

Constructions ex nihilo: conversion, backformation, secretion and spandrels

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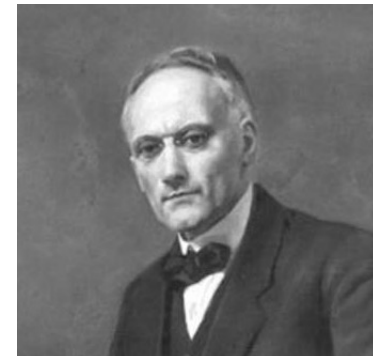
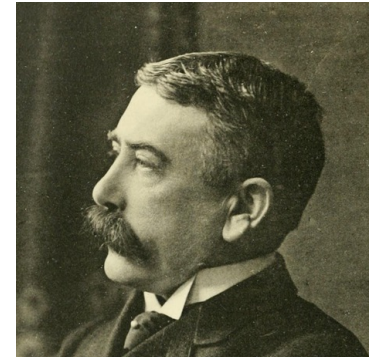
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Introduction: Much Ado About Nothing

- Zero: a pillar of 20th century structuralism
 - "Le signe du génitif pluriel en hongrois a pour exposant zéro. <Pas besoin d'avoir toujours figure acoustique en regard d'une idée. Il suffit d'une opposition et on peut avoir $x / \text{zéro}$.>" (E. Constantin, Saussure's III Course 1993: 113)
 - "Il y a [aucun cas où (*b.*)] <toujours le signe concret à la base même quand> une chose [soit (*b.*)] est exprimée par zéro ... Il reste à épiloguer sur ce mot abstrait." (ibidem: 84)
 - "[Saussure] identifies its 'zero sign' as another type of abstract entity." (Joseph 2012: 583)
 - "Selon la formule fondamentale de F. de Saussure, le langage peut se contenter de l'opposition de quelque chose avec rien, et, justement, ce "rien" opposé à "quelque chose" ou, en d'autres termes, le signe zéro a suggéré des vues personnelles et fécondes à Charles Bally." (Jakobson 1939).



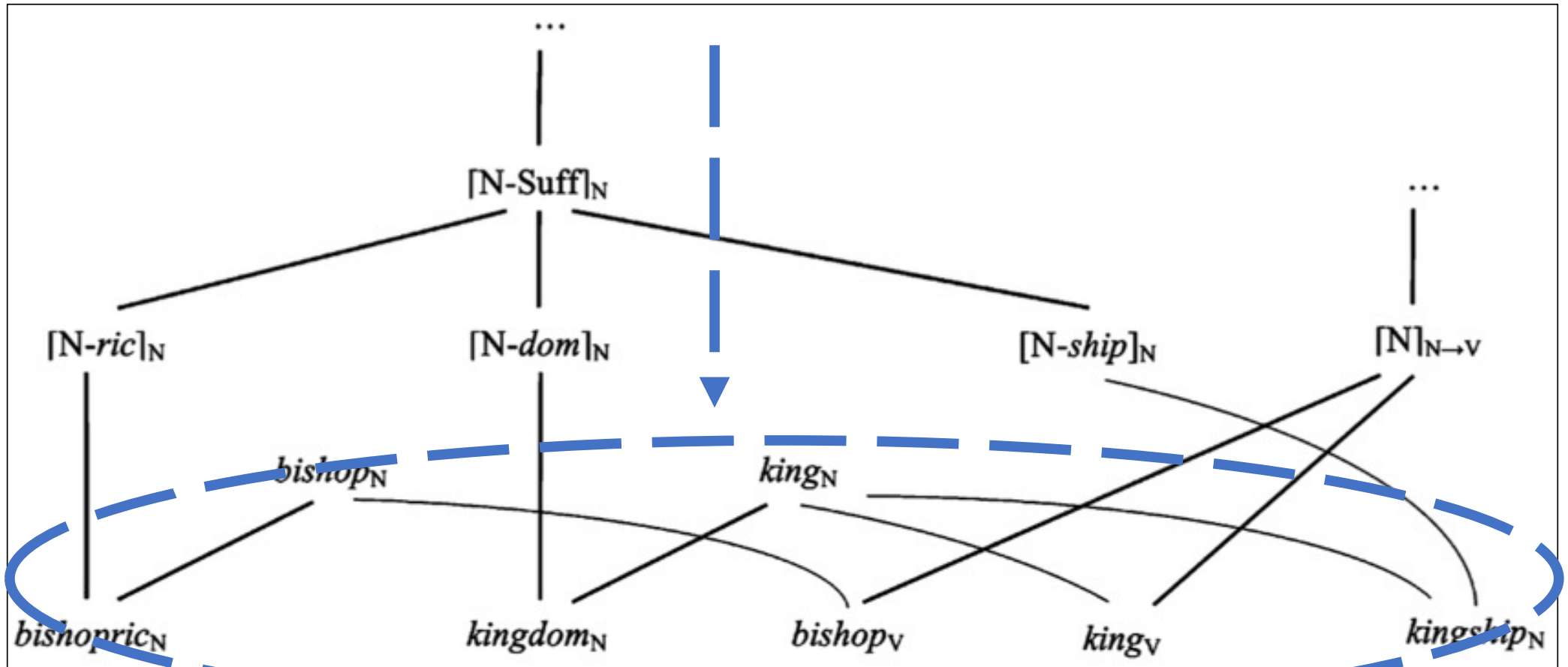
Ex nihilo...

