Lexical Semantics
Week 10: Analytic causatives

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1 Lexical causatives

Some transitive verbs seem to have causation baked into them (as we've seen):

(1) Tom whitewashed the fence.
whitewash: CAUSE(x, HAVE-ON(y, z)) & WHITEWASH(z)

(2) The Queen of Hearts jailed her gardeners.
jail: CAUSE(x, BE-IN(y, z)) & JAIL(z)

(3) Dr. Sheppard killed Roger Ackroyd.
kill: CAUSE(x, BECOME(y, DEAD))

- these verbs have CAUSE in their lexical decomposition, along with another action/verbal predicate, but these components are not separable at the surface
- the 'internal predicate' is intransitive; its argument is affected by the verb (*causee*)
- CAUSE gives us an additional argument: we can think of the subject/agent in (1)-(3) as a *causer*
- we can remove the causer from surface structure by using a passive form:

    (4) The fence was whitewashed.

    . . . but even then, we know that there must have been a causer:

    (5) Roger Ackroyd was killed (by someone).

- in other words, the CAUSE part of the meaning, along with its argument, cannot really be separated from the result component (HAVE-ON, BE-IN, BECOME) part of these verbs.
- verbs like the ones in (1)-(3) are called **lexical causatives**, since the causal component is built into their lexical semantics

2 Analytic causatives

English and other languages also feature a second kind of causative construction. **Analytic** or **periphrastic** causatives do have the cause and result components separate at surface structure: they are formed by using a 'causing' verb as an auxiliary.

- We saw that internally-caused intransitive verbs don't have CAUSE in their meaning, and don't participate in the causative alternation.
- they have only one argument, which is (typically) an agent, rather than something that is acted upon.

(6) a. The children danced.

    b. *John danced the children.

(7) a. The audience gasped.

    b. *The magician gasped the audience.

(8) a. Alice fell down.

    b. *The white rabbit fell Alice down.

(9) a. We wondered when it would stop raining.

    b. *The meteorologist wondered us when it would stop raining.

- the event structure of these predicates doesn't 'naturally' have a place for an external causer
  - *dance* is volitional (agentive); the children are directly responsible for their own movements
  - *gasp* and *fall* can both be involuntary (although perhaps prompted by an external factor); no external causer manipulates your lungs, etc.
- but, it's easy to imagine a situation in which an external causer or force does something that precipitates the internal action – e.g., a magician performs an astonishing trick, which elicits a gasp from the audience
- how do we express this kind of causation? We need to add another argument

We've seen one way: with the periphrastic causative *make*:

(10) John made the children dance.

(11) The performer made the audience gasp.

(12) The white rabbit made Alice fall down.

(13) The meteorologist made us wonder when it would stop raining.

Question: Do the sentences in (10)-(13) seem to say what the ungrammatical (b) sentences in (6)-(9) were getting at? Do they describe events that are similar to the ones in (1)-(3)?

- (10)-(13) seem to describe two events or processes; a causing event which sets the resulting event in motion
- i.e., the external causer *does* something, and the internally-caused event follows as a result of that

We can combine causative *make* with other verbs as well:

- If we use them with lexical causatives, which already have a causer and causee, we get a new, third argument that takes subject position

  (14) Aunt Polly made Tom whitewash the fence.

  (15) She made me open the door.

  (16) Fear made Sheppard kill Roger Ackroyd.

- again, it seems like there are two events here; one in which the 'super' causer does something that precipitates the events described in (1)-(3).
- the same two-event structure arises when we use *make* with verbs that are associated with a lexical causative:

(17)   a. Polly made the door open.

      b. ≠ Polly opened the door.

(18)   a. Suzy made the bottle break.

      b. ≠ Suzy broke the bottle.

(19)   a. Sheppard made Ackroyd die.

      b. ≠ Sheppard killed Ackroyd.

- the (a) and (b) sentences are not equivalent; again, *make* brings in an external causer that is external to the entire caused event

  - in (17a) it doesn't seem like Polly simply turned the handle and opened the door, but more as if some extra force or effort was required:

    (20)   Polly made the door open by hitting the lock with a hammer.

  - similarly, in (18) it doesn't seem as if Suzy operated directly on the bottle, by hitting it, or throwing a stone at it

    (21)   Suzy made the bottle break by hitting a high F.

- the verbs *open*, *break* (in their causative form) and *kill* all have CAUSE as part of their lexical decomposition – maybe the difference in (17)-(19) is due to using *make* as the causative auxiliary:

  (22)   Polly caused the door to open.

  (23)   Suzy caused the bottle to break.

