Ways of being stupid

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1. **Data, problems, and previous accounts**

2. **Cascades and verb semantics**

3. **External *stupid* [*dummerweise*]**

4. **Internal *stupid* [*dumm*]**

5. **Results and outlook**

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1. Data, problems, and previous accounts

"Agentive" adverbs / "external variant"

(1) a. *Lisa rudely departed.*

   b. *Sandy inappropriately kissed Jill on the lips.*

   c. *John stupidly played the ace first.*
   John hat das Ass dummerweise zuerst ausgespielt.

These adverbs alternate with **manner** / VP-**"internal"** uses:

(2) a. *She acted rudely.*

   b. *He behaved inappropriately.*

   c. *He played stupidly.*
   Er hat dumm ausgespielt.

1.2 Problems

- **How is the external variant to be analysed?**

a) McConnell-Ginet 1982, Piñón 2010: "manner" predication of a higher predicate

b) Parsons 1990, Potts 2005: propositional operator

c) Wyner 1994: top element of an "event" (information-state) mereology

d) Geuder 2002: predication of an event which is a preestablished discourse referent / a discourse fact

e) Ernst 2002 / Kubota 2015 / Morzycki 2016: a narrower "comparison class" than with manner adverbs.

All existing analyses face unresolved questions (a,b,d) or are demonstrably insufficient (c,e).

Our own proposal will have some structural similarity with (a), but on a different basis.

1.2 Problems (ctd.)

- **What kind of analysis do we need for the internal/manner variant?**

  a) Parsons 1990: predication of an event ?

  b) Converging ideas that manner adverbs should be explicated via some variant of a **Frame** approach, i.e. in a network of functional attributes + values that serve to decompose a property (Löbner 2013).

     Piñón (2007):   "manner functions"

     Morzycki (2016): "augmentation" of the verb,

        e.g. *quickly(e): speed(e)=r & quick(r)*

- The problem so far: what kind of "role / augment" and what kind of value would correspond to modifiers like *stupidly*?

- Here, we will provide a **cascade analysis** for both variants, where cascades are a particular kind of **frame** structure.

- Contrary to the view presupposed in many neo-Davidsonian accounts, the manner variant will not turn out as the most simple variant in terms of conceptual content and structure.

1.3 The basic idea: criterion predicates

Sæbø (2016) discusses the notion of a *Criterion Predicate*:

A type of abstract predicate that has to be instantiated by some more concrete property.

Sæbø argues that the concrete instance behaves as an argument of the abstract predicate.

Example:

$[\![$ *break the law* $]\!]^w = \lambda P\, \lambda e.\ P$ is illegal in w and $P_w(e)$

Our hypothesis:

The adverbial construction with external *stupidly* behaves as a criterion predicate ('do something stupid'), the VP as its instantiation.

Sæbø (2016)

$[\![$ *break the law* $]\!]^w = \lambda P\, \lambda e.\ P$ is illegal in w and $P_w(e)$

About this formula:

- The criterion predicate *break the law* is a property of events,

- but it is "parasitic" on the event argument of the concrete instantiation.

- The core of the abstract predicate (here: "illegal") is a higher-order property which is not attached to an event as such.

We will depart from this latter assumption.

2.   Cascades and verb semantics
2.1   Alvin Goldman (1970) : "Level-generation" of acts

Higher levels of acts (in what we call "cascades") are **generated by certain upward relations:**
S does A' **"BY"** or sometimes **"IN"** doing A under conditions C*. [p. 20]

type of generation	generating level A	generated level A'	conditions
causal	S does A S shoots at B	S causes E S kills B	under circumstances C*, Act A causes event E
conventional	S says "Hi!" to B	S greets B	circumstances C* and rule that A done in C* counts as A' guarantees that A'
simple	Usain Bolt ran 100 m in 9.58 sec	Usain Bolt broke the world record over 100 m	under circumstances C*, S doing A entails S doing A'
compound	A_1: S holds pen A_2: S presses pen on surface A_3: S moves pen	S draws something on a surface with a pen	Acts A_1, A_2 … jointly constitute A' and are circumstances to each other
augmentation	run moving S's queen	run quickly moving S's queen to a7	circumstances C* cause A to result in A'

2.2   Act-trees

Goldman (1970: 34)

