(23) a. I took my hat off → not anyone other than self.

b. I took Bill's hat off

↳ myself or Bill, not someone

→ ordering in terms of markedness

(must signal more marked than)

Q: what does "unmarked interpretation" mean?

- not reasoning about normal situs / stat. freq in general, but rather just about what's normal with respect to relevant categories (attempt to cohere, standard categories of how we conceptualize events).

(→ some substitutions w/in the picture vs. changes to event structure. (PN).

what's harder to revise later?).

Reading for next week: Dowty (incl. "optional" sections)

(2.1) 2.3.1, 2.3.6–2.3.8

Reading Notes from Week 1 (copied from 01/07/19).

[1] Fodor, J.A. 1970. Three reasons for not deriving "kill" from "cause to die." Linguistic Inquiry 1: 429–438.

Lakoff (1965): (1) from DS like (2)

(1) Floyd melted the glass

(2) F. caused (the glass melt)

... and it surprised me. — either "cause" event or "melt" event

- "do so" tests.

derivation involves 2 transf: predicate raising + lexicalization

1. PR: λt. (caused to melt)(the plan)
2. lex: (caused to melt V_{tr}) $\Rightarrow$ (melt V_{tr})

similarly (8) John caused Mary to die.
(9) J. killed M.
(10) M. died.

Argument 1 distributional characteristics of "kill/cause to die" are different from "melt/cause to melt"

(13) J. caused M to die + it surprised me that
(14) ... he/she did so.

(15) J. killed M. + it surprised me that he/*she
-(16) did so.

→ argues against "M die" as a DS constituent.
could be special lexical restr. —
order of lexicalization vs. "do so"?
- if "do so" is post lexical, "M die" isn't visible.
- but "melt" has to be the other way around, then.

Argument 2 cause (do X) isn't the right DS. for either case.

* PN doesn't make complete sense

(17) (λt. (caused (the plan to melt on Sunday)))
(by (heating it on Sat.))

but *(19) λt. melted the plan on Sunday by
... on Saturday.

difference between "melt" + "cause": syntactically compared vs. free w/r the adverbials.
- same problem of "kill".

Argument 3 "instrumental" adverbials (selectionally restricted to animate subject)

(22) J. contacted M. by using the telephone.
there's no SS corresponding to
(23) *C.J. contacted M. by (M use phone)).
→ instrumental adverbs can only NP
that is DS subject of the verb they modify
(necessary + sufficient condition).
↳ indep. of surface position of NP
→ good evidence exists.

BUT: if derivations like (1)-(2) work, we have to give up the generalization.

(29) (C.J. caused (B. to die)) (by (B. swallowing B's tongue))
(30) J. caused B to die by swallowing his tongue.
should be able to get (30) fr. (29).

lexicalization transformation which derives words from phrases.
→ generally, doubts this kind of transf.

need an explanation for the ambiguity of (3).
(I melted glass + it morphed ...)

- one argument: its not a fact about causal verbs, but rather about pro forms (do so, it)
  ↳ the idea that they only refer if deleted under identity might be wrong.

e.g. (35) J. married M. though we were surprised
(36) that he/she was willing to do it.

"M married J" isn't a constituent at any level.

[12] McCawley, J. 1978. Conversational implicature + the lexicon. In P. Cole (ed), Syntax & Semantics, vol. 9: Pragmatics. New York: Academic Press. 281-297.

conversational implicature depends on utterance or alternatives → issue of "effort", ranking not always clear.

Householder 1971: "pale" goes w certain colours (green, blue, yellow), not others (red, black, white)

proposal: there's a word for "palered" (= pink).
→ so, we use only if we want to distinguish
fr. "pink" + "red"

upshot implicature analysis: 1) defn pink = palered
2) show why can exchange
3) why pale red is closer to red than pale green to green.

Fillmore 1974: (1) a. The door of Henry's bedroom opened + 2 men came in.

b. " .. went in.

- different location for narrator, inf. obj. who opened door.

Q: what are the conditions for transitive vs. intransitive "open"?

