

Clause-Embedding Predicates Bibliography

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Åqvist, Lennart (1965). *A New Approach to the Logical Theory of Interrogatives*. Uppsala: Filosofiska Föreningen i Uppsala (cit. on p. 8).

Baglini, Rebekah & Itamar Francez (2015-06-22). ‘The Implications of Managing’. In: *Journal of Semantics* 33.3, pp. 541–560. ISSN: 0167-5133 & 1477-4593. DOI: 10.1093/jos/ffv007 (cit. on p. 11).

ABSTRACT: Since Karttunen’s [1971] original observations about the two-way implicative verb *manage*, there has been no consensus as to the descriptive and analytical characterization of the implicational behavior of this verb. This short paper presents a reevaluation of the relevant descriptive generalizations, and proposes an analysis, couched within the causal modeling approach to causation developed by Schulz (2010). We propose that *manage* sentences presuppose the familiarity of a ‘catalyst’—a causally necessary but insufficient condition for the truth of the propositional argument of *manage*, and assert that the catalyst actually caused this truth. Various more specific implications mentioned in the literature—trying, difficulty, unlikelihood—are shown to be either special cases of our proposed presupposition, or else cancelable pragmatic inferences. The analysis is argued to account for some new empirical observations as well.

Keyword: clause-embedding.

Baker, Carl L. (1968). ‘Indirect Questions in English’. PhD thesis. Urbana: U. Illinois (cit. on p. 8).

Baker, Carl L. (1970). ‘Notes on the Description of English Questions. The Role of an Abstract Question Morpheme’. In: *Foundations of Language* 6, pp. 197–217 (cit. on p. 8).

Belnap, Nuel (1963). *An Analysis of Questions*. Tech. memo. 1287/00/000. Santa Monica: System Development Corporation (cit. on p. 8).

Bervoets, Melanie (2014). ‘On Opining. Modal Verbs, Dispositions, Free Choice, and Negation’. PhD thesis. Los Angeles: U. California (cit. on p. 12).

Bervoets, Melanie (2020). *The Semantics of Opinion*. Dordrecht: Springer (cit. on p. 12).

Burukina, Irina (2020-06-08). 'Mandative Verbs and Deontic Modals in Russian. Between Obligatory Control and Overt Embedded Subjects'. In: *Glossa* 5, 54. ISSN: 2397-1835. DOI: 10.5334/gjgl.905.

ABSTRACT: The paper presents and examines a previously undescribed puzzle concerning the syntactic distribution of Russian mandative verbs (*velet* 'order', *razrešit* 'allow') and non-verbal deontic modals: these predicates exhibit dual behavior as they embed non-finite clauses with either implicit obligatorily controlled (PRO) or overt referential (DP) subjects. The ambiguity holds for the same native speakers and no detectable difference in terms of the Tense – Agreement characteristics can be found between infinitival constituents with DP/PRO subjects. To account for this phenomenon, I propose, first, to analyze mandative verbs as lexical realizations of a verb of communication that embeds a silent deontic modal head; the latter, in turn, takes a clausal proposition as its complement. Second, I demonstrate that the reported DP/PRO alternation is described by the following generalization: An embedded overt referential subject is allowed only when there is no potential dative DP controller available within the higher clause. In the spirit of the traditional Case theory, I argue that an embedded lexical subject must be Case licensed, and, since non-finite clauses are Case deficient, licensing may only be done by a higher (matrix) functional head, namely Appl⁰, which normally introduces an obligation Holder; thus, matrix Holders and lexical embedded subjects end up competing to receive Case from the same functional head. Finally, I show that, as no true subject raising happens, Case assignment proceeds long-distance over a CP boundary.

Keyword: clause-embedding

CEP Concepts: order, permit, necessary, permitted

CEP Lexemes: rus:велѣтъ, rus:приказáтъ, rus:разрешíтъ.

Ciardelli, Ivano, Jeroen Groenendijk & Floris Roelofsen (2018-11-22). *Inquisitive Semantics*. Oxford: Oxford University Press. ISBN: 9780198814788 & 9780191852473. DOI: 10.1093/oso/9780198814788.001.0001.

ABSTRACT: There is an age-old tradition in linguistics and philosophy to identify the meaning of a sentence with its truth-conditions. This can be explained by the fact that linguistic and philosophical investigations are usually carried out in a logical framework that was originally designed to characterize valid reasoning. Indeed, in order to determine whether an argument is valid, it suffices to know the truth-conditions of the premises and conclusion. However, argumentation is neither the sole, nor the primary function of language. One task that language more widely and ordinarily fulfils is to enable the exchange of information between conversational participants. Inquisitive semantics is a new logical framework for the analysis of this fundamental usage of language. Information exchange can be seen as a process of raising

and resolving issues. Inquisitive semantics provides a new formal notion of issues, which makes it possible to model various concepts that are crucial for the analysis of linguistic information exchange in a more refined and more principled way than has been possible in previous frameworks. This book provides a detailed exposition of inquisitive semantics, and demonstrates its benefits with a range of applications in the semantic analysis of questions, coordination, modals, conditionals, and intonation.

Keywords: clause-embedding, inquisitive semantics, questions, coordination, modals, conditionals, intonational meaning.

Ciardelli, Ivano & Floris Roelofsen (2015). 'Inquisitive Dynamic Epistemic Logic'. In: *Synthese* 192, pp. 1643–1687 (cit. on p. 12).

Coleman, Linda (1975). 'The Case of the Vanishing Presupposition'. In: *Proceedings of the Annual Meeting of the Berkeley Linguistics Society: Proceedings of the First Annual Meeting of the Berkeley Linguistics Society*. Annual Meeting of the Berkeley Linguistics Society 1 (U. California, Berkeley, 15th–17th Feb. 1975). Ed. by Cathy Cogen et al., pp. 78–89. ISSN: 0363-2946 & 2377-1666. URL: <https://escholarship.org/uc/item/9x88s440> (cit. on p. 11).

Keyword: clause-embedding.

Condoravdi, Cleo & Sven Lauer (2009-11-21). 'Performing a Wish. Desiderative Assertions and Performativity'. Handout. California Universities Semantics and Pragmatics 2 (u-california-santacruz, 21st Nov. 2009). URL: <https://web.stanford.edu/~cleoc/CUSP-Handout-final-2up.pdf>.

