Changes in little v and Voice

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Outline

- Argument Structure, the Faculty of Language, and functional structure.

- Changes in v/voice: the loss of *–i-* causative

- Typology and Diachrony: from semantic to syntactic voice

- Voice **vs** v or voice **and** v: they are like C and T in that they combine or that one inherits

www.public.asu.edu/~gelderen/Voice2021.pptx

(Programmatic) insights: theory <--> data

- Explanation of the connection between semantic and syntactic voice: unaccusative *wearðan* `happen' = ambiguous V and voice.

- Historical linguistics gives insight in what synchronic analysis makes sense.

- Theoretical considerations make us look for data, e.g. `by' as Voice head because of adjunct to argument.

- Conflation of phase head and inheritor: C/T and Voice/v.

Three basic lexical aspects

a.   unaccusative, causative:
     telic/Theme (Causer), e.g. *drop, break*

b.   unergative, transitive:
     durative/Agent (Theme), e.g. *dance*

c.   copula, experiencer subjects:
     stative/Theme (Experiencer), e.g. *feel*

Acquisition

Bloom et al (1980) show that children are conscious of aspectual verb classes very early on. Thus, *–ed* morphemes go with non-durative events, *-ing* with durative non-completive activities, and infinitives with stative verbs. Various researchers agree on this, e.g. Broman Olsen & Weinberg (1999) likewise show that a telic verb correlates with the presence of *–ed* and that *–ing* is frequent with dynamic and durative verbs.

Current philosophy about Argument Structure, FL, and interfaces

Chomsky 2013, 2015, Chomsky, Gallego, Ott 2017: "MERGE and the inventory of lexical atoms … must be part of UG" (p. 19).

Argument Structure is up to the C-I system which "imposes a general requirement of *Full Interpretation*" (16-7).

So, AS predates FLN.

Argument structure as pre-linguistic

Argument structure and lexical aspect are at the basis of our propositions and, without it, there is no meaning. It is likely that AS is part of our larger cognitive system and **not restricted to the language faculty**.

Bickerton (1990: 185) suggests that the "universality of thematic structure suggests a deep-rooted ancestry, perhaps one lying outside language altogether."

Relationship to syntax

Lexicalist approach to AS; conceptual structure is handed over to the syntax, as in e.g.

vP　　start

v'

v　　　ASPP　　process

ASP'

ASP　　VP　　result

V'

V　　…
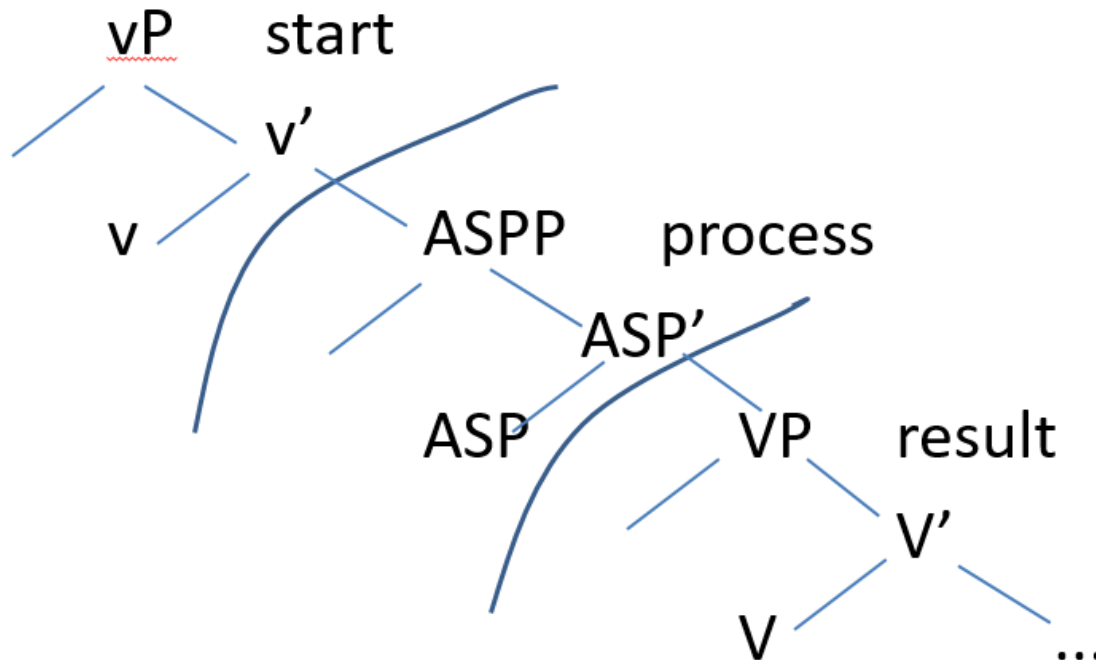
Kratzer (1994) and Jelinek (1998)

Later, I'll mention more recent work on voice splitting/bundling

For now: Voice = Active/Passive

v/Tr = causer/transitivizer

Argument Structure and change

Since argument structure is often seen as the least variable part of language, it makes sense to ask what we can learn from change: how systematic is it?

The language learner has an active role in language change. If a verb becomes ambiguous, as happens with morphological erosion or aspectual coercion, the learner may analyze it in a different way from the speakers s/he is listening to, and this bias is interesting. See e.g. Grestenberger (2020).

(Re)sources

York-Helsinki Parsed Corpus of OE Poetry and Prose
COCA, COHA, …
Visser's *An Historical Syntax of the English Language,* Jespersen's *A Modern English Grammar*, Poutsma's *A Grammar of Late Modern English.* I
Dictionary of Old English (DOE),
Middle English Dictionary (MED),
Corpus of Contemporary American English (COCA),
Corpus of Historical American English (COHA),
Historical Thesaurus of English,
Oxford English Dictionary (OED)
Bosworth & Toller's *Anglo-Saxon Dictionary*
Heine & Kuteva 2002 > Kuteva et al. 2019

The loss of a morphological v in English

Based on van Gelderen (2011; 2014; 2018).

From Old to Modern English, 81 intransitives change to:

Obsolete	39	earlier:
Unchanged	14	
Light v	9	unaccusative
Particle	6	
Labile	8	unaccusative
Transitive	5	unergative
Total	81	

81 intransitives from Visser

*a*berstan `burst out, escape'	Th		particle verb
*a*blican `shine'	Th		obsolete
*a*blinan `cease, desist'	Th		obsolete
æfnian `become evening'	0		light v
æmtian/emtian `become empty'	Th		light v (and labile)
ærnan `run'	A		labile (caus, unerg, unacc)
*æt*fellan `fall away'	Th		particle verb
*æt*glidan `disappear, glide away'	Th		particle verb
*æt*slidan `slip, slide'	Th		labile
*æt*springan `rush forth'	Th		obsolete
*a*ferscan `become fresh',	Th		light v
*a*fulian `become fowl, rot'	Th		light v
*a*latian `to grow sluggish'	Th		obsolete
*a*leoran `to depart/flee'	Th		obsolete
*a*scortian `become short/pass away'		Th	light v
*a*slapan `slumber, fall asleep'		Th	obsolete

berstan `burst'	Th	*burst* labile (causative rare)
bifian `tremble/shake'	A	obsolete
blinnan `cease'	Th	obsolete
brogdian, brogdettan `tremble'	A	obsolete
bugan `bow down/bend'	Th	obsolete
cidan `quarrel, complain'	A	transitive
cirman `cry (out)'	A	obsolete
climban (upp) `climb'	A	(same and) transitive
cloccian `cluck, make noise'	A	transitive (archaic)
clum(m)ian `mumble, mutter'	A	obsolete
clymmian `climb'	A	(particle verb and) transitive
cneatian `argue'	A	obsolete
cneowian `kneel down'	A	obsolete
cnitian `dispute'	A	obsolete
creopan `crawl'	A	same: *creep*
cuman `come, approach, arrive'	Th	same: *come (to)*

Filling up the v-area

The verbs that are replaced by light verbs are deadjectival and denominal verbs, namely *æfnian, æmtian, aferscan, afulian, ascortian, dimmian, fordragan,* etc: all unaccusative verbs in Old English but the new light verb determines whether it is unaccusative or causative.

The change to labile verb affects *ærnan, ætslidan, berstan, droppian, droppetan,* and *growan.* Apart from *ærnan,* these are all unaccusative and end up with an optional causative. The case of *ærnan* is complex; it is an unergative in Old English but acquires causative and unaccusative meanings.