- The essence of zero will probably keep scholars busy for the 21st century.
 - "Making zero morphemes unavailable within a theory is remarkably difficult: if a theory adopts some form of the arbitrariness of the sign, it is conceivable that a morpheme has content but a null phonological representation." (Dahl & Fábregas 2018)
- On the other hand, in this talk I will concentrate on the opposite perspective, namely when new signs arise out of zero, ex nihilo...
- This goal will be pursued by exploiting the conceptual tools made available by Construction Morphology, in which derivational relations are generally represented in hierarchical terms, exploiting the mechanism of Default Inheritance.

Outline of the paper

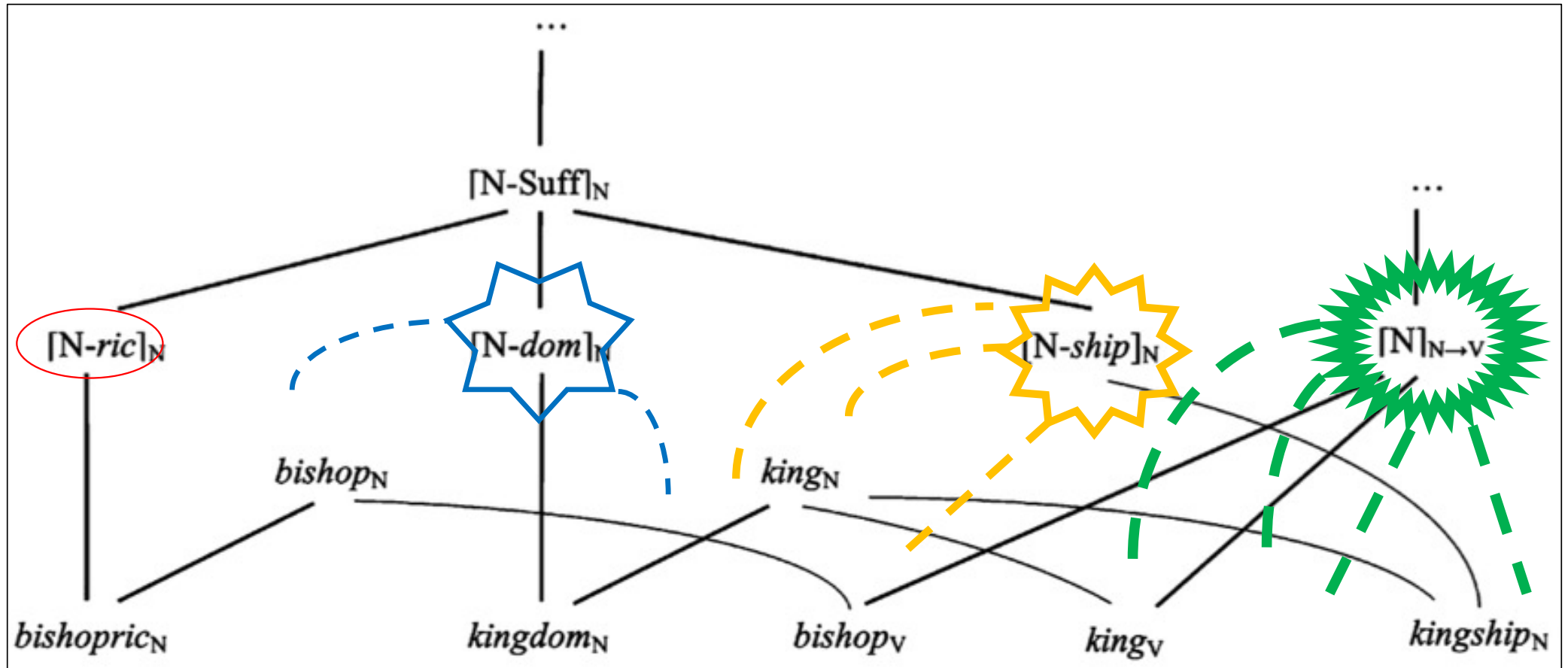
- Brief sketch of the vertical / horizontal relations assumed in Construction Morphology to express derivational relations
- Paradigmatic / Syntagmatic Telescoping
- Telescoping and reanalysis: *E pluribus unum*
- Secretion *ex nihilo*
- *Horror vacui*: backformation and conversion
- Spandrels and exaptation
- Conclusion