Keyword: clause-embedding.

Condoravdi, Cleo & Sven Lauer (2011). 'Performative Verbs and Performative Acts'. In: *Proceedings of Sinn und Bedeutung* 15. Sinn und Bedeutung 15 (Saarland U., 9th–11th Sept. 2010). Ed. by Ingo Reich, Eva Horch & Dennis Pauly, pp. 149–164. ISSN: 2629-6055. DOI: 10.22028/D291-32178. HDL: 20.500.11880/30467. URL: <https://ojs.ub.uni-konstanz.de/sub/index.php/sub/article/view/369> (cit. on p. 4).

ABSTRACT: Searle (1989) posits a set of adequacy criteria for any account of the meaning and use of performative verbs, such as order or promise. Central among them are: (a) performative utterances are performances of the act named by the performative verb; (b) performative utterances are self-verifying; (c) performative utterances achieve (a) and (b) in virtue of their literal meaning. He then argues that the fundamental problem with assertoric accounts of performatives is that they fail (b), and hence (a), because being committed to having an intention does not guarantee having that intention. Relying on a uniform meaning for verbs on their reportative and performative uses, we propose an assertoric analysis of performative utterances that does not require an actual intention for deriving (b), and hence can meet (a) and (c).

Keyword: clause-embedding.

Condoravdi, Cleo & Sven Lauer (2012-12). ‘Imperatives. Meaning and Illocutionary Force’. In: *Empirical Issues in Syntax and Semantics* 9. Colloque de Syntaxe et Sémantique à Paris 2011 (U. Paris 8, 21st–23rd Sept. 2011). Ed. by Christopher Piñón, pp. 37–58. ISSN: 1769-7158. URL: http://www.cssp.cnrs.fr/eiss9/eiss9_condoravdi-and-lauer.pdf (cit. on p. 4).

Condoravdi, Cleo & Sven Lauer (2016). ‘Anankastic Conditionals are just Conditionals’. In: *Semantics and Pragmatics* 9, 8, pp. 1–69. ISSN: 1937-8912 (cit. on p. 6).

ABSTRACT: Since Sæbø (1985, 2001) drew the attention of formal semanticists to the compositionality problems raised by anankastic conditionals like *If you want to go to Harlem, you have to take the A train*, a number of authors have proposed analyses tailor-made for such conditionals. We demonstrate that the seemingly puzzling properties of anankastic conditionals in fact show up independently from each other within a wider range of conditionals, which we call ‘near-anankastic’. While they do not have the means-of implication typically associated with anankastics, near-anankastics give rise to their own special additional implications. As a crucial ingredient for a unified account, we provide a new analysis of the semantics of the desire predicate in the antecedent — an issue that has not been adequately pursued in the previous literature. We claim that *want* has an independently motivated reading on which it predicates the existence of an *action-relevant preference* (Condoravdi & Lauer 2011, 2012; Lauer 2013). We then show that the semantically determined interpretation of anankastic and near-anankastic conditionals arises, predictably and compositionally, from a range of interacting factors that are at play in the interpretation of conditional sentences more generally. The special implications associated with each kind of conditional arise pragmatically. Anankastic and near-anankastic conditionals alike turn out to be just what they seem: regular, hypothetical, indicative conditionals.

Keywords: clause-embedding, anankastic conditionals, priority modals, desire predicates, teleological modality, effective preferences.

Condoravdi, Cleo & Sven Lauer (2020-06). ‘Speaking of Preferences. Imperative and Desiderative Assertions in Context’. Handout. Workshop on Inferential Mechanisms and their Linguistic Manifestation 7. Speaking of Possibility and Time (u-goettingen, 4th–5th June 2020). URL: <http://www.sven-lauer.net/output/CondoravdiLauer-SoPaT10-desiderative-imperative-assertions.pdf>.

Keyword: clause-embedding.

Djäv, Kajsa (2023-07-11). ‘Knowing and Believing Things. What DP-Complementation Can Tell us about the Meaning and Composition of (Factive) Attitudes’. In:

Journal of Semantics. ISSN: 0167-5133 & 1477-4593. DOI: 10 . 1093 / jos / ffac015.

ABSTRACT: In the Hintikkan tradition, attitude verbs are viewed as relations *between* individuals and propositions. Previous work on *know* and *believe* with CONTENT DPs like *the rumour* has tended to treat *know CP* vs. *know DP* as polysemy. In this paper, I show that polysemy runs into conceptual and empirical problems, and propose instead a new compositional approach to *know*-verbs, which avoids polysemy; linking both *know DP* and *know CP* to the same lexical root, which describes, broadly speaking, acquaintance. This analysis thus provides an explicit and compositional morpho-semantic link between *know DP* and *know CP* that accounts for the interpretation of DPs as objects of acquaintance, and further captures the idea that knowledge, and factivity more broadly, is tied to acquaintance with a situation, the res (Kratzer 2002, a.o.). Based on detailed examination of the morpho-syntax and interpretation of DP and CP complements of *believe*, I further show that DPs can either combine with *believe* in the same fashion as CPs, as a direct object (saturating a propositional argument slot, as in Uegaki 2015), or as an indirect object, via a type of attitudinal applicative (proposed here). The former option is defined for Content DPs and the latter for agentive DPs, so-called SOURCE DPs. Together, these proposals account for the observation that the interpretation of *believe DP* sentences varies depending on the type of DP (*believe the rumour* vs. *believe the referee*), whereas for *know*-verbs, both types of DPs are interpreted as objects of acquaintance. At the core of the current proposal is the idea that verbs like *know* and *believe* differ fundamentally at the level of argument structure and internal morpho-semantic composition, and thus combine with DPs via different routes; contrary to uniform approaches to *know* and *believe*. Whereas *believe*-verbs describe relations to intensional content, and require external licensing mechanisms to combine with DPs, *know*-verbs describe complex relations, fundamentally anchored in the attitude holder's acquaintance with (abstract or concrete) individuals in the world, and thus make reference to individuals as part of their argument structure. The current proposal also builds on and adds to previous insights about connections between factivity, DP-complementation, and question-embedding.

