

Cognitive arguments for a Fuzzy Construction Grammar

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Desagulier (2004b and to appear)

- a construction that is cognitively salient in the minds of the speakers of a given linguistic community can be retrieved wholly or partially to provide a **template** for the composition of another construction.
- the dual and somewhat paradoxical nature of constructions (conservative and innovative) is precisely what enables grammar to keep pace with language flexibility.

ISSUE OF MAJOR CONCERN HERE

« Constructions are understood to be learned on the basis of the input and general cognitive mechanisms (they are *constructed*). » Goldberg (2003).

☞ what does it mean for a construction to be *constructed*?

Previous research on fuzziness

Fuzziness is:

problematic (and rejected) if treated from the standpoint of a theory that is not based on usage,

unproblematic and unavoidable otherwise (especially in functional/cognitive linguistics)

Jackendoff's valuable postulate

"(...) fuzziness must not be treated as a defect in language; nor is a theory of language defective that countenances it. Rather, fuzziness is an inescapable characteristic of the concepts that language expresses. To attempt to define it out of semantics is only evasion (Jackendoff 1983: 125)".

Claims (1)

- Fuzzy grammatical categories, which are traditionally perceived as exceptions, may well be the norm when considered from a constructional, usage-based perspective.
- Fuzziness is a central component of Construction Grammar(s) since it amounts to the differential between the conservative and innovative dynamics of a construction.

Claims (2)

- This differential is defined as the **zone of potential development** of a construction, which is precisely what enables grammar to keep pace with language flexibility (both synchronic and diachronic).
- Constructional fuzziness is what makes language change possible.

Working assumption

It is by studying intermediate forms that we can gain a better understanding of the mechanisms of constructional creativity and innovation.

- 'ambiguous' instances of the genitive of measure
- the deontic/advice-giving want to/wanna construction

The genitive of measure

case study #1

GENITIVE CONSTRUCTIONS IN ENGLISH

- One form :

NP1 + 'S + NP2

- The number of correlated functions varies according to the criteria chosen by the linguist

Quirk et al. 1985: 326-330

No fewer than 6 *s*-genitive categories characterized in terms of syntactic and/or semantic criteria:

- Genitive as determinative: *[Jenny's] desk*
- Genitive as modifier *He wants to become a ship's doctor*
- The group genitive *The Moma's director*
- The independent genitive *My car is faster than John's*
- The 'local' genitive *We'll meet at Bill's*
- The 'post-genitive' *some friends of Jim's*

How many *s*-genitive constructions?

Actually, most of Quirk's *s*-genitives fall into two non-controversial, broadly accepted constructions:

- **The determinative genitive**

- **The qualifying genitive**

The determinative genitive (Quirk's « genitive as determinative »)

Syntactic tendencies (after Larreya 1995)

DET in front of NP1 determines NP1

*Promised to give me tips on parallel skiing after **the season's** first snowfall in Tahoe.*

(San Francisco Chronicle)

ADJ in front of NP1 qualifies NP1

*There are a number of cheating methods ranging from the tried and tested, looking over the **clever student's** shoulder (...) (www.bigrag.co.uk)*

The qualifying genitive (Quirk's « genitive as modifier »)

Syntactic tendencies (after Larreya 1995)

DET in front of NP1 determines NP2

***Your** reporter's **card** should never be a license to bore the readers.*

ADJ in front of NP1 qualifies NP2

*His body immediately went limp as his **blue** postman's **cap** fell to the ground.*

The genitive of measure

2 DISTINCTIVE FEATURES (Larreya 1995)

**a) NP1 refers to a measure of TIME,
DISTANCE or MONEY (+ *worth*):**

twenty years' imprisonment

a few miles' drive

thousands of pounds' worth of equipment

b) NP2 functions as an uncountable noun.

Illustration of the 2nd feature (NP2 as uncountable)

For NP2 to be constructed as uncountable means that it cannot be determined by any indefinite determiner (notably *a/an*):

He was sentenced to \emptyset twenty years' imprisonment on the manufacturing charge (www.dpa.state.ky.us)

imprisonment = nominalized predicate
⇒ uncountable

If NP2 is either countable or uncountable

*The seats outside us were occupied by two middle aged women who were going to London for **a week's holiday***

(M. John Harrison, *The Course of the Heart*)

Larrea: then NP2 is treated as uncountable and *a* determines *week*. NP2 determined by \emptyset .

Confirmation: if NP1 is in the plural
for \emptyset two weeks' holiday.

Problem (1)

*for **two** weeks' holiday (OK)*

BUT: ?for one week's holiday

- ⇒ technically possible but not so frequent.
According to Larreya 1995, it confirms the existence of a zone of 'fuzzy syntax', typical of determination in genitive constructions.
- ⇒ Maybe the indefinite article is perceived by speaker and hearer as DET of NP2 (because the speaker wants to preserve the ambiguity)

Voluntary underspecification of the range of DET

Ambiguity?

Not really.

Generality

(Bolinger 1961)

A marginal phenomenon according to Larreya.

Is it so ?

Problem (2): What if NP2 is exclusively countable?