- Default Inheritance (Gaeta & Angster 2019)

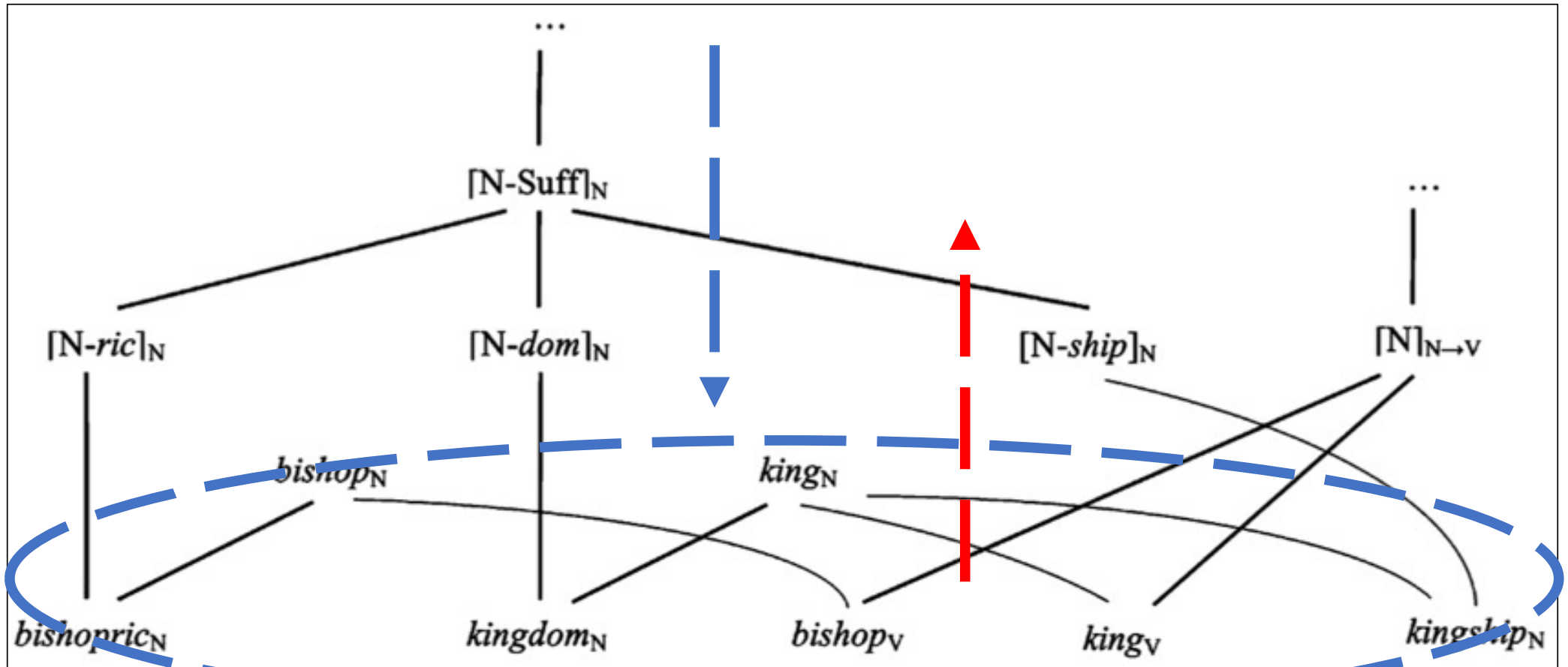


- What is the role of the strength of the connections, namely of productivity in the network?
- How can this be represented / modeled?
 - $P = h / N$ (Baayen 2001, Gaeta & Ricca 2006, 2015)
- Which forces are at play?
 - The role of V?
 - The type of word-formation process wrt its semantics, the lexical classes involved, etc.?
 - *sapiente* 'wise' / *sapienza* 'wisdom' vs. *mini-*, *mega-*, *super-*, etc.
 - The discourse situation, text type/genre?
- Schema-based modeling:
 - "[P]roductivity is marked not on a schema as a whole, but rather on its variables ... In other words, productivity amounts to the openness of the variable, where we take openness to mean the degree to which it accepts new instantiations." (Jackendoff & Audring 2019: 41)
 - "[This] opens up an interesting loophole: a schema might contain one variable that is open and another that is closed." (*ibidem*)

