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A Lexical Semanticist's Apology[1]

1 Lexical Semantics

- W rd carve up the w rld ar und u int metime very fine-grained di tincti n . Lexical emantic i the tudy f w rd meaning, f cu ed n devel ping a the ry f h w a lexic n i rganized and h w w rd meaning c nnect t ther part f language and c gniti n:
  - What i a w rd meaning? I it mething at mic, r mething m re dec mp able?
  - If the latter, what ubc mp nent f w rd meaning matter in me way? And h w d they fit t gether int larger meaning ?
  - Are there limit n w rd meaning ? P ible v . imp ible w rd ?
  - H w d w rd meaning relate t grammar, what d they tell u ab ut h w we perceive the w rld, and h w d they hape r are they haped by deeper c gnitive principle ?
- A typical meth d l gy f r lexical emantic re earch can g up r d wn the f ll wing:
  - Identify a emantically c herent et f w rd
  - Identify me c rrelating pr perty that y u think i intere ting r r bu t:
    - Grammatical c ntext they can (n t) appear in
    - Interpretati n they may (n t) have and inference they (d n t) give ri e t
    - Di tributi nal c ll cati n acr a di c ur e r larger c rpu
    - C rre p nding n n-lingui tic behavi r
  - Identify a pect f w rd meaning implicated in the behavi r, deduce relevant principle linking the tw , and integrat-1.874629(e)-238253.4( )-1.8741( )-1.8795(t)-3.31.87468(c)2.34 c *

(14) a. If the verb ha an agent argument, it i the ubject, el e if the verb ha an in trument argument, it i the ubject, el e if the verb ha a patient/place argument, it i the ubject (i.e. agent in trument patient/place f r ubjecth d)

b. If the verb ha a patient/place argument that i n t the ubject, it i the bject.

c. Anything n t the ubject r bject i a prep iti nal phra e (PP)

- The e can be viewed a nline rule f linking meaning t yntax (e.g. c nverting a et t a functi n), *or* a fact ab ut h w human lexicalize meaning (a per D wty 1991). Either way, nly den tati n f type (15a) are p ible, n t (15b), ruling ut the unatte ted f rm:

(15) a. ⟦*break*⟧ = [½r a ′( )] (y=agent, x=patient)

b. *⟦*break*⟧ = [½r a ′( )] (y=agent, x=patient)

- N w, a key fact f thi appr ach i that participant are **ranked** f r ubjecth d. That ranking thu define a kind f lexical emantic hierarchy r tructure that grammar care ab ut.

∴ W rd meaning are dec mp e int hared emantic piece , which are tructured relative t each ther. Rule mapping meaning t grammar are en itive t

3 From Two Verbs to Whole Verb Classes: Regularity and Idiosyncrasy in Verb Meaning

- F r every verb that behave me way y u'll pr bably find everal that behave ju t like it.

(19) a. J hn hattered/cracked/bent the metal lid (with the hammer).
b. The hammer hattered/cracked/bent the metal lid.
c. The metal lid hattered/cracked/bent.

(20) a. J hn truck/bumped/kn cked the wind w (with the hammer).
b. The hammer truck/bumped/kn cked the wind w.
c. *The wind w truck/bumped/kn cked.

- Thu we have really identified tw verb *classes*, **change-of-state** and **surface contact**, di tingui hed by thematic r le (the grammatically relevant c mp nent f lexical meaning). (Ju t FYI, but Levin 1993 i an excellent re urce n grammatically ignificant verb cla e .)

- But what di tingui he w rd *within a class*? They are n t interchangeable, there mu t be me meaning that di tingui he them (D wty 1979, Levin and Rappap rt H vav 1995, 1998, Pe et ky 1995, Grim haw 2005, Beaver and K ntz-Garb den 2020, *inter alia*).

(21)

Template (e.g. a thematic r le li t)	**Root**
a. cau er patient	BREAK
b. cau er patient	CRACK
c. cau er patient	SHATTER

- The r t affect interpretati n and rule ut unacceptable entence even in ca e where the grammar i therwi e entirely "c rrect" acc rding t the template.

(22) a. #Kim br ke the up. (tructural integrity f patient)
b. #Kim hit the mirage. (rigid phy ical extent f place)

- Fillm re ha a cute trick f r determining thi — ba ed n the hearing f ll wing, what rt f thing d y u think a *twarge* i ?

(23) a. Maxine br ke the twarge.
b. Maxine f lded the twarge.
c. Maxine hattered the twarge.

(24) a. Maxine hit the twarge.
b. Maxine lapped the twarge.
c. Maxine kn ck the twarge.

