nP-internal arguments, agency, causation and Relation R
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Penn Linguistics Colloquium, March 18, 2023
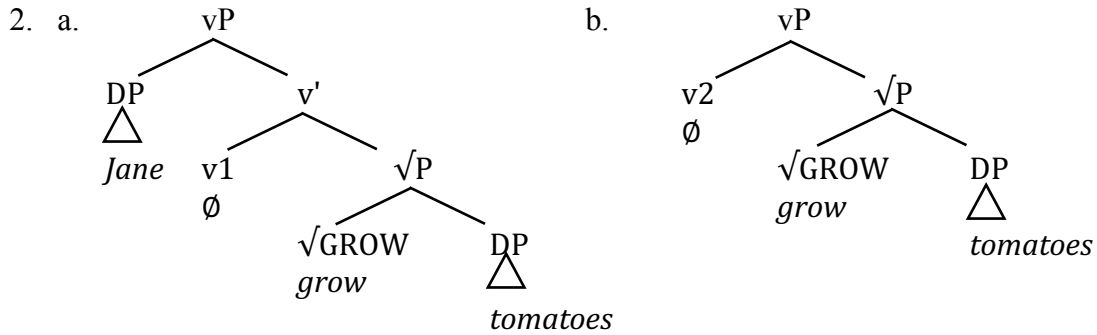
1   Background

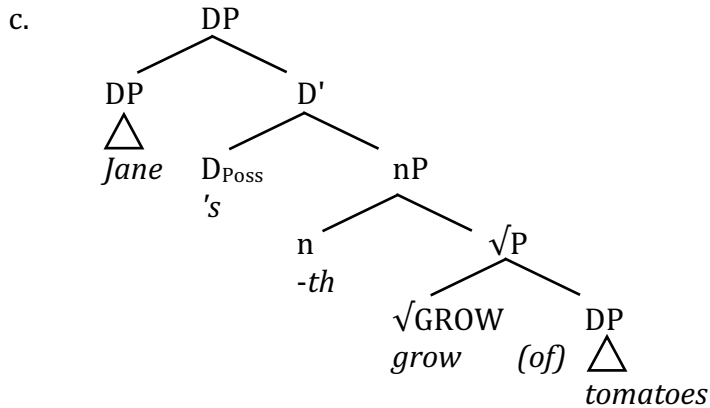*1.1   Marantz 1997 @ PLC 21, No escape from syntax, revisiting Chomsky 1970, RoN.*

1. a.   Jane grows tomatoes.
    b.   Tomatoes grow.
    c.   Tomatoes' growth/The growth of tomatoes
    d.   #Jane's growth of tomatoes   (** on reading parallel to 1a*).

Account: √GROW belongs to 'internally caused CoS' root class
                Flavors of verbalizer
                        v1   'agentive' verbalizer, introduces agent in specifier
                        v2   'BECOME', inchoative verbalizer
                -th instantiates a root nominalization
                        nominalizer attaches without intermediate verbalizing layer
                        hence no v1 (or v2) possible
                        hence no agent argument is structurally introduced

'Since the root of *growth* refers to an internally caused CoS, the complement to the root will be interpreted as both the theme and the internal cause… [HH necessarily reflexive?] there is no source for a v-1 'agent' interpretation'.

2. a.   b.

c.

```
                    DP
             ┌──────┴──────┐
            DP             D'
            △         ┌────┴────┐
          Jane    D_Poss        nP
                    's      ┌────┴────┐
                            n        √P
                           -th   ┌───┴────┐
                               √GROW      DP
                               grow   (of) △
                                        tomatoes
```

Other parallel cases:
    rise/raise   √RISE
    object experiencer psych predicates: *amuse, annoy, entrance*

3.   a.   The glass rose/Jane raised the glass   a'. *Jane's rise/raise of the glass
      b.   Jane amused the children   b'. *Jane's amusement of the children
      c.   The film annoyed Kim   c'. *The film's annoyance of Kim.