- Productivity: number of connections / size of the network



- Default Inheritance (Gaeta & Angster 2019)



Paradigmatic / Syntagmatic Telescoping

[Gaeta & Angster 2019]

- [Adj N]_N : *Rotwein* 'red wine', *Hochhaus* 'sky-scraper'
- [N-ig]_{Adj} : *lustig* 'pleasant', *riesig* 'huge'

...
 bö-
 edel-
 eng-
 groß-
 gut-
 halb-
 hart-
 ...

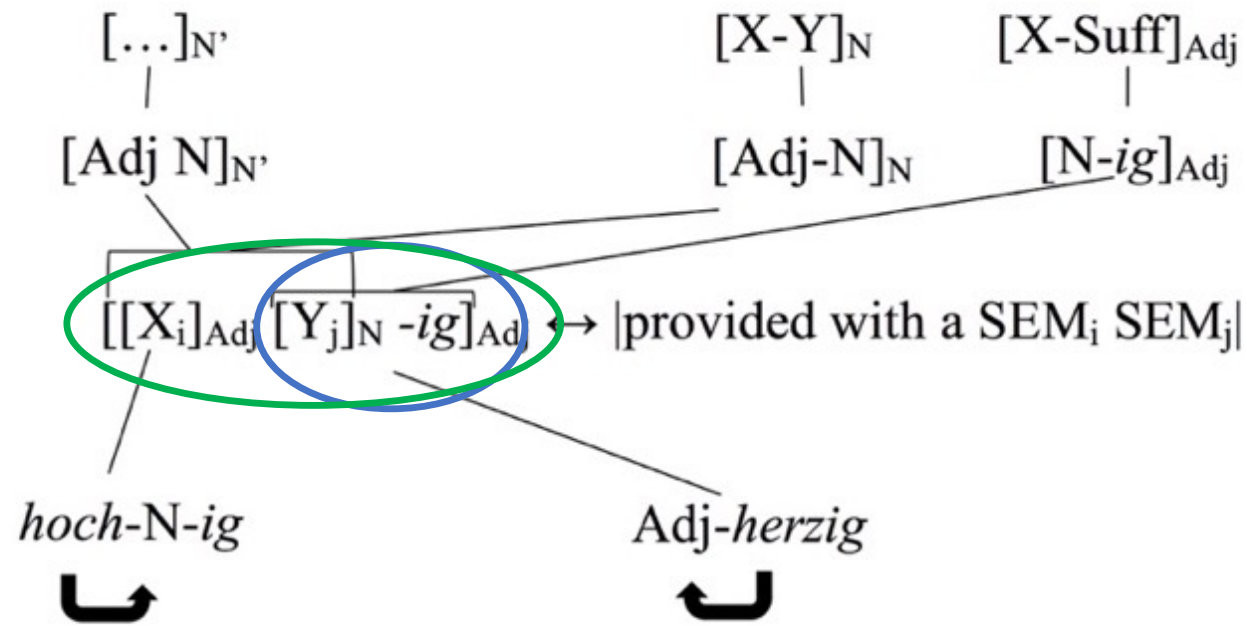
- *hoch-herz-ig* 'generous, lit. high-heart-ed',
- *hochhackig* 'high-heeled'

... -adlig -fiebrig -gradig -hackig **hochherzig** -karätig -klassig -levelig -oktanig ...

kalt-
 klein-
 leicht-
 ...

- **Halbherz*, **Hochhack*
- **herzig*, **hackig*

- Two different sub-schemas arise, depending on the semantic value of the variables N or Adj involved:



Telescoping and reanalysis

- Spanish place nouns (Rainer 1993)

- (1) a. *cerveza* 'beer' → *cervecero* 'brewer' → *cervecería* 'brewery'
cristal 'crystal' → *cristalero* 'glass dealer' → *cristalería* 'glassware shop'
joya 'jewel' → *joyero* 'jeweler' → *joyería* 'jewelry store'
leche 'milk' → *lechero* 'milkman' → *lechería* 'diary'
- b. *acero* 'steel' → *acerería* 'steel mill'
estuco 'plaster' → *estuquería* 'plaster workshop'
juguete 'toy' → *juguetería* 'toy shop'
hamburguesa 'burger' → *hamburguesería* 'burger point'

- E pluribus unum...