Keyword: clause-embedding

CEP Concepts: know-that, know-of, believe

CEP Lexemes: eng:know, eng:believe.

Farkas, Donka F. (1988). 'On Obligatory Control'. In: *Linguistics and Philosophy* 11, pp. 27–58. ISSN: 0165-0157 & 1573-0549 (cit. on p. 6).

Keyword: clause-embedding.

Grano, Thomas (2016-11-11). 'A Progress Report on Intention Reports'. Handout.

Workshop in Linguistics and Philosophy. URL: https://tgrano.pages.iu.edu/uclp_intend.pdf.

Keyword: clause-embedding

CEP Concepts: intend, believe, want

CEP Lexemes: eng:intend, eng:believe, eng:think, eng:want.

Grano, Thomas (2017-07-31). ‘The Logic of Intention Reports’. In: *Journal of Semantics* 34.4, pp. 587–632. ISSN: 0167-5133 & 1477-4593. DOI: 10.1093/jos/ffx010.

ABSTRACT: Unlike belief and desire reports, intention reports (e.g. *John intends to leave soon*) are not well studied in formal semantics. This article aims to begin to fill this gap, focusing on empirical similarities and differences that intention reports bear in relation to other attitude reports and to other expressions that involve intentional action. These empirical properties are shown to follow from the view that an intention report *a intends p* denotes true iff *a* has a maximally ranked ACTION-RELEVANT OR EFFECTIVE PREFERENCE (in the sense of Condoravdi & Lauer 2016) that *a* bears the RESPONSIBILITY relation (in the sense of Farkas 1988) to *p*. Also discussed are intention reports that do not involve syntactic control (e.g. *John intends for Bill to leave soon*), which in some previous literature have been argued to involve coercion. The proposed semantics for *intend* enables a coercion-free analysis of such sentences, and issues surrounding the choice between a coercion-free and a coercion-based approach are discussed.

Keyword: clause-embedding

CEP Concepts: intend, believe, want

CEP Lexemes: eng:intend, eng:believe, eng:think, eng:want.

Groenendijk, Jeroen & Martin Stokhof (1982). ‘Semantic Analysis of Wh-Complements’. In: *Linguistics and Philosophy* 5, pp. 175–233. ISSN: 0165-0157 & 1573-0549 (cit. on p. 19).

Keyword: clause-embedding.

Groenendijk, Jeroen & Martin Stokhof (1984). ‘Studies on the Semantics of Questions and the Pragmatics of Answers’. PhD thesis. U. Amsterdam (cit. on pp. 16, 19).

Hamblin, Charles Leonard (1973). ‘Questions in Montague English’. In: *Foundations of Language* 10, pp. 41–53 (cit. on p. 8).

Heim, Irene (1992-08-01). ‘Presupposition Projection and the Semantics of Attitude Verbs’. In: *Journal of Semantics* 9.3, pp. 183–221. ISSN: 0167-5133 & 1477-4593. DOI: 10.1093/jos/9.3.183.

ABSTRACT: Karttunen observed that, if the complement of an attitude sentence presupposes *p*, then that sentence as a whole presupposes that the attitude-holder believes *p*. I attempt to derive some representative instances of this generalization from suitable assumptions about the lexical semantics of

attitude predicates. The enterprise is carried out in a framework of context change semantics, which incorporates Stalnaker's suggestion that presupposition projection results from the stepwise fashion in which information is updated in response to complex utterances. The empirical focus is on predicates of desire and on the contribution of counterfactual mood.

Keyword: clause-embedding.

Hintikka, Jaakko (1974). 'Questions About Questions'. In: *Semantics and Philosophy*. Ed. by Milton K. Munitz & Peter K. Unger. New York: NYU Press. ISBN: 978-0814753668 (cit. on p. 8).

Jędrzejowski, Łukasz & Carla Umbach, eds. (2023-07-17). *Non-Interrogative Subordinate Wh-Clauses*. Oxford: Oxford University Press. ISBN: 9780192844620 & 9780191933264. DOI: 10.1093/oso/9780192844620.001.0001.

ABSTRACT: This volume presents fourteen case studies of *wh*-clauses which are non-interrogative—lacking an interrogative meaning—and (mostly) subordinate. Moreover, the major part of the studies focuses on cases in which the meaning of the *wh*-word seems to deviate from the literal meaning of the *wh*-word (referring to persons, things, places, times, etc.). These include subordinate manner *wh*-clauses that have a declarative-like meaning as well as locative *wh*-clauses expressing kinds and headed relatives that serve as recognitional cues, to name just a few. While regular interrogative embedding has been widely studied in recent years, little is known about the circumstances under which non-interrogative (subordinate) *wh*-clauses are licensed and the reason why some *wh*-phrases can be polyfunctional whereas others are restricted to their literal meaning. The chapters in the book provide novel insights into the various ways in which interrogative *wh*-phrases can be used in introducing complements, relative clauses, and adverbial clauses. The chapters combine cross-linguistic variations of subordination patterns with formal semantic and syntactic analyses, showing how the meanings associated with the *wh*-words are exploited beyond their standard distribution. In the chapters, a wide range of languages are considered including Basque, Czech, Dutch, English, French, German, Mandarin, Romanian, Russian, Taiwan Southern Min, and Vietnamese. The findings have general implications both for the phenomenon of subordination and for the relationship between form and meaning in the field of *wh*-clauses.

Keywords: clause-embedding, *wh*-phrase, non-interrogative subordinate *wh*-clause, non-interrogative *wh*-clause, free relative clause, relative clause, manner, locative, complementizer, lexical decomposition, semantic interpretation, cross-linguistic variation, grammaticalization.

Karttunen, Lauri (1971-06). 'Implicative Verbs'. In: *Language* 47.2, pp. 340–358. DOI: 10.2307/412084. JSTOR: 412084 (cit. on pp. 1, 11).

ABSTRACT: In addition to the so-called 'factive' verbs, which presuppose the

truth of their complement sentence, a number of other interesting classes of verbs take sentential complements. ‘Implicative’ verbs, such as manage, also involve presuppositions, although in a different way. An asserted main sentence with one of these verbs as predicate commits the speaker to an implied proposition which consists of the complement sentence as augmented by the tense and other modifiers of the main sentence. Questioning a sentence with an implicative predicate amounts to questioning that implied proposition. According to the proposed analysis, an implicative main verb carries a presupposition of some necessary and sufficient condition which alone determines whether the event described in the complement took place. The main sentence can be looked upon as a statement about whether this decisive condition is fulfilled, and under what spatial and temporal circumstances. From an affirmative assertion, it can legitimately be inferred that the implied proposition is asserted to be true; from a negative assertion, that it is asserted to be false.

