# Question agnosticism and change of state

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# Introduction

# A distributional puzzle

## Question

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1. ...declarative clauses?

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2. ...interrogative clauses?

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(2) Jo didn't **wonder** {*that, whether} Bo was smart.

# A distributional puzzle

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(1) Jo didn't **believe** {that, *whether} Bo was smart.

(2) Jo didn't **wonder** {*that, whether} Bo was smart.

(3) Jo didn't **know** {that, whether} Bo was smart.

Challenging to explain predicates like **know** Karttunen 1977a, Groenendijk & Stokhof 1984, Heim 1994, Ginzburg 1995, Lahiri 2002, Egré 2008, Spector & Egré 2015, George 2011, Uegaki 2015

# Terminology

**Q(uestion)-agnostic** Lahiri's (2002) responsives

declaratives and interrogatives (e.g., **know**)

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declaratives and interrogatives (e.g., **know**)

**Q(uestion)-rejecting**

only declaratives (e.g., **believe**)

# This talk

## Minimal pair

Change-of-state (CoS) **decide** v. stative **intend**

(4) a. Jo **decided** (whether) to go out.
b. Jo **intended** (*whether) to go out.

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(4) a. Jo **decided** (whether) to go out.
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**Decide** is part of a nontrivial class of CoS Q-agnostics not captured by current theories of Q-agnosticism

(5) decide, judge, estimate, determine, assess, conclude, resolve, choose, assess, evaluate, appraise, rate, select, infer, diagnose, opt, elect

# This talk

## Overarching claim

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Q-agnosticism is licensed by **change-of-state** (CoS)

- **decide** is Q-agnostic because it is CoS
- **intend** is Q-rejecting because it is not (and because no other lexical property of **intend** licenses Q-agnosticism)

## Upshot

Bring together CoS with another known predictor of Q-agnosticism, **veridicality**, via a shared lexical semantic structure

# Outline

# Veridicality and Q-agnosticism

# Two roles for veridicality

## Veridicality

A verb $V$ is **veridical** iff $\forall p : [\![\mathrm{V}]\!]^{w_@}(x, p) \rightarrow p(w_@)$

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FACTIVE(V) $\longrightarrow$ VERIDICAL(V) if presuppositions are entailments

(7) Jo didn't **know** that Bo was alive $\rightarrow$ Bo was alive

# Two roles for veridicality

Veridicality's relationship to Q-agnosticism

1. Determines selection of interrogatives

   (Egré 2008, George 2011, Uegaki 2015)

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# Veridicality and selection

**Hintikka's (1975) observation**

High correlation between Q-agnosticism and **factivity**

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## Challenge

Some Q-agnostic verbs are not **veridical**

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b. Jo **told** Mo whether Bo was alive.

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b. Jo and Mo **agreed** on whether Bo was alive.

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(10) a. Jo and Mo **agreed** that Bo was alive. $\not\rightarrow$ Bo was alive.
b. Jo and Mo **agreed** on whether Bo was alive.

(11) a. Jo$_i$ **decided** PRO$_i$ to leave. $\not\rightarrow$ Jo will leave.
b. Jo$_i$ **decided** whether PRO$_i$ to leave.

# Veridicality and selection

**Working assumption**

Veridical(V) $\longrightarrow$ Q-agnostic(V)

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# Two roles for veridicality

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1. Determines selection of interrogatives

   (Egré 2008, George 2011, Uegaki 2015)

2. Determines interpretation of interrogatives

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# Two notions of veridicality

## P-veridicality

A verb $V$ is (P-)veridical iff $\forall x, p : [\![\mathrm{V}]\!]^{w_@}(x, p) \rightarrow p(w_@)$

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(13) Jo **knew** whether Bo was alive
$\rightarrow$ Jo **knew** the true answer to "was Bo alive?"

A verb $V$ is Q-**non**veridical if it is not Q-veridical.

# Veridicality and interpretation

**Spector & Egré's (2015) observation**

High correlation between Q-veridicality and P-veridicality

**Spector & Egré's (2015) proposal**

Q-veridicality is derived from P-veridicality

# Veridicality and interpretation

## Spector & Egré's (2015) formalization

When a Q-agnostic predicate takes a question *Q*, it relates an attitude holder to some possible (complete) answer to *Q*

(cf. Hamblin 1973, Groenendijk & Stokhof 1984, Beck & Rullmann 1999, Lahiri 2002)

## Spector & Egré's (2015) formalization

When a Q-agnostic predicate takes a question $Q$, it relates an attitude holder to some possible (complete) answer to $Q$

(cf. Hamblin 1973, Groenendijk & Stokhof 1984, Beck & Rullmann 1999, Lahiri 2002)

$$\forall x : [\![V]\!]^{w_@}(x, Q) \rightarrow \exists p \in Q : [\![V]\!]^{w_@}(x, p)$$

But if a verb $V$ is P-veridical, then...

$$\begin{bmatrix} \forall x, p' : & [\![V]\!]^{w_@}(x, p') \rightarrow p'(w_@) \wedge \\ \exists p \in Q : & [\![V]\!]^{w_@}(x, p) \end{bmatrix} \Longrightarrow \exists p'' \in Q : p''(w_@) \wedge [\![V]\!]^{w_@}(x, p'')$$

# Moving forward

## System

Adopt Spector & Egré's proposal that embedded interrogatives denote possible complete answers (exhaustified Hamblin Qs)

## Goal

Some alternative explanation of Q-agnostic predicates that are neither P-veridical nor Q-veridical—e.g. CoS predicates

# Data and proposal

# Our proposal

## Claim

Change-of-state (CoS) licenses Q-agnosticism

(14) a. Jo hasn't **decided** (whether) to go out.
b. Jo didn't **intend** (*whether) to go out.

## Plan

Show that...