$[[...]_{Ni-ero}]_j \leftrightarrow | \text{activity relating to SEM}_i |_j$ $[[...]_{Ni-ía}]_j \leftrightarrow | \text{condition/place of SEM}_i |_j$

$[[[...]_{Ni} -er]_{Nj} -ía]_{Nk} \leftrightarrow | \text{condition/place of SEM}_j |_k$

$[[...]_{Ni-ería}]_j \leftrightarrow | \text{activity/place of SEM}_i |_j$

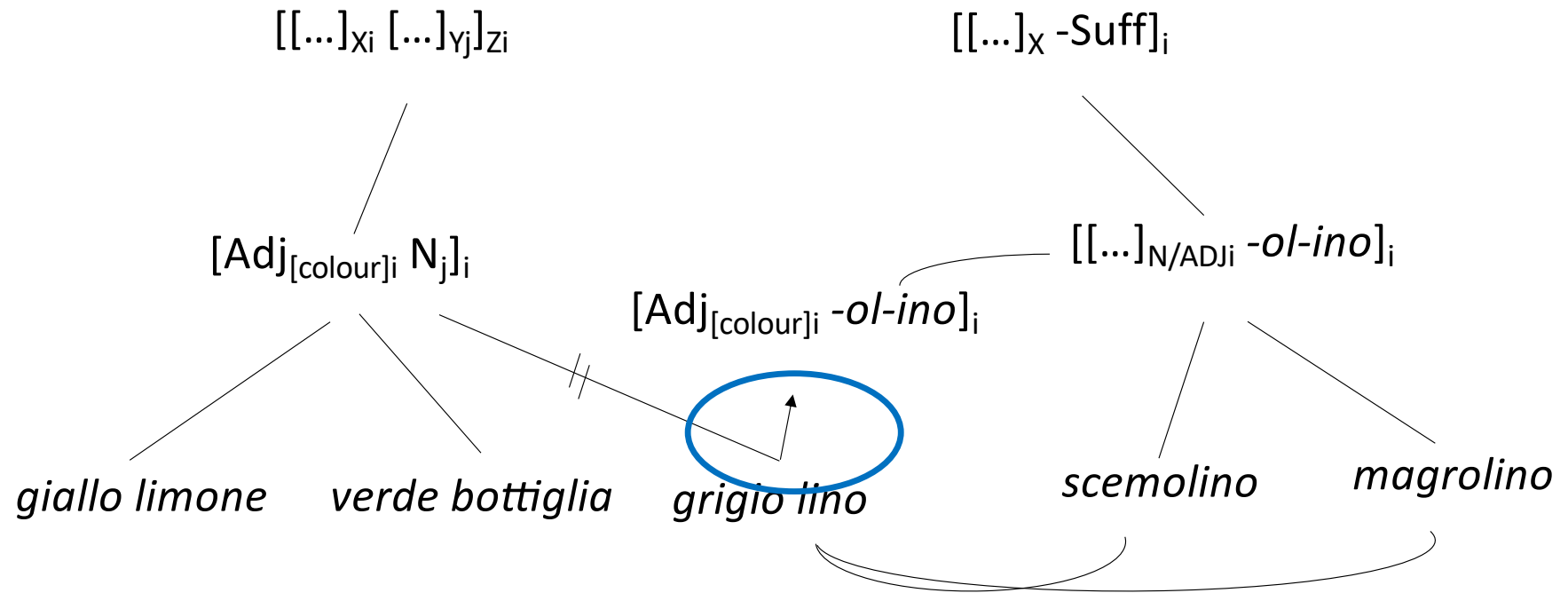
- *abad* ‘abbot’ / *abadía* ‘abbey’, *alcalde* ‘mayor’ / *alcaldía* ‘mayor’s hall / office’, *tirano* ‘tyrant’ / *tiranía* ‘tyranny’

Secretion in Italian color adjectives

[Jespersen 1922, Haspelmath 1995]

- *grigiolino* 'greyish' < *grigio lino* 'linen grey',
 - *giallo limone* 'lemon yellow', *verde bottiglia* 'bottle green', *blu mare* 'sea blue', etc.
- Re-segmentation: *grigi-olino*
 - *magro* 'slim' → *magr-ol-ino* 'slim-ol-DIM', *scemo* 'idiot' → *scem-ol-ino* 'idiot-ol-DIM', *occhio* 'eye' → *occhi-ol-ino* 'eye-ol-DIM', *pesce* 'fish' → *pesci-ol-ino* 'fish-ol-DIM'
- *verde* 'green' → *verd-olino* 'greenish', *beige* 'beige' → *beigi-olino* 'beige-ish', *bianco* 'white' → *biancolino* 'whitish', *giallo* 'yellow' → *giallolino* or *giallorino* 'yellowish'
- *giall-ino*, *grig-ino*, *verd-ino*, *beig-ino*, *bianchino*

Ex nihilo unum...