→ i-open is bad if narrator witnessed the opening act. (when otherwise ID'd as part of act).

(2) I pushed + pushed + finally it opened.

→ acknowledge existence of agent whereas expletive qualifies speaker to (it syntactically more complex, but justified by extra info).

Q: but why is it obligatory? conjecture: path/direction of evidence

- if witness act, opening is subpart
- if don't, given obj. agency less direct.

Lexical vs. productive causatives. (Shibatani 78a,b, 76).

(3) a. Ire - te kudasai
admit-PTCPL please.

b. Hair - ase - te kudasai
enter - CAUS - PTCPL please

(4) a. Let me in

b. Let me come in.

say (3a) to ticket taker @ theater → "to see more"
(3b) → other reason.

(5) a. He killed the sheriff.
b. He caused the sheriff to die.

(5b) indirect causation.
↳ we can attribute to implicate if lexical caus. are restr. to only bip duct. → less complex alt. avail.

✓ predict: can use p-caus for duct when there is a lexical gap.

Japanese - 'aye paradigm for putting on clothing.
is putting on self is. other's. (ex. p. 251).

Sitbafani: productive causative has complex undulyng structure; for lexical, DS = SS.

reasons. reflexive pronoun is J. must have a clause subject as the antecedent
↳ hyp: embedded subj. ok in prod.
~~but~~ causatives, not in lex.

· hamem/haky
not restr. ↑ own body

↳ interp'd as own body if the article of d. is the subject, no ind. obj?

similar to: (23) a. I took my hat off
b. I took Bill's hat off
(myself?).

for (23b), 2 allowable interpretations –
1 dimension of 'markedness':
(either reminiscent fr. pull or fr. self)
– no less marked interp is available.

(23a) – only fully unmarked reading.

conversationally: reference to more marked situations requires comment.

Q: what is an "unmarked interpretation"?
– notion of interpretation – event info plus relevant details to mental picture.
add info (i) important to coherence
(ii) assume co-op. spkr.

prediction/hyp: simple lexical items for direct causation
– produce syntactic or derivational forms for general.
(acquisition argument fr. G. Lakoff).

central point the lack of interchangeability btw. lex. item + periphrastic equivalents is not idiosyncratic, but a consequence of general principles of co-operative behavior.

→ makes it difficult to assess analyses of alt. lexical decomposition.

Q. what parallels does semantic identity predict?

Reading Notes from Week 2 01/14/19

[3] Dowty, D. 1979. Word meaning + Montague grammar. Reidel: Dordrecht.

Chapter 2: The Semantics of Aspectual Classes of Verbs in English.

~~Lexical~~ lexical decomp analyses of classes of English verbs.

→ analysis of "logical words" (tenses, tns adverbials) relate to sem analysis of non-logical words.

Generative Sem theory of lex. decomp — syntactic, morph, + sem. regularities. decomps as fragment of "Natural logic".

* §2.1 The development of decomposition analyses in generative semantics.

origin: structuralist writings of Hjemslev (53), Jakobson (1936).

Hjemslev paradigm: (1) woman man child
cow bull calf
mare stallion foal
hen rooster chick

→ can assign certain sem features (e.g., ±F) to columns, biolog. cat. to rows.

idea: meaning of word is made up of collection of markers assigned in exhaustive these contrasts.

like phonology. ←

basic/optimal contrasts → primitives

Katz: "chair" (2) (Object) (physical) (Non-living)
(Artifact) (Furniture) (Portable)
(cf. Dillon 1977) (Sthg w/ legs) (Sthg w/ a back)
(Sthg. with a seat) (Seat for one).

Dowty Q: if we ask what consequences such analyses will have w/ a theory of reference, only 1 poss. answer: denotations of extensional predicates are key defined in terms of the intersections of denotations of other, supposedly more basic ext. preds.

↳ have to treat preds as non-logical constants

→ buys us ability to reduce certain nat. lang. entailments to ones definable in terms of logical operators.

w/out decomposing "bachelor", (4) at best has LF (5).