Keyword: clause-embedding.

Karttunen, Lauri (1977-01). ‘Syntax and Semantics of Questions’. In: *Linguistics and Philosophy* 1, pp. 3–44. ISSN: 0165-0157 & 1573-0549.

ABSTRACT: This paper presents a novel account of the syntax and semantics of questions, making use of the framework for linguistic description developed by Richard Montague (1974). Certain features of the proposal are based on work by N. Belnap (1963), L. Åqvist (1965), C. L. Baker (1968, 1970), S. Kuno and J. Robinson (1972), C. L. Hamblin (1973), E. Keenan and R. Hull (1973), J. Hintikka (1974), Lewis (1975), and D. Wunderlich (1976), but it differs from all of its predecessors in one way or another. I will start with a number of observations which provide the basis for the treatment of questions presented in the second part of the paper and conclude with a summary and a brief discussion of how the proposed description compares with recent transformational analyses.

Keywords: clause-embedding, question-embedding

CEP Concepts: assume, be-amazing, be-certain-that, be-relevant, depend-on, discover, doubt, expect, find-out, inquire, know-that, remember-that, seem, tell-that, wonder

CEP Lexemes: eng:amazing, eng:ask, eng:assume, eng:depend, eng:discover, eng:doubt, eng:expect, eng:find, eng:know, eng:matter, eng:remember, eng:say, eng:seem, eng:sure, eng:tell, eng:wonder, jpn:問, rus:сказать, tur:hatırlamak.

Karttunen, Lauri & Stanley Peters (1979-01-01). ‘Conventional Implicature’. In: *Presupposition*. Ed. by Choon-Kyu Oh & David A. Dinneen. Vol. 11. Syntax and Semantics. New York: Academic Press, pp. 1–56. ISBN: 978-90-04-36798-2. DOI: 10.1163/9789004368880_002 (cit. on p. 11).

- Keenan, Edward & Robert D. Hull (1973). 'The Logical Presuppositions of Questions and Answers'. In: *Präsuppositionen in Philosophie und Linguistik*. Ed. by János S. Petőfi & Dorothea Franck. Linguistische Forschungen 7. Frankfurt/M.: Athenäum. ISBN: 9783761092323 & 9783761048238 (cit. on p. 8).
- Kratzer, Angelika (2002-12). 'Facts. Particulars or Information Units?' In: *Linguistics and Philosophy* 25.5-6, pp. 655–670. ISSN: 0165-0157 & 1573-0549. DOI: 10.1023/a:1020807615085. JSTOR: 25001868 (cit. on p. 5).
- Kuno, Susumu & Jane J. Robinson (1972). 'Multiple Wh Questions'. In: *Linguistic Inquiry* 3.4, pp. 463–487. JSTOR: 4177732 (cit. on p. 8).
- Lahiri, Utpal (2002-03-28). *Questions and Answers in Embedded Contexts*. Oxford Studies in Theoretical Linguistics. Oxford: Oxford University Press. 320 pp. ISBN: 9780198241331 & 9780199246526 (cit. on p. 16).
- ABSTRACT: Linguists have realized for some time that predicates of the 'know' and 'wonder' classes behave differently in semantic terms with respect to their interrogative complements, but have not so far fully understood how or why. This book seeks to explore and to provide solutions to this and to related problems in explaining the meaning and grammar of embedded interrogatives and the predicates that take interrogative complements (indirect questions and how they are answered).
- Keyword: clause-embedding
- CEP Concepts: know-that, wonder.
- Landau, Idan (2010-07-01). 'The Explicit Syntax of Implicit Arguments'. In: *Linguistic Inquiry* 41.3, pp. 357–388. DOI: 10.1162/ling_a_00001. JSTOR: 40926385.
- ABSTRACT: Although they participate in control relations, implicit arguments are standardly viewed as unprojected ϑ -roles, absent from the syntax. I challenge this view and argue that implicit arguments are syntactically represented. The argument rests on the observation that implicit arguments can exercise partial control, and the claim that partial control must be encoded in the syntax (given plausible assumptions on the limits of lexical relations). I further argue that the syntactic constitution of implicit arguments is more impoverished than that of *pro*, explaining their differential visibility to various syntactic processes.
- Keywords: clause-embedding, implicit arguments, partial control, binding, object *pro*.
- Lauer, Sven (2013-08). 'Towards a Dynamic Pragmatics'. PhD thesis. Stanford U. URL: <http://www.sven-lauer.net/output/Lauer-Dissertation-DynamicPragmatics.pdf> (cit. on p. 4).
- Lewis, David & Stephanie Lewis (1975). 'Review of R. Olson and A. Paul, eds. Contemporary Philosophy in Scandinavia'. In: *Theoria* 61, pp. 39–60 (cit. on p. 8).

Mayr, Clemens (2019). 'Triviality and Interrogative Embedding. Context Sensitivity, Factivity, and Neg-Raising'. In: *Natural Language Semantics* 27 (cit. on p. 12).

Keyword: clause-embedding.

Montague, Richard (1974). 'The Proper Treatment of Quantification in Ordinary English'. In: *Formal Philosophy. Selected Papers of Richard Montague*. Ed., with an introd., by Richmond H. Thomason. New Haven & London: Yale University Press, pp. 247–270. ISBN: 0-300-01527-5 (cit. on p. 8). Repr. of 'The Proper Treatment of Quantification in Ordinary English'. In: *Approaches to Natural Language. Proceedings of the 1970 Stanford Workshop on Grammar and Semantics*. Stanford Workshop on Grammar and Semantics (Sept.–Nov. 1970). Ed. by K. J. J. Hintikka, J. M. E. Moravcsik & P. Suppes. Synthese Library 49. Dordrecht: Reidel, 1973, pp. 221–242. DOI: 10.1007/978-94-010-2506-5_10.