1. ...Spector & Egré's proposal makes no wrong predictions about **CoS** verbs, but it undergenerates entailments
2. ...to strengthen their predictions without overgenerating, we have to make reference to **CoS**

# Two contexts

| | Selecting | Alternating |
|---|---|---|

# Two contexts

| | Selecting | Alternating |
|---|---|---|
| decide to | | |

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# Context 1: selecting

## Selecting contexts

DECIDER selects an intention from set of possible intentions

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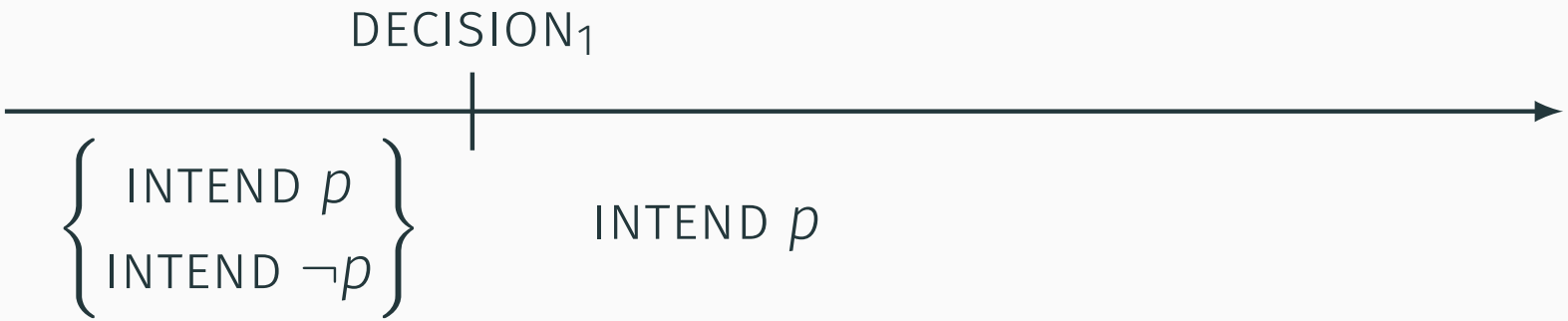
DECIDER selects an intention from set of possible intentions

(15) a. Before 3pm, Jo was considering whether to leave.
b. → It's false that Jo intended to leave before 3pm.
c. → It's false that Jo intended not to leave before.

(16) At 3pm, Jo decided to leave at 5pm.



## Alternating contexts

DECIDER changes intention from mutually exclusive intention

(17) At 3pm, Jo decided to leave at 5pm.

(18) At 4pm, Jo changed her mind and decided not to leave.

# Two contexts

| | Selecting | Alternating |
|---|---|---|
| decide to | ✓ | ✓ |
| decide whether to | | |

# Selecting v. switching contexts

## Possibility

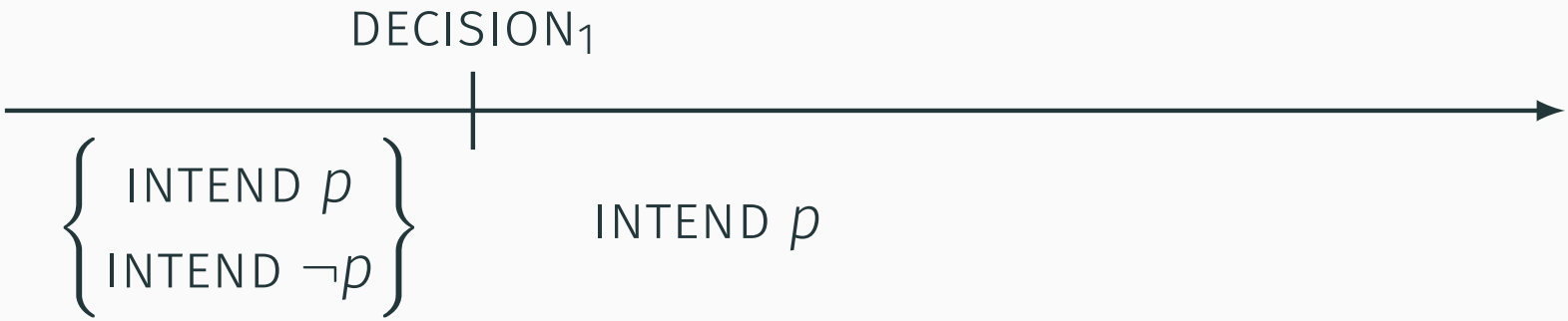
Given only the (prototypical) selecting contexts...

(19) At 3pm, Jo decided to leave at 5pm.

a. $\rightarrow$ Jo intended to leave after 3pm.

b. $\overset{?}{\rightarrow}$ It's F that Jo intended to leave before 4pm

c. $\overset{?}{\rightarrow}$ It's F that Jo intended not to leave before 4pm



# Selecting v. switching contexts

## Conclusion

The availability of alternating contexts suggests...

(20) At 4pm, Jo decided not to leave at 5pm.

a. $\rightarrow$ Jo intended not to leave after 4pm.
b. $\rightarrow$ It's F that Jo intended to leave before 4pm
c. $\not\rightarrow$ It's F that Jo intended not to leave before 4pm

# An initial try

## A CoS denotation

Suggests a very straightforward CoS denotation for **decide to** (simplified to capture just entailments of interest)

(21) $[\![\text{decide S}]\!]^t = \lambda x.\neg \textsc{intend}(x, [\![\text{S}]\!], < t) \wedge \textsc{intend}(x, [\![\text{S}]\!], \geq t)$

# Question embedding and CoS

## Question

What predictions does Spector & Egré's (2015) proposal make?

(22) Jo decided whether to leave.

## Answer 1

Predicts everything correctly for post-states

(23) Either Jo intended to leave or she intended not to leave.

# Question embedding and CoS

## Question

What predictions does Spector & Egré's (2015) proposal make?

(24) At 4pm, Jo decided whether to leave at 5pm.

## Answer 2

For pre-states, where it makes predictions, they are correct

# Question embedding and CoS

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What predictions does Spector & Egré's (2015) proposal make?

(24) At 4pm, Jo decided whether to leave at 5pm.

## Answer 2

For pre-states, where it makes predictions, they are correct

(25) Before 4pm, either it's false that Jo decided to leave at 5pm or it's false that she decided not to leave at 5pm.

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(25) Before 4pm, either it's false that Jo decided to leave at 5pm or it's false that she decided not to leave at 5pm.

(26) $\exists p \in Q : \neg \textsc{intend}(x, p, < t) \wedge \textsc{intend}(x, p, \geq t)$

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But this prediction is too weak

# Question embedding and CoS

## Observation

While **decide to** is licensed in selecting and alternating contexts, **decide whether to** is only licensed in selective contexts

(27) a. Before 3, Jo intended neither to leave nor not to.
b. At 3, Jo decided whether to leave.

(28) a. Before 4, Jo intended either to leave or not to.
b. #At 4pm, Jo decided whether to leave at 5pm

## Intuition

(28b) $\rightarrow$ Jo have no intention with respect to leaving before 4pm

# Two contexts

| | Selecting | Alternating |
|---|---|---|
| decide to | ✓ | ✓ |
| decide whether to | | |

# Two contexts

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| decide whether to | ✓ | # |

# Question embedding and CoS

## Consequence

We need (30), rather than (29) for CoS embedded questions.

