# 'Propositions' vs. 'States-of-Affairs':

# Insights from adjectival and nominal complementation in English

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### Traditional distinction

- 1. Traditional **philosophical** distinction imported in linguistics (Lyons 1977)
  - proposition: third-order entity: not located in time and space; evaluated in terms of truth
  - state-of-affairs: second order entity; located in time and space; evaluated in terms of reality
- 2. Are often taken to define **complement** types determined by predicate types (Hengeveld 1989, Dik & Hengeveld 1991: 233), e.g.
  - **believe** predicates take a **proposition**
  - factive predicates take a state-of-affairs

### Our main aims

- Set out alternative functional-cognitive approach, stressing semiotic relation of meaning coded by lexicogrammatical form (see also Hjelmslev 1943, Bolinger 1968)
   Comparable but also different basic distinction, for which, to avoid confusion, we use different terms
  - thesis (Halliday (1970)
  - **process** (Halliday 1967, Langacker 1991, 2015, cf. Boye 2012) [corresponds roughly to "**predicate**" in Hengeveld 1989]
- 2. How do adjectival and nominal complement-taking predicates (adj + nom CTPs), e.g. *I am sure, it is possible, it is important, there's a chance, there's no question,* etc. relate to this distinction?

# Theoretical affiliation of our approach

• thesis – process

#### (i) thesis:

- finite clause with coded relation to situation of utterance (SU)
- thesis either **epistemically** or **deontically-valued**  $\longleftrightarrow$  proposition: only truth-valued

#### (ii) process:

- non-finite (part of) clause, with inferred relation to SU
- process: relation with inherent time dimension between participants
- Halliday 1970, 1985, 1994; Bolinger 1979; Langacker 1991; McGregor 1997; Davidse 1991, 1997, 1998; Verstraete 2001, 2002, 2007; Van linden 2012; Van linden & Verstraete 2011

### Structure of presentation

We will discuss distinction thesis – process for present-day English

- 1. In independent clauses
- 2. In complements of speech and thought constructions
- 3. In complements of factive constructions

Adding to discussion of each environment, contributions made by adjectival and nominal complement-taking predicates:

- 1. Secondary, grammatical adj + nom CTPs expressing modal meanings in independent clauses
- 2. Primary, lexical adj + nom CTPs in speech and thought constructions
- 3. Primary, lexical adj + nom CTPs in factive constructions

#### 1. Thesis in independent clause

- **finite** clause: expresses **thesis** with **coded** relation to situation of utterance (SU), viz. relation to SU of tensed VP or of speaker-related modal auxiliary (Halliday 1970, 1985, 1994; Langacker 1991)
- Halliday: process is made into a "thesis" (1970) which "can be **argued** about" (1985: 75), by being given a reference point in SU,
  - the 'now' of the SU, the 'temporal zero-point' (Declerck 1991a), relative to which primary tense locates the thesis
  - the speaker's judgement "of the probabilities or obligations involved", expressed by speaker-related modal auxiliaries (Halliday 1985: 75)
- Langacker (1991, 2002: 7, 2015): process is made into a "proposition whose validity can be assessed" (2015: 4) by being accorded some status in relation to the interlocutors and their circumstances, or the ground, i.e. by being grounded, by
  - tense, "which offers a rudimentary assessment of its epistemic status" (2015:6)
  - speaker-related modal

#### 2. Speaker stance construed by relation of thesis to SU

- coded relation of thesis to SU involves speaker stance, i.e. interpersonal meaning:
- either epistemic, assessing degrees of likelihood of thesis being true, expressed by
  - deictic element of **primary tense**: fact of situating process relative to  $t_0$  entails 100% epistemic commitment on part of speaker, and turns it into a thesis (Davies 2001, Verstraete 2002, 2007), e.g. *This gazebo was built by Christopher Wren* (Halliday 1970: 328)
  - or **epistemic modal** auxiliaries, which are inherently speaker-related (Verstraete 2007), and express degrees of likelihood or certainty w.r.t. thesis, e.g. *This gazebo must/should/ought to/will/may be by Wren* (Halliday 1970: 334)
- or deontic, assessing desirability of process to be realized, expressed by
  - speaker-related **deontic modal** auxiliaries, which turn process into an 'arguable' thesis, e.g. You must build a gazebo. No, I shan't. (cf. Halliday 1970: 336)