Other root nominalizations, of roots which bring different kinds of denotations to the table, behave differently:
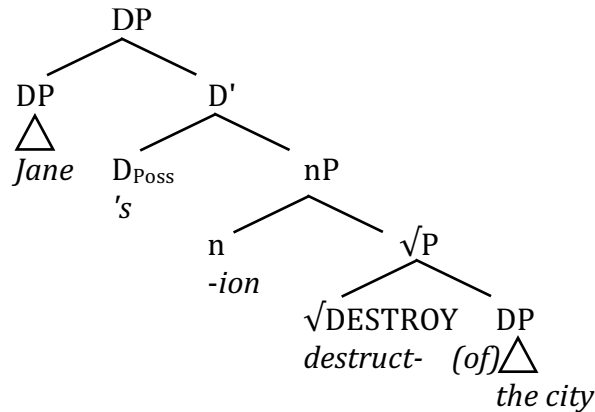
√DESTROY class ('externally caused CoS')

4.   a.   Jane destroyed the city.
      b.   *The city destroyed.
      c.   Jane's destruction of the city.
      d.   The city's destruction (by Jane)

→ √DESTROY: compatible with agentive interpretation for possessor

→ 3b. shows it's incompatible with verbalizer which explicitly excludes agentivity
       i.e. with v-2

→ Root nominalization structure *permits* an agentive interpretation for possessor, despite the fact that we know (from *grow*) that it doesn't include a v layer

5.

```
                        DP
              ┌─────────┴─────────┐
            DP                    D'
            △            ┌────────┴────────┐
          Jane        D_Poss              nP
                        's         ┌───────┴───────┐
                                   n              √P
                                 -ion      ┌───────┴───────┐
                                        √DESTROY          DP
                                        destruct-   (of)△
                                                      the city
```

→ All signs point to a claim that √DESTROY includes agentivity entailments *in the root*.
→ √GROW does not; any non-internal cause has to be introduced from outside

→ √BREAK class ('result-of-CoS' √)

6. a. Jane cracked the glass
    b. The glass cracked.
    c. *Jane's crack of the glass
    d. *The glass's crack/*The crack of the glass
    (e. The crack in the glass.)

    'Essentially, 'possessors' of NPs may be interpreted in almost any kind of semantic relation with respect to the possessed NP that can easily be reconstructed from the meaning of the possessor and possessed **by themselves'**

→ The famed 'Relation R' — some kind of association, whatever the root & possessor license.

7. *Yesterday's destruction of the city…*

    ' 'John' in *John destroyed the city* and *John's destruction of the city* might receive similar interpretations through different syntactic means.'

    'There's a further issue of whether the categories reflect features of the roots themselves or rather features of the functional nodes that serve as the context for the insertion of the roots'

→ Sketch of a feature-based account: Roots acquire features constraining the flavor of v they must co-occur *when in the context of v* (cf Ramchand 2008's system)

8.   √GROW   /   [[____] v]v   + *u*v
     √DESTROY   /   [[__] v]ᵥ   + *u*v1

Plus +RelationR interacting with √GROW and √DESTROY encyclopedically, in the way Marantz proposes, to derive possessor-agency facts

1.2   Harley and Noyer 2000: Encyclopedic knowledge, not root features

→ √ACCUMULATE a member of the √GROW class…in certain contexts

9. a. Dust accumulated
    b. Jane/the armoire accumulated dust
    c. *Jane/the armoire's accumulation of dust
    (d. Dust's accumulation on the armoire/The accumulation of dust on the armoire)

10. a. Jane accumulated wealth
    b. Jane's accumulation of wealth / The accumulation of wealth by Jane
    c. (Wealth accumulates in the top 1%)
    d. (The top 1%'s accumulation of wealth)

→ Other cases: Causation not licensed for possessors, agentivity is licensed

11. a. The couple separated.
    b. Adultery separated the couple.
    c. *Adultery's separation of the couple.

12. a. The children separated.
    b. The teacher separated the children.
    c. The teacher's separation of the children.