  (24)   Sheppard caused Ackroyd to die.

- even with *cause* as the auxiliary, the causer in (22)-(24) seems to take part in an event which is separate from the *opening, breaking* or *dying* itself
- recall the apparent difference between *cause* and CAUSE:

  (25)   a. Suzy caused the bottle to break today by overheating it yesterday.

        b. #Suzy broke the bottle today by overheating it yesterday.

  (26)   a. Sheppard caused Ackroyd to die today by poisoning his whisky yesterday.

        b. #Sheppard killed Ackroyd today by poisoning his whisky yesterday.

- the difference between the (a) and (b) sentences is often referred to as the difference between **indirect** and **direct** causation
- hypothesis: analytic causatives indicate indirect causation, while lexical causatives indicate direct causation.

3 Causative meaning

We can give the following sketch for the meaning of an analytic causative:

(27) *Event A* CAUSATIVE *Event B:*
     A happened and B happened, and A exerted a causal influence on B (A brought B about)

(we might also want to specify that A did not happen after B)

3.1 *Make*-causatives

Why not just say "A *caused* B" in (27)?

- *cause* and *make* sentences seem to differ from one another in what they tell us about the kind of influence A had on B:

  (28) a. John made the children dance.
        b. John caused the children to dance.

- (28a): John did something (event A) which left the children no choice about dancing
  (28b): John did something (event A) as a result of which the children danced
- *make* seems, if anything, more direct than *cause* (though less direct than lexical causatives)
- a suggestion: *make*-causatives involve *intention* – their subjects intend the result to come about, and the *making* event is performed with this aim in mind
- where the causee is animate, *make*-causatives also seem to be paraphrased well by *force*. The causee doesn't seem to have a choice about their actions, while the *cause*-causees still seem to:

  (29) a. John made the children dance.
        b. John forced the children to dance.

- how do we encode these differences into the meaning of *make* and *cause*?

  (30) Wierzbicka 1998:*make* of coercion (p. 136)
        Person X made person Y do Z :=
        a. X wanted Y to do Z
        b. Y knew this
        c. X knew that if X didn't do something to Y, Y wouldn't do it
        d. because of this, X did (said) something to Y
        e. because of this, Y thought "I have to do it"
        f. because of this, Y did Z
        g. Y wouldn't have done Z (at that time) if Y had not thought this

- the "*make* of coercion" only applies to interpersonal causation: (30) captures the causer's intention, as well as the sense that the causee has no choice (and recognizes this)
- according to Wierzbicka, there are several other kinds of *make* causatives, both interpersonal and otherwise
  - these convey different information about the relationship between causer (causing event) and causee (or resulting event)
  - Wierzbicka: all of the *make* constructions have a causal and a *counterfactual* component, but these components can relate different pieces of the overall structure
  - *make*-causatives vary according to the following factors:
    1. is the causer the same as the causee?

       (31) a. I made myself go to bed early.
             b. My mother made me go to bed early.

    2. is the causer a person, thing, or event?

       (32) a. Poirot made Sheppard confess to killing Ackroyd.

     b. Fear of discovery made Sheppard confess to killing Ackroyd.

     c. Poirot's discovery made Sheppard confess to killing Ackroyd.

3. is the causee a person, thing, or event?

(33)   a. The white rabbit made Alice fall down.

     b. The earthquake made the lighthouse fall down.

4. does the causer DO something?

(34)   a. Aunt Polly made Tom whitewash the fence.

     b. The weather forecast made me think about climate change.

5. does the causee DO something?

(35)   a. Aunt Polly made Tom apologize.

     b. Aunt Polly made Tom feel bad.

6. if the causee does something, is this intentional or involuntary?

(36)   The magician made the audience gasp.

7. does something HAPPEN to the causee?

8. does the causee THINK something?

- these variables lead to Wierzbicka's list of *make*-causatives:

  – interpersonal *make* constructions:

(37)   a. *Make*-happen: *Person X made person Y fall*

     b. *Make*-feel: *Person X made person Y feel guilty*

     c. *Make*-think: *Person X made person Y think about Z*

     d. *Make*-want: *Person X made person Y want something*

     e. *Make* of involuntary emotional response: *Person X made person Y cry/laugh*

     f. *Make* of coercion (*make*-do): *Person X made person Y apologize*

  – impersonal make:

(38)   *Make* of subjective necessity: *Something (X) made person Y do Z)*

- Wierzbicka argues that these are irreducible:

(39) *make*-happen:
The white rabbit made Alice fall down.
Person X made Z happen to person Y:=
  a. *X* did something
  b. because of this, something bad (*Z*) happened to *Y*
  c. *Z* wouldn't have happened to *X* if *Y* hadn't done this