The new particles replace a prefix, as in *aberstan, ætfellan, ætglidan, forscrincan, forþgangangan,* and *forþræsan.* Like the prefixes, the new particles indicate a path or result and `help' original lexical aspect.
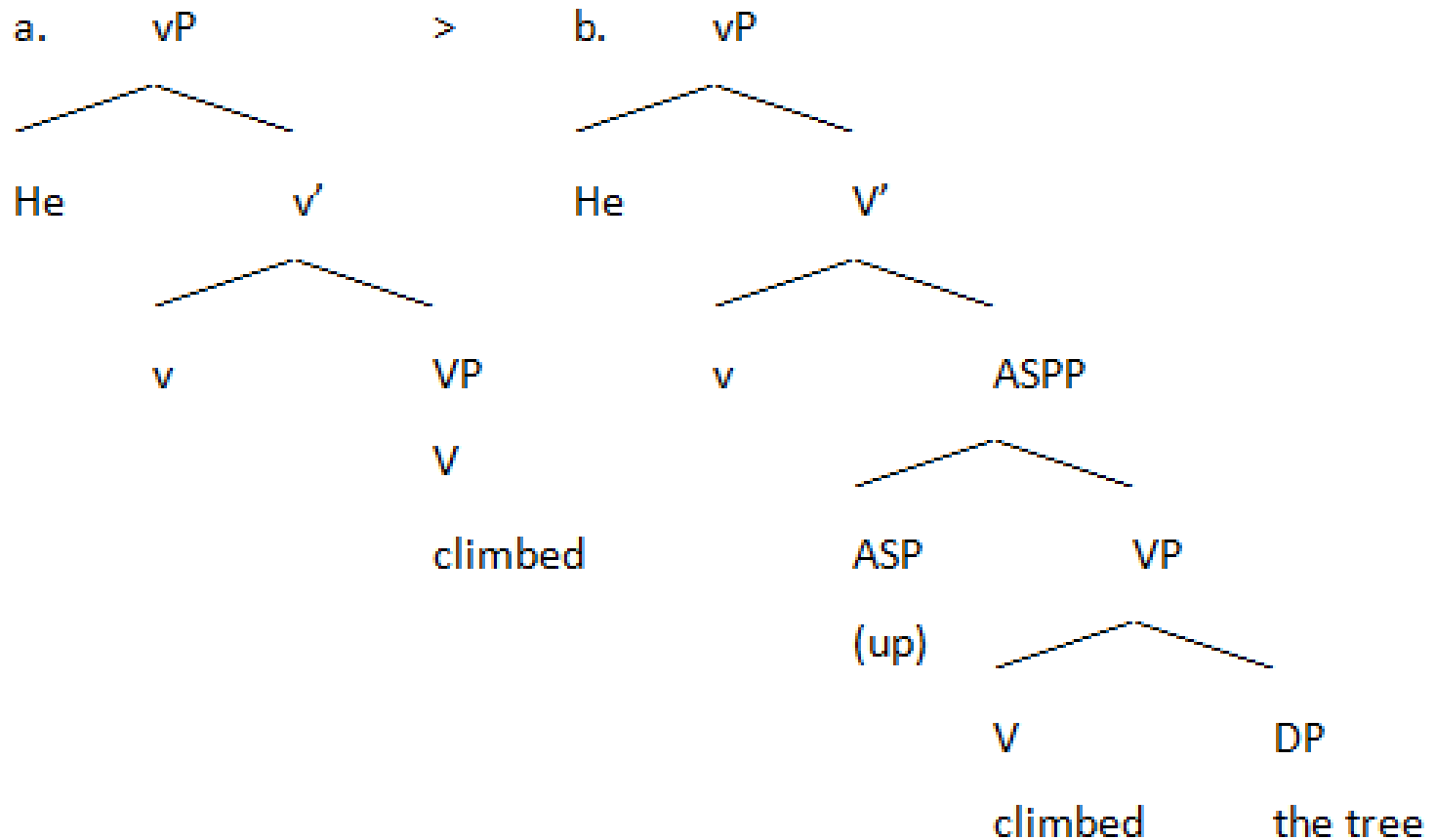
The five unergative verbs that become transitive are *cidan, climban, cloccian, clymmian,* and *felan*. *Cloccian* is archaic but the others acquire a regular Theme. Again: filling up the tree.

From OE>ME: Loss of Intransitives

a) a complete loss of the verb, e.g. *bifian* `to shake',

b) the loss of prefixes and addition of resultative particles, e.g. *aberstan* `burst out, escape',

c) the replacement by light verbs and adjective or noun, e.g. *emtian* `become empty',

d) a change to labile verbs, e.g. *dropian* `drop', *æmtian* `empty', i.e. alternating between causative and unaccusative, and

e) a change to transitive verbs by unergatives, e.g. *climb* and *chide*.

Tree "gets more filled up": unergative > transitive

a.　　 vP 　　　 > 　 b.　 vP

He 　　　　 V′ 　　　　　 He 　　　　 V′

　 v 　　　 VP 　　　 v 　　　　　 ASPP

　　　　 V

　　　 climbed 　　　 ASP 　　　 VP

　　　　　　　　 (up) 　　 V 　　　 DP

　　　　　　　　　　 climbed 　 the tree

And unaccusatives > light v and labile

a. VP > b. VP or c. vP

a.
- VP
  - DP — *He*
  - V'
    - V — *empty*
    - AP

b.
- VP
  - DP
  - V'
    - V — *(become)*
    - AP — *empty*

c.
- vP
  - DP
  - v'
    - v — *(make)*
    - VP
      - V
      - AP — *empty*
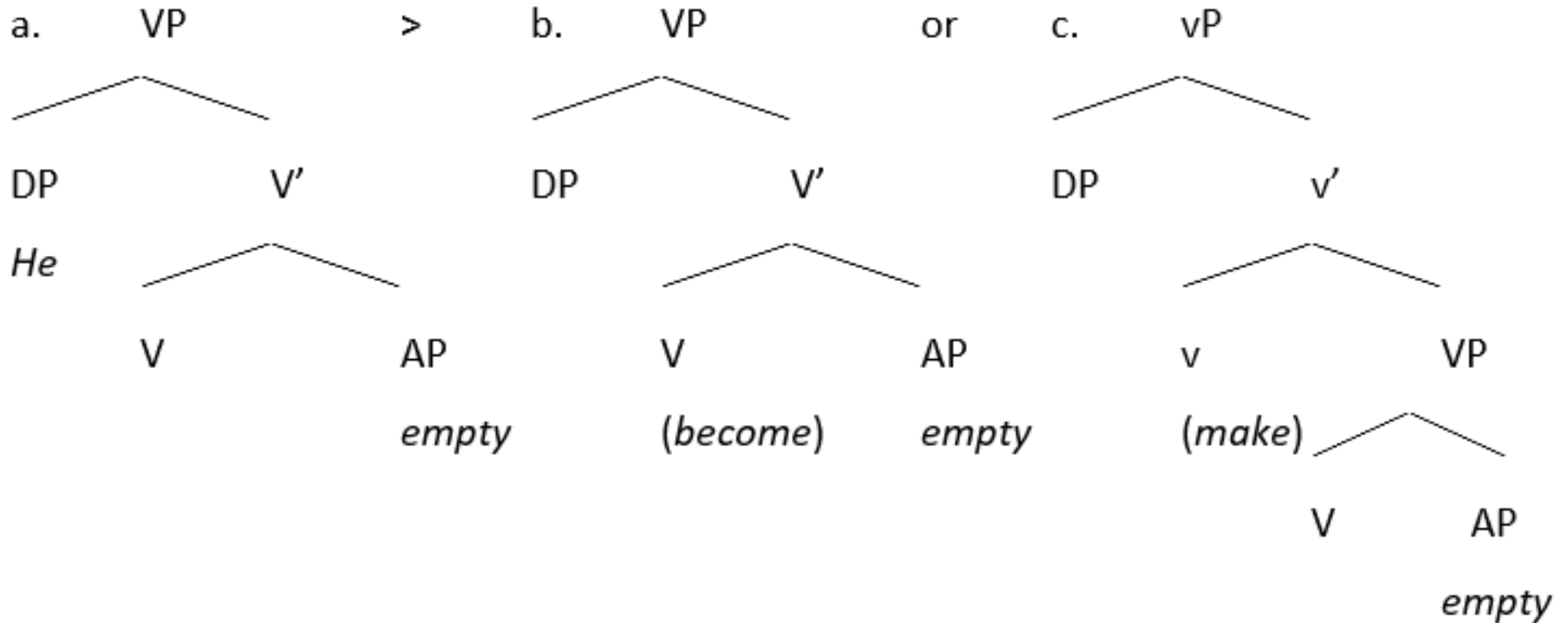
As causative *–i-* becomes opaque, more lability between causative/unaccusative