(29) $\exists p \in Q : \neg \textsc{intend}(x, p, < t) \wedge \textsc{intend}(x, p, \geq t)$

(30) $\forall p \in Q : \neg \textsc{intend}(x, p, < t) \wedge \exists p \in Q : \textsc{intend}(x, p, \geq t)$

## Observation

The pre-state conjunct is equivalent to the negation of the post-state conjunct (*modulo* tense)

(31) $\forall p \in Q : \neg \textsc{intend}(x, p) \leftrightarrow \neg \exists p \in Q : \textsc{intend}(x, p)$

# Question embedding and CoS

## Idea

Apply Spector & Egré's (2015) proposal to each conjunct

(32) $Q = [\![\text{whether S}]\!] = \{[\![\text{S}]\!], \neg[\![\text{S}]\!]\} = \{p, \neg p\}$

(33) $[\![\text{decide whether S}]\!]^t = \lambda x.\neg \textsc{intend}(x, Q, < t) \wedge \textsc{intend}(x, Q, \geq t)$

(34) $[\![\text{decide whether S}]\!]^t = \lambda x.\neg \exists p \in Q : \textsc{intend}(x, p, < t) \wedge$
$\exists p \in Q : \textsc{intend}(x, p, \geq t)$

# Question embedding and CoS

**Problem**

Mysterious why we shouldn't be able to do this for **intend**

(35) a. Jo hasn't **decided** whether to go out.
b. *Jo didn't **intend** whether to go out.

$$[\![\text{intend whether S}]\!] = \lambda x.\textsc{intend}(x, [\![\text{whether S}]\!])$$
$$= \lambda x.\exists p \in [\![\text{whether S}]\!] : \textsc{intend}(x, p)$$

# Question embedding and CoS

## Observation

Problem doesn't arise for CoS veridicals

(36) a. Jo doesn't **figure out** (whether) Bo left.
b. Jo doesn't **know** (whether) Bo left.

$$\begin{aligned}[\![\text{know whether S}]\!] &= \lambda x.\textsc{know}(x, [\![\text{whether S}]\!]) \\ &= \lambda x.\exists p \in [\![\text{whether S}]\!] : \textsc{know}(x, p)\end{aligned}$$

# Question embedding and CoS

## Upshot

Only target certain event types (e.g. intentions) in CoS structure

## Proposal

Make interrogative-taking dependent on CoS

# Implementation

# Our implementation

## Minimal requirements

For **decide to**, something of the form in (37)

(37) $\ldots \neg \textsc{intend}(x, [\![\mathrm{S}]\!], < t) \wedge \textsc{intend}(x, [\![\mathrm{S}]\!], \geq t)$

For **decide whether to**, something of the form in (38)

(38) $\ldots \forall p \in Q : \neg \textsc{intend}(x, p, < t) \wedge \exists p \in Q : \textsc{intend}(x, p, \geq t)$

# Our implementation

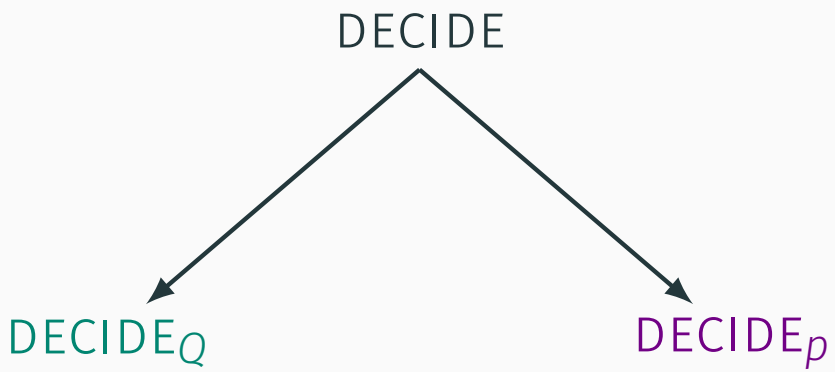
Core idea

Q-agnostic predicates undergo a regular polysemy

Lexical abstraction

Polysemy rules

Lexicon



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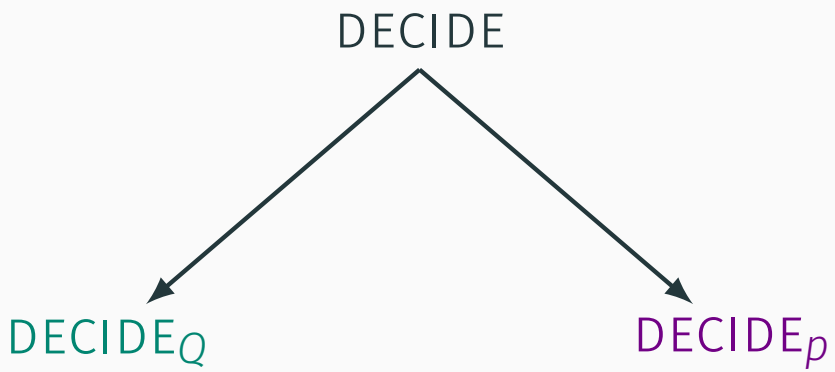


# George's (2011) Twin Relations Theory

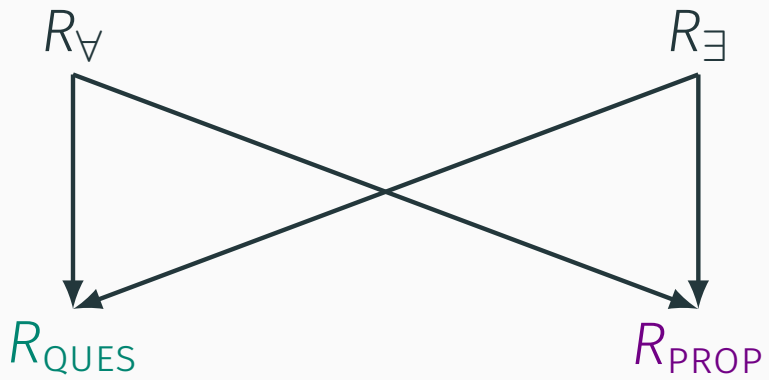
## Goal

A polysemy approach for Q-agnostics

**Elementary relations**

**Lexical templating**

**Lexicon**



# Lexical templates

Proposition-taking variant passes $p$ to elementary relations

$$R_{\text{PROP}} \equiv \lambda w.\lambda x.\lambda p.R_{\forall}(x,p,w) \wedge R_{\exists}(x,p,w)$$

Question-taking variant passes $p \in Q$ to elementary relations

$$R_{\text{QUES}} \equiv \lambda w.\lambda x.\lambda Q.\forall p \in Q : R_{\forall}(x,p,w) \wedge \exists p \in Q : R_{\exists}(x,p,w)$$

Veridicality arises from $R_{\forall}$

$$\text{KNOW}_{\forall}(x,p,w) \equiv \text{BELIEVE}(x,p,w) \rightarrow p(w)$$

$R_{\text{PROP}}$ corresponds to the form we need for **decide to**, and
$R_{\text{QUES}}$ corresponds to the form we need for **decide whether to**