(4) Every bachelor is an unmarried man.

(5) $\wedge x[\text{bachelor}(x) \rightarrow [\neg\text{married}(x) \,\&\, \text{man}(x)]]$.

but if "bachelor" ~ (-married)(adult)(male),
"man" ~ (adult)(male), then: valid
first-order fmla.

(6) $\wedge x[[\neg\text{married}(x) \,\&\, \text{adult}(x) \,\&\, \text{male}(x)] \rightarrow$
$[\neg\text{married}(x) \,\&\, \text{adult}(x) \,\&\, \text{male}(x)]]$

open q can all nat. lang entailments among extensional preds be captured this way?

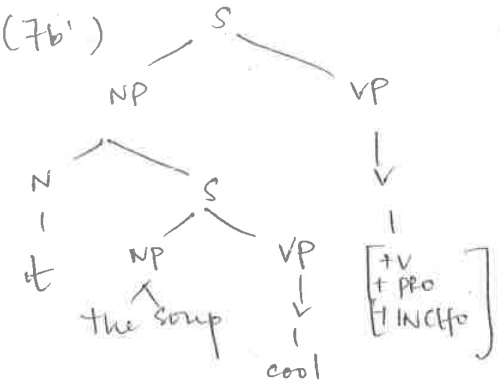
Lakoff (1965) - causatives + inchoatives

(7) a. The soup was cool.
b. The soup cooled.
c. J. cooled the soup.

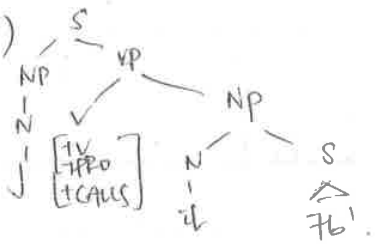
(8) a. The metal was hard
b. The metal hardened.
c. J. hardened the metal.

- systematic syntactic relship. "deep gramm. relship" parallel selectional restrictions.
- Lakoff added become/+INCHo feature.
  ↳ DS for (7b), (7c).

(7b')



(7c')



"causative" transf. not rel for causes where inchoative transf. prev. applied.

(11) a. the window broke.
b. J. broke the window.

(12) a. The horse galloped.
b. J. gall. the horse.

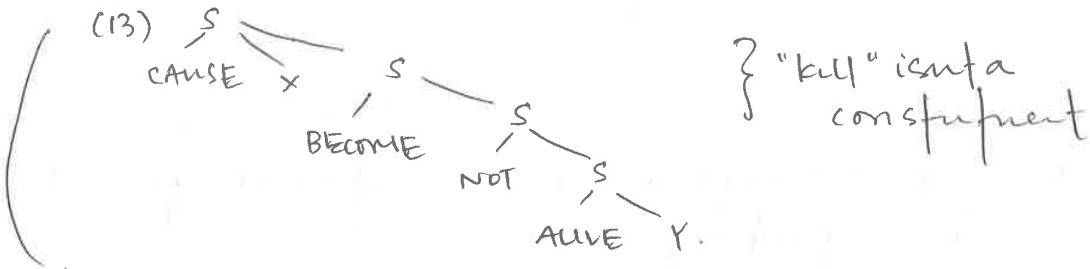
McCawley: post-transformational lexical insertion.

1960s. abstract lex items w/ sem. significance proliferate in DS.

(McCawley, Lakoff, Ross: "deepest" level of underlying syntactic structure would turn out to have properties attrib. to sem. representation.
(full range, but not lex items)

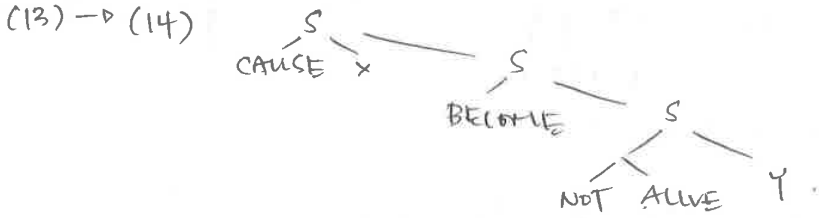
"surface" words would be complex here.