- S there' tw "halve " f a w rd' meaning. There' me en e in the field that the e rt f emantic di tincti n are very lexic graphic, and n t likely t matter grammatically (a ugge ted by Fillm re 1970: 129 and D wty 1979: 32).

- Well, Beaver and K ntz-Garb den (2020) and Beaver et al. (2021) beg t differ! Thi que ti n will the t pic f my third talk. But let me ay a few w rd here that p int t that.

#1 R t them elve clu ter int ubtype (Rappap rt H vav and Levin 1998):

- Rappap rt H vav and Levin (2010) ugge ted that r t can nly have a limited et f meaning , de cribing a type f (re ult) tate r a type f manner, but never b th at the ame time:

  (31) a. **Result roots**: break, crack, hatter, burn
  b. **Manner roots**: run, j g, wim, laugh

- But there i debate ab ut thi — G ldberg (2010), Beaver and K ntz-Garb den (2012, 2017, 2020) and Ri man (2016) have ugge ted that there are n limit n h w much meaning a r t can have (ee al Grim haw 2005 n r t meaning c mplexity).

> W rd meaning are br ken int (a) regular meaning that define w rd cla e and (b) idi yncra ie that di tincti n w rd within a cla , pr viding tw axe f variati n.

- FYI: What the right analy i f template i , and h w ther fact r like truth c nditi n matter, i the t pic f next week' lecture (Beaver 2006, 2010, Beaver and Francez 2012).

4 The Scope of Variation in Verbal Behavior in One Language

- The variati n in argument realizati n ab ve far ha n't been t bad. But it get gnarlier. Levin and Rappap rt H vav (2005) di tingui h tw type f variable argument tructure.

- What we have far een are **argument alternations** where ne r m re argument that eem t be part f the verb' lexical c ntent have multiple realizati n pti n , with a eman-tic that' till pretty imilar regardle f h w that argument i realized:

(32)

The Causative Alternation
a. The va e br ke.
b. Kim br ke the va e.

The Locative Alternation
e. Kim prayed paint nt the wall.
f. Kim prayed the wall with paint.

The Dative Alternation
i. Kim ent a letter t Sandy.
j. Kim ent Sandy a letter.

The Conative Alternation
m. Kim kicked Sandy.
n. Kim kicked at Sandy.

The Object Drop Alternation
c. Kim ate a pie.
d. Kim ate.

The *Clear* Alternation
g. Kim cleared the di he fr m the table.
h. Kim cleared the table f di he .

The Benefactive Alternation
k. Kim baked a cake f r Mary.
l. Kim baked Mary a cake.

The Preposition Drop Alternation
. The man climbed the tair .
p. The man climbed up the tair .

- H wever, while verb with imilar meaning d h w imilar alternati n , there can be *a lot* f ubcla e , and even then there i idi yncratic variati n (ee ab ve).

- There are al what Levin and Rappap rt H vav (2005) de cribed a **event composition**, where a verb eem t h w up in argument frame that inv lve participant n t th ught t be part f their lexical meaning (data drawn fr m Rappap rt H vav and Levin 1998).

(33)
a. Terry wept. (pure acti n)
b. Terry wept the fl r. (acti n n place)
c. Terry wept the crumb int the c rner. (m ti n t ward)
d. Terry wept the leave ff the idewalk. (m ti n away)
e. Terry wept the fl r clean. (change- f- tate)
f. Terry wept the leave int a pile. (creati n)

(34) a. Kim whi tled. (pure und emi i n)
b. Kim whi tled at the d g. (directed und emi i n)
c. Kim whi tled a tune. (c mplete perf rmance)
d. Kim whi tled a warning. (me age delivered)
e. Kim whi tled me a warning. (me age delivered t individual)
f. Kim whi tled her appreciati n. (me age delivered)
g. Kim whi tled t the d g t c me. (me age delivered t individual)
h. The bullet whi tled thr ugh the air. (und plu m ti n)
i. The air whi tled with bullet . (und plu m ti n)

(35) a. Pat ran. (pure m ti n)
b. Pat ran t the beach. (directed m ti n)
c. Pat ran her elf ragged. (change f tate f m ving figure)
d. Pat ran her h e t hred . (change f tate f mething el e)
e. Pat ran clear f the falling r ck . (change f l cati n and tate)
f. The c ach ran the athlete ar und the track. (cau ed m ti n)

(Rappap rt H vav and Levin 1998: 97-98, (1)-(3))

- Can we p ibly capture thi by p iting ne verb and a imple et f linking rule ?
- *Prima facia*, it eem many verb can ccur in t wide a range f argument realizati n frame with different a ciated meaning t give them a truly unified analy i .
- At thi p int ne might begin t c n ider an alternative: c uld it be that the yntactic c n- tructi n here are what are meaningful, and the verb(al r t) are being ma aged meh w int each frame (G ldberg 1995, F lli and Ramchand 2005, B rer 2005, 2013, Harley 2012)?
- Thi i a ignificant debate that I w n't delve int here, alth ugh there are till pattern that delimit the empirical c pe f fact that are part f the debate.