- *He went further, saying: "We have reached the stage in the Conservative Party where if we have **a week's conference**, and in that we have a 10-minute row about the euro, that will be all that is reported.*
(<http://news.bbc.co.uk>)
- *Each expedition starts with **a week's training period***
(<http://www.raleigh.org.uk>)
- *Initially she purchased CMSI services, and after **a week's session**, she switched to IBIS facilitation available in-house from SCE.*
(<http://www.touchstone.com>)

Further counter-examples

- *Afternoon 13:30 start from the Crown for **a 5½ miles' walk** through Brackmills Woods*
- *No application, however, shall be denied unless an opportunity for a hearing has been given the applicant by **a ten days' notice** in writing (...)*
(www.hermosabch.org)
- *a ten days' absence* (Quirk et al. 1985: 1333)

**Ok, not so frequent
in contemporary English**

Variation concerning the genitive of measure

e.g. ***for two weeks' holiday***

(a) for two weeks holiday

(b) for a two-week's holiday

(c) for a two week holiday

(d) for a two-week holiday

(e) for a two weeks holiday

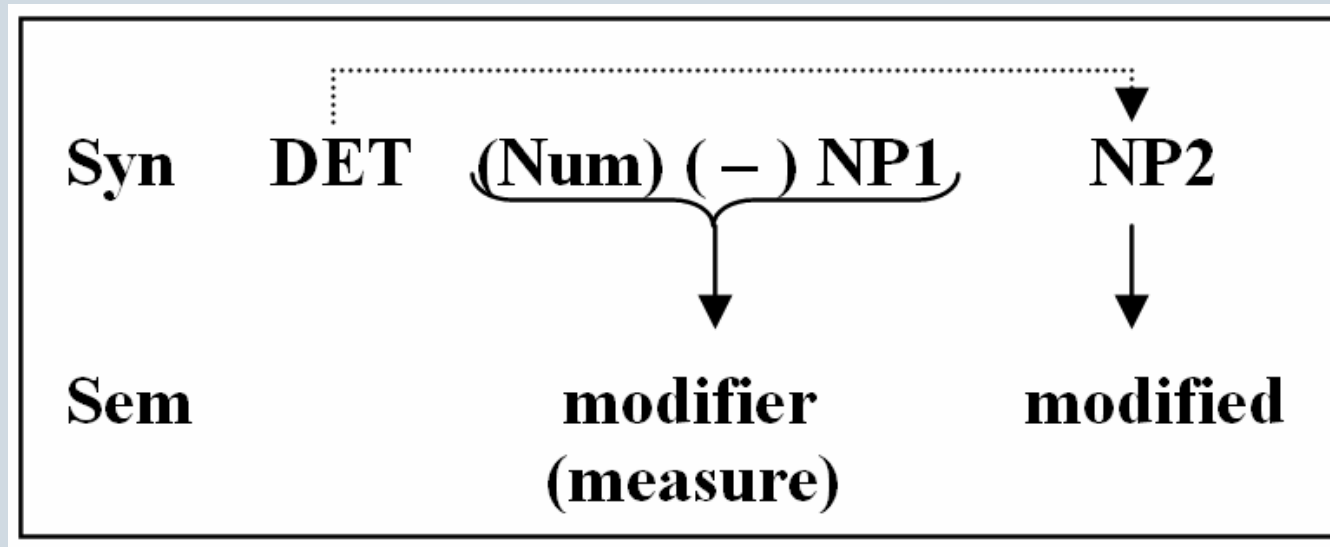
(f) for two week's holiday

etc.

- (c), (d) and (e) are the most frequent forms
- They fall into the nominal-compound constructions.
- The other alternatives are intermediate cases (fuzzy).