(39) $\text{DECIDE}_{\forall} = \neg\text{INTEND}$

(40) $\text{DECIDE}_{\exists} = \text{INTEND}$

$R_{\forall} = R_{pre}$ characterizes pre-states
$R_{\exists} = R_{post}$ charatcerizes post-states

# Basic approach

## Hacquard's (2010) neo-Davidsonian event content approach

(cf. Kratzer 2006, Moulton 2009, Bogal-Allbritten 2016)

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(41) $\textsc{con}(e) = \{w : w \text{ is compatible with the contents of } e\}$

(42) $[\![[\text{V S}]_{VP}]\!] = \lambda e.P_V(e) \wedge \forall w \in \textsc{con}(e) : [\![\text{S}]\!](w)$

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Champollion's (2015) verb-as-event-quantifier approach

(43) $[\![\text{VP}]\!] = \lambda f.\exists e : f(e) \wedge \ldots$

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Our attitude denotations

(44) $[\![[\text{V S}]_{VP}]\!] = \lambda f.\exists e : P_V(e) \wedge f(e) \wedge \forall w \in \textsc{con}(e) : [\![\text{S}]\!](w)$

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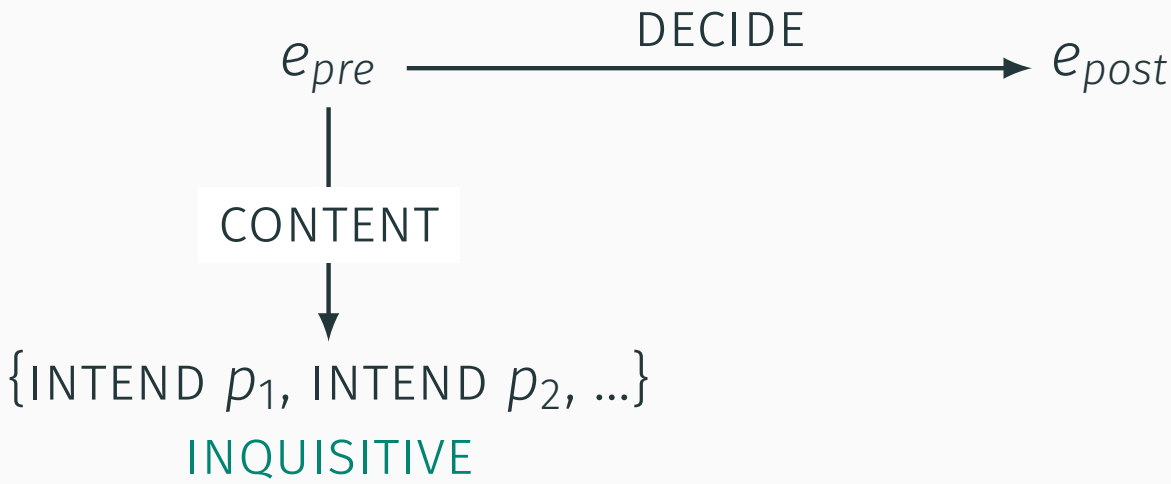

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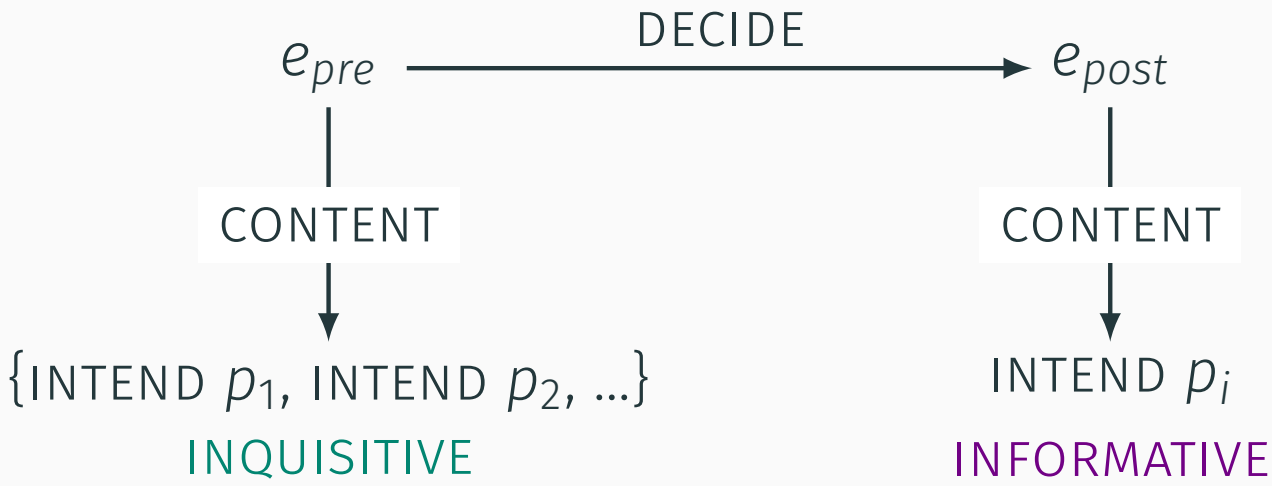

# Defining decision

Define DECISION to relate a pre-state and a post-state

(45) $\textsc{decision}(e, e_{pre}, e_{post}) \equiv e$ is a decision with pre-state $e_{pre}$ and post-state $e_{post}$

Define constraint on inquisitive pre-state

(46) $R_{pre}(e, p) = \neg\forall w \in \textsc{con}(e) : p(w)$

Define constraint on informative post-state

(47) $R_{post}(e, p) = \forall w \in \textsc{con}(e) : p(w)$

# Defining lexical templates

As expected for a change-of-state verb

(48) $\forall e, p : R_{pre}(e, p) \longleftrightarrow \neg R_{post}(e, p)$

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Extend George's lexical templates to events

(49) a. $[\![\text{decide}_{\text{PROP}}]\!] = R_{\text{PROP}}(\textsc{decision}) = (50a)$
b. $[\![\text{decide}_{\text{QUES}}]\!] = R_{\text{QUES}}(\textsc{decision}) = (50b)$

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(50) a. $\lambda p.\lambda f.\exists e, e_{pre}, e_{post} : \text{DECISION}(e, e_{pre}, e_{post}) \wedge f(e)$

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Extend George's lexical templates to events

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b. $[\![\text{decide}_{\text{QUES}}]\!] = R_{\text{QUES}}(\text{DECISION}) = (50b)$

(50) a. $\lambda p.\lambda f.\exists e, e_{pre}, e_{post} : \text{DECISION}(e, e_{pre}, e_{post}) \wedge f(e)$
$\wedge R_{pre}(p)(e_{pre}) \wedge R_{post}(p)(e_{post})$

# Defining lexical templates

As expected for a change-of-state verb

(48) $\forall e, p : R_{pre}(e, p) \longleftrightarrow \neg R_{post}(e, p)$

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# Full denotations

When **decide** takes a declarative...

$$[\![\text{Jo decide}_{\text{PROP}}\ \text{S}]\!] = \exists e, e_{pre}, e_{post} : \textsc{decision}(e, e_{pre}, e_{post}) \wedge \textsc{agent}(j, e)$$

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# Embedded modality

## Remaining question

Where does the **intention** entailment come from?