[type labels replace original corresponding type numbers]

Disappointing his followers
— causal —
Breaking a long-standing tradition
— simple —
Declining the nomination for vice-president
— simple —
Indicating refusal
— conventional —
Moving his head from side-to-side
— augmentation —
Moving his head

Upsetting his glasses
— causal —

2.3   Cascades

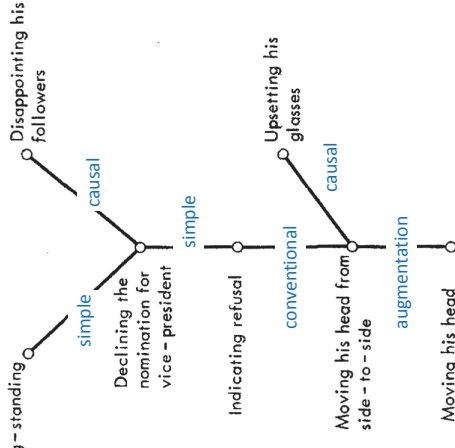A **cascade** is a structure produced by level-generation.

2.4   The upward ⇑ cascade relation: constitution

The upward relation is generalized level-generation: **constitution_under_circumstances** **c-const.**
What acts a given act-token may be considered to level-generate, depends on the circumstances.

2.5   The downward ⇓ cascade relations IN and BY: substrate

The relation IN can be considered an attribute like IMPLEMENTATION, PHYSICAL_BASIS, FOUNDATION; its inverse is COUNTS_AS, AMOUNTS_TO, CONSTITUTES, MEANS.

S does A' **in** doing A.
Doing A **is** doing A'.
Doing A' **consists in** doing A.

[BNC]   *All through "The Graduate" Nichols thought he'd made a mistake **in casting me**.*

The relation BY can be considered an attribute like MEANS (OF) (if A' is intended), CAUSE; its inverse relation is EFFECT.

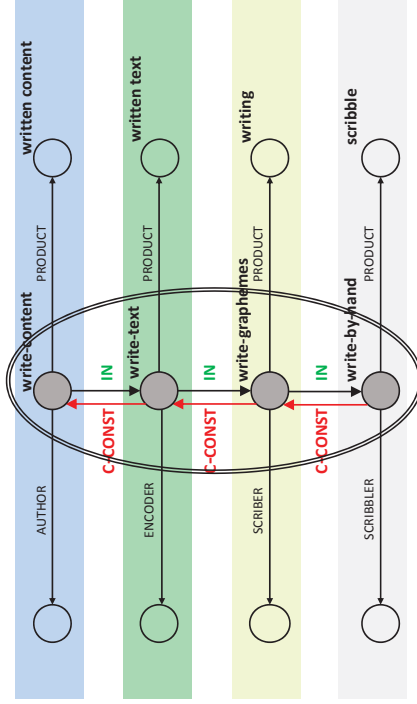S does A' **by** doing A.
Doing A **has the effect of** doing A'.
A' is not A.

[BNC]   *reduce the number of new HIV infections **by giving** young people the facts about AIDS*

2.6 The internal cascade of the 'write' concept

written content — write-content (PRODUCT) — AUTHOR
IN
written text — write-text (PRODUCT) — ENCODER
IN
writing — write-graphemes (PRODUCT) — SCRIBER
IN
scribble — write-by-hand (PRODUCT) — SCRIBBLER

C-CONST (between write-content / write-text / write-graphemes / write-by-hand)

2.7 Augmentation generation: definition

"The generated act is formed by "augmenting" the generating act with some relevant fact or circumstance. The fact the generating act is not merely performed but performed *in a certain manner, or in certain circum- stances*, entails that the generated act is also performed." (Goldman 1970: 28)

Examples (acc. to Goldman):

- Adding directional specification   *extending one's arm* + *out the window*
- Adding a manner specification   *say hello* + *loudly*
- Adding specification of duration   *run the mile* + *in 3:40*
- Compound generation   *jump* + *shoot* / *shoot* + *jump* = *jumpshoot*

Distinction from other types of generation

- Augmentation generation is the only type of generation where the generated act **entails** the generating act.
- The *by paraphrase* is inapplicable [Goldman: 29].