13. a. The German principalities unified in the 19th century.
    b. The (events of the) 19th century unified the German principalities.
    c. *The (events of the) 19th century's unification of the German principalities

14. a. The German principalities unified.
    b. Bismarck unified the German principalities.
    c. Bismarck's unification of the German principalities

→ Our conclusions:

Membership in the 'internally caused' class of CoS verbs is a property of the whole √P predicate; the √ interpreted in conjunction with its arguments, in the context of our world/encyclopedic knowledge

The availability of an Agent interpretation for possessive D depends on whether the event nominal denotes an internally caused event, which arises from our world/encyclopedic knowledge

Separation/Unification cases: what's bad is when the subject of a caused CoS verb is a Cause, rather than an Agent—controlled for by controlling animacy; these inanimate subjects of these events are encyclopedically typically Causes, not Agents Folli & Harley 2005, and Folli & Harley 2008—coming back to this)

Accumulation/collection of dust/wealth cases: what's bad is when the CoS itself is encyclopedically typically caused, rather than agentively executed, determined by the nature of the theme. In those caused contexts, can really clarify which sense is meant by controlling animacy (*Jane* marginally allows for an agentive interpretation, *The armoire* does not).

→ What is super clear is that *causativization* cannot be encoded by RelationR

→ Rolf & I wrote:

> "The question still arises, of course, as to why the 'facilitator' role present in transitive verbal *grow* is not a possible interpretation for the specifier of D."

→ What is the nature of the relationship between a possessor in Spec-D and the nominal in its complement?

2   Lessons from relational nouns

Partee & Borschev 2003, Barker 2019

2.1   DP'ses are always arguments of relational nPs

→ First pass: All DP'ses are arguments of some relation
- either arguments of a 'free R', usually possessive, if the denotation of nP is sortal
- or arguments of 'inherent R' (if the denotation of nP is relational either by virtue of being headed by relational √, or by virtue of containing a relational adjective like 'favorite')

→ Partee & Borschev's version of Jensen and Vikner's treatment.

15. *That brother of Jane's*
        [that [brother (of) [[Jane] s]]]]   *'s* turns type e argument into something
                                                                       that can compose with a relational noun

a.	's	$\lambda y \lambda R[\lambda x[R(y)(x)]]$	
b.	Jane's	$\lambda R[\lambda x[R(Jane)(x)]]$	NOT an <e,t> predicate *That brother is Jane's*
c.	brother (of) Jane's	$\lambda x[brother(Jane)(x)]$	Now an <e,t> predicate *He is a brother of Jane's*

(d.   Jane's brother   ιx[brother(Jane)(x)]]   = *the brother of Jane's*)

→ R contained in the noun, not introduced by the *'s*

→ Jensen and Vikner: all sortal nouns coerce to relational nouns to compose with *'s*

→ Content of coerced R determined lexically (e.g. *brother*) or pragmatically (e.g. *book* in *Jane's book*)

→ One interesting moral of the literature on relational nominals: The property of being relational is a *phrasal* property, not a property of the head

16.   Barker: *birthday* vs *day*
       Partee & Borschev: *movie* vs *favorite movie*

→ inherent relation can be contributed by non-head;
          open argument position in *favor* or *birth* percolates up.

(→ fits with our observations above about *accumulation of dust* vs *accumulation of wealth*
       Property of being a √*GROW*-class predicate a phrasal property, not a √-level property)

→ Means that possessor must be introduced as sister of nP, not sister of √
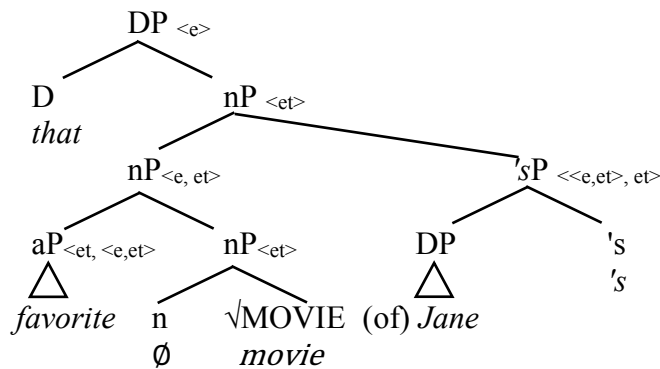
2.2   Possession relations, lexical relations, contextually-supplied relations