(40) *make*-think:
She made me think that maybe I've had it wrong all these years.
Person X made person Y think something Z:=
  a. *X* did something
  b. because of this, *Y* thought something (*Z*)
  c. *Y* wouldn't have thought this (*Z*) if *X* had not done this

(41)   *make* of involuntary emotional response:
       The magician made the audience gasp.
       Person X made person Y [response]:=
   a. X did something
   b. because of this Y thought something
   c. because of this Y felt something
   d. because of this Y did something (Z)
   e. Y didn't do Z because Y wanted to do it.
   f. Y wouldn't have done it if X had not done this.

It seems clear that *make* can be used for a number of subtly different causal relationships, but:

- do we really have this many irreducible *make* constructions?
- can we find commonality between them?
- do each of the constructions have all of the individual implications that Wierzbicka proposes?
- for instance, with the *make* of coercion, is it really necessary that the causer intend the specific result that occurs?

   (42)   Instead of motivating him to improve, you've inadvertently made him tune you out!

   question: why does this suggest that intention may not be part of the *make* of coercion?
- another example: does the involuntary emotional response really have to be something the causee did not want?

   (43)   I went to see the play hoping to be moved, and sure enough, Cate Blanchett's performance made me cry.

A reduced proposal (cf. Lauer 2010):

(44)   *X make Y to Z:*
   a. event A happens, where A is X if X is an event; else A is an event in which X is a participant
   b. Y does Z (call this event B)
   c. A brings about event B (means that event B must happen; i.e. the personal aims or desires of Y became irrelevant)
   d. B would not have happened if A had not happened

We can think of (44c) as capturing the *causing* part of the meaning, and (44d) as capturing the *counterfactual* part of the meaning (following Wierzbicka):

- the *counterfactual* part of the meaning is usually what is taken to be shared with *cause*:

   (45)   John caused the children to dance.
          The children would not have danced if John had not done what he did.

- but, is this really part of a *make* construction?

   (46)   I was not sure if I should go to band camp last year, but then my mother insisted that I go. I am so happy that she made me go. I had the best summer ever.
          ↛ I would not have gone to band camp if my mother had not insisted that I go.

3.2 Other analytic causatives

English has several more periphrastic causative verbs: *get, have, force, talk into, let*

(47) a. John got the children to dance.
      b. John had the children dance.
      c. John forced the children to dance.
      d. John let the children dance.

- Each of these tells us something slightly different about the causing process:
  - *got* implies that John either convinced or possibly manipulated the children into dancing (compare with *make*)
  - *had* suggests that he told or otherwise instructed them to dance, from a position of authority
  - *forced* is closer to *make* but more directly implies coercion
  - *let* suggests that he simply failed to obstruct their dancing (thought he might have)
- different periphrastic causatives also suggest different things about the relationship the causee has to the causer, and the desires of the causee:
  - compare *make* and *have*:

    (48) She **had** the girls clean his bicycle and **made** Anand pump the tires every morning.

  - both cases suggest a directive coming from the causer, but *had* does not allow the possibility of resistance
  - Wierzbicka's formula for *have*-causatives:

    (49) *Person X had person Y do Z:=*
          a. X wanted Z to happen (to W)
          b. because of this, X wanted Y to do Z (to W)
          c. because of this X said something to someone
          d. because of this, Y did Z
          e. X could think that Y can't say "I don't want to do this."

  - so, with *make* the causee's will is (or can be overridden), but *have* precludes the possibility of the causee expressing opposition in any way – perhaps due to a relationship of authority, or a convention established between the causer and causee

    (50) I took my shoes to the cobbler and had him resole them.

  - what about:

    (51) John had the children dance, even though they didn't like dancing/didn't want to.

    Is this different from *make*? How?
  - Notice: we can passive the embedded verb in a *have* construction, but not in a *make* construction:

    (52) a. I had the cobbler resole my shoes.
          b. I had my shoes resoled (by the cobbler).
    (53) a. I made the cobbler resole my shoes.

      b. *I made my shoes resoled (by the cobbler).

    What does this suggest about the difference?

- *got* is often claimed to refer to 'manipulative' causation:
  - the causee does something because they perceive the causer as wanting it to happen
  - the causee seems to have some choice in the matter
  - the desire is conveyed through some form of action or communication
  - Wierzbicka on interpersonal *get*:

    (54) *Person X got person Y to do Z*:=
    - a. *X* wanted *Y* to do *Z*
    - b. *X* knew that if *Y* didn't want to do it, *Y* would not do it
    - c. *X* thought that if *Y* wanted to do it, *Y* would do it
    - d. because of this *X* did (said) something to *Y*
    - e. because of this after this *Y* wanted to do *Z*
    - f. because of this *Y* did *Z*
    - g. because of this *X* could think: "I wanted something to happen, and it happened."