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Where does the **intention** entailment come from?

## Possible answer

Decision pre-states just **are** intentional states

# Embedded modality

## Evidence

Always(?) intention for infinitivals

(51) Jo {determined, decided, chose} whether to leave.

# Embedded modality

## Evidence

Always(?) intention for infinitivals

(51) Jo {determined, decided, chose} whether to leave.

Otherwise dependent on content of finite complement

(52) a. Jo decided whether she would leave.
b. Jo decided whether Bo could leave.

# Embedded modality

## Remaining question

Where does the **intention** entailment come from?

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Decision pre-states just **are** intentional states

## Our answer

Modality in the embedded clause (Bhatt 1999, Grano 2012, Wurmbrand 2014, White 2014)

# Conclusion

# Wrapping up

**Working assumption**

Veridicality predicts Q-agnosticism

**Proposal**

Change-of-State (CoS) also predicts Q-agnosticism

**Implementation**

Assimilates CoS pre-state entailments to veridicality entailments

# Wrapping up

## Question

Why would pre-state entailments be like veridicality entailments?

## Relevant observation

Pre-state entailments are generally backgrounded (cf. **start**, **stop**) (Roberts 1996, Simons 2001, Abusch 2002, Simons et al. 2010, Abusch 2010, Abrusán 2011, Romoli 2011, Anand & Hacquard 2014)

# A generalization

## Tentative generalization

No monomorphemic verb characterizes a relation between an informative pre-state and an inquisitive post-state (*__undecide__)

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Possible exception: __forget__

## Relevance

Suggests an asymmetry between pre-states and post-states that we don't currently encode

## Suggestion

Whatever gives rise to pre-state backgrounding for other CoS predicates also gives rise to this asymmetry

# Future directions

### Direction 1

Reducing the relationship between veridicality and Q-agnosticism to a relationship between CoS and Q-agnosticism

### Direction 2

Explaining remaining nonveridicals in terms of event structure

# Reducing to CoS

## Observation

Many verbal veridicals besides the stative **know** are CoS

remember, forget, discover, find out, figure out, realize, recognize, ...

# Reducing to CoS

## Timid reduction

Most verbal veridicals explained by CoS; **know** stipulated

## Aggressive reduction

**Know** has a bipartite structure involving a knowledge state (fact contents) and a belief state (proposition contents) (Kratzer 2002)

# Explaining residuals

**Question**

What about the other Q-agnostic nonveridicals?

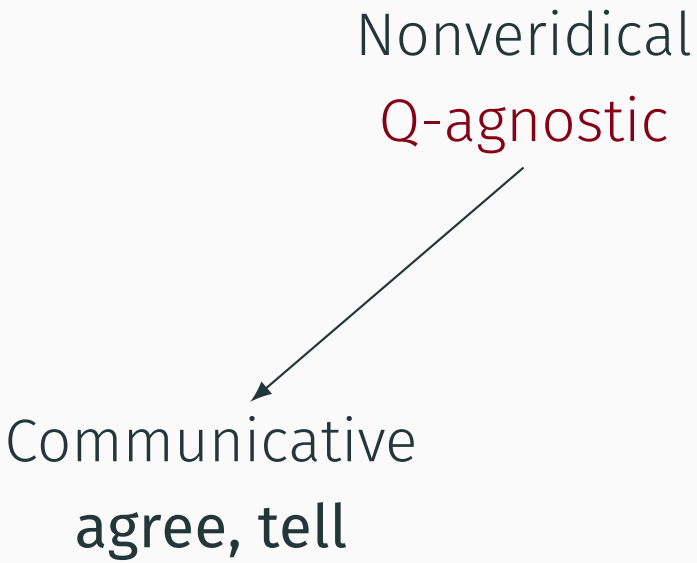
# Regimenting nonveridical Q-agnostics

Nonveridical

Q-agnostic

(cf. Anand & Hacquard 2014, White & Rawlins 2016)

# Regimenting nonveridical Q-agnostics

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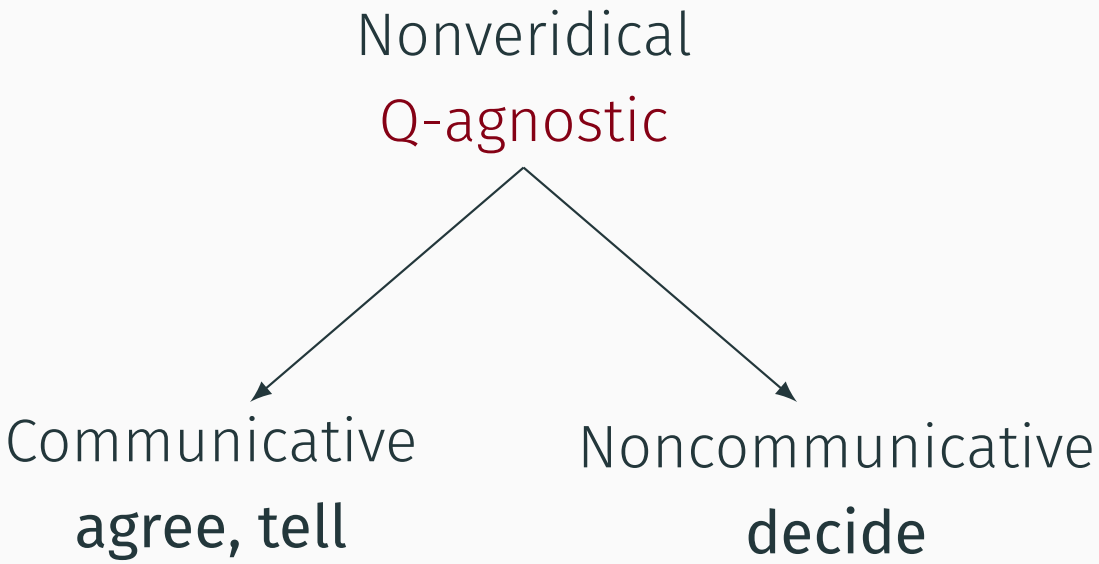