In common

"[The] generated act is formed by making use of some *additional fact* not implicit in the generating act." (p.29)

2.7 Augmentation generation (ctd.)

Notation and terminology
If A level-generates A' by augmentation, we will write A^+ for the augmented action A'.
We will call the generating action the "**underlying** action".

Why distinguish the levels?

- Goldman:
Acts A and A^+ are not identical since they have **different properties** [Goldman p.29f]. Among them
  o A^+ may be unintentional, even if A is intentional.
  o A^+ may have causes different from those of A.
  o A^+ may cause different things than A.

One might add:
  o A^+ may level-generated acts that A doesn't.

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3. External modification

3.1 What is known about the word meaning of *stupid(ly)*?

- It is felt to be "evaluative". However, none of the adverbs in this class is purely evaluative, in the way of *good / bad*.
- The underlying adjective selects an argument of its own with a quasi-agentive role:
  That was stupid of him.
- Fábregas et al. (2012): "Evaluative adjectives" behave like stage level predicates (even without progressive form!); they allow agentive modifiers:
 *He is often cruel to his little sister on purpose*
  When he is cruel, he is really cruel.

Conclusion: The adjectives in question make (covert) reference to an action already on their own.

3.2 The 'stupid' frame

- *stupid* – in one sense – is a predicate about at least two arguments, an action argument and its agent.
- It expresses an evaluation of the intellectual performance of the agent in executing the action.

dumm/stupid

eine Dummheit / a stupid thing to do
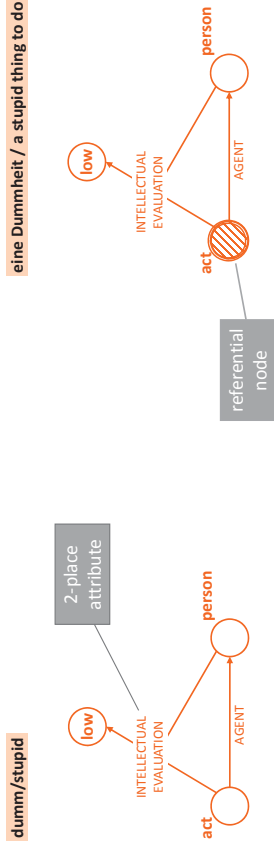
3.3 'dummerweise' / 'stupidly$_{ext}$'

stupidly x V-s, dummerweise V-t x

- x's V-ing as a whole act is intellectually evaluated
- By **augmentation** generation, the underlying act that x-V-s generates, under circumstances, a higher-level act that counts as stupid.
- The adjective/adverb frame is applied to the act-agent pair of the newly generated level.
- According to the external modification with *stupid*, x's V-ing is a stupid thing to do / eine Dummheit.
- Semantic analysis cannot explicate what exactly is stupid with x acting so – cf. the dependence of any level-generation on the context : **c**-constitution
- The modification adds semantic content.
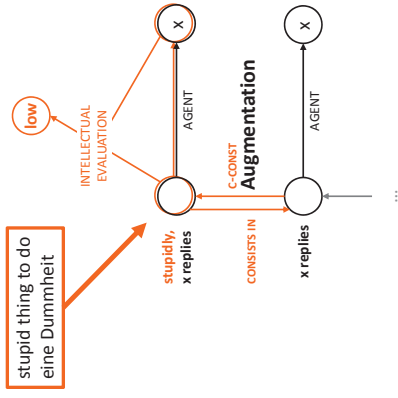
dummerweise hat x geantwortet stupidly, x replied