#### 3. Grounding of clause: from Sp- to H-orientation

• Verstraete (2007): criterial semantic argument for generalizing over primary tense, Sp-related epistemic and deontic modal auxilaries:

with change from declarative to interrogative, shift from construing **speaker** as modal authority to making **hearer** modal **authority** (also Declerck 1991)

- primary tense as epistemic 'certainty' marker
- (1) My trip was in the first week in May. It *rained* on day one and thereafter the weather was glorious. (WB)
- (2) Did it rain on Saturday? (WB)
- epistemic modal auxiliary:
- (3) A: Is it Ronseal? -- B: I think it *might* be Ronseal yeah. (WB)
- (4) A: Would would people take notice of it? -- B: Erm some of them would but some of them C: just sit down B: Yeah A: *Might* it be that with everything though do you think? -- C: Yeah.

#### 3. Grounding of clause: from Sp- to H-orientation

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with change from declarative to interrogative, shift from construing **speaker** as modal authority to making **hearer** modal **authority** 

- deontic modal auxiliary:
- (5) Andrew McClintock nodded his head to the girl. 'You may go.' (WB)
- (6) The girl stood and curtsied. "Thank you for your kindness. *May* I go back after I eat, then?" "Certainly," Verna said. (WB)

- 4. Primary tense as basic epistemic thesis-builder
- primary tense, relation to  $t_0$ , is basic epistemic thesis-builder
  - $\rightarrow$  3 arguments:
- primary tense is default grounding of processes: both objectively-modalized and straight processes
- 2. tensed thesis is **scopal domain** of speaker-related epistemic modal auxiliaries
- 3. with non-verbal epistemic modal markers, **scopal domain** is tensed thesis and primary tense is **grounding** type

#### 5. Primary tense is default grounding of processes

- locating instance of process relative to t<sub>0</sub>
  - → scopal structure: primary tense grounding (process)
- primary tense grounding has widest distribution; scopes over:
  - straight process, yielding tensed thesis
  - objectively modalized process: internal objective dynamic or deontic modal relations (Verstraete 2002, 2007)
    - dynamic, e.g. past existence of ability/possibility (Palmer 1976, 1986, 2001)
    - deontic, e.g. past existence of permission (Declerck 1991a)

#### 5. Primary tense is default grounding of processes

- primary tense grounding has widest distribution; scopes over:
  - straight process, yielding tensed thesis, e.g.
    - (1) It rained on day one and thereafter the weather was glorious. (WB)
    - (2) Did it rain on Saturday? (WB)
  - objectively modalized process, yielding tensed thesis with internal objective dynamic (3-4) or deontic (5-6) modal relations (Verstraete 2002, 2007)
    - dynamic, e.g. past existence of ability/possibility (Palmer 1976, 1986, 2001)
      - (3) Late yesterday Newcombe could still have substituted Mark Woodford. (WB)
      - (4) Could TB be cured in the 1950? (Google)
    - deontic, e.g. past existence of permission (Declerck 1991a)
      - (5) the child is asked to give up quite a few of its privileges. ... Once you could run around naked, now you are told off for doing so. (WB)
      - (6) it wasn't too long ago where you could smoke anywhere and everywhere. *Could* you watch a hockey game and enjoy a smoke? Yes. (Internet)

#### 6. Tensed thesis is scopal domain of speaker-related epistemic modal auxiliaries

- speaker-related epistemic modal auxiliary "associates with the thesis an indication of its status and validity" (Halliday 1970: 335) ->
  - → scopal structure: sp-rel modal grounding (tensed thesis)
- speaker-related epistemic auxiliaries "are outside the domain of tense" (Halliday 1970:336)
- their link with SU is hic et nunc (Verstraete 2001) and performative (Nuyts 2001) assessment
- but they assess **tensed** theses, whose different (absolute and relative) relations to  $t_0$  (Declerck 1991b, 2006) may be neutralized (Halliday 1970:337), e.g.
- He must have left ::
  - (1) surely he left yesterday
  - (2) surely he has already left
  - (3) surely he had left before you came (Halliday 1970:337)