Mucha, Anne, Jutta M. Hartmann & Beata Trawiński, eds. (2021-09). *Non-canonical Control in a Cross-linguistic Perspective*. Linguistik Aktuell/Linguistics Today 270. Amsterdam & Philadelphia: Benjamins. ISBN: 978-90-272-0927-6 & 978-90-272-5958-5. DOI: 10.1075/1a.270.

ABSTRACT: Control, typically defined as a specific referential dependency between the null-subject of a non-finite embedded clause and a co-dependent of the matrix predicate, has been subject to extensive research in the last 50 years. While there is a broad consensus that a distinction between Obligatory Control (OC), Non-Obligatory Control (NOC) and No Control (NC) is useful and necessary to cover the range of relevant empirical phenomena, there is still less agreement regarding their proper analyses. In light of this ongoing discussion, the articles collected in this volume provide a cross-linguistic perspective on central questions in the study of control, with a focus on non-canonical control phenomena. This includes cases which show NOC or NC in complement clauses or OC in adjunct clauses, cases in which the controlled subject is not in an infinitival clause, or in which there is no unique controller in OC (i.e. partial control, split control, or other types of controllers). Based on empirical generalizations from a wide range of languages, this volume provides insights into cross-linguistic variation in the interplay of different components of control such as the properties of the constituent hosting the controlled subject, the syntactic and lexical properties of the matrix predicate as well as restrictions on the controller, thereby furthering our empirical and theoretical understanding of control in grammar.

Keyword: clause-embedding.

Nadathur, Prerna (2023-10-03). 'Causal Semantics for Implicative Verbs'. In: *Journal of Semantics*. ISSN: 0167-5133 & 1477-4593. DOI: 10.1093/jos/ffad009.

ABSTRACT: **Implicative verbs** (e.g., *manage*, *dare*) are characterized by com-

plement inferences (Karttunen, 1971). English *manage* entails its complement; the entailment reverses polarity with matrix negation, and is accompanied by a projective inference to the complement's non-triviality (Coleman, 1975; Karttunen & Peters, 1979). I use data from Finnish and English to argue that the implicative inferential profile is derived from backgrounded relations of *causal necessity* and *causal sufficiency* (defined over the structure of a formal causal model; Pearl 2000; Schulz 2010) which link the lexical content of an implicative verb to the realization of its complement. The proposal builds on Baglini & Francez's (2015) causal analysis of *manage*, but significantly revises the earlier proposal to offer a treatment which accounts not only for English *manage*, but extends to the lexical semantics of the full implicative class, including 'polarity-reversing' verbs like *fail*, lexically specific verbs like *dare*, and their Finnish counterparts. Unlike earlier analyses, the proposed causal semantics also provides a natural explanation of the commonalities between two-way entailing verbs like *manage* and a related class of weaker 'one-way' implicatives such as Finnish *jaksaa* ('have the strength'), which entail complement truth values under only one matrix polarity, but generate strong pragmatic implicatures in the two-way implicative pattern under the non-entailing polarity.

Keyword: clause-embedding

CEP Concepts: be-able, be-effortful, be-expected, be-likely, be-shy-to, be-small-enough-to, be-too-x, be-x-enough, bother-to, cause, condescend, dare, discover, fail, have-arrogance-to, have-hard-heartedness-to, have-patience-to, have-shamelessness-to, have-strength-to, hesitate, intend, make-time, manage, necessary, neglect, sufficient, try

CEP Lexemes: eng:bother, eng:condescend, eng:dare, eng:discover, eng:effortful, eng:enough, eng:expect, eng:fail, eng:hesitate, eng:intend, eng:make, eng:manage, eng:neglect, eng:nerve, eng:too, eng:try, eng:unlikely, fin:ehtiä, fin:epäröidä, fin:hennoa, fin:jaksaa, fin:kehdata, fin:laiminlyödä, fin:mahtua, fin:maltaa, fin:onnistua, fin:pystyä, fin:röyhjetä, fin:ujostella, fin:uskaltaa, fin:viit siä, fra:assez, fra:pouvoir, fra:réussir.

Özyıldız, Deniz (2021-05). 'The Event Structure of Attitudes'. PhD thesis. Amherst: U. Mass. DOI: 10.7275/22484415.0.

ABSTRACT: This dissertation focuses on what it means to *think that* or to *think whether something is the case*.

First, I show that the type of clause that *think* combines with makes a difference in the kind of attitude a thought report ascribes, and in the kind of eventuality that it describes. With a declarative complement, *think* entails belief and introduces an eventuality description that may (but need not be) stative. With a question complement, *think* introduces an eventuality description that is necessarily dynamic, and often deliberative. In this case, there is no en-

tailment of belief, but one of agnosticism and curiosity about the answer to the embedded question. This, and a second generalization that governs the attitude related and the aspectual properties of *think that* and of *think whether* hold cross-linguistically.

Second, I attempt to square the observation that *think whether* is grammatical and necessarily dynamic with two recent proposals that predict *that think* should be ungrammatical with embedded questions (Mayr, 2019; Theiler et al., 2019). As these go, the excluded middle presupposition, which is associated with *think* to derive neg(ative)-raising with declaratives, gives rise to an anomalous meaning with embedded questions, which is perceived as ungrammaticality. I argue that question embedding and neg-raising do exclude each other, pace White (accepted), but that this is because the former requires *think* to introduce a dynamic description, and the latter requires a stative one (Xiang, 2013; Bervoets, 2014, 2020). I stress that *think whether* is often unacceptable in the sentence frames in which we have been trying to observe it—for example, with the verb in the present simple—but argue that such restrictions are reducible for the most part to interpretive restrictions on dynamic predicates in those frames.

Third, we need to derive the attitude related and the aspectual alternations that *think* gives rise to with declarative and question complements. I propose that *think*'s attitude component encodes the entertain modality from inquisitive semantics (Ciardelli and Roelofsen, 2015, a.o.), which is equivalent to belief in the declarative case and compatible with an inquisitive attitude in the question case. Turning to the aspectual alternation, I propose to structure attitude eventualities with embedded clause denotations by relating subeventualities of the former and the alternatives provided by the latter. Declaratives provide a single alternative, which makes it possible to construct a divisive (hence stative) predicate. Questions, on the other hand, provide multiple alternatives, which forces *think whether* to introduce a non-divisive (hence non-stative) predicate.