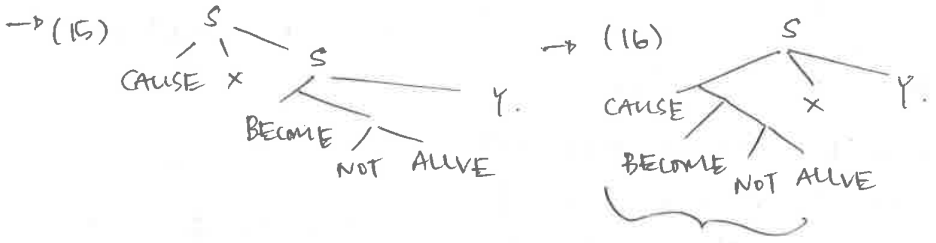
McCawley (1968): "kill".



} "kill" is not a constituent.

→ "predicate lifting" (Predicate Raising).





(optional replacement).

→ paradigmatic + syntagmatic evidence for decomp

McCawley makes (7) & (17) parallel:

(17) a. Harry is dead (not alive)

b. Harry died.

c. J. killed H.

justified on assumption that all word meanings are built from simple set of fundamental units.

(no, if INCH + CAUS in (7), want them in (17) as well).

Q: but what counts as "basic"?

"units of mng" as distinctive pairs →
unit = atomic predicate.

again, theory of lang. to be justified entirely on contrastive criteria – evidenced in lang.

↳ syntactic expl. relevant mngful elt. present in syntactic structure.

BUT: this is different than Hjelmslev's examples.

→ here we are looking for syntagmatic contrasts (less search space).

↳ compositional semantics.

lexical insertion + GS derivations →.

when can ~~derivation~~ lex. insertion apply in deriv?
all at once, or in stages?

e.g. CAUSE-BECOME-NOT-ALIVE → kill or
↳ dead → die → kill
common pattern in English. } rules for causative alternation.

Binnick (1971) (also Fillmore + Perlmutter).

"bring" (as causative of "come")

idioms: "come down", "come off", "come to".

and – "bring down", "bring off", "bring to".

↳ lexicalization rule.

but, we should expect this in other idiomatic cases.

Binnick: doesn't work w/ "go"/"send".

– difficult/hard: morphol. + sem. criteria in conflict. (p. 50).

point: post-transf. lex. insertion doesn't eliminate prob. of 'exceptions' to lex. transf.

* 2.3 An Aspect Calculus

2.3.1. The goal + purpose of an aspect calculus → Hypothesis (Dowty 1972):

different aspectual properties of various kinds of verbs can be explained by postulating a simple homogeneous class of preds – stative – plus some sentential operators + connectives.

stative verbs – stative preds in LF.

others – stative preds + "aspectual" connectives, operators. ↘ logical constant.
↙ non-log. constants

= reductionist analysis of the aspectual classes.

goal: puzzling diversity of verbs explained as combos of aspectually simple + unproblematic kind of verb, w/ explicitly introduced operators.

(assumption: statives are clearly understood, unproblematic).

stative: can be judged T/F of indiv. by ref. to state of world at only a single moment of time (other classes req. more info).

similar goal (Lakoff 1972): – "only finite number of atomic preds in natural logic + aki sentential complement."

methodological assumption: appropriate syntactic distribution of these operators in logical structure + model-theoretic interp, can be adduced by

careful attention to syntagmatic + paradigmatic contrasts + restrictions enforced w/ lang. itself.

-> non GS: isn't just about syntax.

goal structurally-motivated nat.-logic.

Aspect calculus: makes claim abt. Fregean interp. $\langle B, G_\gamma, f\rangle_{\gamma \in \Gamma}$ for English.