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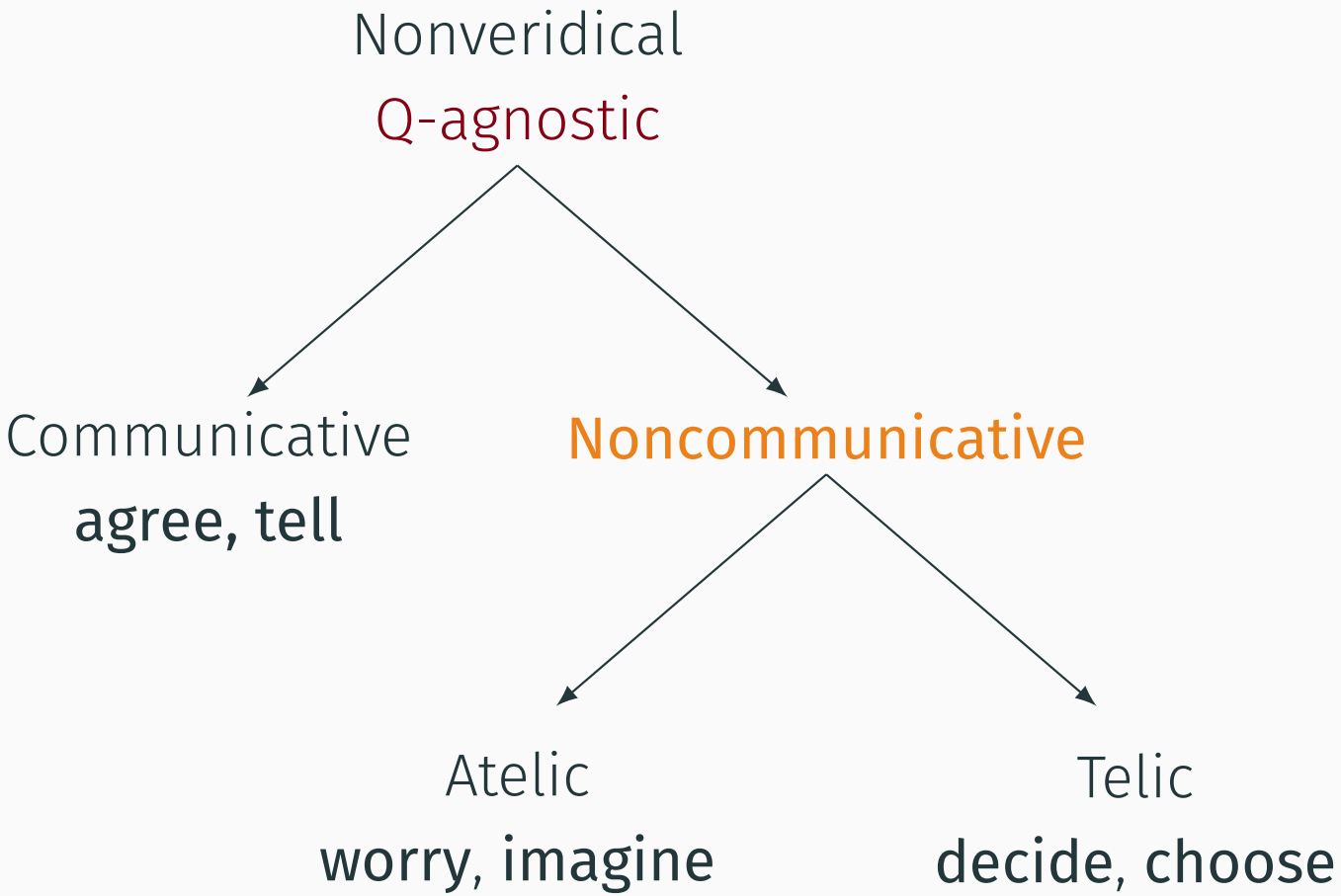


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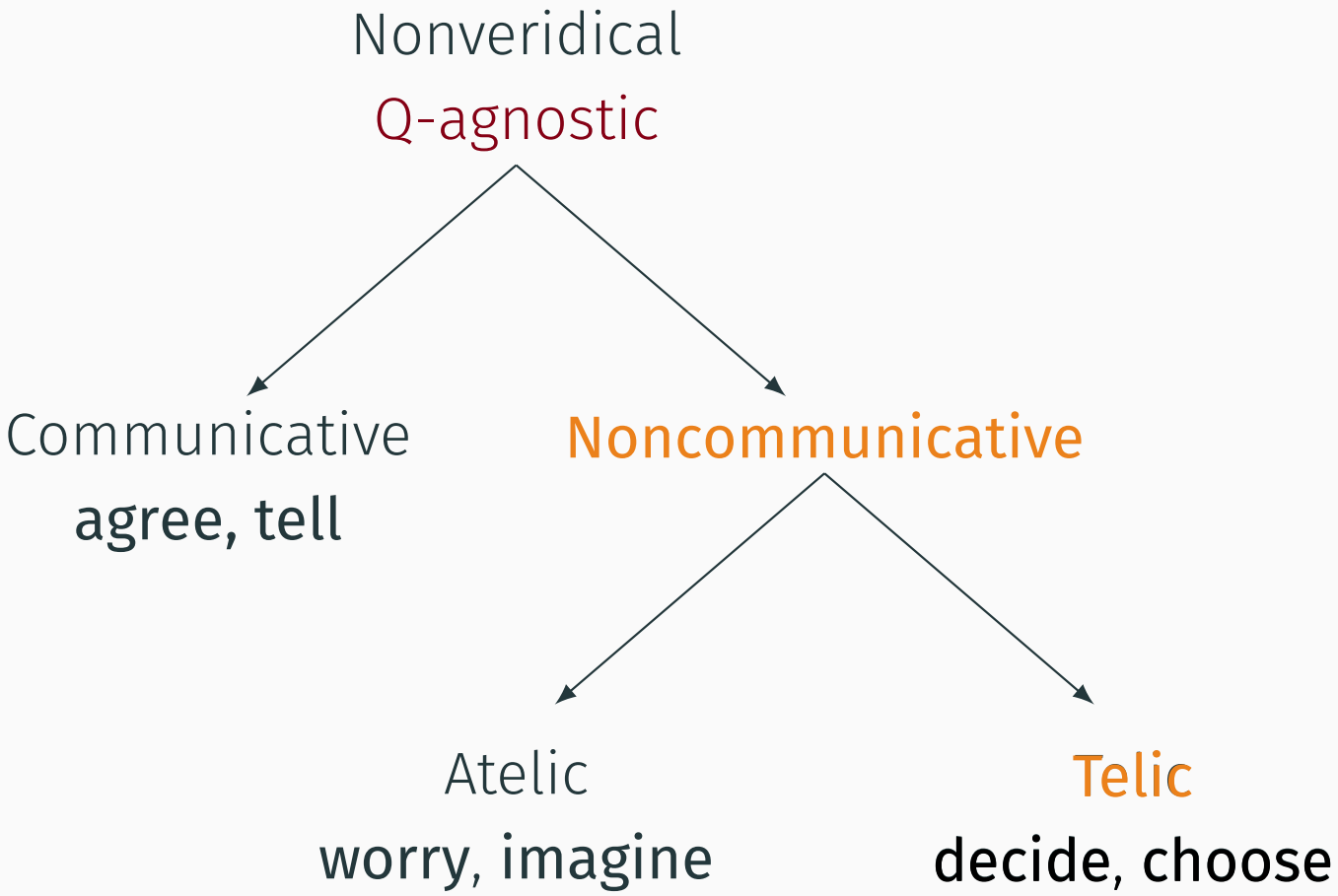