stupid thing to do eine Dummheit

Augmentation

3.4 Two levels

- The modification augmentation generates a more abstract level, where actions are **evaluated actions**; the modification places the underlying action in a different context and relates it differently.
- The actions at the lower level of the underlying action and at the higher level of evaluated action may differ in intentionality; e.g. even if the original action is intentional, the stupid action will not be (esp. in its causing unwelcome consequences).
- The stupid action as a stupid thing to do causes other things than the underlying action.
- Only under certain circumstances does the underlying action constitute a *stupid* action. The dependence on the circumstances is captured by the nature of the **c**-const link.
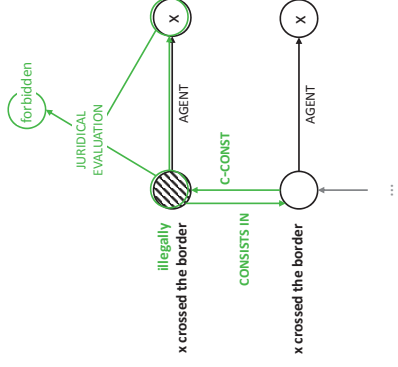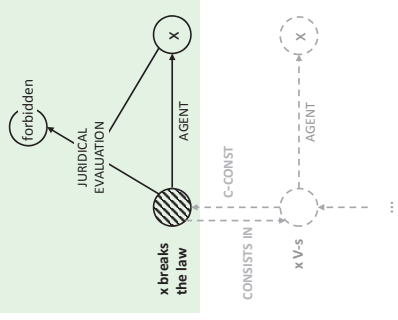
dummerweise antwortet x stupidly, x replies
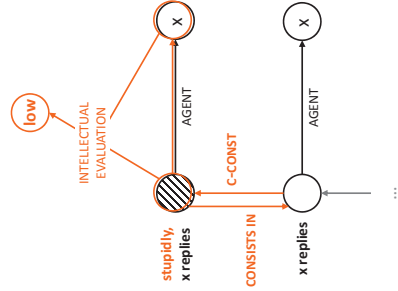
3.5 Further example:
'illegally'
'break the law'
(cf. Sæbø 2016)

illegally, x crossed the border
x überquerte die Grenze illegal[erweise]

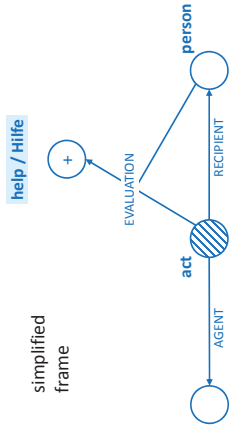**x breaks the law** by doing V
x bricht das Gesetz, indem x V-t

3.7 Stacking: stupidly, illegally help

Context: forbidden doping

stupidly illegally help by doping

doping that constitutes **stupid illegal** help

doping that constitutes **illegal** help

doping that constitutes **help**

doping

stupidly, x illegally helps y

INTELLECTUAL EVALUATION

x illegally helps y

JURIDICAL EVALUATION — forbidden

x helps y

C-CONST — AGENT — RECIPIENT — EVALUATION — +

x dopes y — C-CONST
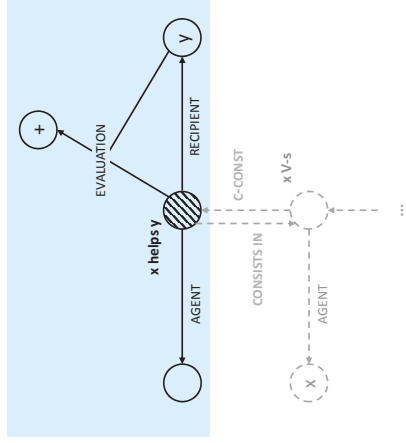

3.6 Further examples: help

(cf. Engelberg 2005)

Helping [Level 0] consists in doing something [Level –1] that under the given circumstances is to be evaluated positive for the one helped.

simplified frame

x helps y by doing V
x hilft y, indem x V-t

x helps y — AGENT — RECIPIENT — EVALUATION — + — CONSISTS IN — C-CONST — x V-s

help / Hilfe

act — person — AGENT — RECIPIENT — EVALUATION — +

4.1 Play stupidly – data (ctd.)

Observation 2

- The information used in an elaboration cannot be overtly integrated alongside a manner modifier. Hence, VP-internal stupidly must refer to some implicit attribute.

(3) a. *He played stupidly.*   e.g. he stupidly played the ace [at some point]

b. *He played the ace stupidly.*   e.g. he stupidly played the ace very early

c. ?*He played the ace very early stupidly.*   > If no specification can be found, the sentence is odd.

However:
He played the ace very early, stupidly.   = external modification

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4. Internal modification

4.1 Play stupidly – data

Observation 1

- Manner uses may call for *explanations* — these could be elaborated using external modification.