Finally, I sketch out some ways in which attitude predicates vary in terms of their attitude related and lexical aspectual properties. I ask whether *believe that* and *believe wh-* could be given a treatment similar to *think*. I point out that there are predicates like *know*, *remember* and *agree* that may or must remain stative in question embedding, and speculate whether presupposing truth or belief might be enabling this option. I end with a typology of predicates that should all be possible if the stative/dynamic alternation seen for *think* were free, observe that many are missing and characterize the ones that are.

Keyword: clause-embedding

CEP Concepts: agree, be-able, be-certain-that, be-correct-that, be-curious, be-

important, be-permitted, be-surprised, believe, choose, circumstantial-possibility, claim, consider, decide, deliberate, demonstrate, deontic-must, deontic-should, direct, discover, doubt, enable, entertain, epistemic-possibility, evaluate, explain, force, guess, hope, imagine, inform, inquire, investigate, know-that, permit, persuade, realize, regret, remember, struggle, think-that, understand, want, wonder

CEP Lexemes: cmn:𐀀, cmn:𐀀, cmn:𐀀, eng:able, eng:agree, eng:allow, eng:ask, eng:believe, eng:can, eng:can, eng:certain, eng:choose, eng:claim, eng:consider, eng:curious, eng:decide, eng:deliberate, eng:demonstrate, eng:discover, eng:doubt, eng:entertain, eng:explain, eng:figure, eng:force, eng:guess, eng:hard-time, eng:have, eng:hope, eng:imagine, eng:important, eng:investigate, eng:know, eng:might, eng:need, eng:persuade, eng:realize, eng:regret, eng:remember, eng:right, eng:should, eng:struggle, eng:surprise, eng:tell, eng:think, eng:understand, eng:want, eng:wonder, eng:wrestle, est:mõtlema, fra:demandeur, fra:devoir, fra:penser, fra:r        , hin:      , hin:      , hin:        , hin:      , jpn:    , rus:      , rus:      , rus:        , rus:      , tur:bilmek, tur:d        , tur:inanmak, tur:merak, tur:sanmak, ukr:        , ukr:      , ukr:        , ukr:        .

      , Deniz et al. (2023-05-06). ‘A Crosslinguistic Database for Combinatorial and Semantic Properties of Attitude Predicates’. In: *Proceedings of the 5th Workshop on Research in Computational Linguistic Typology and Multilingual NLP*. Workshop on Research in Computational Linguistic Typology and Multilingual NLP 5. Ed. by Lisa Beinborn et al. Association for Computational Linguistics, pp. 65–75. DOI: 10.18653/v1/2023.sigtyp-1.7. URL: <https://aclanthology.org/2023.sigtyp-1.7>.

ABSTRACT: We introduce a cross-linguistic database for attitude predicates, which references their combinatorial (syntactic) and semantic properties. Our data allows assessment of cross-linguistic generalizations about attitude predicates as well as discovery of new typological/cross-linguistic patterns. This paper motivates empirical and theoretical issues that our database will help to address, the sample predicates and the properties that it references, as well as our design and methodological choices. Two case studies illustrate how the database can be used to assess validity of cross-linguistic generalizations.

Keyword: clause-embedding.

Pearl, Judea (2000). *Causality. Models, Reasoning, and Inference*. Cambridge: Cambridge University Press (cit. on p. 11).

S    , Kjell Johan (1985). ‘Notwendige Bedingungen im Deutschen. Zur Semantik modalisierter S  tze’. PhD thesis. U. Oslo (cit. on p. 4).

S    , Kjell Johan (2001-07-22). ‘Necessary Conditions in a Natural Language’. In: *Audiatur Vox Sapientiae. A Festschrift for Arnim von Stechow*. Ed. by Caroline F  ry & Wolfgang Sternefeld. Studia Grammatica 52. Berlin: Akademie

Verlag, pp. 427–449. ISBN: 9783050036724 & 9783050080116. DOI: 10.1515/9783050080116.427 (cit. on p. 4).

Sæbø, Kjell Johan (2007-09-04). ‘A Whether Forecast’. In: *Logic, Language, and Computation. 6th International Tbilisi Symposium on Logic, Language, and Computation*. International Tbilisi Symposium on Logic, Language and Computation 2005 (Batumi, 12th–16th Sept. 2005). Ed. by Balder D. ten Cate & Henk W. Zeevat. Lecture Notes in Computer Science 4363. Berlin & Heidelberg: Springer, pp. 189–199. ISBN: 978-3-540-75143-4 & 978-3-540-75144-1. DOI: 10.1007/978-3-540-75144-1_14 (cit. on p. 19).

ABSTRACT: It is a well-known fact that only factive propositional attitude predicates are felicitous with *wh*- (indirect question) complements. It has also been noted that so-called emotive factive predicates are only felicitous with some, not all, indirect question complements. But the reasons for these two constraints have remained unclear. I propose a competition-based explanation in terms of optimality theoretic pragmatics: Due to the competition with factive predicates, predicates like *believe* are infelicitous with complements automatically verifying the factive presupposition; and emotive factive predicates are infelicitous with *wh*- complements to the extent that these complements compete with more informative *that* complements. To arrive at these results, it is necessary to assume an analysis of questions on which they denote propositions and to be more careful than has been customary about the formulation of the presuppositions of factive and what I call super-factive predicates.

Santorio, Paolo (2016-01-01). ‘Nonfactual Know-How and the Boundaries of Semantics’. In: *The Philosophical Review* 125.1, pp. 35–82. ISSN: 0031-8108 & 1558-1470. DOI: 10.1215/00318108-3321721.

ABSTRACT: Know-how and expressivism are usually regarded as disjoint topics, belonging to distant areas of philosophy. This paper argues that, despite obvious differences, the two debates have important similarities. In particular, semantic and conceptual tools developed by expressivists can be exported to the know-how debate. On the one hand, some of the expressivists’ semantic resources can be used to deflect Stanley and Williamson’s influential argument for factualism about know-how: the claim that knowing how to do something consists in knowing a fact. On the other, expressivism provides the resources to formulate a nonfactualist account of know-how. On this account, know-how has a kind of nonpropositional content and plays the role of guiding performance of action, rather than recording information from the environment.