Productive secretion in German

[Eisenberg 2020: 440]

- The German suffix *-ler* is extremely productive with nominal bases for denoting agents, professions, etc.:
 - *Kunst* ‘art’ → *Künstler* ‘artist’
 - *Sport* ‘sport’ → *Sportler* ‘sports person’
 - *Schwergewicht* ‘heavyweight’ → *Schwergewichtler* ‘heavyweight boxer’
- Origin: *angeln* ‘to angle’ / *Ang(e)ler* ‘angler’, *nörgeln* ‘to grumble’ / *Nörg(e)ler* ‘grumbler’, *betteln* ‘to beg’ / *Bett(e)ler* ‘beggar’, etc.
- Re-segmentation: *angeln* / *Angl-er* > *Ang-ler*
- Division of labor: the secreted suffix *-ler* is productively used with nominal bases while *-er* is largely employed with verbs.

Horror vacui: backformation and conversion

- *contribuire* 'to contribute' / *de-contribuire* 'to de-contribute'

(2) a. *l'accordo del 23 luglio ... decontribuisce gli straordinari per meglio sfruttare i lavoratori*

'the July 23 agreement ... de-contributes overtime to better exploit workers'

b. *dalla legge, che detassa e decontribuisce totalmente il salario corrisposto*

'by the law which totally de-taxes and de-contributes the salary paid'

Normal prefixation?

- *comprimere* 'to compress' / *de-comprimere* 'to decompress',
- *congelare* 'to freeze' / *de-congelare* 'to defrost',
- *stabilizzare* 'to stabilize' / *de-stabilizzare* 'to destabilize'
- Generally, transitive bases preserves their transitive argument structure, which constitutes one of the main pieces of evidence in support of the idea that prefixes are not heads in contrast to most suffixes (Iacobini 2004: 106)
 - *Un controllo migliore dei costi **ha contribuito all'aumento** degli utili dell'azienda.*
'Better cost control has contributed to the increase in the company's profits'.

- *de-contribuire* 'to reduce the social security charges paid on the salary'

(2) a. *l'accordo del 23 luglio ... decontribuisce gli straordinari per meglio sfruttare i lavoratori*

'the July 23 agreement ... de-contributes overtime to better exploit workers'

b. *dalla legge, che detassa e decontribuisce totalmente il salario corrisposto*

'by the law which totally de-taxes and de-contributes the salary paid'

Backformation and reverbalization

- *contribuzione* 'social security charges weighing on the gross salary'
 - *pagamento / contributo* 'ACT/RESULT of paying / contributing'
- (3)
- a. *Modalità di pagamento delle tasse*
'Methods of payment of fees'
 - b. *un provvedimento per la decontribuzione del salario*
'a provision for the decontribution of wages''
 - c. *insieme alla detassazione e decontribuzione degli straordinari*
'together with the detaxation and de-contribution of overtime'

Interaction of prefixation with prefixation and conversion

(4) a. *decaffeinare* ‘to decaffeinate’

$[de- [V]_V]_V + [N]_V = [de- [N]_V]_V$

b. *denuclearizzare* ‘to denuclearize’

$[de- [V]_V]_V + [Adj-izza-]_V = [de- [N-izza-]_V]_V$

c. *deprogrammazione* ‘de-programming’

$[de- [V]_V]_V + [[N]_V -zione]_N = [de- [[N]_V -zione]_N]$

d. *depenalizzazione* ‘de-criminalisation’

$[de- [V]_V]_V + [[Adj-izza-]_V -zione]_N = [de- [[N-izza-]_V -zione]_N]$

Second-order schemas

(5)	<i>realizzare</i> ‘to realise’	<i>realizzazione</i> ‘realisation’
	<i>massimizzare</i> ‘to maximise’	<i>massimizzazione</i> ‘maximisation’
	<i>inizializzare</i> ‘to initialise’	<i>inizializzazione</i> ‘initialisation’
	<i>berlusconizzare</i> ‘to berlusconise’	<i>berlusconizzazione</i> ‘berlusconisation’