(cf. Anand & Hacquard 2014, White & Rawlins 2016)

# Anand & Hacquard's (2014) proposal

**Fundamental split**

Communicatives characterize speech events that involve updates to a public **Common Ground** (cf. Farkas & Bruce 2009)

$$[\![\text{claim}]\!]^w = \lambda p.\lambda e.\textsc{claim}(e, w) \wedge [\forall w' \text{ compatible with } \textsc{goal}(e)] \\ ([\forall w'' \in CG(w')]\,(p(w'')))$$

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Noncommunicatives make reference to private eventualities

$$[\![\text{believe}]\!]^w = \lambda p.\lambda e.\textsc{belief}(e, w) \wedge [\forall w' \text{ compatible with } e](p(w''))$$

# Anand & Hacquard's (2014) proposal

## Idea (Anand & Hacquard in prep)

1. Some communicatives also make reference to a Question Under Discussion (QUD) (Roberts 1996)

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# Anand & Hacquard's (2014) proposal

## Idea (Anand & Hacquard in prep)

1. Some communicatives also make reference to a Question Under Discussion (QUD) (Roberts 1996)
2. Encoding of QUD is predictable from the kind of communicative act a verb characterizes
3. A communicative embeds interrogatives iff it explicitly represents QUDs

## Possibility

Encoding of QUD may be (partially) predictable based on CoS

# Thanks!

We'd like to thank the JHU Semantics Lab as well as Valentine Hacquard and Pranav Anand for helpful discussion.

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# Appendix

# Veridicality and selection

## Egré's (2008) solution

1. Some apparently nonveridical communicatives have veridical variants (cf. Spector & Egré 2015)
2. All others embed questions only via prepositions

# Egré's (2008) proposal

## Evidence

Some nonveridical verbs can embed via prepositions

(53) a. Jo and Mo **agree** {on, about} whether Bo is alive.
b. Jo is still **deciding** {on, about} whether she will go.

# Egré's (2008) proposal

## Evidence

Some nonveridical verbs can embed via prepositions

(53) a. Jo and Mo **agree** {on, about} whether Bo is alive.
b. Jo is still **deciding** {on, about} whether she will go.

## Assumption

A clause-embedding preposition can be silent

(54) Jo is still **deciding** ({on, about}) whether she will go.

# Egré's (2008) proposal

**Possible prediction**

All Q-agnostic nonveridicals at least embed Qs via prepositions

**Challenge**

There are Q-agnostic nonveridicals that don't embed clauses via prepositions

(55) Jo **determined** {*on, *about} whether she would leave.

There are some complications with *about* (see Rawlins 2013)

# Predictions for Q-agnosticism

| Embedded interrogatives | Captured | Cost |
|---|---|---|
| True answers<br>(K-GS questions) | Q-veridicals<br>(*know*) | Q-nonveridicals<br>(*agree*, *decide*) |

# Predictions for Q-agnosticism

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| True + possible answers | Both (*know*, *agree*, *decide*) | Must explain selection |

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| True answers (K-GS questions) | Q-veridicals (*know*) | Q-nonveridicals (*agree*, *decide*) |
| True + possible answers | Both (*know*, *agree*, *decide*) | Must explain selection |
| Possible answers (Hamblin questions) | Q-nonveridicals (*agree*, *decide*) | Must explain Q-veridicals |

# A note on coordination

## Argument

Declaratives and interrogatives can be coordinated, so their denotations must have the same type

(56) I **decided** that I would go to the store but not whether I would get apples.

# A note on coordination

## Question

Does XP *and* YP $\rightarrow$ **type**($[\![\text{XP}]\!]$) = **type**($[\![\text{YP}]\!]$)?

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(57) I **decided** to go to the store and that I would get apples.

## Conditional answer

If we're willing to say that infinitival denotations have the same type as declaratives, then maybe. But...

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(57) I **decided** to go to the store and that I would get apples.

## Conditional answer

If we're willing to say that infinitival denotations have the same type as declaratives, then maybe. But...

(58) I remember leaving and that Mary left with me.

# George's (2011) Twin Relations Theory

## Elementary relations

$$\textsc{know}_{\forall} \equiv \lambda w.\lambda p.\lambda x.\textsc{believes}(w)(p)(x) \rightarrow p(w)$$

$$\textsc{know}_{\exists} \equiv \lambda w.\lambda p.\lambda x.\textsc{know}(w)(p)(x)$$

# George's (2011) Twin Relations Theory

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$$\textsc{know}_{\forall} \equiv \lambda w.\lambda p.\lambda x.\textsc{believes}(w)(p)(x) \rightarrow p(w)$$