(2') Manner — **possible explanation in a given context**

a. *She acted rudely*   e.g. rudely, she departed, instead of helping

b. *He behaved inappropriately.*   e.g. he inappropriately kissed Jill on the lips

c. *He played stupidly.*   e.g. he stupidly played the ace first

- The evaluation applies to some aspect of the action; e.g. which card is play in which situation, or when a particular card is played.

- This conceptually requires a level lower than 'act stupidly';
The lower level is '**augmentation-generated**' by the level of the act as such (the bare act).

4.2 The cascade for internal modification: application in a particular context
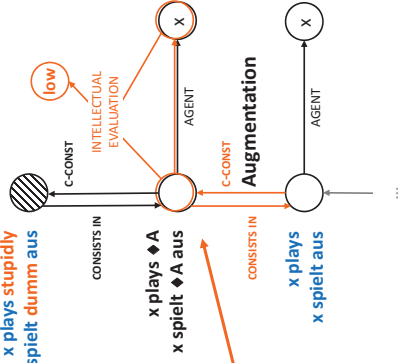
Example:
x is playing bridge;
x is playing a card;
example: playing *this* card (e.g. ♦A) is stupid,
⟹ x plays stupidly

Diagram:

x plays stupidly / x spielt dumm aus

low — INTELLECTUAL EVALUATION — C-CONST — AGENT — Augmentation — C-CONST — CONSISTS IN — AGENT

x plays stupidly / x spielt dumm aus
x plays ♦A / x spielt ♦A aus
x plays / x spielt aus

Commentary:
stupidly x plays ♦A
dummerweise spielt x ♦A aus

4.3 The cascade for internal modification: compositional analysis

- Three levels are involved:

  [0] act as such
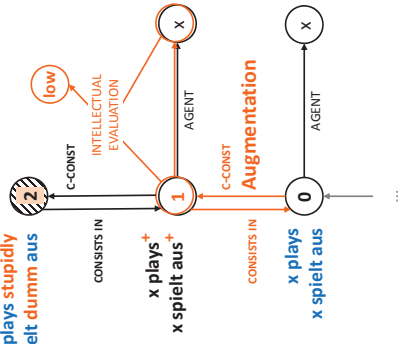
  [1] augmented act

  [2] "act"-ing stupidly

- The nature of the mid-level act is not semantically determined, but completely contingent on the context.

- Semantics tells us as much as this: The level-1 act must be augmented such that it constitutes the level-2 act of acting stupidly; with other words: doing what is done at level 1 is a stupid thing to do.
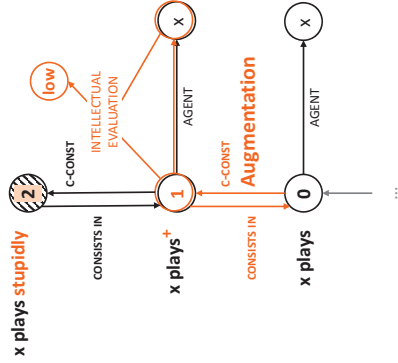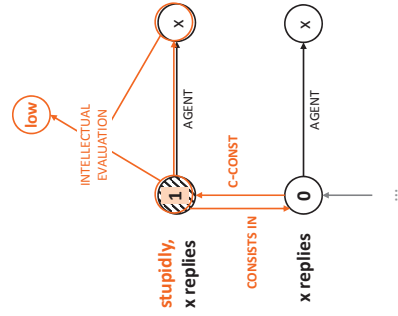
Diagram:

x plays stupidly / x spielt dumm aus

low — INTELLECTUAL EVALUATION — C-CONST — 2 — 1 — 0 — AGENT — Augmentation — C-CONST — CONSISTS IN

x plays stupidly / x spielt dumm aus
x plays$^+$ / x spielt aus$^+$
x plays / x spielt aus

4.4 External vs. internal modification

Diagram (left):

stupidly, x replies / dummerweise antwortet x

low — INTELLECTUAL EVALUATION — C-CONST — -1 — 0 — AGENT — CONSISTS IN

stupidly, x replies
x replies

Diagram (right):

x plays stupidly / x spielt dumm aus

low — INTELLECTUAL EVALUATION — C-CONST — 2 — 1 — 0 — AGENT — Augmentation — C-CONST — CONSISTS IN

x plays stupidly
x plays$^+$
x plays

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5. Results and outlook

5.1 Modification and cascades

- Ad-verbial modification of the types discussed can be modelled using Goldmanian **cascades** of action.
  This makes sense as
  - the underlying action and the action-as-modified constitute two different types of action, one entailing the other but, not vice versa;
  - they are both involved and referred to.
  - yet they may have different properties, relevant in different contexts.