- Paradigmatic solidarity:

$\langle [X\text{-izza-}]_{Vi} \leftrightarrow SEM_i \rangle \approx \langle [V\text{-zione}]N_j \leftrightarrow [\text{act of } SEM_i]_j \rangle$

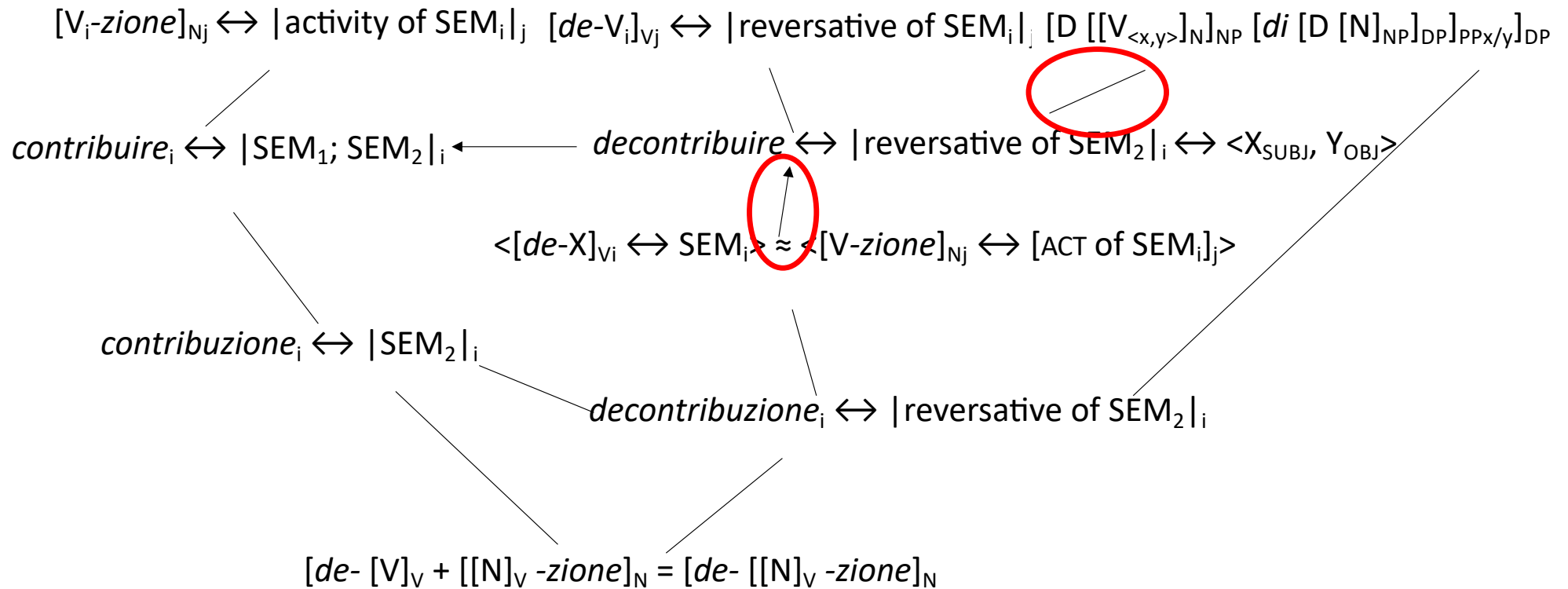
Second-order schemas

- (6) *decapsulare* ‘to decapsulate’ *decapsulazione* ‘decapsulation’
 denudare ‘to denude’ *denudazione* ‘denudation’
 declassare ‘to downgrade’ *declassazione* ‘downgrading’
 defenestrare ‘to defenestrate’ *defenestrazione* ‘defenestration’

- Paradigmatic solidarity

$\langle [de-X]_{Vi} \leftrightarrow SEM_i \rangle \approx \langle [V-zione]_{Nj} \leftrightarrow [act\ of\ SEM_i]_j \rangle$

- Backformation as "re-verticalization"



Reverbalization in German

[Wurzel 1998, Gaeta 2014]

- (7) a. *ehescheiden* 'to divorce' < *Ehe scheiden / Ehescheidung* 'divorce'
 ▮ Reverbalization and/or object incorporation
 Hans und Jutta wollen Ehe scheiden.
 'Hans and Jutta want to divorce'.
- b. *eislaufen* 'to ice-skate' < *Eislauf* 'ice skating'
 ▮ Reverbalization of conversion with oblique incorporation
 Lia kann auf dem Eis laufen. 'Lia can skate on ice'.
- c. *bergsteigen* 'to mountaineer' < *Bergsteiger* 'mountaineer'
 ▮ Reverbalization as backformation
 Sigrid möchte auf den Berg steigen.
 'Sigrid wants to climb the mountain.'