→ Lots of effort to distinguish between different types of *'s* relations

→ Lots of languages (Russian, Polish, Hebrew) make sharper morphosyntactic distinctions than English

→ One surprising result from English, emphasized by Barker: The *flexible* R relation, the relation whose content can be supplied by pragmatic or lexical content, is *not* available with postnominal *DP's*

→ The postnominal *'s* relation is always **possession** (in Barker's/Vikner & Jensen's terms: 'control')

→ Barker: The *flexible* R relation appears only with prenominal *'s*

17. a. Those dogs of Jane's were rabid   ← possession only
    b. Jane's dogs were rabid   ← any kind of relation
                 (including possession, but also contextually supplied ones)

→ But! Even prenominally, can still distinguish between possession R and inherent or coerced R.

→ Prenominal possession R can take scope over *former*, coerced/pragmatic or lexical R cannot:

18. a. *my former mansion*   the mansion that used to be mine   *possessive R*
                               my thing that used to be a mansion

    b. *my former wife*   the person who used to be my wife   *lexical R*
                               *my person who used to be a wife

    c. *my former favorite book*   the thing that used to be my favorite book *lexical R*
                               *my favorite thing that used to be a book

    d. *my former attorney*   the attorney who used to work for me   *contextual R*
                               *my person who used to be an attorney

    e. *my former ponytail*   the hairstyle that used to be my ponytail   *lexical R*
                               *my hair that used to be a ponytail

    f. *my former class*   the class I used to attend/teach/organize *contextual R*
                               *my meeting that used to be a class

→ Confirm's Jensen & Vikner's approach to flexible R—it's introduced at the nP level by coercion of a sortal noun to a relational noun

→ Suggests a syntactic approach to possessive R — actually introduced by a syntactic head.

→ *DP's* adjoined to nP, like *former*, can adjoin first or second for different scope readings
[Larson & Cho]

→ When prenominal *DP's* triggers coercion of nP; no change in structure of nP; *former* must include coerced R in its scope

(→ Coercion account supported by P&B's observation that predicate *DP's* is also always
     possessive:

19. a. That book/mansion/dog/painting is Jane's
     b. *That mother/friend/uncle is Jane's

→ of course can't coerce an nP that isn't there!

→ complicated to sort out for predicative _DP's_ in English because N-ellipsis is also a thing. But
  best P&B can tell, still have to be different:
  *If Kandinsky's portraits had all been Gabrielle Münter's, then I suppose they would all be in
  Munich now.*)

→ Whole thing makes sense in an *i** kind of Wood/Marantz framework
      o *'s* introduces an argument DP in an nP
      o it might be interpretable or uninterpretable
           ▪ if interpretable, introduces possession relation between DP & nP
           ▪ if uninterpretable, Full Interpretation requires relational nP
                • relation provided lexically if nP inherently inalienable/relational *or*
                • relation provided by coercion, then it's 'Free R'

2.3 Summary

→ *'s* encodes either possession (if interpretable) or is semantically vacuous
→ If vacuous, then nP must provide a relation allowing *'s* argument to be interpreted
      (lexically ('inalienable possession') or via coercion+contextual relation 'Free R')
→ postnominal and predicative _DP's_ is interpretable, contributes possession
→ prenominal _DP's_ can be interpretable or uninterpretable

→ Terminology:
      • I will call possessive _DP's_ 'alienable possessors'
      • I will call vacuous _DP's_ 'inalienable possessors'
      • I will call the possession relation 'possession'
      • I will call a relation contributed by nP, either lexically or via coercion,
         'lexical/pragmatic-enrichment R'; referring specifically to coercion,
         'contextual R' or 'coerced R'

3   Return to agentive _DP's_ in denominal verbs

→ Seems obvious that *Jane's destruction of the city* involves the vacuous, uninterpretable
instance of *'s,* with the relational content coming from the noun

→ Can test this: If agentive _DP's_ is some kind of possession reading, should be possible as a
predicate and take scope under *former*; if agency interpretation is derived from
lexical/pragmatic-enrichment R, then it can't