And this triggers a full vP shell:
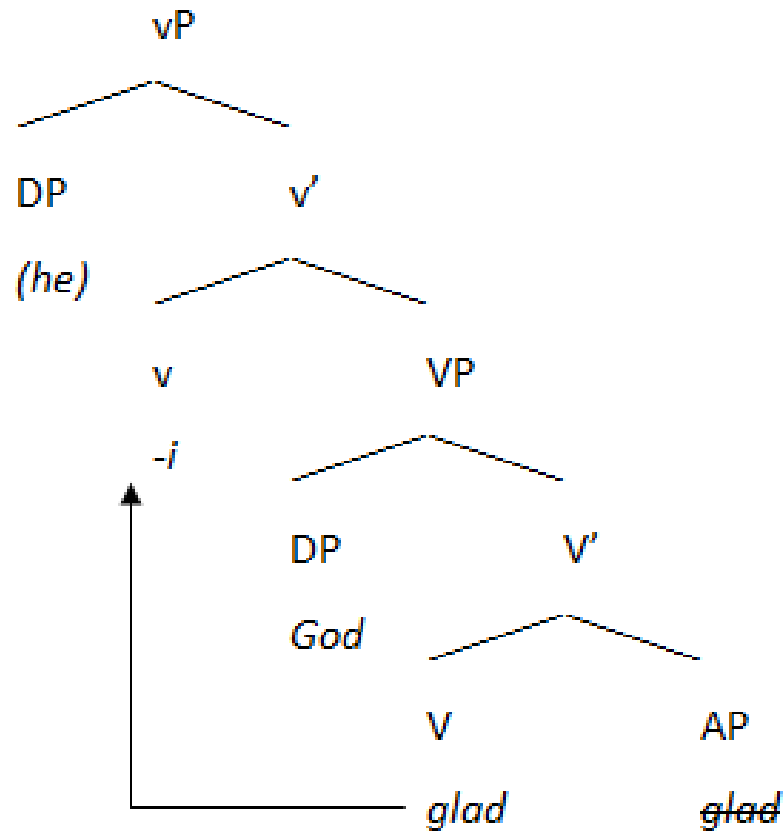
Derived causatives (Bosworth & Toller and Ottosson 2013: 373)

belgan 'be/become angry'	>	*abielgan* 'irritate'
bugan `bend'	>	*bigan* `bend'
dreopan 'drop'	>	*drīepan* 'moisten'
feallan 'fall/flow/die'	>	*fiellan* 'fell/defeat/destroy'
hweorfan 'turn/go/die'	>	*hwierfan* 'turn/destroy'
meltan 'melt, burn up, be digested'	>	*mieltan* 'melt/purge'
nesan 'escape from/be saved'	>	*nerian* 'save/protect'
scrincan 'shrink/wither'	>	*screncan* 'cause to shrink'
sigan 'sink/fall/move'	>	*sægan* 'cause to sink/fell/destroy'
sincan 'sink'	>	*sencan* 'sink, submerge/drown'
springan 'jump/burst forth/spread'	>	*sprengan* 'scatter/burst'

Derived causatives in Old English

This is controversial, however

Garcia Garcia (2012; 2020) doubts the transparency of the *–i-*.

Lass (1994: 166): by Old English, the function of *-i* as causativizer is visible only in a small group of verbs, cf. also Visser and Bosworth & Toller.

Ottosson (2013: 374): even though the *j-*causatives were less transparent in Old English, this formation may still have been somewhat productive.

Other effects of *–i-* (overt v) loss

ObjExp to SuExp: loss of telic aspect

fǽran `frighten'	OE-1480	`fear'	1400-now
lician `please'	OE-1800	`like'	1200-now
loathe	OE-1600		1200-now
marvel	1380-1500		1380-now
relish	1567-1794		1580-now

Loss of causative *–i-*

Many object Experiencer verbs are causative:

   *fǽran < *fǽrjan* `frighten'

Other productive causatives are object experiencers (Garcia Garcia 2012):

a-hwænan `vex, afflict', *gremman* `enrage', *a-bylgan* `anger', *swencan* `harrass', *a-þrytan* `weary', *wægan* `vex', and *wyrdan* `annoy'.

So, does the loss of the causative in *ferian* cause reanalysis? Possibly with *ferian* but not with *marvel* and *relish*.

`Last' ObjExp with `fear'

(1) *Þe fend moveþ þes debletis to **fere** Cristene [men] fro treuþe.*

   `The enemy moves these devils to frighten Christian men from the truth.'

   (MED, a1425 Wycl.Serm. Bod 788 2.328)

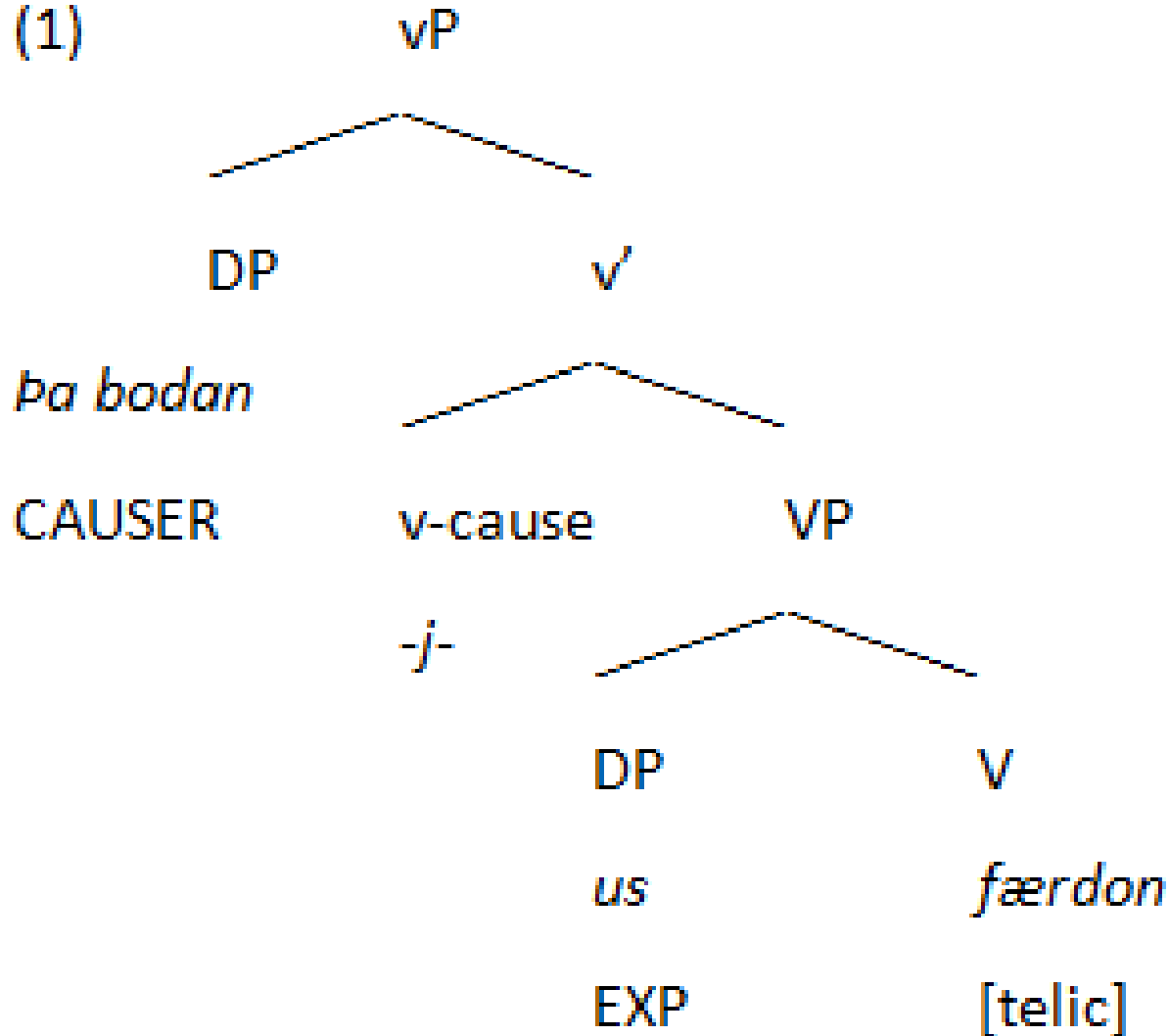(2) *Thus he shal yow with his wordes **fere**.*

   `Thus, he'll frighten you with his words.' (MED, Chaucer TC 4.1483)

The addition of result/instrument in ObjExp emphasizes Change of State in the later stages.