#1 The pattern ab ve are repre entative nce again f wh le cla e f urface c ntact, und emi i n, and manner f m ti n verb , ugge ting again lexical c nditi ning.

#2 There i al micr variati n within cla e , i.e. *cross-cutting classifications*. Even within und emi i n verb there' variati n in which all w a cau ative/inch ative alternati n:

(36) a. The tea kettle whi tled
b. *The b iling water whi tled the tea kettle.

(37) a. The teacup clattered.
b. I clattered the teacup a l aded the di hwa her.

(Levin and Rappap rt H vav 2005: 10, (2), (3))

- Surface c ntact verb differ in which re ult expre i n they all w:

(38) a. The heriff h t/battered the utlaw t death.
b. The heriff h t/*battered the utlaw dead. (ba ed n Beaver 2008)

#3 Event c mp iti n frame d n t eem a applicable t change- f- tate verb :

(39) a. *Kelly br ke. (pure acti n)

b. Kelly br ke the table. (change f tate)

c. *Cinderella br ke her finger t the b ne.

d. *The clum y child br ke the beauty ut f the va e.

e. *Kelly br ke the di he ff the table.

f. *Kelly br ke the di he int a pile.

- Acr language the e tw verb type clu ter a di tinct in ther way . F r example, ***hit*** but n t ***break*** verb ften all w their bject t be realized a blique phra e (i.e. n t a can nical ubject r direct bject), either categ rically r at lea t pti nally:

(41) a. ***M raudi L *(kau) bau-t-ida.***
M SUBJ L at hit-TA-3S
'M hit L.'

b. ***Aaka bakaka ulni-ki panka (*kau) bah-t-ida***
thi child writing-1S tick at break-TA-3S
'Thi kid br ke my pen.' (Ulwa; Andrew K ntz-Garb den' field n te)

(42) a.

- The intuiti n i that c re tran itive ca e are re erved f r when verb meet me pr t type (r ughly, again, cau ed change- f- tate). Here' the li t fr m (H pper and Th mp n 1980):

(45)

	HIGH	LOW
A. PARTICIPANTS	2 r m re participant (A and O)	1 participant
B. KINESIS	acti n	n n-acti n
C. ASPECT	telic	atelic
D. PUNCTUALITY	punctual	n n-punctual
E. VOLITIONALITY	v liti nal	n n-v liti nal
F. AFFIRMATION	affirmative	negative
G. MODE	reali	irreali
H. AGENCY	A high in p tency	A l w in p tency
I. AFFECTEDNESS OF O	O t tally affected	O n t affected
J. INDIVIDUATION OF O	O highly individuated	O n n-individuated
	pr per	c mm n
	human, animate	inanimate
	c ncrete	ab tract
	ingular	plural
	c unt	ma
	referential, definite	n n-referential

- Thu change- f- tate verb are the m t pr t typical fr m a tran itivity per pective, everything el e le . Thi fit neatly with the event c mp iti n and cr -lingui tic variati n data ab ve, where ***hit*** verb (and ther) h w m re grammatical variati n than ***break*** verb .

- Yet language may differ in h w much "deviati n" the c re frame t lerate ! Engli h i pretty liberal, u ing c re tran itivity f r ***break*** and ***hit*** verb , but Tibetan clearly i n't thi way.

> Ju t a verb meaning vary in way that influence grammatical behavi r, the c rre p ndence principle relating meaning t grammar vary a well, an ther p int f variati n.

6 Moving Beyond Verbs

- S far I've talked m tly ab ut verb ince thi i the categ ry where me f the riche t the rie f ubcateg rie f w rd have been devel ped. But there are intere ting generalizati n in ther categ rie a well. Here I give a quick di cu i n f adjective .

- Dix n (1982) argued f r a cla ificati n f adjective that de cribe -called "pr perty c ncept " (that can h ld f mething f r purely inherent rea n , r ughly) int 7 ba ic type :

(46)

dimension	big, mall, l ng, tall, h rt, wide, deep, etc.
age	new, y ung, ld, etc.
value	g d, bad, l vely, atr ci u , perfect, pr per, etc.
color	black, white, red, etc.
physical	hard, ft, heavy, wet, r ugh, tr ng, h t, ur, etc.
speed	fa t, quick, l w, etc.
human propensity	jeal u , happy, kind, clever, gener u , cruel, pr ud, etc.