    (we could probably get rid of (e) – why?)
  - there is another kind of *get* construction, where there doesn't seem to be a causee but simply a caused event (a lot of these have been in the news lately):

    (55) a. Seth Meyers got Trump elected.
          b. Racism got Trump elected.

  - what's the difference between this and Wierzbicka's *get*?

    (56) a. I got the door to open.
          b. I got the door open.

- What about *let*?

3.3 Counterfactual *cause*

A plausible analysis linking analytic causatives together would be that they all involve *cause* (or maybe CAUSE), plus some additional inferences:

- the first question is: what analysis should we give *cause*?
- David Lewis (1973) suggests that we should think about *cause* in terms of a counterfactual:

  (57) The recession caused Jerry to lose his job.
       $\rightsquigarrow$ *If the recession had not happened, Jerry would not have lost his job.*

- A first pass at *cause*:

  (58) *X cause Y to Z:*
  - a. event *A* happens, where *A* is *X* if *X* is an event; else *A* is an event in which *X* is a participant
  - b. *Y* does *Z* (call this event *B*)
  - c. *B* would not have happened if *A* had not happened

We have already seen reason to believe that counterfactuality might not be part of the meaning of *make*. It turns out that there are also problems for this analysis of *cause*:

(59) The problem of **late pre-emption:** (cf. Hall 2004)

    a. *Context:* There is a bottle on the wall. Billy and Suzy are standing close by with stones and each one throws a stone at the bottle. Their throws are perfectly on target. Suzy happens to throw first and hers reaches the bottle before Billy's. The bottle breaks.

    b. ↝ Suzy caused the bottle to break.

    c. ↝̸ If Suzy had not thrown her stone, the bottle would not have broken.

- is there a way to save the counterfactual analysis?
- there is another version of this problem, called **early preemption**, in which Billy is a backup for Suzy: he will only throw if she misses. Can we rescue the counterfactual in this scenario?

The reverse problem: the counterfactual might not be enough to motivate *cause*.

(60) Survival scenario (Hall 2000):

    a. *Context:* An assassin places a bomb under your desk, which causes you to find it. Finding it causes you to remove it, which causes your survival.

    b. ↝̸ The assassin caused your survival.

    c. ↝ If the assassin had not placed the bomb under your desk, you would not have removed it and ensured your survival.

Do the other analytic causatives have a counterfactual component to their meaning?

4 Other languages

Proposed dimensions of analytic causative variation:

- direct vs. indirect
- contactive vs. distant
- strong vs. weak coercion
- authority vs. absence of authority
- factitive vs. permissive
- manipulative vs. directive

4.1 German *lassen*

As Wierzbicka points out, languages seem to divide up the space of motivation/influence/ coercion/authority in different ways with their analytic causatives:

- German *lassen*, most often translated by *let*, can range in meaning from *make* to *let* to *get*:

(61) Said by a prisoner:

    Ich habe mir Bleistift und neues Papier geben lassen.
    I   have me pencil   and new   paper give let.

'I asked for a pencil and new paper (and got them).'
I got myself given a pencil and new paper.

(62) coercive or directive reading:

Hans hat die Kinder tanzen lassen.
Hans has the children dance let.

'Hans made the children dance/Hans had the children dance.'

(63) *Er hatte ihm   durch   seinen Assistent zum Geburtstag Blumen überreichen*
He had   to-him through his   assistant for birthday   flowers present
lassen.
let

'He had his assistant present flowers to him for his birthday.'

4.2 Morphological causatives

In English, the verbs that participate in the causative alternation don't overtly mark whether they are causative or not:

(64) a. The door opened.
      b. Sally opened the door.

In a number of other languages, including Japanese and Hindi, the form of the verb tells you whether it is causative or not:

- in Hindi, intransitive externally-caused and their transitive causative forms differ in terms of the vowel length:

  (65) a. *Darvaazaa khul-aa.*
           door   open-PAST.MASC
           'The door opened.'
        b. *Us-ne   darvaazaa khol-aa.*
           She-ERG door   open-PAST.MASC
           'She opened the door.'

- It's typically assumed that the causative form is more basic, and that the vowel is 'shortened' (a process called *ablaut*) to produce the intransitive form.
- Hindi also has a morphological process for adding a causer: a morpheme (*aa*, or variants) is added to the vowel stem.