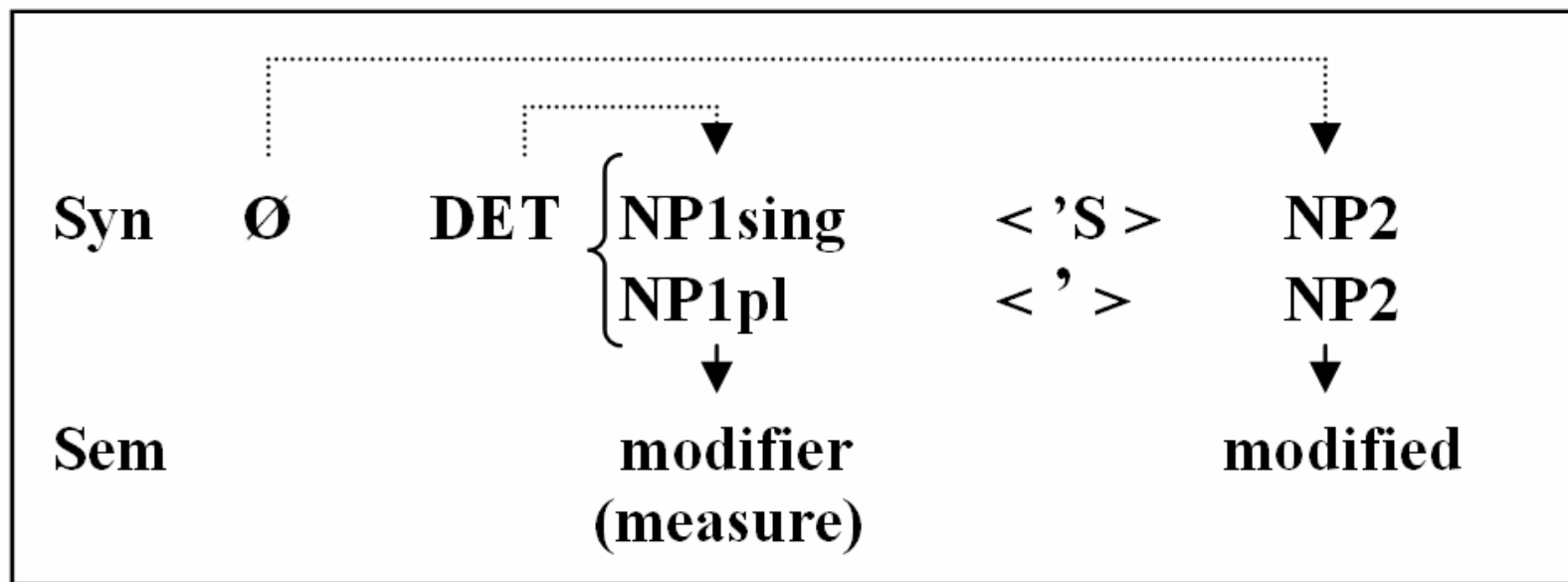
Form-function reanalysis as a possible explanation for 'fuzziness'

The form-meaning mapping of the construction prototypically associated with the genitive of measure is increasingly reanalyzed by the speaker/hearer in light of the nominal-compound constructional schema.



Why is the compound-noun schema gaining ground? (1)

It is compatible in form and meaning with the constructional schema of the genitive of measure:



Why is the compound-noun schema gaining ground? (2)

It is cognitively salient and perceived as easier to process than the constructions associated with the genitive of measure (notably concerning the range of DET)

Cf. principle of **cognitive economy**:

« Given two structural alternatives, the option demanding less mental effort is more likely to be chosen than that option requiring more mental effort . »

(Rosenbach 2002: 238).

Less mental effort

- Speakers/hearers can produce/interpret a complex construction in light of a similar one which is more readily accessible to them (esp. in spoken discourse)
- The genitive construction can be said to be more complex because of the fluctuating the role of DET and the multifunctionality of <S>.

Usage-based factor

in **non-expert** situations of performance and perception, the speaker's mental representation of a given construction may not correspond to the hearer's mental representation of the same unit.

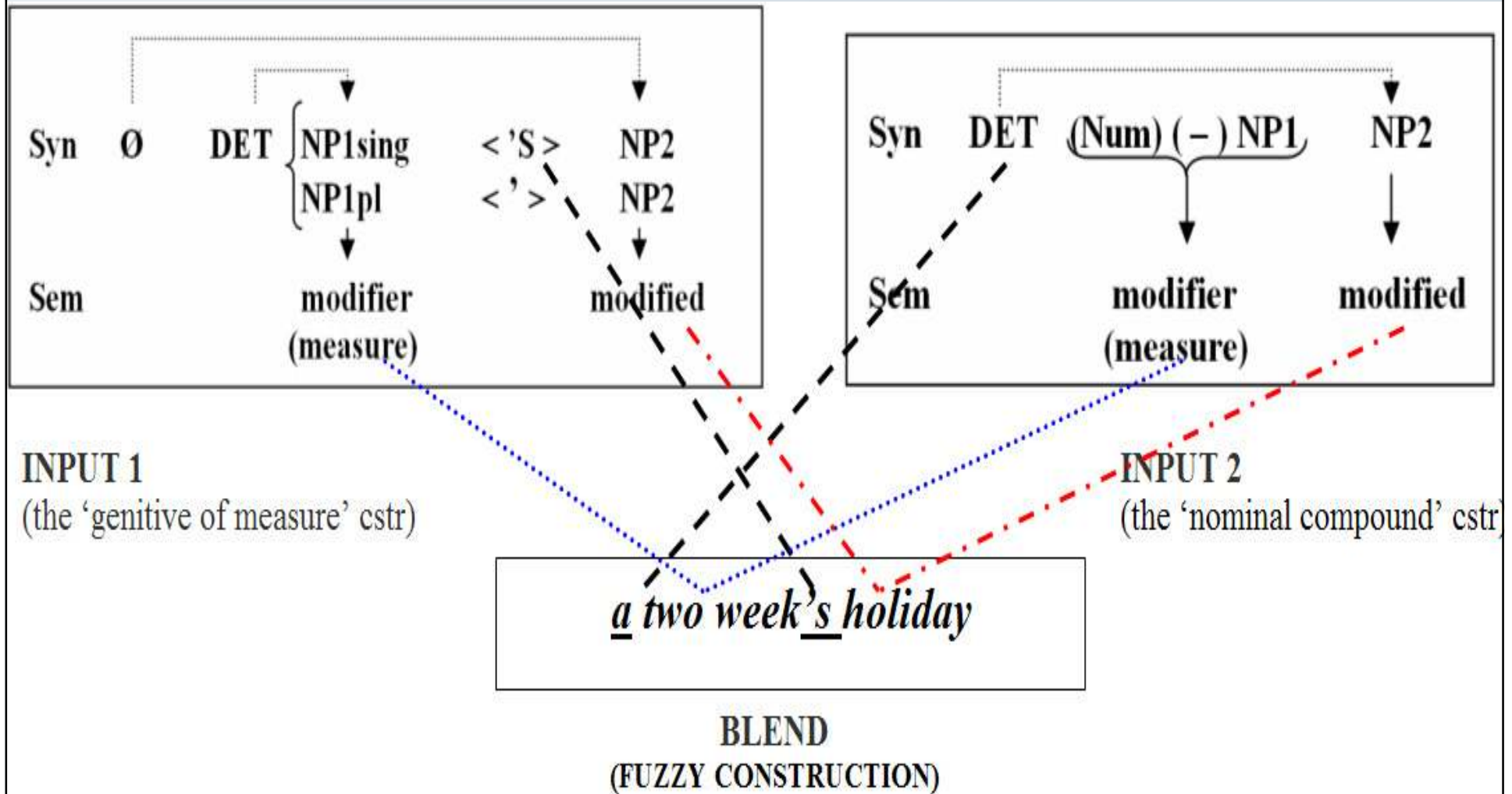
e.g. in spoken discourse, <S> might be intended as POSS morpheme but perceived as the marker of the plural.