- The modifiers have a **top-down effect;** they impose restrictions on the generating lower levels.

- The special conditions responsible for generating the modified-act level are not specified by the semantics of the modifier; the justification lies in the specific circumstances of the single act.

- This context-dependence is captured by the general notion of "level generation".

5.2 External modification

- **External modification** generates a cascade level immediately above the underlying-act level.

- The characterization expressed by the modifier applies to the underlying operand act **without imposing concrete restrictions on its execution**. The burden of justification is on the circumstances of the operand act.

- Apparently, many adjective/adverbs occurring in this construction are **evaluative** in some sense or other.

- Certain "**criterion** verbs" (Kearns 2003, Sæbø 2016) have an in-built highest cascade level of evaluation, for example predicates like *help, break the law, make a mistake*; they require that there be an underlying realization ("method") cascade level.

5.3 Internal modification

- **Internal modification** applies at a level generated by the operand act by an augmentation generation between the level of the act-as-modified and the underlying operand act-level. The modifier does not evaluate the act as such, but its individual way of exertion, under the given circumstances. The modifier relates to some implicit component in the operand frame.

- The semantics of modifier and operand does not determine the component the modification relates to. Thus, **there is no general MANNER attribute** in the operand frame whose value would be specified by a manner adverbial. "Manner" is a lose cover term for various sorts of augmentations to the operand verb concept.

5.4 Outlook

Adverbs betray their status as criterion predicates by the fact that the concept expressed by them can regularly be used in order to refer to the whole cascade:

(4) a. *Stupidly, he played the ace very early.*
    b. *This was **a stupid thing** to do / a mistake.*

(5) a. *He **erroneously** attached an old version of the file.*
    b. *This was **an error**.*

(6) a. *Surprisingly, they eventually won the game.*
    b. *This was **a surprise**.*

The paraphrase relations cut across the established classes of "**agentive**", "**mental-attitude**", and "**evaluative**" adverbs. Our analysis using independent predicates carries over to other types of predicates. Being a "propositional modifier" does not make them pure operators.

dummerweise antwortet x
stupidly, x replies
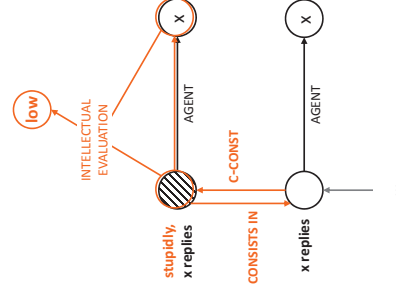
References

Engelberg, Stefan (2005): Stativity, Supervenience, and Sentential Subjects. In Claudia Maienborn & Angelika Wöllstein (eds.): *Event Arguments: Foundations and Applications*. Tübingen: Niemeyer, pp. 45–68.

Fábregas, Antonio,Brian Leferman & Rafael Marín (2012): Evaluative adjectives are Davidsonian states. In *Proceedings of Sinn und Bedeutung 17*, ed. V. Homer, E. Chemla & G. Winterstein, pp. 237–253. Paris: École Normale Supérieure.

Goldman, Alvin I. (1970). *A Theory of Human Action*. Prentice Hall. London.

Löbner, Sebastian (2013). *Understanding semantics. 2nd edition*. Routledge. New York, London.

McConnell-Ginet, Sally (1982): Adverbs and logical form. *Language* 58: 144–184.

Morzycki, Marcin (2016): *Modification*. Cambridge University Press.

Parsons, Terence (1990): *Events in the Semantics of English*. Cambridge MA: MIT Press.

Piñón, Christopher (2010): What to do with agent-oriented adverbs. Talk presented at the *7th workshop on inferential mechanisms and their linguistic manifestation*, Göttingen. http://pinon.sdfeu.org/covers/wdaoa.html.

Sæbø, Kjell Johan (2016): "How" questions and the manner–method distinction. *Synthese* 193: 3169–3194. Online 2015, DOI 10.1007/s11229-015-0924-9.