20. a. *The destruction of the city is the barbarians'.
     b. The barbarians' former destruction of the city
             The destruction of the city by the barbarians that occurred in the past

<p style="text-align:center">*The destruction of the city that used to be done by barbarians
but now is done by someone else.</p>

→ So agent interp of *DP's* is an instance of lexical/pragmatic-enrichment R—the R is coming from nP, not from any underspecified relation contributed by *'s* itself

→ nP might be lexically relational, including an Agent role (cf. Ausensi, Yu, Smith 2021; Smith, Yu 2022), or, we pragmatically enrich it, coercing an agentive relation between *DP's* and the nP (a version of Marantz's take)

→ A reason to prefer the coercion account: *accumulation, separation, unification*

21. a. The couple separated
    b. Adultery separated the couple.
    c. *Adultery's separation of the couple.
    (d. *The separation of the couple/The couple's separation*)

22. a. The children separated.
    b. The teacher separated the children.
    c. The teacher's separation of the children.
    (d. *The separation of the children/The children's separation*)

23. a. The German principalities unified in the 19th century.
    b. The (events of the) 19th century unified the German principalities.
    c. *The (events of the) 19th century's unification of the German principalities
    (d. *The unification of the German principalities/The principalities' unification*)

24. a. The German principalities unified.
    b. Bismarck unified the German principalities.
    c. Bismarck's unification of the German principalities
    (d. *The unification of the German principalities/The principalities' unification*)

→ Agentive vs causative verbal structures not *lexically* different; we don't want SEPARATE1 and SEPARATE2

→ Just one SEPARATE & one external-argument-less, Voice-less deverbal nominalization structure
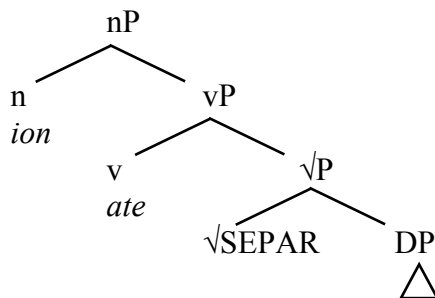
the couple

→ When a <u>*DP's*</u> is added, pragmatic coercion supplies an Agent relation

→ If Agency R can be coerced with *separation, destruction*, etc:
  Why can't we pragmatically coerce a causation relation between <u>*DP's*</u> and a √*GROW*-class nominalization?

→ Consider the transitive possessive forms again. Why do we get the readings that we get?

25.	a.	Jane's growth of tomatoes	ok as possessed result nominal * as causative event nominal * as an agentive event nominal
	b.	*Jane's rise of the glass	*no result nominal possible* *as a causative event nominal *as an agentive event nominal
	c.	DP's separation of the couple	*no result nominal possible*
	d.	DP's unification of the German principalities	
			no result nominal possible *as a causative event nominal ok as an agentive event nominal
	e.	DP's accumulation of dust	ok as a possessed result nominal *as a causative event nominal odd scenario but ok as agentive event nominal

Animacy and (in)alienable possession:

26.	a.	That oak tree has a long branch.	
	b.	#That oak tree has a bird's nest	
	c.	Jane has a long neck.	
	d.	Jane has a bird's nest/book/red car…	Belvin 1993, Harley 1998

27.	a.	The tree's branch
	b.	#The tree's nest
	c.	Jane's neck
	d.	Jane's book

→ inanimate DPs ok as inalienable possessors, saturating a lexically-supplied merelogical part-of relation provided by nP (?what about pragmatic-enrichment R?)
→ inanimate DPs not ok as arguments of possessive *'s*
→ animate DPs ok as arguments of possessive *'s*, as inalienable possessors, and as arguments of pragmatic-enrichment R

→ Let's look at each case in turn. First: Cases with both event and result nominal interpretations, and an intentional subject or <u>*DP's*</u>