Consequence on the genitive of measure

'Fuzzy' instantiations of the genitive of measure are actually *constructional blends* that integrate component elements from two *inputs*, i.e. the *constructional schemas* associated with the prototypical genitive of measure and nominal compounds.

Cf. Taylor 1996: ch.11, esp. 11.2 on 'the **fudging** of possessives and compounds'

Constructional blending



Provisional conclusion

The fuzziness attached to the genitive of measure construction is not merely syntactic. It is clearly constructional.

The deontic want to/wanna construction

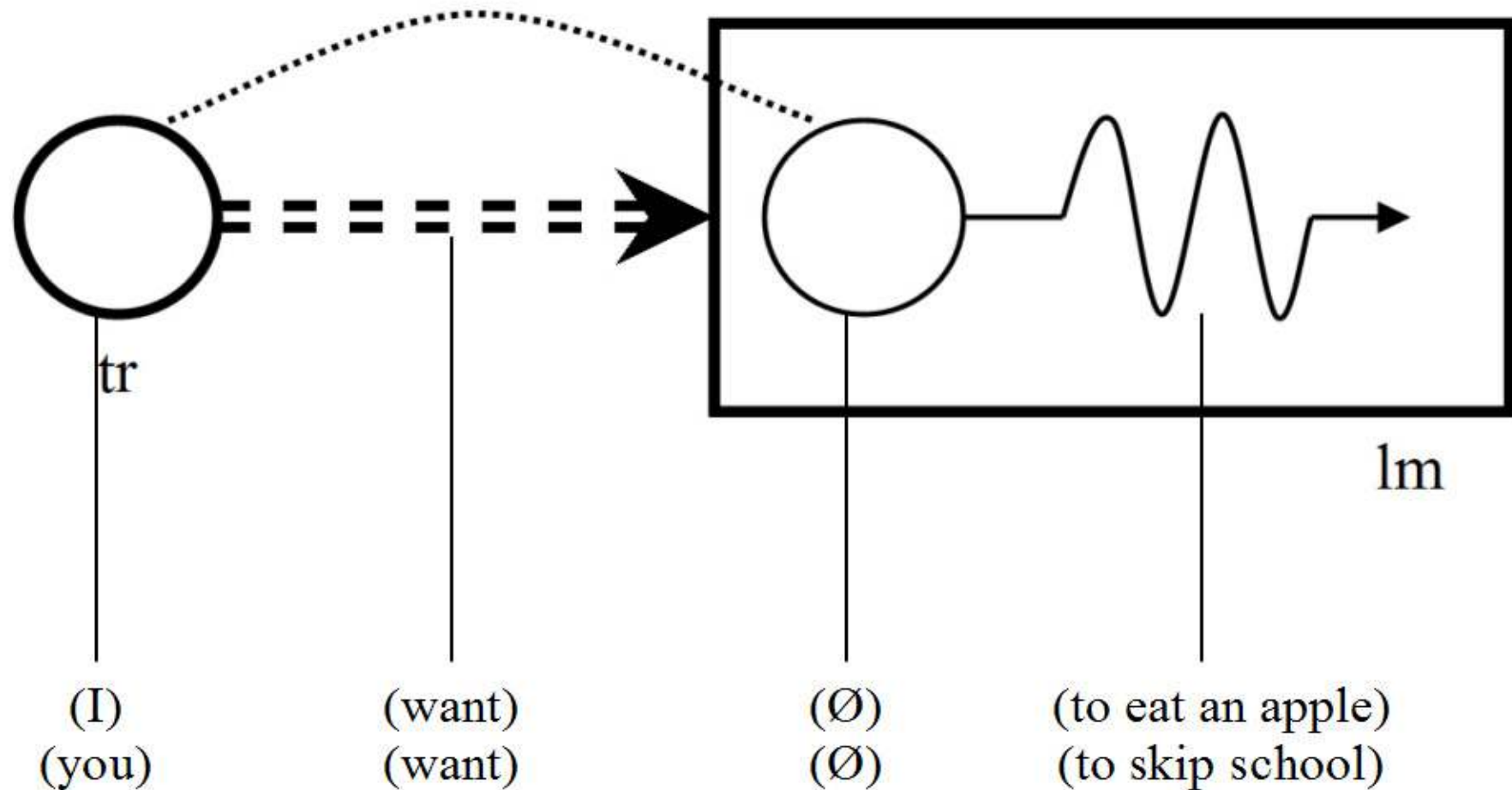
Another case of constructional
fuzziness