Object Experiencers

(1)

vP

DP v'

þa bodan

CAUSER   v-cause   VP

-j-

DP   V

us   *færdon*

EXP   [telic]

Ambiguity

(1)   *Thou wenyste that the syght of tho honged knyghtes shulde **feare me**?*

`You thought that the sight of those hanged knights should frighten me?'
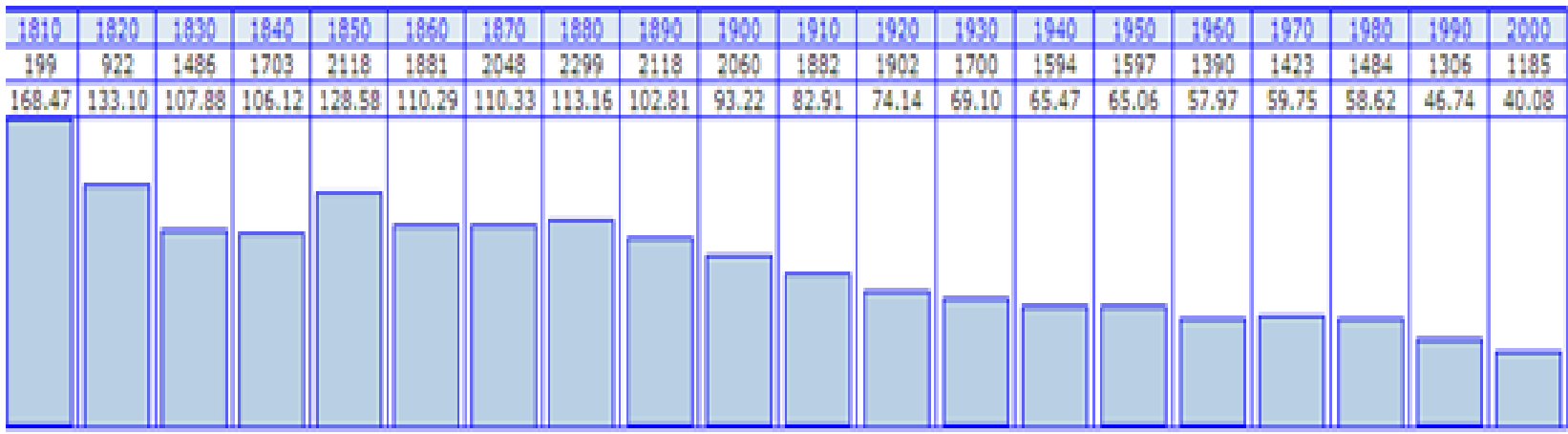
(MED, a1470 Malory Wks.Win-C 322/17)

(2)   *`Sir,' seyd sir Dynadan ... 'I **feare me** that sir Palomydes may nat yett travayle.'*

`Sir, said Sir Dynadan, I fear that Sir Palomydes cannot yet travel.'

(MED, a1470 Malory Wks.Win-C 606/17)

Loss of Obj Exp

-Possibly, the loss of the –*i*- causative

-Causer seems unstable, e.g. *please*

1810	1820	1830	1840	1850	1860	1870	1880	1890	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000
199	922	1486	1703	2118	1881	2048	2299	2118	2060	1882	1902	1700	1594	1597	1390	1423	1484	1306	1185
168.47	133.10	107.88	106.12	128.58	110.29	110.33	113.16	102.81	93.22	82.91	74.14	69.10	65.47	65.06	57.97	59.75	58.62	46.74	40.08

-has particles and light verbs in ME

-learned late

Interim summary: Intransitives and Exp Vs

Very predictable change:

     unaccusative > causative

     unergative > transitive

     Inner aspect (telic and durative) is stable

L1 acquisition: unergative and unaccusative are distinguished early on.

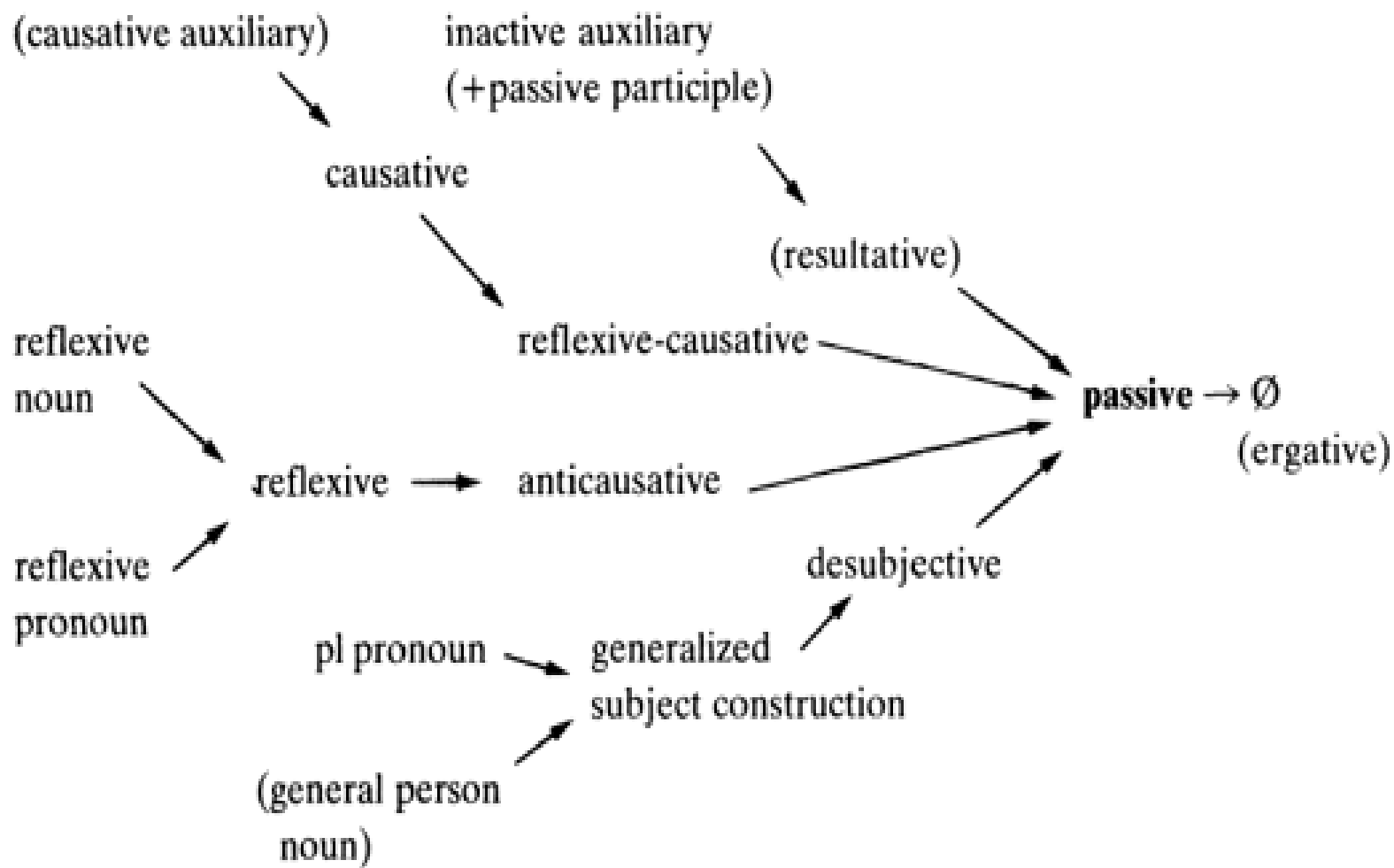Changes involve the `filling up of the vP'.

And a change from Object > Subject Experiencer

Now we turn to the typology of change.

Typology and Diachrony:
from semantic to syntactic voice

Haspelmath (1990): all passives are expressed through morphological means and the source is from somewhere else, e.g. reflexives, reciprocals, intransitive, or transitive verbs.