#### 7. With non-verbal epistemic modal markers

- 1) thesis is grounded in terms of primary tense: what is assessed is commitment to tensed thesis
- non-verbal epistemic modal markers are discursively secondary (≠ discursively primary lexical uses) can be identified by Boye & Harder's (2007, 2012) addressability tests (really?, interrogative tag, also prosody (Halliday 1970: 330)), which reveal that tensed thesis is being 'addressed'
  - > reorientation from S to H as modal authority with change from declarative to interrogative, e.g.
- (1) Others say they were just a crowd of violent paedophiles. There were, I am sure, holy men among them who lived holy and sacrificial lives. (WB)
- (2) "No, she didn't die in her sleep. She's not in bed." "Are you sure she's dead, Meg?" ['is she dead?'] Rose said. "Perhaps she's had a faint... (WB)
- 2) as epistemic modal markers they may be interpreted as having S or H as modal source
  - → we analyse them as **interpersonal modifiers** (McGregor 1997): they scope over a tensed thesis, but they are not themselves grounding expressions
  - → scopal structure: modal modifier (primary tense grounding (process))

#### 7. Non-verbal epistemic modal markers

- fact that epistemic modal markers assess tensed theses transpires most clearly with non-verbal epistemic markers, which are, besides adverbs (see previous slide), adj + nom CTPs (Halliday 1970: 331) in secondary, grammatical uses (Boye & Harder 2007, 2012)
- (i) secondary adj CTP in I am/are you sure, certain (that) ...; also I am/are you doubtful (whether ...). Compare I think that ... Do you think that ...
- (ii) secondary adj CTP in it is possible, likely, conceivable (that) ...
- (iii) secondary nom CTP in there is a possibility, chance, likelihood, presumption (that)
  - → all "combine freely" with theses in any tense (Halliday 1970: 331)
- such modal markers have S or H as modal source, but are not grounding predications (because of their secondary discursive status)

#### 7. Non-verbal epistemic modal markers

- grammaticalization of erstwhile lexical nom and adj CTP (understood as reanalysis from discourse primary into discourse secondary uses, Boye & Harder 2007, 2012) has contributed epistemic modal interpersonal modifiers that have hitherto been neglected
  - secondary nom CTP in impersonal clause there is ... that ... any/no question/doubt (historically also existential with zero/it)
    - ... there is absolutely no question, we didn't deserve to win that match. (WB)
  - secondary nom CTP in speaker-hearer clause *I have no question/doubt that* ... it was his habitual mood, *I had no doubt*. (CLMETEV, 1780-1850)
  - adverb

There will be changes on Saturday, no question. (WB)

→ scopal structure: modal modifier (primary tense grounding (process))

Simon-Vandenbergen 2007, Davidse & De Wolf (2012) Davidse, De Wolf & Van linden (2015)

#### 7. Imperative in English independent clause: process

- only independent clause type for which **non-finite** status is **motivated** in English is **imperative** (Bolinger 1968)
- as non-realized action is at issue it cannot be given a temporal reference point in SU
  - it codes a **process** only
  - its relation to SU and its deontic meaning have to be **inferred** (Verstraete 2007)
- deontic meaning: strongly matter of contextual interpretation, e.g. command (1), advice (2), permission (3), wish (4), offer(5) (Verstraete 2007) all construe (implied) subject as responsible for realization of process
- (1) And then phone Brian, will you. (COLT)
- (2) so you know hang onto your common sense in all of this (WB)
- (3) Keep them for as long as you want. (WB)
- (4) Enjoy your holiday break (WB)
- (5) Take this for the journey, darling. (WB)

#### 7. Speaker-related deontic modal auxiliaries construe thesis

- speaker-related deontic modal auxiliaries are third way of giving clause a reference point in SU
  - by adding speaker-related deontic auxiliary, untensed process is turned into an 'arguable' thesis
    - → scopal structure: deontic speaker-related modality ((untensed) process)
      - e.g. You must build a gazebo. No, I shan't. (cf. Halliday 1970: 336)
  - express performative, hic et nunc (Verstraete 2001, 2007) assessment of **desirability** of realizing process
  - with change from declarative to interrogative, shift from construing speaker as modal authority to making hearer modal authority
    - (1) Andrew McClintock nodded his head to the girl. "You may go." (WB)
    - (2) The girl stood and curtsied. "Thank you for your kindness. *May* I go back after I eat, then?" "Certainly," Verna said. (WB)

#### Thesis and Process in independent English clause: Interim conclusion

- Only clause type whose non-finite status is semantically motivated: imperative
  - codes process whose relation to TU and deontic meaning have to be inferred
  - expected response is compliance: realization of process (verbal response is not essential to successful 'adjacency pair' (Halliday 1994))
  - does not construe an arguable thesis
    - but if tagged, then turned into an arguable thesis, e.g.
      - A. Be quiet, will you. B: No I won't.

