grand!”
How actual are the Bench jackets?

(13) Adrian wants to buy a jacket like Malte’s.

standard assumption: the truth conditions for Reading 3 of (13) depend on the actual extension - but compare:

(14) Adrian wants to buy one of the green Bench jackets.
(15) Adrian is planning to order a piano like your grandmother’s.

... “I will order a Fazioli grand!”

Reading 3 + amount comparison:

(16) Adrian hopes for the company to raise the production of pianos like your grandmother’s, so that they become cheaper and he can afford one.
Intermediate Conclusion

Not all instances of Reading 3 can be treated in terms of “transparent restrictors” (extension at the actual world):

- empty extensions (Burj Dubai-problem)
- interest in jackets/pianos that haven’t been produced (yet)
An alternative analysis as *de qualitate*

starting point:
An alternative analysis as *de qualitate*

starting point: Reading 3 involves:

- **reported property** (what the attitude subject has in mind)
- **reporting property** (used by speaker to describe attitude)
An alternative analysis as \textit{de qualitate}

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**reminiscent of de re à la Kaplan (1969) for individuals**

- ‘*x believes property $P$ of an entity $a$’:
  - *x* has a **representation** $\alpha$ that picks out entity $a$ in $\mathcal{Q}$
  - *x* believes that $P$ holds of what is picked out by $\alpha$
  - the **DP used in the report** refers to $a$ in $\mathcal{Q}$
An alternative analysis as *de qualitate*

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- **reported property** (what the attitude subject has in mind)
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- ‘\( x \) believes property \( P \) of an entity \( a \)’:
  - \( x \) has a *representation* \( \alpha \) that picks out entity \( a \) in \( @ \)
  - \( x \) believes that \( P \) holds of what is picked out by \( \alpha \)
  - the DP used in the report refers to \( a \) in \( @ \)

- \( \alpha \): individual concept, Hintikka-belief:

\[
(17) \quad \exists \alpha[\alpha(\@) = a \& \forall w \in \text{Dox}_{\@}(x)[P_w(\alpha(w))]]
\]
An alternative analysis as *de qualitate*

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- ‘\(x\) believes property \(P\) of an entity \(a\)’:
  - \(x\) has a *representation* \(\alpha\) that picks out entity \(a\) in \(\Theta\)
  - \(x\) believes that \(P\) holds of what is picked out by \(\alpha\)
  - the DP used in the report refers to \(a\) in \(\Theta\)

- \(\alpha\): individual concept, Hintikka-belief:

\[
\exists \alpha[\alpha(\Theta) = a \land \forall w \in \text{Dox}_\Theta(x)[P_w(\alpha(w))]]
\]

- not any \(\alpha\) is good enough in every context (*shortest spy-problem*; Kaplan 1969 ‘Vividness’, Aloni 2000)
An alternative analysis as *de qualitate*

starting point: Reading 3 involves:

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reminiscent of *de re* à la Kaplan (1969) for individuals

- ‘$x$ believes property $P$ of an entity $a$’:
  - $x$ has a **representation** $\alpha$ that picks out entity $a$ in @
  - $x$ believes that $P$ holds of what is picked out by $\alpha$
  - the **DP used in the report** refers to $a$ in @

- **$\alpha$**: individual concept, Hintikka-belief:

  $\exists \alpha[\alpha(\ominus) = a \& \forall w \in Dox_\ominus(x)[P_w(\alpha(w))]]$ (17)

- not any $\alpha$ is good enough in every context (*shortest spy-problem*; Kaplan 1969 ‘Vividness’, Aloni 2000)

- can we extend this to abstract *res* (= *de qualitate*)?
“Classical *de qualitate*”

- Cresswell & von Stechow derive *de re* as structured propositions:

\[(18) \quad \text{Attitude}_@ (x, \langle P, a \rangle)\]

- generalizing:
  - *a (res)* may be an abstract entity:
Generalized de re: Cresswell & von Stechow 1982

“Classical de qualitate”

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  - E.g. the property (qualitas) expressed by the restrictor
Generalized de re: Cresswell & von Stechow 1982

“Classical de qualitate”

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- generalizing:
  a (res) may be an abstract entity:
  e.g. the property (qualitas) expressed by the restrictor

- required:
  a suitable relation $\xi$ that $x$ bears uniquely to $a$ (“an identifier”)
  $\xi$ has to reflect “cognitive contact” between $x$ and $a$
  (intuitively: to be construed from what $x$ has in mind)
Mary wants to buy a building with at least 192 floors.
Classical *de qualitate* applied to Burj Dubai

(19) Mary wants to buy a **building with at least 192 floors**.

(20) \( \text{want}_@ (\text{Mary}, \langle \lambda w \lambda Q. \exists x[buy_w (\text{Mary}, x) \& Q_w (x)], \lambda w \lambda x. \text{has-at-least-192-floors}_w (x) \rangle) \)
Mary wants to buy a building with at least 192 floors.