He provides many examples, e.g. the Korean passive –*ji* originates as the unaccusative *ji* `fall' and, likewise, the Tamil passive –*pat* derives from *paṭu* `fall, happen.' The examples where transitives are the source are `undergo, receive' and the English *get*-passive is an example of this. See also Givón (1979=2018); Zúñiga & Kittilä (2009: 226)

(causative auxiliary)　　　　inactive auxiliary
　　　　　　　　　　　　　　　(+passive participle)

　　　　　　　　　　causative

　　　　　　　　　　　　　　　　　　　　　(resultative)

reflexive
noun　　　　　　　　　　　　reflexive-causative

　　　　reflexive　→　anticausative　　　　　　**passive** → Ø
reflexive　　　　　　　　　　　　　　　　　　　(ergative)
pronoun
　　　　　　　　　　　　　　　　　desubjective

　　　　pl pronoun　→　generalized
　　　　　　　　　　　　subject construction

　　(general person
　　　　noun)

Haspelmath 1990: 54

Theory > data

Insights from the linguistic cycle: phrase > head

head to higher head

Makes sense that unaccusative is `ambiguous' with passive. What is the bridge context?

Never expect an unergative, etc.
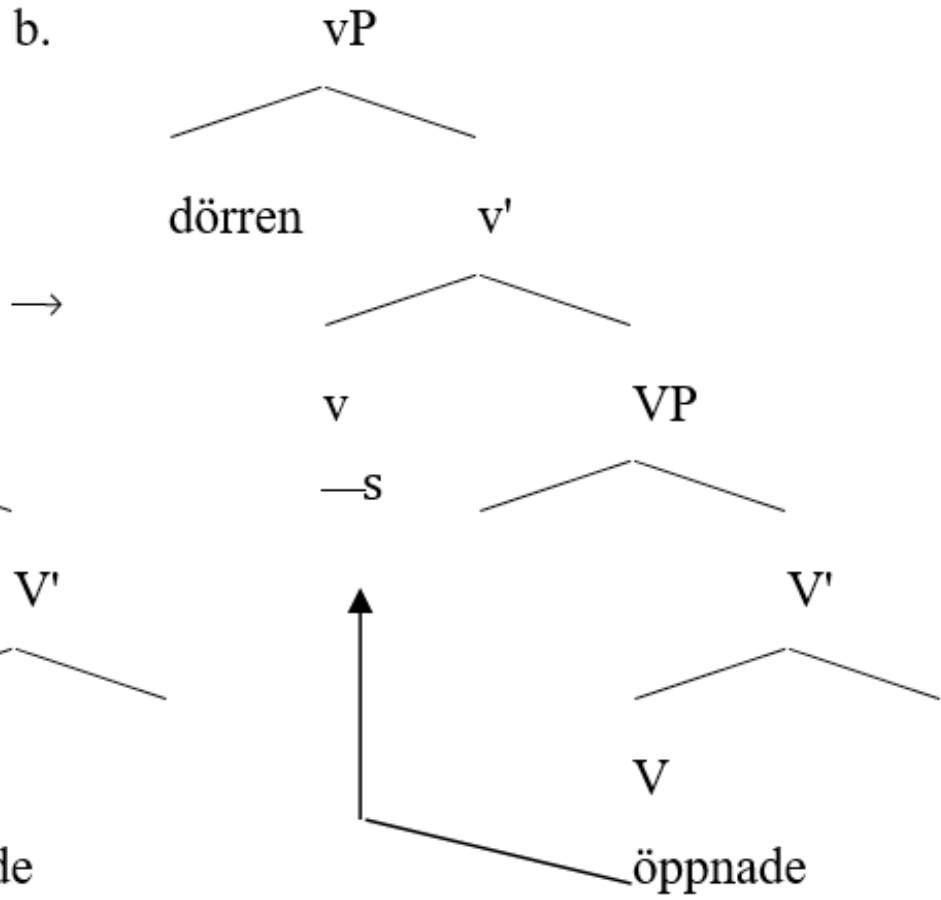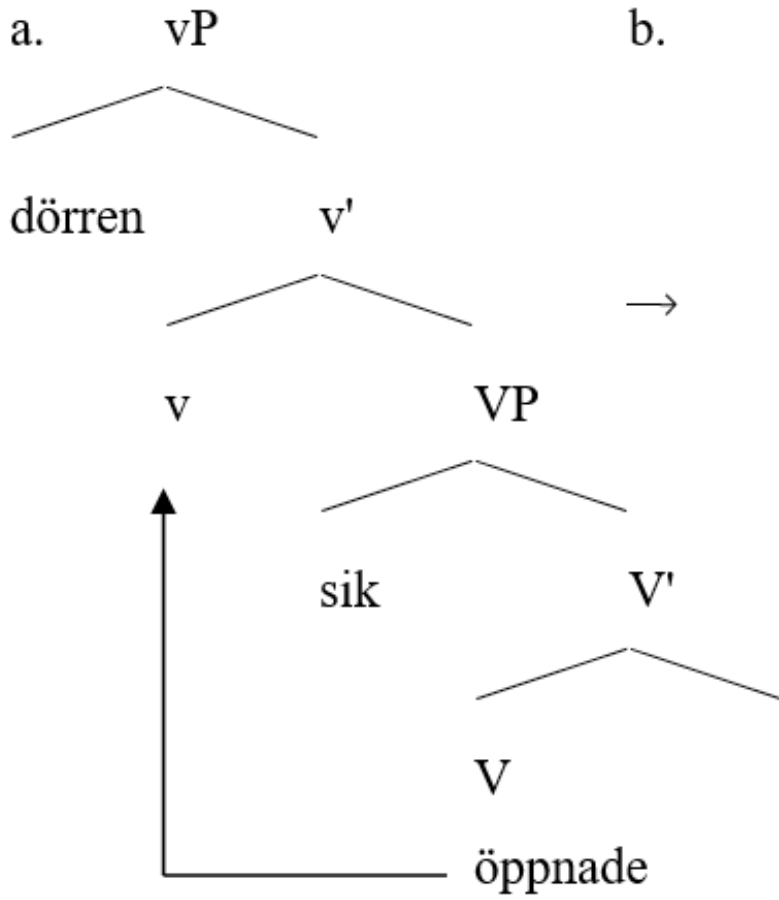
Therefore the following sources:

Sources of Voice (v)

A.   Transitive > passive, via object (reflexive) pronoun to v/Voice

B.   Unaccusative > passive from V > v/Voice

(the passive obtains an implicit Agent, as obvious from use of *deliberately*, the *by*-phrase, and control of PRO).

C.   Copula > passive (not in Kuteva, Heine, et al)

D.   Preposition (loc, instr) > passive (not in K et al)

A. via reflexive

(1)   *hann   nefndi **sik**   Ola*   Old Norse
         he   called self   Oli
         'He called himself Oli.' (Faarlund 2004: 149)
(2)   *sumir   hofðu **sik**   sjalfa   deydda*
         some-NOM   had   REFL   self   killed
         `Some had killed themselves.' (Faarlund 2004: 90)
(3)   a.   *kollu-**mk***
                  call-1S
                  'I call myself; I am called.'
         b.   *kalla-**sk***
                  call-3S
                  'He calls himself; he is called.' (Ottosson 2004)

Refl > v/Voice:
labelling is easier as we'll see

a.   vP
```
            vP
          /    \
      dörren    v'
              /    \
             v      VP
                   /   \
                 sik    V'
                       /  \
                      V
                      öppnade
```

→

b.   vP
```
            vP
          /    \
      dörren    v'
              /    \
     v            VP
    —s           /   \
                      V'
                     /  \
                    V
                    öppnade
```

Motivation: economy

Pronoun	> clitic	> zero
nominal	verbal	
Gothic	Old Norse	English

typical towards another (*help, kill, attack, kiss*)	ambiguous (*see*)	typical towards oneself (*wash, shave, shame, defend*)
MORE marking	⟷	LESS marking
Judas hine **sylfne** *aheng* Judas him-ACC self-ACC hanged 'Judas hanged himself.'		*þæt we* **us** *gehydan mægon* that we us hide may 'that we can hide ourselves.'

Type of Reflexive verb

Other reflexive > voice

(4)   *Ivan   uvidel   **sebja***   Russian

        Ivan   saw   himself

        `Ivan saw himself.'

(5)   *Ivan   moet-**sja***

        Ivan   wash-REFL

        `Ivan washes himself.'