28. Jane accumulated dust
    Jane's accumulation of dust
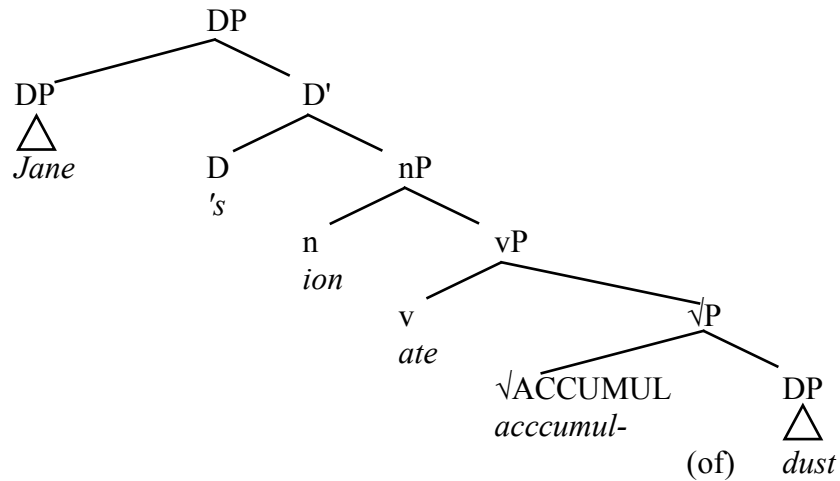
```
                        DP
              ┌─────────┴─────────┐
            DP                    D'
            △           ┌─────────┴─────────┐
          Jane          D                   nP
                       's          ┌────────┴────────┐
                                   n                vP
                                  ion      ┌─────────┴─────────┐
                                           v                  √P
                                          ate         ┌────────┴────────┐
                                                   √ACCUMUL            DP
                                                   acccumul-           △
                                                              (of)    dust
```
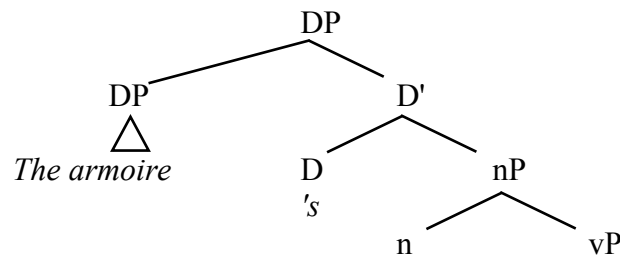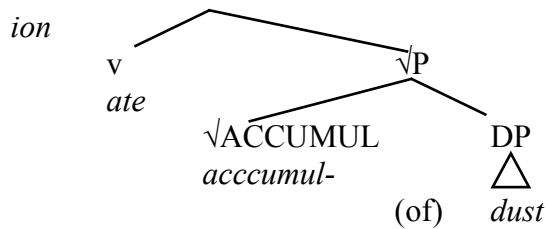
→ Readings for *'s*: possession relation, or vacuous with coerced R
→ Readings for *nP*: event of accccumulation of dust
                      result of the event of accumulation of dust (regular sortal nP)

	possessive 's	*vacuous 's — coerced R*
event reading	*	The event of dust-accumulation agentively accomplished by Jane—she actively went out and ccolleccted dust
result reading	the physical accumulation of dust that Jane owns	The physical accumulation of dust associated with Jane …probably locative, but could be other contextually determined associations

→ Next: Cases which only allow a result nominal reading, with inanimate, non-intentional
   subject or *DP's*

29. The armoire accumulated dust
    The armoire's accumulation of dust

```
                        DP
              ┌─────────┴─────────┐
            DP                    D'
            △           ┌─────────┴─────────┐
       The armoire      D                   nP
                       's            ┌───────┴───────┐
                                     n             vP
```

```
                              ion
                            v        √P
                            ate
                                √ACCUMUL      DP
                                acccumul-      △
                                          (of)  dust
```

→ Readings for *'s*:   possession relation, or vacuous with coerced R
→ Readings for *nP*:   event of accumulation of dust
                    result of the event of accumulation of dust

	possessive 's	*vacuous 's — coerced R*
event reading	*	*
result reading	* because armoires aren't animate, can't possess things	The physical accumulation of dust associated with the armoire …probably locative, but maybe could be other contextually determined associations