  (66) a. *Makaan jal   rahaa   hai.*
           house   burn PROG.MASC PRES
           'The house is burning.'
        b. *Dakaiton ne   makaan jal-**aa**   rahaa   hai.*
           bandits   ERG house   burn-CAUS PROG.MASC PRES.
           'Bandits are burning the house.'

- these behave more like lexical causatives than the English analytic causatives, because the derived-causative meaning can be idiosyncratic (the causer can be taken to be direct)

(67)   a.   *Bachchon ne   ganith seekh-aa.*
          children   ERG math   learn-PAST.MASC

          'The children learned math.'

      b.   *Us-ne   bachchon ko ganith sikh-**aa**-yaa.*
          she-ERG children   to math   learn-CAUS-PAST.MASC

          'She taught the children math.'

(68)   a.   *Woh chal-aa.*
          He   walk-PAST.MASC

          'He walked.'

      b.   *Us-ne   chal-**aa**-yaa.*
          He-ERG walk-CAUS-PAST.MASC

          'He drove (a car).'

- Hindi also has a second derived causative, which adds an indirect causer: *vaa*, or variants:

(69)   a.   *Makaan jal-aa.*
          house   burn-PAST.MASC.

          'The house burned.'

      b.   *Zamiindaar ne   (dakaiton se) makaan*
          Landlord   ERG (bandits   by) house

          *jal-**vaa**-yaa/jal-**vaa**   diy-aa.*
          burn-CAUS2-PAST.MASC/burn-CAUS2 give-PAST.MASC

          'The landlord had the house burned (by bandits).'

- the second derived causative does not get idiosyncratic interpretations: why might this be?
- Some Hindi verbs allow both the first and second causatives: *jalnaa*, above, or *bachnaa* (be saved)

(70)   a.   *Ramesh bach ga-yaa.*
          Ramesh save go-PAST.MASC

          'Ramesh got saved.'

      b.   *Ram ne   Ramesh ko   bach-aa-yaa.*
          Ram ERG Ramesh DAT   save-CAUS-PAST.MASC

          'Ram saved Ramesh.'

      c.   *Ram ne   Ravi se   Ramesh ko   bach-vaa-yaa.*
          Ram ERG Ravi INSTR Ramesh DAT save-CAUS2-PAST.MASC

          'Ram had Ramesh saved by Ravi.'

- Verbs allowing the transitive to 'anti-transitive' change (the ablaut): *dhonaa=wash* → *dhulnaa=be.washed*, *kaatnaa=cut* → *katnaa=be.cut*, *kholnaa=open* → *khulnaa=open.INCH*, *gholnaa=dissolve* → *ghulnaa=dissolve.INCH*, *maarnaa=kill* → *marnaa=die*, *roknaa=stop* → *ruknaa=stop.INCH*

  – the derived intransitives do not have an agent role

- Verbs allowing the first causative:

  – Intransitives: *jalnaa=burn* → *jalaanaa=burn.CAUS*, *chhipnaa=hide* → *chhipaanaa=hide.CAUS*, *suukhnaa=dry* → *sukhaanaa=dry.CAUS*

- Transitives: *siikhnaa=learn → sikhvaanaa=have/make learn, sunnaa=hear → sunaanaa=tell/cause to hear, dekhnaa=see → dikhaanaa=show, khaanaa=eat → khilaanaa=feed, samajh-naa=understand → samajhaanaa=explain*

- Verbs allowing the second causative:
  - Transitive: *karnaa=do → karvaanaa= make/have do, kholnaa=open → khulvaanaa=have/make open*
    NB: verbs that don't passivize also don't have second causatives.
  - Derived transitives: *jalaanaa=burn.CAUS → jalvaanaa=have/get burned, bhagaanaa=run.CAUS → bhagvaanaa=make run, sukhaanaa=dry.CAUS → sukhvaanaa=make dry, sikhaanaa=teach → sikhvaanaa=have teach*
  - Ditransitive: *denaa=give → dilvaanaa = have/make give, kehnaa=say → kehel-vaanaa=have/make say, likhnaa=write → likhvaanaa=have/make write, dhonaa=wash → dhulvaanaa=have/make wash*
  - Derived ditransitive: all transitives taking the first causative
  - NB: in the second causative, the 'lower' causer usually appears in the instrumental (INSTR) case (you can think of this as *by* or *with* phrase in English: e.g., "I had the letter written by Sally")

Can we make any generalizations like we did for English causative alternations?

5 References

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