∃ finite set of functions $f_1, \ldots, f_n$ (which corresp. to the interpretations of aspectual operators) + set of objects A (interps of state preds), s.t. for ea. verb α of English, interp of α is equiv. to some composite function constructed out of (a finite # of) $f_1 \ldots f_n$ + members of A —

and this way of specifying interp of α is more economical, elegant, useful, insightful than any other comparably explicit way of defng interp of α.

2.3.6 Accomplishments + CAUSE

"kill" - accomplishment vb.
causatives, coext. w/ accompl.

* Kenny: accomplishments, "bringing it about that p". (vs. cause to be).

prop construe accomplishments as [φ CAUSE ψ].
where φ, ψ are sentences.

often φ - become or contain activity pred,
ψ - become.

"John killed Bill".

(97) [[J. does sthg] CAUSE [BECOME [B. is alive]]]

"J. painted a picture".

(98) [[J. paints] CAUSE [BECOME [a picture exists]]].

here, CAUSE - 2-place sentential connective, not rel.ship btw. indivs + propositions.

(refs: Dowty 1972, Vendler 1967a, Geis 1970, Fillmore 1971, McCawley 1971, Lee 1971, N.A. McCawley 1973, Rogers 1972, Givón 1972)

- Wojcik 1974, 76. Shibatani 1976.

motivation for CAUSE as subj-compl. verb:

Ryle (1949) · accomplishments are semantically bipartite in a way that activities are not. (activity is "subservient").

(99) elliptical for (100), (101).

(99) J. dissolved the Alka-Seltzer.

(100) " by doing sthg. (101) J.'s doing sthg. dissolved the A-S.

Geis: (101) is underlying structure of (100), (100) derived by "Agent Creation". - breaks up subj. complement into agentive subj + postposed by-phrase. (= Raising to subj).

Q: but in many cases, nothing is specified about type of agentive activity

→ but some cases (manner?) do specify.

"factitive" accomplishment constructions (instrumental in gen. semantics).

(103) Jane shot him dead.
She painted the house red.
She hammered the metal flat.
He swept the floor clean.

(104) He drank himself silly.

↳ result state is provided.

(105) [[He sweeps the floor] CAUSE [BECOME [the floor is clean]]].

- obj. of causal clause usually id'd w/ subj. of result-clause

verb-particle constructions →

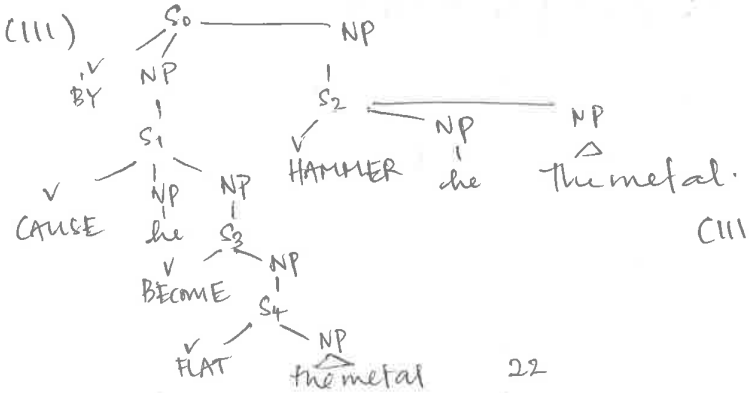
particle expr. a location that DO come to be in as result of activity identified by basic verb. ("put the book away").

point: a restricted subj. of verb-particle constr. should not be treated as cycle lex. with — are really compositional accompl. constructions

alternative (McCawley) —

CAUSE relates indiv. to prop. "by" phrases owned by other abstract operator.

(111)



(111) → (108) - (110).

(108) He made the metal flat by hammering it.
(109) He flattened the metal by hammering it.
(110) He hammered the metal flat.

(BY as a sentential connective use).

reason to prefer sentential conn. CAUSE over McCawley: BY(φ,ψ) is similar to [φ CAUSE ψ], but order of arguments is reversed.

issue: sentences w/ derived causatives may not be exactly paraphrasable by sentences w/ Engl. verb ~~CAUSE~~ "cause".