Mary’s identifier:

$$\xi = [\lambda w . \nu Q[Q = \lambda w' \lambda x . x \text{ has one more floor in } w' \text{ than that building } (= \text{pointing to the Burj Dubai}) \text{ has in } w]]$$
Classical *de qualitate* applied to Burj Dubai

(19) Mary wants to buy a building with at least 192 floors.

(20) $\text{want}_\oplus(Mary, \langle \lambda w \lambda Q. \exists x [\text{buy}_w(Mary, x) \& Q_w(x)], \\
\lambda w \lambda x. \text{has-at-least-192-floors}_w(x) \rangle)$

Mary’s identifier:

$\xi = [\lambda w. \nu Q[Q = \lambda w' \lambda x. x \text{ has one more floor in } w' \text{ than that building } (= \text{pointing to the Burj Dubai}) \text{ has in } w]]$

$\xi(\oplus) = \lambda w \lambda x. \text{has-at-least-192-floors}_w(x)$
Identification by extension (detective case)

A murder has occurred on campus, people with offices in the left wing of the building might have seen it. Detective CS Foyle decides: ‘I want to talk to someone who has his office in the left wing of the building.’ Unbeknownst to him, all offices in the left wing belong to the English department, and only professors have offices.  

Foyle wants to interrogate an English professor.
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**Foyle wants to interrogate an English professor.**

\[(21) \quad \text{want}_@ (\text{Foyle}, \langle \lambda w \lambda Q. \exists x [Q_w (x) \& \text{interrogate}_w (\text{Foyle}, x)], \lambda w \lambda x. \text{English-professor}_w (x) \rangle)\]

try: \(\xi = \lambda w. \nu Q [Q = \lambda w'. \lambda x. x \text{ has an office in the left wing of that building in } w]\)
Identification by extension (detective case)

A murder has occurred on campus, people with offices in the left wing of the building might have seen it. Detective CS Foyle decides: ‘I want to talk to someone who has his office in the left wing of the building.’ Unbeknownst to him, all offices in the left wing belong to the English department, and only professors have offices.

**Foyle wants to interrogate an English professor.**

(21)  \[ \text{want}_@ (\text{Foyle}, \langle \lambda w \lambda Q. \exists x [Q_w(x) \& \text{interrogate}_w (\text{Foyle}, x)], \\
\quad \lambda w \lambda x. \text{English-professor}_w(x) \rangle) \]

try: \[ \xi = \lambda w. \nu Q [Q = \lambda w' \lambda x. x \text{ has an office in the left wing of that building in } w] \]

\[ \xi (@): \text{at each world } w', \text{ ‘has an office in the left wing of the building in } w' \text{’ } (\neq \lambda w \lambda x. \text{English-prof}_w(x)) \]
Identification by extension (detective case)

A murder has occurred on campus, people with offices in the left wing of the building might have seen it. Detective CS Foyle decides: ‘I want to talk to someone who has his office in the left wing of the building.’ Unbeknownst to him, all offices in the left wing belong to the English department, and only professors have offices.

**Foyle wants to interrogate an English professor.**

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**Foyle wants to interrogate an English professor.**

Intuitively: about the extension \( \Rightarrow \) could be treated via evaluation at \( @ \):

\[
(21) \quad \text{Foyle wants to interrogate one of the English professors.}
\]

reported property\( (@) \subseteq \text{reporting property}(@)\)
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**Detective case type**

evaluation in actual world after all (but: subset)

*de qualitate* in terms of Cresswell & von Stechow: inapplicable to detective-case type
identification via extension is incorrect:

(21) **Adrian wants to buy a jacket like Malte’s.**
\[ \approx \ldots \text{buy one of the jackets like Malte’s, i.e. one of the actual green Bench jackets} \]
\[ \approx \ldots \text{buy a jacket of the kind Malte’s jacket instantiates.} \]
The jacket example (1)

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▷ ... buy one of the jackets like Malte’s, i.e. one of the actual green Bench jackets
≈ ... buy a jacket of the kind Malte’s jacket instantiates.

but: no identification of the reporting property either

(22) \text{want}_@ (Adrian, \langle \lambda w \lambda Q. \exists x [Q_w(x) \& \text{buy}_w(Malte, x)], \\
\quad \lambda w \lambda x. x is a jacket like Malte’s in w \rangle)
The jacket example (1)

identification via extension is incorrect:

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from **green Bench jacket** we can’t construe a \( \xi \) that

- picks out **jacket like Malte’s** (at the actual world), and
- characterizes Adrian’s bouletic alternatives (**Adrian** is in the **buy one of**-relation to \( \xi(w') \) at all his bouletic alternatives \( w' \))
The jacket example (2)

Adrian does not stand in any appropriate cognitive contact to the property of *being a jacket like Malte’s*. 
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- Adrian does not stand in any appropriate cognitive contact to the property of *being a jacket like Malte’s*

- The attitude is not about the property *jacket like Malte’s* in a particular guise ξ
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---

**jacket like-sentences**

Not about extension (vs. detective).
The reporting property identifies the reported property (vs. classical de qualitate-contexts like Burj Dubai)
The jacket example (3): *de specie*?