Reverbalization and adverb formation

(8) a. *Bayern München hat klasse gespielt.*

‘Bayern Munich played great (lit. class)’.

b. *Im Restaurant haben wir spitze gegessen.*

‘In the restaurant we had a great meal (lit. we ate point)’.

• *Klassefrau* ‘great woman’ *Spitzenqualität* ‘prime quality’

Klassenspiel ‘great game’ *Spitzenessen* ‘top food’

(9) *Marta läuft eis und spielt klavier.*

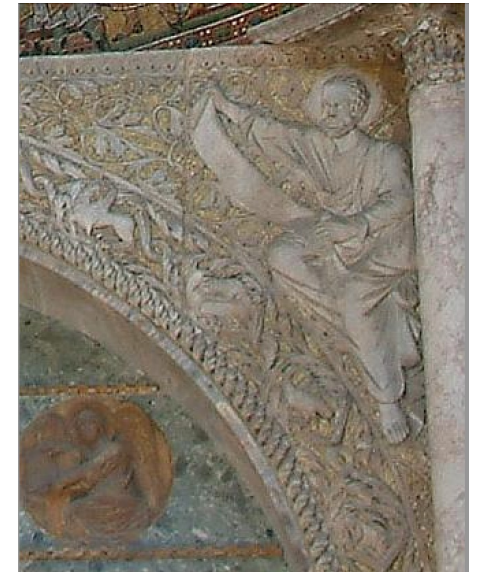
‘Marta ice-skates and plays the piano’.

• Reverbalization and adverb extraction: *klasse spielen, spitze essen*

Spandrels and exaptation

[Gould & Lewontin 1979, Lass 1997, Gaeta 2016]

- Spandrels provide instances of pure recycling of biological material to serve a different purpose, because they are intended as the by-product of the evolution of some other characteristic rather than a direct product of adaptive selection relating to (the functionality of) a certain organ.
- They are peculiar instances of exaptation which do not display a pre-adaptive character in the sense that their properties and structure does not foreshadow any predisposition for the subsequent reuse in the new function.



Secretion and exaptation

- Secretion driven by structural "pre-disposition" (cf. *water, gate, ham*)
 - *-gate* | political scandals |
 - *Watergate* > *Irangate, Stormygate*
 - *-burger* | sandwich fillers |
 - *Hamburger* > *cheeseburger, chickenburger*
- Pure spandrels :
 - *-elfie* | type of selfie | (Hamans 2020)
 - *shelfie* 'selfie made in front of a shelf', *felfie* 'farm animal selfie', *lelfie* 'selfie of legs', *belfie* 'selfie with bare buttocks', *nelfie* 'selfie of a nude person'
 - *-fie* | type of selfie | in Dutch (Jackendoff & Audring 2019: 49)
 - *stemfie* 'photo of oneself voting' from *stemmen* 'vote', *fietsfie* 'photo of oneself biking' from *fietsen* 'ride a bike', *domfie* 'photo of oneself in front of the cathedral' from *dom* 'cathedral', *brilfie* 'photo of oneself wearing glasses' from *bril* 'glasses', *vliegfi* 'photo of oneself, flying' from *vliegen* 'fly', *reünifie* 'photo of selves celebrating a reunion', *panorafie* 'photo of oneself in front of a panorama'

Conclusion

- Adopting a network approach to morphological complexity allows us to get rid of fallacies coming from top/down models like those characterizing structuralist linguistics or the so-called rule/list fallacy typical of competence-based models of language (Langacker 1987, Gaeta 2006).
- Speakers constantly exploit the possibilities offered by the multiple links existing among words, including the complex morphosyntactic constructions in which they are involved, as shown by their influence on the argument structure of the backformation *decontribuire*.
- Re-verticalizations driven by *horror vacui* aim at exhausting the paradigmatic space and at restoring in this way transparency.
- Spandrels are creatively produced which completely disregard the transparent complexity of the words involved.
- To be sure, we are a long way from discovering the limits of interpretation. On the other hand, a relational approach, crucially based on rich networks of more or less schematic constructions, is a promising method to pursue that goal.

Many thanks for your attention!

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