An intermediate situation-type of grammaticalizing construction

it has grammaticalized from non-modal semantics and non-auxiliary forms to modal extensions between Middle English and present-day English. But not (yet) a prototypical modal (cf. Krug 2000)

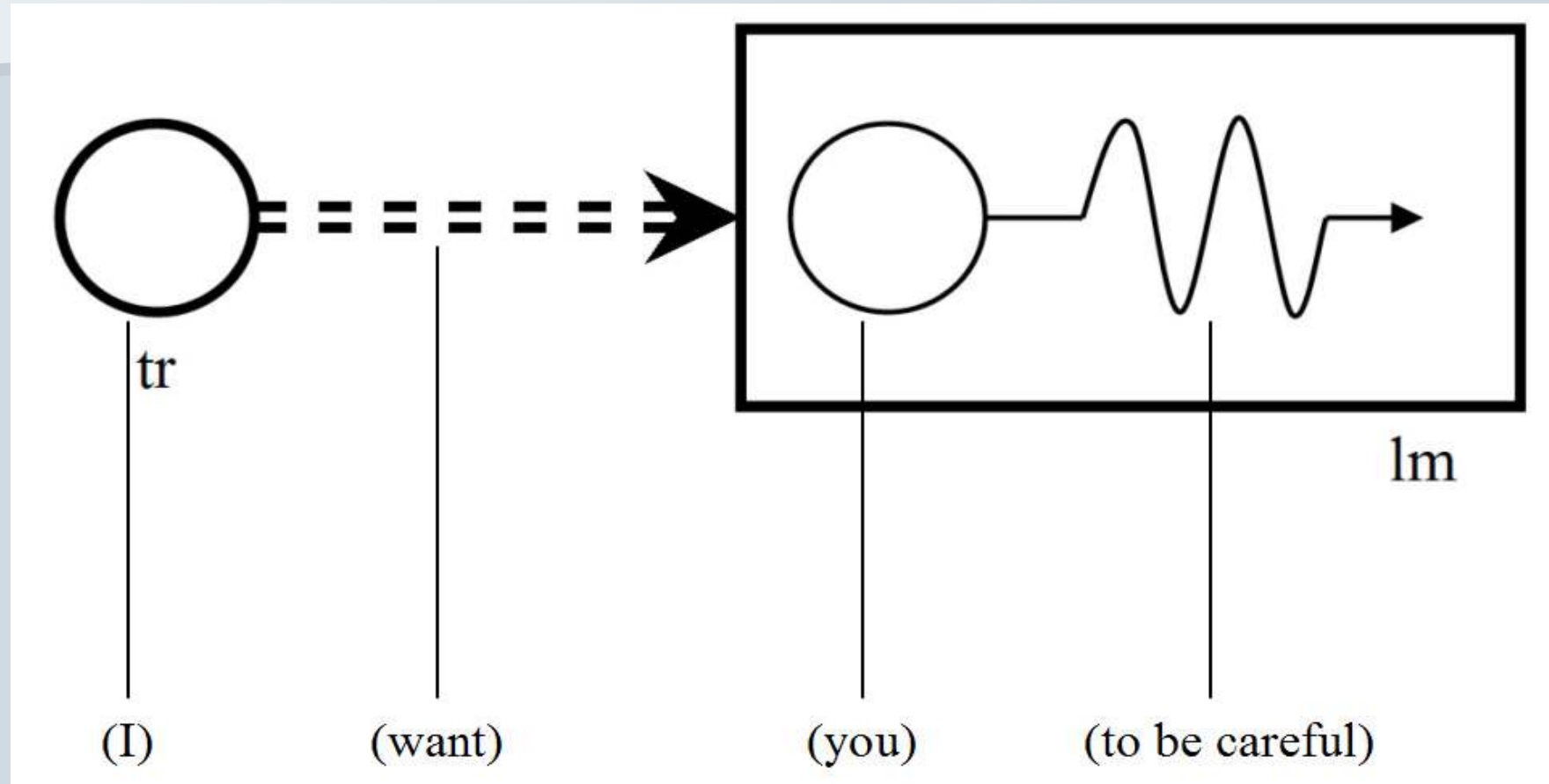
Conventional uses

Ex (20)-(21) in handout



- (i) In the construction, WANT TO/WANNA makes schematic reference to another process (the landmark process).
- (ii) The overall trajector (the primary focal participant) and the trajector of the landmark process are equated.
- (iii) The subject is the locus of some kind of potency directed at the landmark process.
- (iv) The realization of the landmark process is potential, hence the dashed arrow.