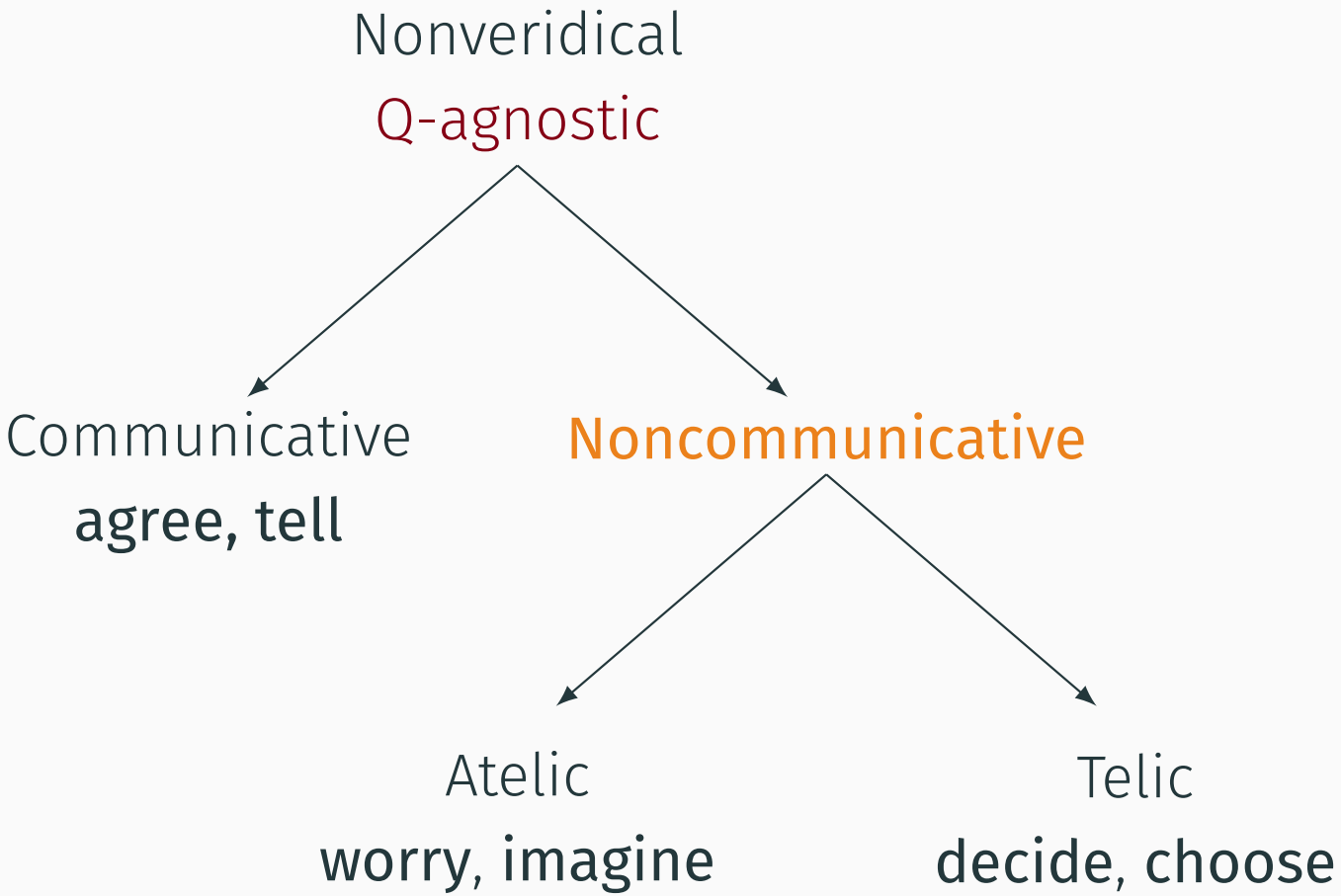
$$\textsc{know}_{\exists} \equiv \lambda w.\lambda p.\lambda x.\textsc{know}(w)(p)(x)$$

## Lexicon

$$\textsc{know}_{\textsc{prop}} \equiv \lambda w.\lambda p.\lambda x.\textsc{know}_{\forall}(w)(p')(x) \wedge \textsc{know}_{\exists}(w)(p')(x)$$

$$\textsc{know}_{\textsc{ques}} \equiv \lambda w.\lambda Q.\lambda x.\forall p' \in Q : \textsc{know}_{\forall}(w)(p')(x) \wedge \exists p' \in Q : \textsc{know}_{\exists}(w)(p')(x)$$

# Regimenting nonveridical Q-agnostics




(cf. Anand & Hacquard 2014, White & Rawlins 2016)

# Explaining residuals

## Observation 1

All atelic Q-agnostics are degraded with questions

(59) a. Jo imagined {that, ???whether} she could fly.
b. Jo worries {that, ???whether} Bo gets too little support.

# Explaining residuals

## Imagine Whether Or Not

1

I have this sentence using "*think*":

> I was ***thinking*** whether or not he has money that I can borrow.

is good English. If I replace "*think*" with "*imagine*":

> I was ***imagining*** whether or not he has money that I can borrow.

Would this be okay English?

interrogative free-relative-clauses

share improve this question

edited Oct 11 '15 at 18:38
StoneyB
128k 5 134 292

asked Sep 5 '14 at 16:01
meatie
3,100 4 10 41

They're both correct grammatically, but the sentences have different connotations. – TheIntern Sep 5 '14 at 16:08

@TheIntern I have a feeling that while "think" could be used with two or more posibilities, "imagine" can only be used with one possibility or the other? – meatie Sep 5 '14 at 16:15

1 "Think" can be used when there is only one possibility, like "I think he has money that I can borrow.". "Imagine" is more like you are fantasizing or dreaming. – TheIntern Sep 5 '14 at 16:18

# Explaining residuals

1 Answer

active oldest votes

3

Neither *think* nor *imagine* is used this way with *whether*.

To *think* X is to hold it as a strong idea or opinion that X is true or happened, and to *imagine* it is to form and subsequently hold such an idea or opinion. These do not suit well with *whether*, which implies uncertainty between two or more ideas or opinions.

Ordinarily we ***wonder*** whether X is true, to indicate that we raise the question in our minds; or if we ponder the question deeply we **consider** or *think* ***about*** whether it is true.

share improve this answer

edited Sep 5 '14 at 18:01

answered Sep 5 '14 at 17:52

StoneyB

128k 5 134 292

+1 for **wonder**. Good suggestion! – Manish Sep 5 '14 at 18:01

*"I'm going to think about whether or not he has money I can borrow."* is valid to say, but has a different connotation. It suggests more that it's the thinker who will be making the decision--it doesn't express a curiosity. It's as if they were a puppetmaster of some kind, who will examine his assets and then make the decision; the lending will be happening or not on the thinker's terms. – HostileFork Sep 6 '14 at 0:02

@HostileFork I agree about 90%; but "thinking about" **could** be *Hmm - I know he just got a promotion...but then he also just got a girlfriend...and he's been talking about buying a house...but on the other hand he owes me a big favour, he wouldn't have gotten that promotion if I hadn't rewritten his report...and he never spends any money on clothes....* – StoneyB Sep 6 '14 at 0:20

But the pattern "***be thinking whether*** ...." could definitely be found in substantial numbers on google. – meatie Sep 6 '14 at 22:26

@meatie See this Google Ngram. It arose in the 1780s and surged in the early 19th century - by 1818 it was four or five times more common than *imagine* - but from 1820 on it declined rapidly and is now strictly colloquial. Avoid it. – StoneyB Sep 6 '14 at 23:13

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## Observation 2

Insofar as they are good, they act like **doubt** (cf. Karttunen 1977b)

(60) a. Jo doubted whether Bo could fly.
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# Explaining residuals

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## Observation 3

All(?) take subjunctive in languages that have it