(113) a. A change in molecular structure caused the window to break.
b. * A Δ in mol. str. broke the window.

Hall (1965) - "cause" doesn't need to = CAUSE.
(but how do we pin down CAUSE, then?).

causation now: 2 kinds - direct/manipulative? (Shibatani 76).
indirect/directive

direct - lex. causatives
directive - periphrastic } Q: relate the two? how?

remedy: try to assign explicit model-theoretic interpretation to any abstract element postulated.

so: CAUSE as logical operator (not "cause"), try to give model-theoretic interp of [φ CAUSE ψ]

2.3.7 CAUSE, Lewis. - causation + counterfactuals.

Von Wright 1963, 68 — to assert that agent has brought about event, need to relate 3 kinds of facts

(116) J. opened the door. (117) a. The door was not open just before J. acted.

BECAME { b. The door was open just after J. acted.

c. The door would not have become open at that point in time if J. had not acted. all else remained same.

CAUSE →

Stalnaker, Lewis on counterfactuals.

(118) If the Chinese enter the Vietnam conflict, the United States will use nuclear weapons.

S: take facts, add antecedent, evaluate.

Lewis (1973) - no antecedent. - equivalence classes (PN: limit assumption).

Dowty 1972 - attempted t-cs for [φ CAUSE ψ] in terms of Stalnaker's cond. logic.

Lewis: propositions, not events.

"event c caused event e" → ☐(O(e) + O(c), O(e) = prop that event e occurs.

defines causal dependence btw. events e + c as counterfactual dependence btw. O(e) + O(c).

[e depends causally on c iff both O(c) □→ O(e) and ¬O(c) □→ ¬O(e)

Is first cond. vacuous for real events.

Lewis causal dep ≠ causation. (latter is transitive).

event c causes event e just in case ∃ series of events
c, c_1, c_2, ... c_n s.t. c_1 depends causally on c, etc...

b/c c-dep isn't transitive, c can cause e w/out e
being causally dependent on c.

problem 1 direction of causation. - similarity of worlds.
(what can we "give up" more easily).
- PN. Kahneman + Tversky.

prob 2 epiphenomena
↳ alternate worlds (not just 1 c.f. Stalnaker)
↳ "shadow" example.

prob 3 pre-emption. - failure of transitivity of c-dep,
but not causation itself.

prob 4 over-determination. - Lewis doesn't solve.
(Lyon 1967, Loeb 1974).

prob 5 causal selection. - doesn't deal w/.
nat. lang causation statements single out 1
event as cause of another.
Abbott (1974). (124) a. If I had not lit J's cigarette,
he would not have smoked it.
b. My lighting J's cigarette
caused him to smoke it.
- Lewis isn't worried about why we pick one out vs. another.

proposal we select as "cause" the one of various causal
conds that we can most easily imagine to
have been otherwise.

→ might also explain why we often label human action as cause.

relabel Lewis's dfn of causation – causal factor

(128) φ depends causally on ψ iff φ, ψ, and $\neg\varphi \Box\!\!\rightarrow \neg\psi$ are all true.

(129) φ is a causal factor for ψ iff $\exists$ series of sets $\varphi, \varphi_1, \ldots \varphi_n, \psi$ $(n \geq 0)$ s.t. ea. member of series depends causally on previous.

(130) [φ CAUSE ψ] is true iff (i) φ is a causal factor for ψ), + (ii), for all other φ' s.t. φ' is also a causal factor for ψ, some $\neg\varphi$-world is more similar to the actual world than any $\neg\varphi'$-world is.

→ I don't want to assume more causal cause

(130) → (131) [φ CAUSE ψ] is true iff (i) φ is a c-factor for ψ, + (ii) $\forall$ other φ' s.t. φ' is also a c-factor for ψ, some $\neg\varphi$-world is as similar or more similar to the actual world than any $\neg\varphi'$-world is.

"I think it is important to leave open the possibility that the best analysis of causation for purposes of the philosophy of science may turn out to be quite different from the best analysis for causation in ordinary language." (p.109).