Keyword: clause-embedding.

Schmitt, Viola & Frank Sode (2018). ‘An Anti-Intellectualist Treatment of German wissen (‘know’). In: *Proceedings of Sinn und Bedeutung* 21.2. Sinn und

Bedeutung 21 (u-edinburgh, 4th–6th Sept. 2016). Ed. by Robert Truswell et al., pp. 1091–1108. ISSN: 2629-6055. URL: <https://ojs.ub.uni-konstanz.de/sub/index.php/sub/article/view/186>.

ABSTRACT: German *wissen* ('know') can embed both finite clauses ('*wissen-FIN*') as well as infinitives ('*wissen-INF*'). Based on novel empirical observations, we argue that *wissen-INF* cannot be reduced to the standard analysis of *wissen-FIN*, i.e. that *wissen* with infinitival complements does not involve a propositional attitude. As cross-linguistic evidence suggests that German *wissen* is not ambiguous, it follows that *wissen-FIN* cannot denote a propositional attitude, either. Accordingly, we require a new, uniform meaning for *wissen*. We derive this meaning by first considering *wissen-INF*, arguing that it combines semantic properties of ability modals with semantic properties of implicative verbs and *enough to*-constructions. We then show that these properties can also be used to characterize *wissen-FIN*, as long as certain nonstandard assumptions are made about the denotation of the complement. This gives us a new, unified analysis of *wissen* and also helps to explain some properties of this verb (with both kinds of complements) that traditional analyses cannot account for.

Keyword: clause-embedding.

Schueler, David (2016-06-24). 'Factivity and Complement-Types'. In: *Studia Linguistica* 70.3, pp. 297–335. DOI: 10.1111/stul.12050.

ABSTRACT: In this paper I argue that the presuppositions associated with factive predicates are triggered not by the predicates themselves, but by their complement clauses. Evidence is brought to bear from different clause types in English, some of which, such as some gerunds and nominalizations, cause the presuppositions to disappear in certain uses of the implicit conditional, or simple subjunctive, construction. I survey the attempt to analyze these facts by assuming that factive predicates trigger presuppositions, that their complement clauses do, and that both do, and find that the thesis that solely the complement clauses are responsible for the presuppositions achieves the maximum explanatory power. This hypothesis has further implications for the nature of presuppositions in general.

Keyword: clause-embedding.

Schulz, Katrin (2010-09-14). "If You'd Wiggled A, then B Would've Changed". Causality and Counterfactual Conditionals'. In: *Synthese* 179, pp. 239–251. ISSN: 0039-7857 & 1573-0964. DOI: 10.1007/s11229-010-9780-9 (cit. on pp. 1, 11).

Searle, John R. (1989-10). 'How Performatives Work'. In: *Linguistics and Philosophy* 12.5, pp. 535–558. ISSN: 0165-0157 & 1573-0549. JSTOR: 25001359 (cit. on p. 3).

Sells, Peter (1987). ‘Aspects of Logophoricity’. In: *Linguistic Inquiry* 18.3, pp. 445–479. JSTOR: 4178550.

Keyword: clause-embedding.

Theiler, Nadine, Floris Roelofsen & Maria Aloni (2019-03-18). ‘Picky Predicates. Why Believe Doesn’t Like Interrogative Complements, and Other Puzzles’. In: *Natural Language Semantics* 27, pp. 95–134. DOI: 10.1007/s11050-019-09152-9 (cit. on p. 12).

ABSTRACT: It is a long-standing puzzle why predicates like *believe* embed declarative but not interrogative complements (e.g., *Bill believes that/*whether Mary left*) and why predicates like *wonder* embed interrogative but not declarative complements (e.g., *Bill wonders whether/*that Mary left*). This paper shows how the selectional restrictions of a range of predicates (neg-raising predicates like *believe*, truth-evaluating predicates like *be true*, inquisitive predicates like *wonder*, and predicates of dependency like *depend on*) can be derived from semantic assumptions that can be independently motivated.

Keyword: clause-embedding.

Uegaki, Wataru (2015-07-17). ‘Content Nouns and the Semantics of Question-Embedding’. In: *Journal of Semantics* 33.4, pp. 623–660. ISSN: 0167-5133 & 1477-4593. DOI: 10.1093/jos/ffv009 (cit. on p. 5).

ABSTRACT: This article proposes that RESPONSIVE PREDICATES—predicates that embed both interrogatives and declaratives, such as *know*—select for questions (modeled as sets of propositions) rather than propositions. Declarative complements denote singleton proposition-sets, meaning that declarative-embedding is a special (‘trivialized’) case of question-embedding. This analysis is in contrast to the more standard analysis of responsive predicates that treats them as proposition-taking items and reduces embedded questions to propositions (Groenendijk & Stokhof 1984; Lahiri 2002).

The argument is based on the semantic contrast between responsive predicates and predicates that only embed declaratives (e.g., *believe*), when they take DP complements headed by content nouns (Vendler 1972), as in *John knows the rumor that Mary left* vs. *John believes the rumor that Mary left*. Under the common assumption that responsive predicates are proposition-taking, any plausible predictive account of the entailment from *John believes the rumor that Mary left* to *John believes that Mary left* would run into an incorrect prediction that *John knows the rumor that Mary left* would also entail *John knows that Mary left*. On the other hand, if responsive predicates are question-taking, the contrast can be captured given an inventory of type-shifters that map entities to propositions and questions. It is also argued that the proposed analysis enables a natural semantic account of the selectional restrictions of attitude predicates: *believe*-type predicates select

for propositions, *know*-type predicates select for questions, and *ask/wonder*-type predicates select for *non-singleton* questions.

Keyword: clause-embedding.

Uegaki, Wataru (2019-01-13). ‘The Semantics of Question-Embedding Predicates’. In: *Language and Linguistics Compass* 13.1, e12308. ISSN: 1749-818X. DOI: 10.1111/lnc3.12308.