(6)   *saya **di**jemput   oleh   dia*   Indonesian
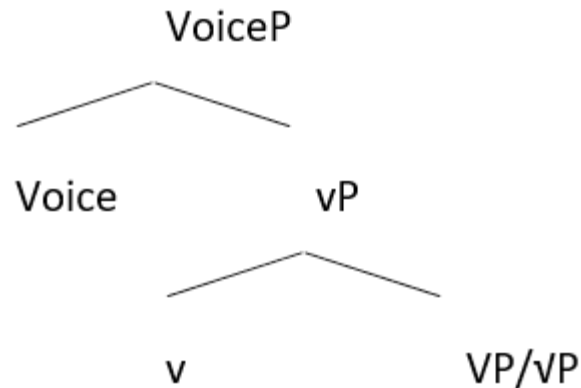
        I   PASS-met   by   3S

        'I was met by him/her.' (Sneddon 1996: 248)

!Xun

Kuteva et al (2019: 61 and 363-5):

reflexive > anti-causative > passive

French/German *se/sich*: refl > unaccusative

VoiceP
├─ Voice
└─ vP
   ├─ v
   └─ VP/√P

In English: gain and loss of reflexive

Mustanoja (1960: 429-430) sees a tendency whereby transitive verbs develop into intransitives and attributes that to "the inherent aversion of English speakers to the reflexive form". Cf. also König & Siemund (2000) and Rohdenburg (2009).

(1)   *þæt*   *we*   ***us***   *gehydan*   *mægon*
         that   we   us   hide   may
         `that we can hide ourselves.' (DOE, Satan 100)

(2)   *Ac ic*   *þa*   *sona eft*   *me*   ***selfum*** *andwyrde*
         But I   then   soon after   me   self answered
         `But I soon thereafter answered myself.'
         (*Pastoral Care*, Cotton, 4.21-2, Sweet)

(3)   It is our custom to **bathe** in the streams near my home very often and **wash** always before eating. (BNC - C85 1859)

From regular object > active v/voice

The object cycle:

a.   I saw yesterday them (and you).

b.   I saw 'm (*them).

c.   I saw'm THEM.

d.   I saw them.

Siewierska (2013): verbal object marking occurs in 57% of the languages surveyed, i.e. stage (b). Many languages show evidence of an object cycle or a partial one, e.g. French, Spanish, Athabaskan, Persian, Arabic, Kosraen, Swahili, and Rwanda.
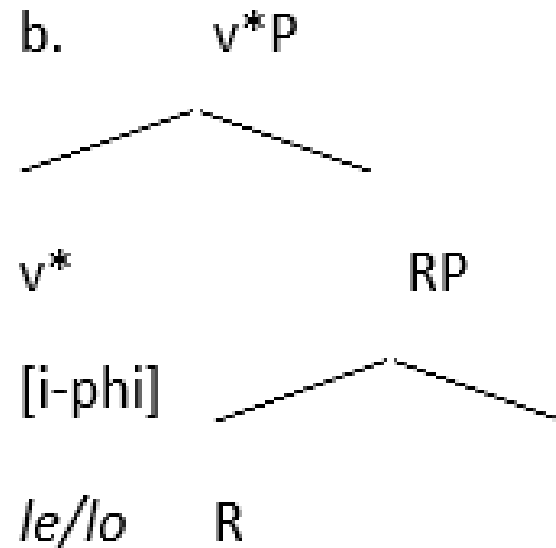
Maddox (2019: 71-2; 83-86) and Fischer et al (2019), each in slightly different ways, have argued for an object cycle in the history of Spanish.

Reanalysis of the object as v* resulting in simpler labeling

a.　　　v*P　　　　　　　　＞　　　　b.　　　v*P

v*　　　　　　　RP/<phi,phi>　　　v*　　　　　　　　RP

[u-phi]　　　　　　　　　　　　　[i-phi]

　　　R　　　　　　　　*lo*　　　　*le/lo*　　R

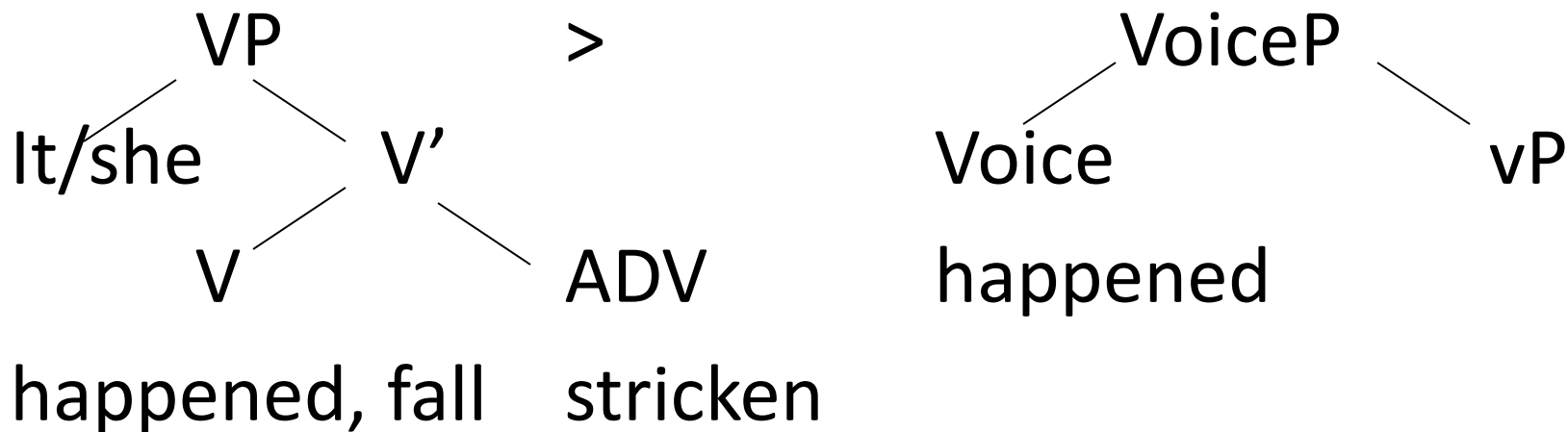　　　　　　　　　[i-phi]
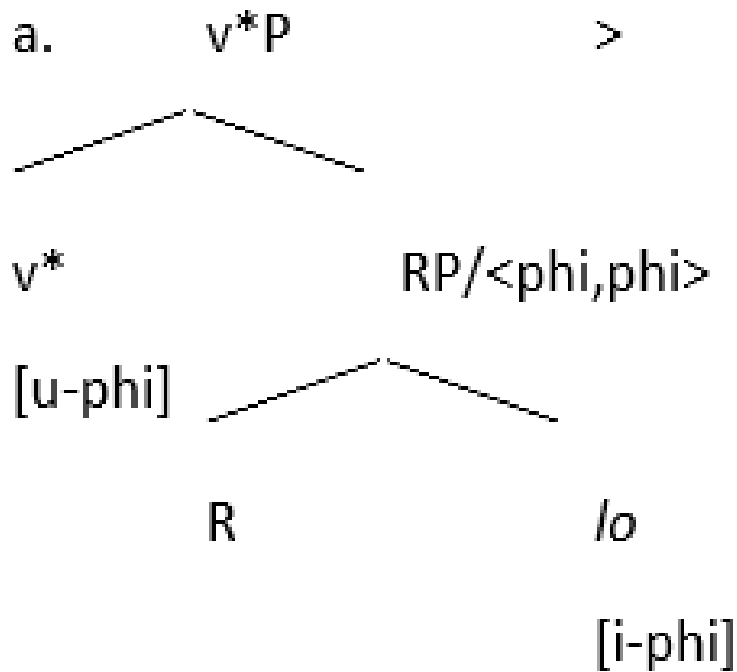
Minimal Search or transfer and sharing　　　　Minimal Search

B: Unaccusative > voice/v

Unaccusative > passive: from V > v/Voice

This is frequent (e.g. Michaelis 1997) but harder to find a `bridge', ambiguous context for!

```
        VP                >                    VoiceP
It/she        V'                     Voice                vP
       V         ADV         happened
happened, fall   stricken
```

(1) *Iþonked*   *wurðe*   *him.*

Thanked   happens   him

`Let us thank him.'

(MED, a1225 MS Lamb. in R. Morris Old Eng. Homilies 1st Ser. p. 153)

Copula first?

(2) *Scyld Scefing ..., syððan ærest **wearð** feasceaft **funden**.*

Sc Sc ... since first became poor found (Beowulf 7)

(3) *Þæt cweartern **wearð afylled** mid fulum adelan,*

That prison became filled with foul filth

(OED, ÆLFRIC *Lives of Saints* (Julius) II. 392)

OED (s.v weorthan)

"It is unclear how far an underlying sense 'to become, to come to be' is reflected in use as auxiliary of the passive in Old English".