Deontic uses of the want to/wanna construction



the overall trajector and the trajector of the landmark process are not equated anymore (force dynamics)

Ex (22)-(30) : you want to/wanna

You wanna be careful where you're throwing your accusations! (ITV)

the locus of the source of constraint/potency is no longer the trajector. It is subjectively construed by the speaker/conceptualizer. S/C imposes the constraint upon the profiled trajector while pretending to report objectively that the subject is the locus of potency.

An indirect speech act

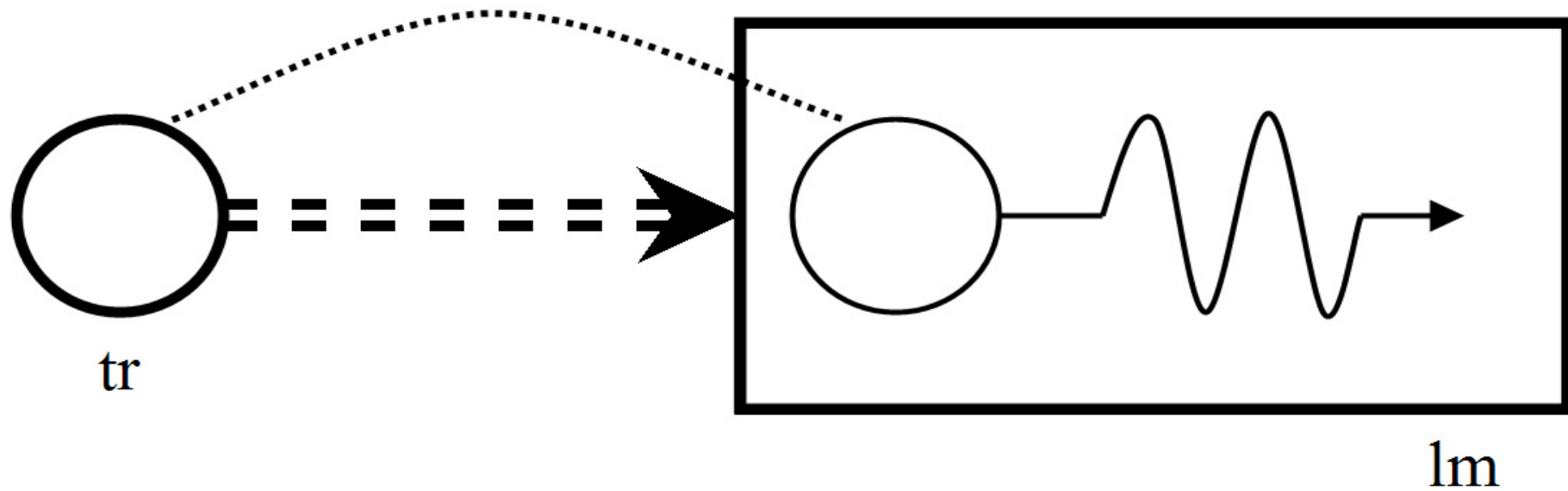
⇒ **an indirect speech act:** illusory acknowledgment on the part of the speaker that the hearer (*you*) is his/her own authority (comparatively speaking, *need* and *should* are more constraining on the part of the speaker). But in the end, it is the speaker who is the actual source of authority. There is a voluntary underspecification as regards the locus of potency.

a possible paraphrase for (26):

(i) 'you want to be careful because it is in your interest to be so'