#### Thesis and Process in independent English clause: Interim conclusion

- Finite clause: expresses thesis with coded relation to SU
- 1. primary tense is default grounding type: turns untensed process into tensed thesis by giving it reference point in time of SU  $t_{0}$ .
- 2. speaker-related epistemic modal auxiliary: associates hic et nunc assessment of degree of likelihood/ certainty with tensed thesis
- speaker-related deontic modal auxiliary: associates hic et nunc assessment of desirability of untensed process
- arguability of thesis, agreement or disagreement, thus relates to:
  - 1) commitment to tensed thesis
  - 2) degree of likelihood
  - 3) desirability status

#### 1. The structure of English IST

against traditional analysis of indirect speech/thought (IST) as in Noonan 1985,
 Quirk et al 1985, etc.:

 we argue for binary structural analysis as in Halliday 1985, Vandelanotte 2008, 2009, and Davidse 2009

matrix clause head + report complement

#### 2. The semantics of English IST

 reporting matrix represents speech act or thought process, which <u>creates</u> reported locution or idea relative to actual SU (<u>SU 1</u>)

e.g. He told/ may tell me that ... , Tell me if ....

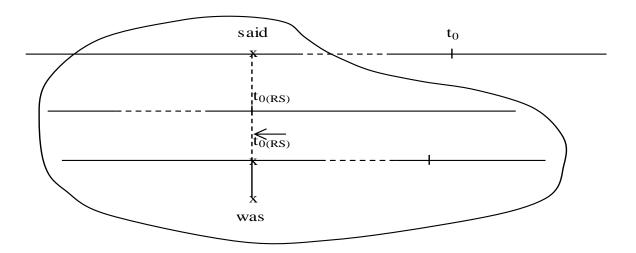
- reported complement clause represents <u>created locution/idea</u> which evokes secondary SU (<u>SU2</u>), which is co-temporal and co-spatial with represented speech act or thought process (Davidse 1991, 1997, Davidse & Vandelanotte 2011, Gentens 2016)
- SU 2 traditionally assumed to shift wholly to SU 1 in (IST) so as to cease existing
- against this, Dik 1981, Vandelanotte 2004, 2005, 2009, Davidse & Vandelanotte 2011:

**SU 2** present as reference point in IST necessary to explain grammatical and interpretative features of reported locutions and ideas

→ deictic dependence does not entail non-presence of TU 2

#### 3. SU 2 in English IST

- only by positing SU 2 in IST can we explain:
  - expressivity, now/here as represented speaker/cognizant 's in SU 2 (Vandelanotte 2005, 2009)
  - meaning of tense (Davidse & Vandelanotte 2011) as relating to represented speaker's t<sub>0</sub>
- (1) So he said briskly that he would bloody well go inside himself and did.
- (2) Pete Domenici said that the problem **now was** on the spending side. (WB)



#### 3. SU 2 in English IST

- and only by positing SU 2 in IST can we explain:
- must and might being used as relative past tenses in complement of IST (Declerck 1991)
   which clearly have represented speaker of SU 2 as modal source
- (1) Then **she** became perfectly calm and said that we *must* call the police at once.
- (2) Yes, Papa said you might have the boat if you wanted it.
- Note:
- speaker-related modals such as *must* and *may* are normally non-tensed (with no past form for *must* and no past, only tentative, meaning of *might*)

#### 4. Complements of STR: Thesis vs. Process

- distinction grounded, finite thesis non-finite process in independent clauses corresponds in terms of formal and semantic features to grounded, finite thesis – non-finite process in indirect SRT complement
- but: shift from relations to SU 1 -> relations to SU 2
- thesis: typically coded by finite complement clause whose grounding fundamentally relates to SU2
  - Tense (represented speaker's t<sub>0</sub>)
  - (represented) Speaker-related modal auxiliaries
- desired **process**: typically coded by **to-infinitive**, which conveys future orientation, volitional aspect and 'face to face interaction' (Wierzbicka 1988:139) in terms of SU 2, which is anaphorically inferrable from matrix