C Unacc > copula > passive??

Sources of copulas:

Also unaccusative:	also transitive:	also labile:
appear, remain, stay, drift persevere, persist, go come (expensive), fall (flat) loom, break, befall, seem, stand, lie, blush, rest, become	feel, sound, smell, look, taste hold, keep, wear, get, prove, strike, show, flash, bang (shut)	ring, continue, grow, turn, commence, wax, fly (open), burn blow (open)

Sorace's term	example	copular aspect
Change of Location	come, fall, befall, drift, go	telic
Change of State	break, blush, become, appear	telic
Continuation of a pre-existing state	remain, stay, persist, persevere stand, lie, rest, loom	durative
Existence of State	seem, appear	stative
Uncontrolled process	--	
Controlled process (motional)	--	
Controlled process (non-motional)	--	

Dutch copulas > passive

ANS (1984: 528) and Verhagen (1994: 318): *staan* `stand', *liggen* `lie', *zitten* `sit', and *blijven* `remain':

(1)   Dat **staat** aangekondigd/vermeld.

     `That is/has been announced/mentioned.'

(2)   Dat **ligt** begraven/uitgestald.

     `That lies/has been buried/displayed.'

(3)   Dat **zit** beklemd.

     `That is stuck.'

(4)   De wet **blijft** gehandhaaft.

     `The law remains in force.'

Mechanism of unacc > passive

Unaccusative has Theme as does the copula and the aspect remains stable, telic or stative:

appear, become, fall, go, grow, turn, wane, break, last, remain, rest, stay, continue.
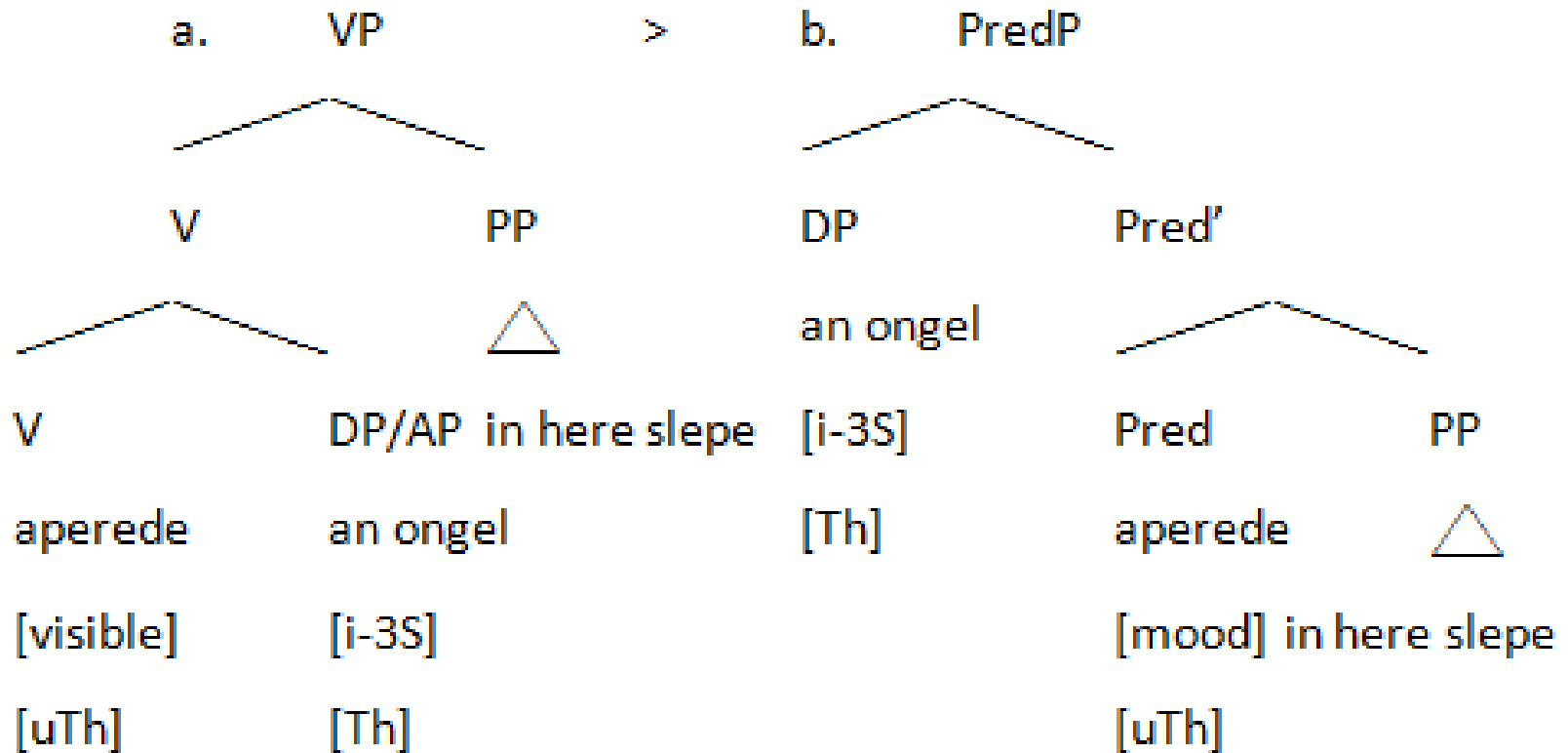
For instance:

(1)   *This Sterre ... that wee clepen the Lode Sterre, ne **apperethe** not to hem*

       `This star, which we call the Lode Star, is not visible to them.' (OED, 1366 Mandeville's Trav. xvii. 180)

(2)   *And the Lord siʒ, and it **apperide** yuel in hise iʒen.*

       'And the Lord saw and it appeared/was evil in his eyes.' (OED, *a*1425 *Wycliffite Bible*)
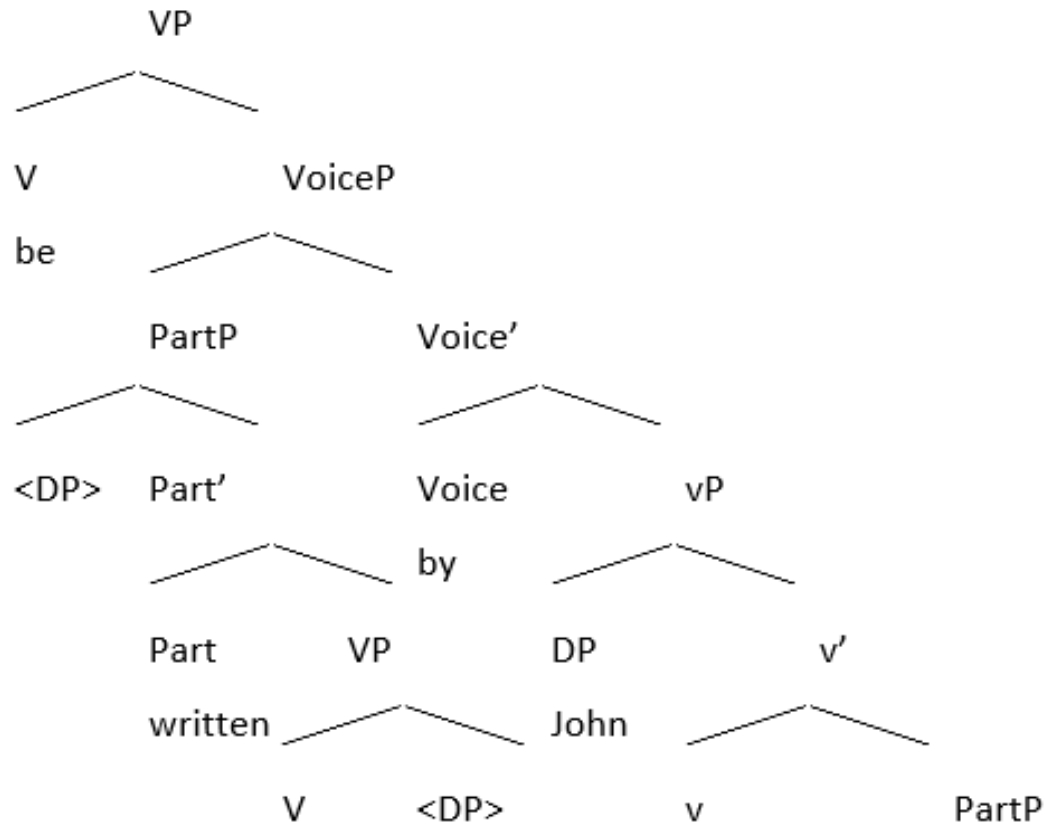
Theme remains stable: adjunct incorporation

a.

```
            VP                  >    b.         PredP
          /    \                              /      \
        V        PP                        DP          Pred'
       / \        △                      an ongel      /    \
      V    DP/AP  in here slepe   [i-3S]              Pred     PP
                                                                △
  aperede  an ongel              [Th]      aperede
                                                     [mood]  in here slepe
  [visible]  [i-3S]                                  [uTh]
  [uTh]     [Th]
```

D Preposition to Voice

Collins (2005): `by' is in Voice because the highest DP keeps the theta-role of the active, not one assigned by `by'.