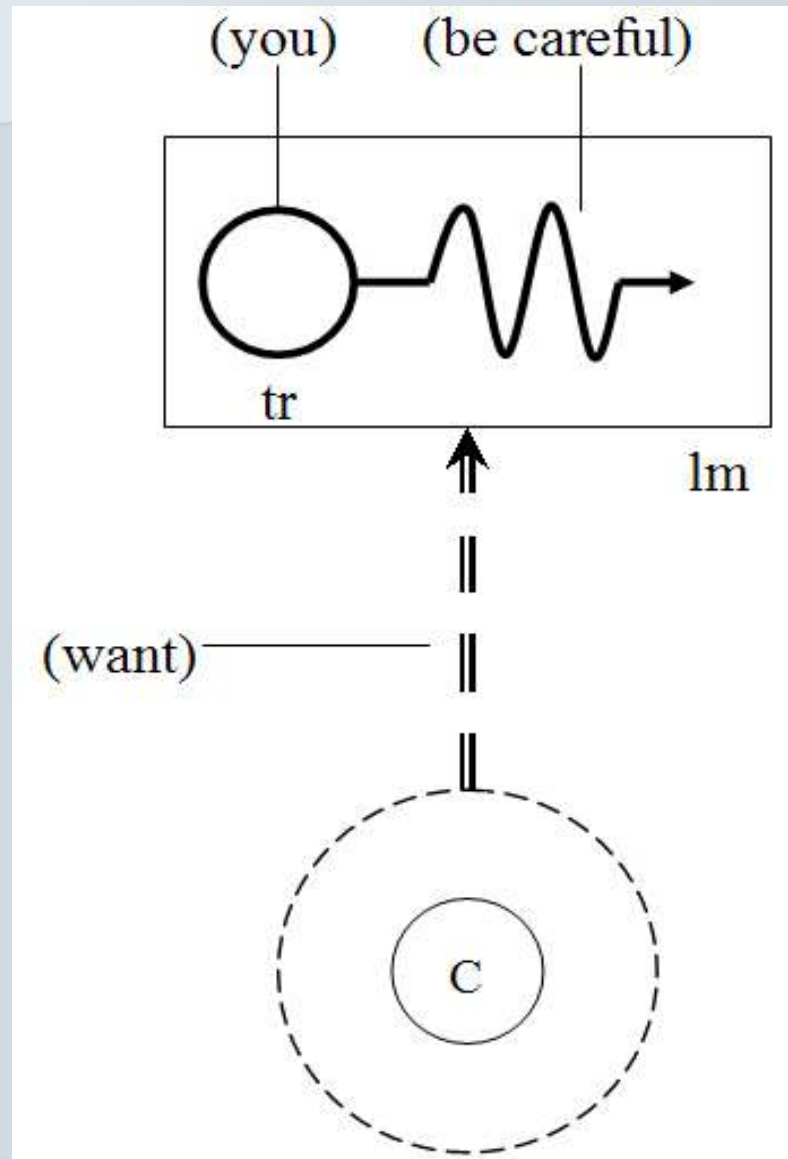
(ii) 'It is therefore natural for you to desire to be careful when in fact *I* (the speaker) want you to be so.'

apparently we have



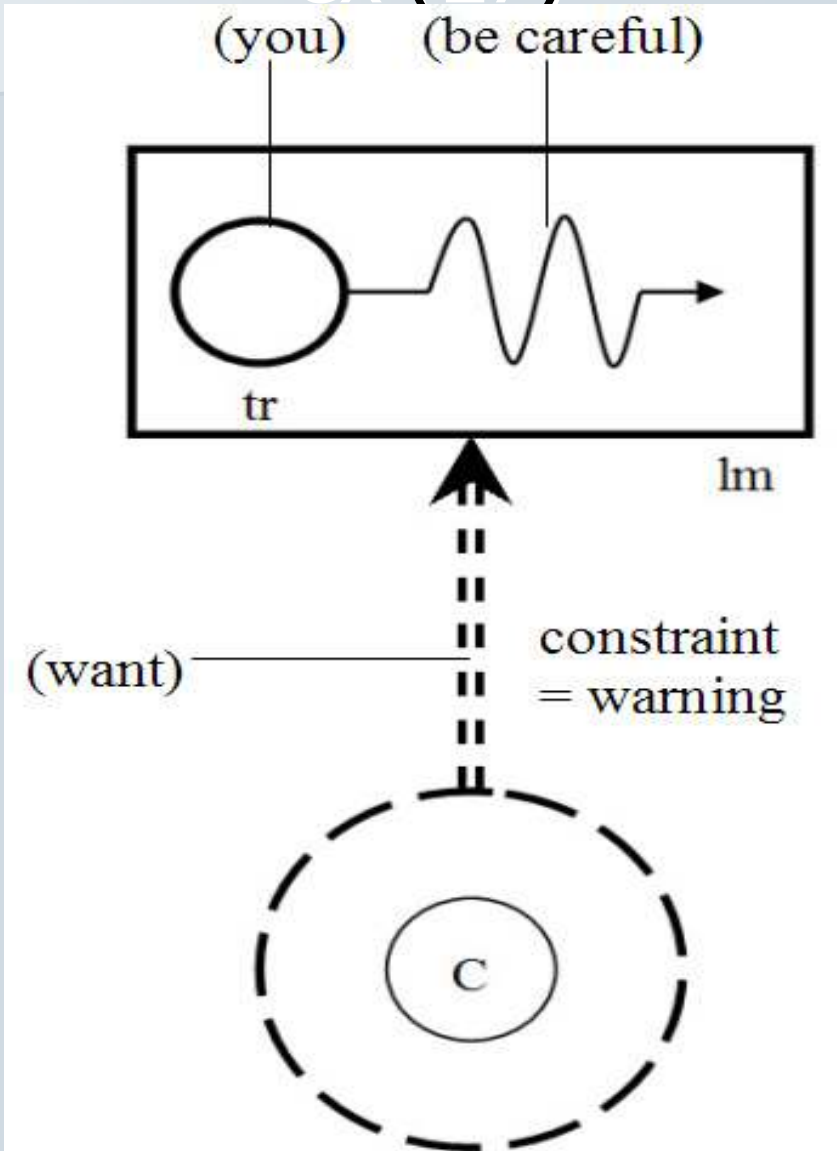
In fact...