#### 4. Complements of STR: Thesis vs. Process

- distinction thesis (finite clause) process (non-finite) persists in IST complements (Davidse 1991):
- in IS, SAME verbalization predicates (tell, ask, suggest) can sometimes be used to report (Halliday 1985)
  - (ia) epistemically- or (ib) deontically-valued thesis (dependent finite)
  - vs. (ii) desired **process** (typically **to-infinitive**)
    - (i) He told them that /asked them if they (ia) were/might be working/OR (ib) must work.
    - (ii) He asked/told us to work harder.
- in IT, DISTINCT classes of predicates tend to report (Halliday 1985, 1994)
  - (ia) epistemically- or (ib) deontically-valued thesis (dependent finite) (think, suspect, wonder)
  - vs. (ii) desired **process** (typically **to-infinitive**) (want, desire, intend, offer)
    - (i) He thinks/suspects that / wonders if it (ia) rains/might rain OR that/if (ib) they must work.
    - (ii) He wants /desires / intends (for) her to do research.
- in IST desired process typically coded by *to*-infinitive, which conveys future orientation and volitional interaction (Wierzbicka 1988:139): anaphorically retrievable SU 2

#### 5. IST-cxns with lexical adjectival and nominal CTPs in matrix: Thesis vs. Process

- discourse **primary** adjectival and nominal CTPs can be used lexically in matrix to represent verbalization or cognitive process (even elliptically) that creates specific locution or idea
- in principle same basic distinction for reported complements between:
  - epistemically- (ia) or deontically-valued (ib) thesis (coded by dependent finite)
  - (ii) desired **process** (coded by *to*-infinitive)
  - (ia) "Is there word whether he still lives?" "That is not known." (Internet)
  - (ia) Bernie's last chance is to try to flip the Super Delegates by making the case that Hillary might be indicted, which **there has been word** that it *may* happen. (Google)
  - (ib) 'Are you certain you should risk everything you own on this scheme?' I asked Jennifer . `You are,' Jennifer countered . (WB)
  - (ii) I tried to keep this room off limits but the charge nurse says that unless **there has been order to** *keep away from you*, the students must practice on you (*https://books.google.be/books?isbn=0595355633*)
  - (ii) A: You want to keep holding? B: Uh -- tell you what -- no need. (CASO)

- 1. Formal and semantic features of English factive constructions
- (i) possibility main verb negation (Kiparskys 1970) motivated by pre-existence of factive complement
- (1) Saddam didn't accept/accepted that he lost the 1991 Gulf war. (Davidse 2003, 2016, Gentens 2016a, b)
- on the level of representational semantics, **thesis** in factive complement is **pre-existent** to its cognitively or emotionally being **interacted with** in the way expressed by the factive predicate
- unlike reporting clauses, factive predicate does *not* describe instance of process that *created* factive thesis and thus does not define a SU 2 for it
- (ii) nominalized status of factive complement correlates with its being participant in cognitive/emotional process (being emotionally 'handled' "as an object of affect" (Halliday 1994: 249), being loved, hated, regretted, etc., or being cognitively 'grasped' or 'not grasped')

#### 2. Factive complements are theses

- in contrast with reported speech/thought, factive complement clauses
- can not be a process
- can only be thesis, i.e. entity grounded by
  - primary tense
  - Speaker-related epistemic modality
  - Speaker-related deontic modality
- against Dik & Hengeveld (1991: 235), who hold that complement of factive predicates is SoA, i.e. cannot
  have speaker-related epistemic or deontic modality
- Gentens & Davidse (2014): factive complements allow Sp-related epistemic/deontic modal auxiliaries
- we agree with Field (1997:803) that the traditional notion of speaker commitment to *truth* of the proposition in factive complement is "equivalent to certainty as a type of epistemic stance"
- against Lyons (1977), Haegeman (2006): no Sp-related epistemic/deontic modality in factive complement