(23) Adrian wants to buy an expensive jacket.
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(23) **Adrian wants to buy an expensive jacket.**

- ordinary *de re* w.r.t. a kind individual?
  ‘*there is a kind k which is actually an expensive jacket and Adrian wants to buy an instantiation of k*’
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- problem: Reading 3 vs. kind-anaphora *such* (Carlson 1977)

(24) **Adrian wants to buy a Burberry jacket or a Boss jacket, he has not yet made up his mind. Adrian wants to buy an expensive jacket.**
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(24) **Adrian wants to buy a Burberry jacket or a Boss jacket, he has not yet made up his mind. Adrian wants to buy an expensive jacket.**

(25) **Adrian wants to buy a Burberry jacket or a Boss jacket. Malte wants to buy such a jacket, too.**

▷ Reading 3: ok; kind anaphora: out.
Towards a uniform version of *de qualitate*

“Uniform *de qualitate*” reconsider the relation between *reported property* and *reporting property*:

**failure i** pick out the same set of individuals at attitude worlds and at actual world (Burj Dubai: empty extensions)

**failure ii** the subject has an identifier for the reporting property w.r.t. which the attitude holds (*jacket like*: unidentified property; detective: only extension matters)
for reporting of attitudes, replacing of reported property by reported property is okay if
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**de qualitate reconsidered**

- For reporting of attitudes, replacing of *reported property* by *reported property* is okay if
  - Reporting and *reported property* are extensionally equivalent at “all relevant worlds”
  - The actual world
  - Actual worlds is not enough if the extension is empty:
    - Intuitively, we cannot describe the Burj Dubai situation by (26)

(26) **Mary wants to buy a unicorn.**
**de qualitate reconsidered**

- for reporting of attitudes, replacing of *reported property* by *reported property* is okay if
  - *reporting* and *reported property* are extensionally equivalent at “all relevant worlds”
    - the actual world
    - actual worlds is not enough if the extension is empty:
      intuitively, we cannot describe the Burj Dubai situation by (26)

\[(26) \quad \text{Mary wants to buy a unicorn.}\]

- we need to take into account worlds at which the extension is non-empty
Extensionally equivalent at all relevant worlds

\[
\text{Attitude}_w(x, \langle \mathcal{P}, Q \rangle) \text{ iff there is a } Q' \text{ s.t. at the } w\text{-closest worlds } w' \text{ where } Q'(w') \neq \emptyset :
\]

- \( Q'(w') \subseteq Q(w') \)
- \( \text{PropAttitude}_w(x, \lambda w'. \mathcal{P}_w(Q')) \)

Each world is closest to itself.
Extensionally equivalent at all relevant worlds

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- \[ Q'(w') \subseteq Q(w') \]
- \[ \text{PropAttitude}_w(x, \lambda w'. \mathcal{P}_{w'}(Q')) \]

Each world is closest to itself.

- worry: what if at closest possible world the Burj Dubai is lower (instead of there being higher buildings)?

compare counterfactual conditionals:

(27) If there was a building that was one floor higher than the Burj Dubai, that building would have 192 floors.

Counterfactuals are context dependent; Reading 3, too (I think).
Comparing *de re* and uniform *de qualitate*

- *de re* and *de qualitate*: content of attitude is partly replaced for reporting reasons
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- *de re* and *de qualitate*: content of attitude is partly replaced for reporting reasons.
- *de re* about individuals: evaluation of *reporting DP* picks out individual which is targeted by the attitude under a certain guise.
- Uniform *de qualitate*: evaluation of *reporting property* at the actual (or closest possible) world does not pick out the *reported property* itself, but merely imposes an requirement on what the latter could be.
- Uniform *de qualitate*: even if the extension is non-empty, the attitude is about a property (and not about the actual extension).
Conclusions and related matters

- at most one type of Reading 3 (detective) could be treated via extension of restrictor
  empty extensions (Burj Dubai) and interest in properties (jacket like) require relation to properties
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  Empty extensions (Burj Dubai) and interest in properties (jacket like) require relation to properties.
- Unified *de qualitate*-analysis imposes requirement on relation between reported and reporting property.
- Remaining argument for evaluation at @ (but cf. Cresswell & von Stechow 1982):
  (28) If every semanticist was a syntactician, the field would collapse.
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- how to account for syntactic restrictions (Percus 2000, Keshet 2008)? (= “what structurings are possible”)
- develop and test alternatives to unified *de qualitate*