subjectification

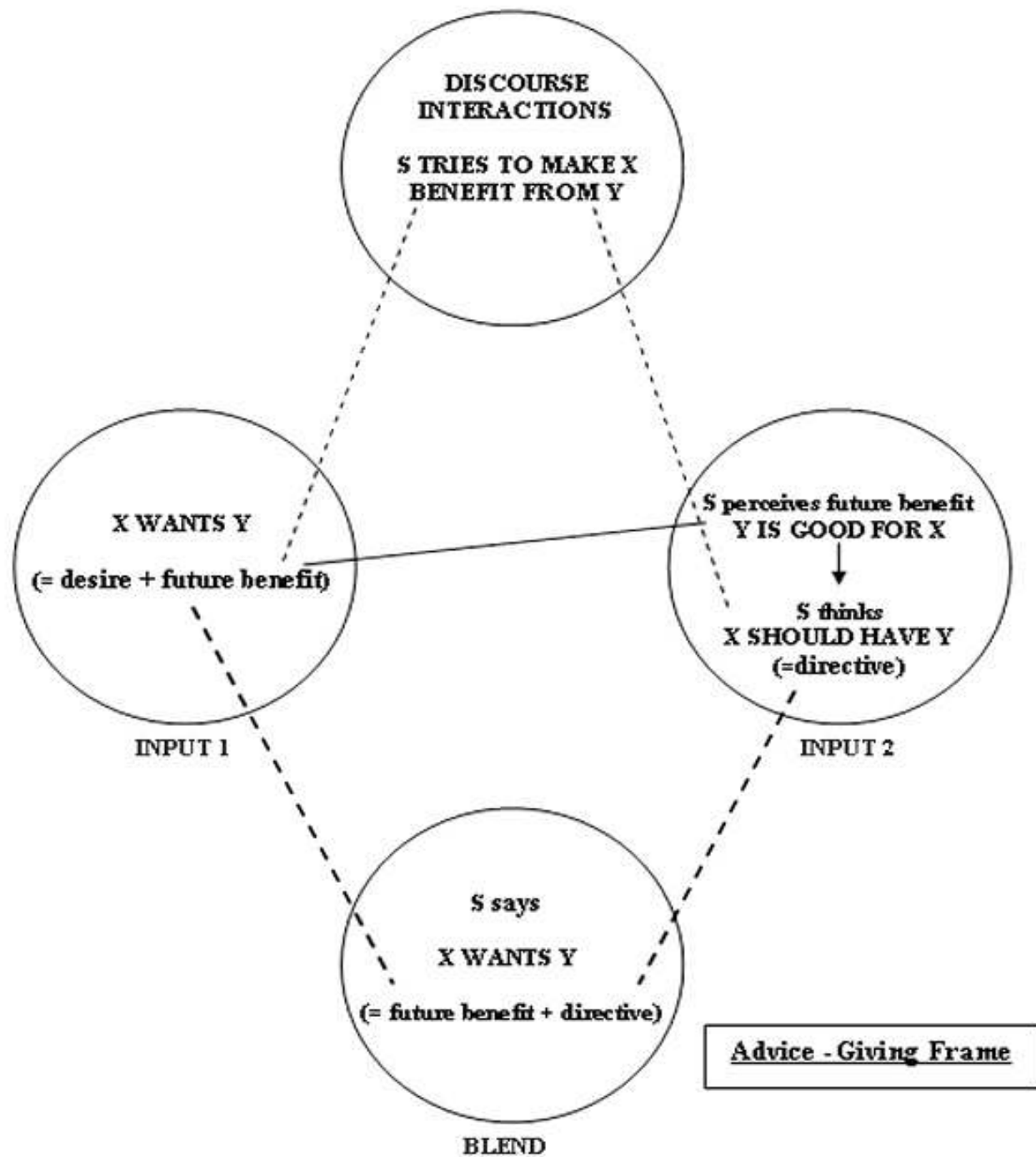


degrees of subjectification

ex (27)



GENERIC SPACE



constructional fuzziness

- entrenched yet not fully transparent,
- The V retains a certain degree of analyzability,
- voluntary underspecification as regards the locus of potency.

Constructional compositionality

NON-MODAL SEMANTICS
TRANSITIVE STRUCTURE

NON-AUXILIARY FORM

X WANTS (TO) Y

INPUT 1

MODAL SEMANTICS

DITRANSITIVE STRUCTURE

AUXILIARY FORM IMPOSSIBLE

S WANTS X TO Y

INPUT 2

TRANSITIVE STRUCTURE

Syn X WANTS TO Y

MODAL SEMANTICS (deontic)

Sem S wants X to Y

AUXILIARY FORM POSSIBLE

→ possible univerbation: <wanna>

BLEND

Conclusion (1)

Speaker and hearer stock and share a certain number of form-meaning pairing conventions which have been abstracted from previous linguistic experience

BUT they do not have access to exactly the same form-meaning pairings

- ▶ The differential between those two principles defines a **zone of potential development.**

Conclusion (2)

“Novel expressions are not created by the linguistic system per se, but rather by the speaker, drawing on all available resources (Langacker 1999: 111)”.

◆ speakers routinely use constructions or fragments of constructions (which may be mutually inconsistent) in a compositional manner. They can do so because the parts involved in the grammatical engine (the constructions) are loose (fuzzy) enough to make form/function reanalysis possible.

**Thanks for your
attention !**