ABSTRACT: The complementation pattern of certain question-embedding predicates, such as *know* and *agree*, presents a puzzle for the compositional semantics of clausal complementation, as the predicates seem to be able to combine with two distinct types of semantic objects: propositions and questions. The traditional approach to the semantics of these predicates, where embedded questions are *reduced* to propositions, faces two problems. First, it cannot account for the observation that *know-wh* sentences require the subject not to believe any false answer to the embedded question. Second, it makes a problematic prediction concerning the interpretation of Predicates of Relevance, such as *care* and *matter*. We review three alternative approaches to the semantics of question-embedding predicates, i.e., the PROPOSITION-TO-QUESTION reduction, the uniform approach and the AMBIGUITY approach, and argue that only the Proposition-to-Question reduction and the uniform approach can deal with the interpretation of the Predicates of Relevance. The paper concludes with a remark on how lexical denotations of question-embedding predicates are constrained in general.

Keyword: clause-embedding

CEP Concepts: know-that, agree-that, care, be-relevant, realize, report, believe, wonder

CEP Lexemes: eng:know, eng:realize, eng:report, eng:agree-that, eng:care, eng:believe, eng:wonder, jpn:知る, jpn:同意, jpn:疑問.

Uegaki, Wataru (2023-07-17). ‘The Doubt-Whether Puzzle’. In: *Non-Interrogative Subordinate Wh-Clauses*. Ed. by Łukasz Jędrzejowski & Carla Umbach. Oxford: Oxford University Press, pp. 461–491. DOI: 10.1093/oso/9780192844620.003.0015.

ABSTRACT: The predicate *doubt* exhibits a distinctive selectional restriction: it is compatible with declarative and *whether*-complements but is incompatible with constituent *wh*-complements. The interpretation of a *whether*-complement under *doubt* is also puzzling, as *doubt whether p* is almost—but not completely—synonymous with *doubt that p*. This chapter presents a semantic account of these facts, based on the mechanisms of highlighting and exhaustification. *Doubt* expresses an existential doxastic attitude toward the negation of the highlighted content of the complement while having presuppositions that are sensitive to the ordinary content of the complement. Since *that p* and *whether p* are equivalent in the highlighted content but non-

equivalent in the ordinary content, the semantics explains fine-grained differences in interpretations between *doubt whether p* and *doubt that p*. Furthermore, due to the absence of a stronger scalemate, the interpretation of *doubt that/whether p* undergoes strengthening via exhaustification, akin to the behavior of scaleless modals.

Keywords: clause-embedding, doubt, selectional restriction, semantic account, highlighting, exhaustification, attitude, declarative complements, whether-complements

CEP Concepts: doubt

CEP Lexemes: eng:doubt.

Uhlik, Mladen & Andreja Žele (2018-10-08). 'Да-предложения при глаголах желания и побуждения в словенском языке'. In: *Вопросы Языкознания* 2018.5, pp. 87–113. ISSN: 0373-658X. DOI: 10.31857/S0373658X0001399-7. АБСТРАКТ: В статье предпринята попытка проанализировать синтаксические и семантические особенности слов *želei* 'хотеть, желать', *hoteti* 'хотеть, желать (с директивным значением)' и *zahtevati* 'требовать', типичных глаголов желания и побуждения в словенском языке. Рассмотрены различные типы реализации их дополнений, в первую очередь актантные придаточные, вводимые союзами *da* и *naj*. Затронут вопрос взаимозаменяемости придаточных и инфинитивных дополнений. Проанализированы семантические, синтаксические и прагматические критерии, влияющие на выбор наклонения в придаточном предложении. В анализе выделяются три типа конструкций с союзами *da* и *naj* в независимых и зависимых предложениях: 1) *da* + индикатив, 2) *da* + сослагательное наклонение, 3) *naj* + индикатив. Употребление конструкций связано с разными значениями: в *da*-предложениях сослагательное наклонение выражает оптативное значение, в то время как *da* и *naj* с индикативом передают побуждение.

Keyword: clause-embedding.

Vendler, Zeno (1972). *Res Cogitans. An Essay in Rational Psychology*. Ithaca, NY: Cornell University Press. 237 pp. (cit. on p. 16).

Wunderlich, Dieter (1976). 'Fragesätze und Fragen'. German. In: *Studien zur Sprechakttheorie*. Frankfurt/M.: Suhrkamp, pp. 181–250. ISBN: 978-3-518-07772-6 (cit. on p. 8).

Xiang, Yimei (2013-01-28). 'Neg-Raising and Aspect. Evidence from Mandarin'. In: *University of Pennsylvania Working Papers in Linguistics* 19.1, 29: *Proceedings of the 36th Annual Penn Linguistics Colloquium*. Penn Linguistics Conference 36 (U. Penn., Philadelphia, 23rd–25th Mar. 2012). ISSN: 1524-9549. HDL: 20.500.14332/44904 (cit. on p. 12).

АБСТРАКТ: Two canonical negatives in Mandarin, *mei* and *bu*, display an asymmetry with respect to the presence of neg-raising inferences. In par-

ticular, *mei* prefers non-neg-raising readings, while *bu*, unless attaching to a functional category, is forced to be interpreted as neg-raising. This paper aims to explore an approach to address this asymmetry based on interactions between negation and aspect in both syntax and semantics. I argue that the asymmetry between *mei* and *bu* is resulted from their syntactic positions relative to aspect, and their licensing conditions especially selections of event variable binders.

Keyword: clause-embedding.

Zimmermann, Thomas Ede (2006). 'Knowledge and Desire, From a German Perspective'. In: *A Festschrift for Kjell Johan Sæbø. In Partial Fulfilment of the Requirements for the Celebration of his 50th Birthday*. Ed. by Torgrim Solstad, Atle Grønn & Dag Haug. Oslo: Unipub, pp. 211–223. HDL: 10852/25205. URL: <http://urn.nb.no/URN:NBN:no-21252>.

ABSTRACT: The German modal verb *wollen* (\approx *want*) easily embeds reports of interrogative knowledge (*know whether*), but is reluctant to take propositional knowledge reports (*know that*) as complements. The difference is accounted for in terms of presupposition projection and a bridge principle relating desire reports and knowledge. The overall setting is a presuppositional extension of Groenendijk & Stokhof's (1982, 1984) partition semantics, as proposed by Sæbø (2007).

Keyword: clause-embedding

CEP Concepts: want, know-that

CEP Lexemes: deu:wissen, deu:wollen, eng:know, eng:want.