VP
- V
  - be
- VoiceP
  - PartP
    - <DP>
    - Part'
      - Part
        - written
      - VP
        - V
        - <DP>
  - Voice'
    - Voice
      - by
    - vP
      - DP
        - John
      - v'
        - v
        - PartP

Reanalysis from P > Voice: adjunct incorporation?

This structure is allows for a possible pathway from locative `by' to agentive.

(1)   Abraham ... was leid Sarram bi.

          Abraham   was laid Sarrah by

`Abraham was buried next to Sarah.' (MED, a1325(c1250) Gen.& Ex.(Corp-C 444)1454)

However, the locative is infrequent with passives.

Interim summary

Examination of the loss of a voice/v head and what this tells us about the stability of aspect and the vP shell.

Due to the ambiguity, the shell fills up through light verbs and lability.

Obj > Subject Experiencers

Interlude with the sources.

Now: returning to other consequences of the loss of *–i-*.

Voice **vs** v or voice **and** v: like C and T

Just like the C/T complex is responsible for phi-checking of the subject, the v*/V complex is responsible for checking phi-features on the object. Both C and v* also define phases. However, the v* is involved in the theta-role of the EA and the C is not.

The split v*: e.g. Harley (2007; 2017) uses v for causative and Voice for EA, because e.g. (a) v° is present within nominalizations but the external-argument-introducing head is not and (b) stacking passive morphology on top of causative morphology in Japanese.

Parallel with C/T: bundling

Pylkkänen (2002): bundling of Voice and v.
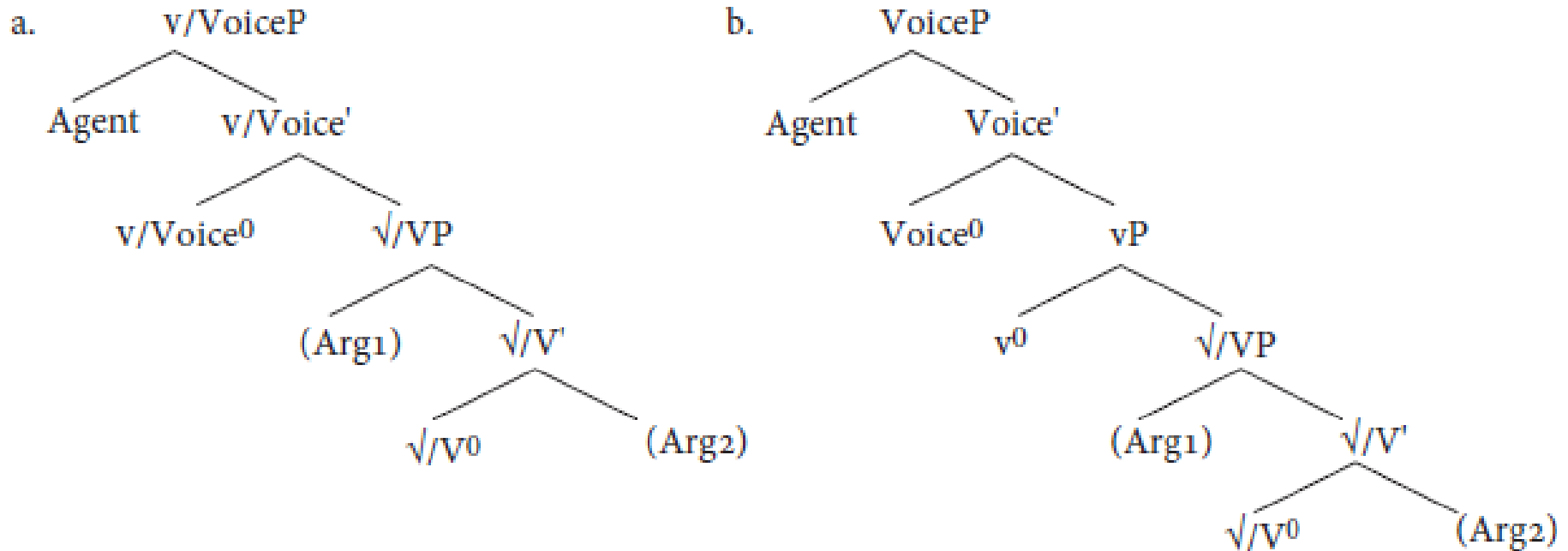
(from Harley 2017)

CP/TP boundary = a problem

Subjacency: either CP or TP

Phasehood: only C is phase head – transfer to T

Feature Inheritance from C to T

Indeterminacy (Chomsky et al 2019) bars v to T to C

Resolution (van Gelderen 2022):

CP and TP, but C(P) deletion: ModE

CP and TP, but skipping T: double modal
                              varieties of English

CP only: OE, Dutch, German (evidence in lack of
                that-trace, C-deletion, and subjectless RCs

TP only: not encountered

Old English: Causative and passive

Harley (2017: 16): a voice-splitting language "can show causative morphology in the absence of a syntactic Causer argument". Japanese has cause without a theta-role.
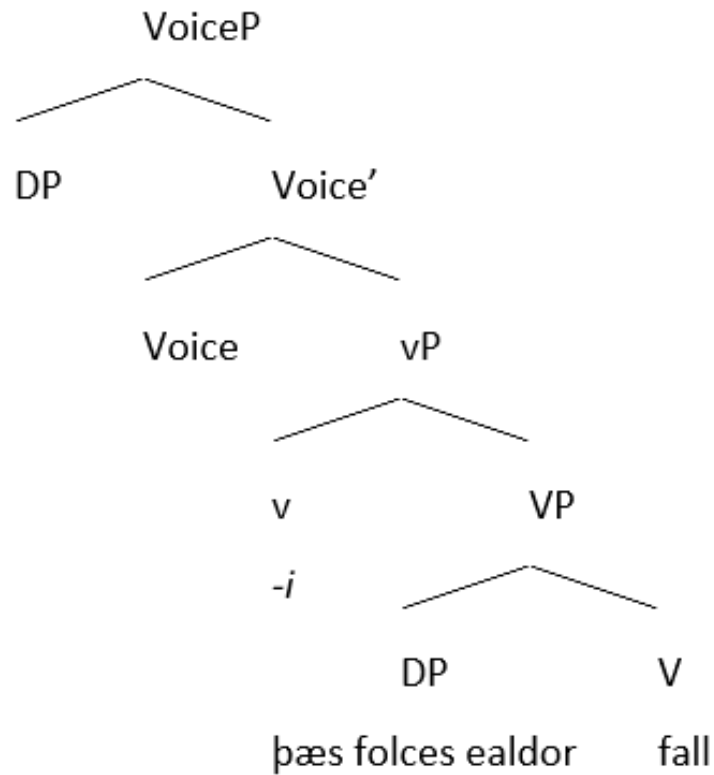
–*i*- causative and passive:

(1) *Þa **wearð afeallen** þæs folces ealdor, Æþelredes eorl*

then PASS felled that people's lord, Aethelred's earl

`Then was killed the people lord, Aethelred's earl.'

(DOE, Maldon, 202, Dobbie edition)

Loss of causative: split to bundling

VoiceP

DP   Voice′

Voice   vP

v   VP

-i

DP   V

þæs folces ealdor   fall

Modern English is bundled

Cause and passive cannot be together:

(1)   She made Elly roll the ball.

(2)   *Elly was made roll the ball.

Conclusions

Data > theory

Ramifications of the loss of the morphological voice head *–i-* :

Ambiguity as to causative or unaccusative resulting in filling up v with light verbs and increase in lability. Inner aspect remains the same and arguments are added in systematic ways.

Loss of *–i-* is also responsible for the change of Object Experiencers to Subject Experiencers.

Theory > data:

Predictions on the (four) sources of v/voice

Phrase to head: easier labelling

Unaccusative to copula: adjunct avoidance

Copula to passive: ??

P to voice; adjunct avoidance

Notes on voice bundling …

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