- Gentens & Davidse (2014): thesis in factive complement can have three grounding types:
  - deictic element of primary tense: situating thesis relative to t<sub>0</sub> entails 100% epistemic commitment (cf. Field 1997), e.g.
    - (1) Saddam did not accept that he lost the 1991 Gulf war. (WB)
    - → this is type to which tradition has (tacitly) restricted factive complement, e.g Lyons 1977
  - speaker-related **epistemic modal** auxiliaries
    - (2) "I hate it that people *might* think I don't care. I cried my eyes out when I watched the towers collapse." (BNC)
  - speaker-related deontic modal auxiliaries
    - (3) Not that she does not deserve it, this has been going on for years, but I hate that I must do this. (BNC)

#### 3. Factive complements involve modal position construed by speaker: congruent or echoic

- following Verstraete's lead (2001, 2002, 2007), Gentens & Davidse (2014) note that construal by actual speaker of modal position of thesis may also be **echoic**
- this possibility was revealed by Vandelanotte (2004a, 2004b, 2005, 2009) for echoic represented speech, which is *deictically singular*, and involves the actual speaker *appropriating* speaker-anchoring of report to echo it for rhetorical purposes, typically dissociating himself from echoed modal position, e.g.

I have airs about myself and e:rm (.) I think I am someone special, he says. (p.c. Van de Mieroop)

- factive cxns are deictically singular: they involve only one SU, which speaker can use congruently or speaker-anchoring of factive complement can be appropriated, echoing modal commitment of other source
  - echoic primary tense
  - echoic **epistemic modal** auxiliaries
  - echoic deontic modal auxiliaries

- 3. Factive complements involve modal position construed by speaker: congruent or echoic
- echoic primary tense
- (1) <u>Dr Reid</u> claimed <u>that the suspension of the Stormont assembly was designed to give the parties "breathing space" ... ."There's been a deal done, ... I don't buy it that John Reid *has* taken this decision by himself," said Mr Adams. (WB)</u>
- echoic epistemic modal auxiliaries
- (2) <u>Dart's claim</u> did not persuade the academic community and he was severely criticised. Many were favourable to admit that the Taung child was the representative of a new species of fossil primate, but they did not accept that it *might* be ancestral to ourselves.
- echoic deontic modal auxiliaries
- (3) Mr. Blix didn't repeat his charge of three weeks ago that Iraq has not, even now, accepted that it must disarm. (WB)

#### 4. Factive constructions with lexical adjectival + nominal CTPs in matrix: complement is thesis

- adjectival and nominal CTPs can be used **lexically** to represent cognitive or emotional way in which preexistent proposition with is interacted with (Van linden & Davidse 2009; Van linden 2012)
- in principle, factive complements have formal and semantic features of thesis, and 3 grounding types:
  - deictic element of primary tense:
  - (1) This book presents a balanced and sensible self-help programme or bulimia. It is particularly **important** that ... it *is written* by someone who has experienced the syndrome herself. (WB)
  - speaker-related epistemic modal auxiliaries
  - (2) **it is worrying** that he *may* well be the fourth best quick bowler we have. (uk.sport.cricket.narkive.com/4TZzXab4/simon-jones-94mph)
  - speaker-related deontic modal auxiliaries
  - (3) It's **important** that we *must* maintain the passion. This is the most important thing! (Internet)

### 4. Conclusion

- we have argued that proposed distinction thesis process, as developed for English, captures
- semantically motivated major grammatical faultline in
  - independent utterances
  - complements
- and can be profitably used to elucidate
  - constructions of indirectly reported speech/thought: thesis vs. process
  - factive complement cxns: only thesis

### 4. Conclusion

**Differences** with traditional SoA – proposition distinction:

- process: untensed relation between lexical verb and its participants
  - ⇔ SoA: different definitions circulate:
    - narrow one: tensed predication (Lyons 1977; Dik & Hengeveld 1991)
    - broad one: description that *can* be located in time and place (Cristofaro 2003)
- thesis: clause with arguability value relative to coded reference point in SU (temporal zero-point, Sp-related epistemic aux or Sp-related deontic aux)
  - ⇔ proposition: only truth-value
    - indirectly represented speech/though complement: arguability of thesis relative to SU 2
    - factive complement: ep- +deont-thesis committed to or echoed by actual Sp ← SoA (Dik-Hengeveld 1991)