→ Next: Cases without a result nominal, variable intentionality *DP's*

30.   a.   The teacher/Adultery separated those guys
        b.   The teacher's/*Adultery's separation of those guys   *no result nominal possible[1]*
        c.   Bismarck/The 19th century unified the German principalities
        d.   Bismarck's/*The 19th century's unification of the German principalities
                                     no result nominal possible

→ Readings for *'s*   vacuous with coerced R   (can't possess an event)
→ Readings for nP   event

	possessive 's	*vacuous 's — coerced R*
event reading	*	* for inanimate/nonintentional *DP's* Agent for animate/intentional *DP's*
result reading	*	*

→ Got to coerce a relationship between *DP's* and the event; best way is for *DP's* to be an event participant. Agency is a good way to be an event participant, coercible. Inanimate/non-intentional DPs can't participate agentively, so they can't be *DP's*

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[1] Ok maybe there is a result nominal available for *separation* naming the physical space between two objects created by the event of separating them; needs objects to be introduced with *between* not *of* imho (*The separation between A and B measured 5 cm*)

→ Next: Cases without a result nominal, only causative external arguments possible, impossible to participate in the event as an Agent

→ Readings for *'s* vacuous
→ Readings for nP event

31. a. *Jane raised her glass*
   b. **Jane's raise/rise of her glass*

	possessive 's	*vacuous 's — coerced R*
event reading	*	* Just can't relate a DP to the event nohow
result reading	*	*

→ Next: Cases with a result nominal, event such that only causative external arguments are possible, impossible to participate in the event as an Agent

→ Readings for *'s* possessive, vacuous
→ Readings for nP event, result

32. a. *Jane grew tomatoes*
   b. *Jane's growth of tomatoes*

	possessive 's	*vacuous 's — coerced R*
event reading	*	* Just can't relate a DP to the event reading nohow
result reading	The growth of tomatoes owned by Jane	The growth of tomatoes associated with Jane, probably locative or mereological but other relations could be possible

4 Conclusions

→ When *'s* is vacuous, and <u>*DP's*</u> needs to be related to an event-denoting nominal via coercion, the way we do it is by coercing an event participant role for the DP

→ It seems like 'Causer' is not an event participant role
→ Observations about Causes and the things they cause

→ Kayne 1975, Folli and Harley 2004: Causes require an $<s,t>$ complement — a Small Clause, a saturated predicate

33. a. *Jane ate the apple*
   b. *Jane ate the apple up*
   c. *#The sea ate the beach*
   d. *The sea ate the beach away.*

→ We proposed another external-argument-introducing 'flavor of v,

Marantz	v1	Folli & Harley v_{DO}, Agent subjects
		Folli & Harley v_{CAUSE}, Cause subjects
Marants	v2	Folli & Harley v_{BECOME}

→ We said *v_{CAUSE}* selects a SC complement

→ Probably not right—no obvious, principled way to allow v_{DO} inside nominalizations but exclude v_{CAUSE}

→ Alternative: only 1 v, introducing event, fine inside deverbal nominalizations like *separation* or *growth*

→ <u>*DP's*</u> inside such nominalizations must get its interpretation via coerced R in the denotation of the event nominal

→ How to relate to an event-denoting nominal? Be an event participant

→ Why 'Cause' not an event participant?

→ Levin & Rappaport Hovav 1999 note that causes can temporally precede their caused events ('ballistic causation'), and can cease their involvement in the event after initiation but prior to its culmination.

→ Agents' involvement in events continues throughout ('entrained causation')

34.   a.   The Vietnam War gave Norman Mailer a book.
        b.   The news upset Jane.
        c.   Jane sang *La Bamba*.

→ This also seems to be what is required to be understood an event participant via a coerced R relation—you have to be an event participant *throughout*, you can't just cause the event and bow out.

→ Related to the observation from Vikner & Jensen, building on Pustejovsky 1998's Qualia structures, that 'CONTROL' is relevant to the contextual R relation supplied in vacuous possession.

(What is CONTROL? I dunno. But Causes don't have it).

→ That's why in *Jane's growth of tomatoes* it sounds like she has tomatoes growing out of her head or body.

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