- He give numer u diagn tic m tivating the e (Dix n 1982: 17, Table 1 ummarize). One

(47) value dimen i n phy ical pr perty peed human pr pen ity age c l r

a. ld white truck, g d tall ladder, fat ld un

b. ?white ld truck, ?tall g d ladder, ? ld fat un

- Thi ugge t again that there are lexical emantic generalizati n in the meaning-t -grammar

- He then n te that there are tw type f language :

  (52) , Large pen cla f adjective (Engli h, Dyribal)
  Small(er) cl ed cla f adjective (Hau a)

- There are typ l gical generalizati n ba ed n the e:
  - In , language , all type f pr perty c ncept are adjective .
  - In language , dimen i n, age, value, and c l r will g in there.
  - In language , phy ical pr perty tend t be verb . ***But*** if there' a mewhat larger cl ed et f adjective , they'll be adjective .
  - In language , if phy ical pr perty i a verb, then peed will be an adverb. If phy ical pr perty i an adjective, peed will be, t .
  - In language , human pr pen itie tend t be n un . Even in Engli h and Spani h thi ccur (***hunger/hungry***, ***tener hambre***). The e are the la t t g int the adjective cla .

- The e difference have ther manife tati n . The relati n hip between a ba ic Dix nian tate and the inch ative that de cribe the c(a)2.3505(t)-243.95787468(f)-2647cltathhhe 957-0.921(h)-1.0951v

7 Conclusion and Notes on Lectures

- T um up, what we have een far i the f ll wing general picture:
  - W rd meaning are c mplex bject :
    - ∗ They are br ken d wn int piece .
    - ∗ We can identify th e meaning by emantic te t and u e in c ntext.
    - ∗ S me meaning are hared acr w rd (template) and me are n t (r t).
    - ∗ The piece are tructured relative t ne an ther.
    - ∗ There i me l gic f r putting the piece t gether int bigger meaning .
  - W rd meaning figure int grammatical generalizati n :
    - ∗ Linking principle de cribe the e relati n hip .
    - ∗ Linking principle are en itive t b th the emantic and emantic tructure.
    - ∗ N t every part f w rd meaning figure int grammar.
  - B th w rd meaning and the c rre p ndence t grammatical pr pertie are ubject t inter- and intra-lingui tic variati n, albeit with me y tematicity.

The e fact r p int t ward the need f r a the ry f w rd meaning and it grammatical ramificati n in rder t have a full under tanding f the human language faculty.

- My g al ver the next tw lecture i t b re d wn int a c uple f t pic we t uched up n ab ve t reflect m re n where I think the tate f the art i and what the pen que ti n are:

Oct 13: There are different the rie f r what a lingui tically relevant lexical emantic nt l gy and tructure i . What are the m tivati n f r the e and why, and h w much i reducible t ther a pect f lexical emantic , e pecially truth c nditi nal meaning?

- Thi will be next week' t pic, where I'll l k at me ca e tudie that I have w rked n that ha b th ught t gr und ut lexical emantic tructure in mething that i truly emantic, while al ackn wledging that thi appr ach ha it limit .

Oct 20: The idea that w rd meaning c n i t f template and r t i widely accepted, but the f cu f m t w rk ha been n template , with le attenti n paid t r t , which are metime even di mi ed a unintere ting. I thi ju tified?

- Thi will be the t pic f the third lecture, where I'll l k at ca e tudie h wing that template and r t meaning are hard t tea e apart, f rming a c ntinuum. Thi w rk ha a tr ngly typ l gical and cr -lingui tic bent, thu h wing the value f uch w rk.

- While expl ring the e t pic , there are me caveat I want t lay ut right fr m the get g .

#1 A n ted ab ve, w rk in lexical emantic cr e a very diver e range f literature fr m different the retical traditi n and framew rk , maybe m re than ther field .

- H wever, de pite the metime dramatic variati n in the retical per pective , there i actually a very urpri ing am unt f c n en u n the big idea .
  - Thematic r le v . event tructure i a c mm n debate n what verb meaning are.
  - Template v . r t (regular v . idi yncratic meaning) i a c mm n di tincti n.
  - The ame n ti n c me up again and again (cau ati n, change, ma , c unt, etc.).
  - The relative r le f yntax v . the lexic n i a c mm n theme.

- Yet it' al my impre i n that the the retical difference b cure the imilaritie , and blind pe ple t big picture imilaritie , leading t redundancy and unnece ary debate .
- I'll be drawing n and ften b curing difference am ng a range f appr ache , becau e I