

ParaDis : a Families-and-Paradigms model for derivation.

The case of prefixed privative verbs in Italian

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Revisiting paradigms in word-formation

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- 1 Introduction**
- 2 Derivational discrepancies
- 3 The ParaDis model (Paradigms vs Discrepancies)
- 4 Applying ParaDis to the Italian data
- 5 Conclusion

Paradigms and derivation (1)

- Paradigms: in morphology, strongly related to inflection.
 - ▶ For the last 20 years, the paradigm-based organization of inflectional morphology has become a standard (languages like French or Italian)
 - ▶ paradigms in inflection: prototype for paradigms in morphology
- In derivation, the situation is much more complicated.
 - ▶ Identification of paradigms less easy
 - ★ the dimensions that determine abstract paradigms not easy to identify.
 - ▶ derivation traditionally considered as binary and oriented
 - ▶ transpositions to derivation of inflectional paradigms do not always succeed
- Evidence: there is still no consensual standard definition of this concept in derivation.

Paradigms and derivation (2)

- Derivational paradigms: superposition of derivational families that share the same graph structure [Bonami & Strnadová, 2018].
 - ▶ Derivational (**morphological**) **family** = graph of derivationally related lexemes
 - ▶ The aligned elements in the different families belong to the same derivational class or derivational series.

pred	agent	action	potentiality
manage	manager	management	manageable
announce	announcer	announcement	announceable
recruit	recruiter	recruitment	recruitable
employ	employer	employment	employable

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Privative verbs in Italian: data (1)

- Data partly inspired from [Todaro, 2017].
- **Derivational families**
- Semantic relation between property, causative predicate, privative predicate
- The noun and the causative verb are regularly based on the adjective; several derivation patterns are involved.

Prop_A	Prop_N	Caus_V	Priv_V
GONFIO	GONFIORE	GONFIARE	SGONFIARE
COMPATTO	COMPATTEZZA	COMPATTARE	DECOMPATTARE
COMPATTO	COMPATTEZZA	COMPATTARE	SCOMPATTARE
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Privative verbs in Italian: data (2)

- The **stem of the Priv_V**: always identical to the **form of the Caus_V**
- The meaning of the privative verb directly depends on the meaning of the adjective
 - ▶ Result: loss of a property previously owned by the referent of the patient
 - ▶ (*sgonfiare* 'deflate' : "deprive smth from the property *gonfio* 'swollen'")

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Privative verbs in Italian: data (3)

- Discrepancy between **form** and meaning
- Competition between prefixes: *s-*, *de-*, *dis-* ; between formal process that derive causative verbs: conversion, suffixes *-izzare*, *-ificare*, between suffixes that derive property nouns: suffixes *-ore*, *-ezza*, *-ità*.
- Co-membership of synonymous rival forms (overabundance [Thornton 2011,2012])

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Paradigmatic regularity

- Form and meaning are predictable for privative verbs
 - ▶ Formal regularity between causative and privative verbs.
 - ▶ Semantic regularity between adjectival property and privative verb.
- The form and meaning of the privative verb can be retrieved by the knowledge of the adjective and the causative verb
 - ▶ A paradigmatic description makes it possible to account for it in a "natural" way
- Total semantic co-predictability into families (semantic paradigm)
- Semantic regularity takes precedence over surface differences.
- A semantics-driven paradigmatic organization highlights partial formal regularities

Outline

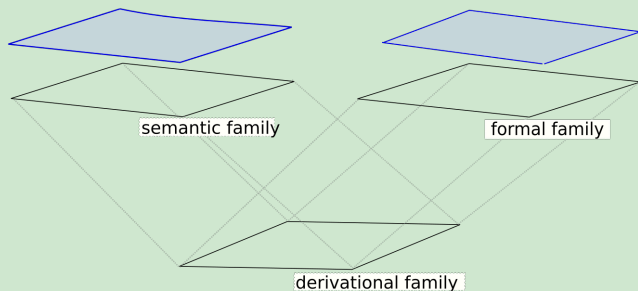
- 1 Introduction
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ParaDis: basic principles (1)

- Description and analysis unit: the **family**
 - ▶ Connected network of elements with inter-predictable properties
- The notion of **family** is **generalized** :
 - ▶ Morphological families connect lexemes
 - ▶ Formal families connect phonological forms
 - ▶ Semantic families connect meanings
- (Generalized) **paradigms** are **surperposition of families**
 - ▶ Morphological paradigms are superpositions of morphological families
 - ▶ Formal paradigms are superpositions of formal families
 - ▶ Semantic paradigms are surperpositions of semantic families
- Formal and semantic paradigms are in correspondence with the morphological paradigms
- No direct correspondence between the formal and the semantic paradigms

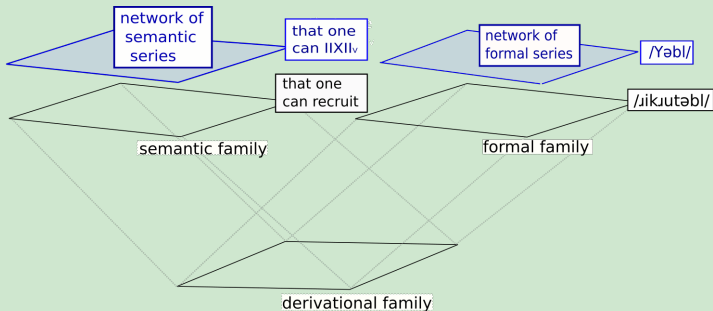
ParaDis: basic principles (2)

- Formal and semantic **families** are **independent** components;
- Each component: a concrete and an abstract levels
 - ▶ concrete formal family: network of phonological forms
 - ▶ abstract formal family: network of formal patterns or series
 - ▶ concrete semantic family: network of meanings
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- Morphological (derivational) families: in correspondence with concrete formal and semantic families.



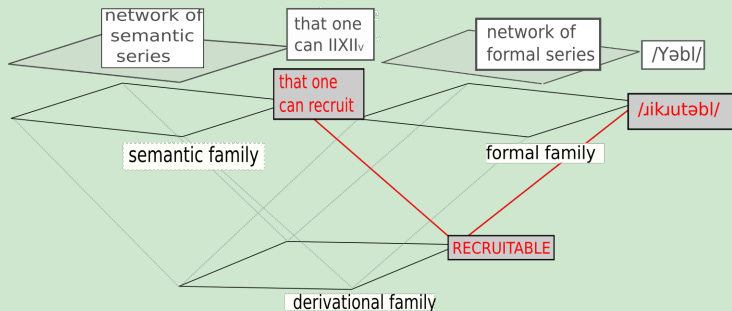
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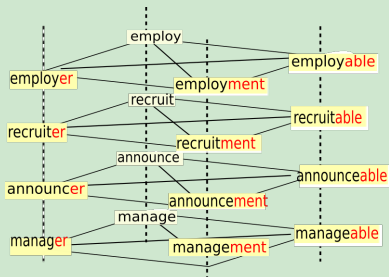
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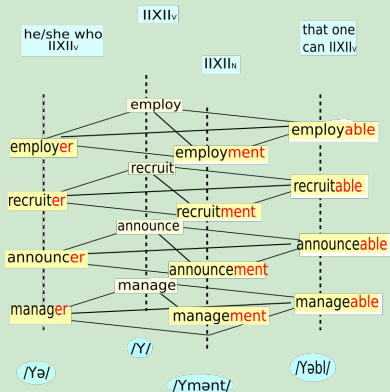
ParaDis: canonical paradigms (1)

- staked derivational families are fully **isomorphic**
- members with the same position in families form formal series (abstracted as formal patterns) **and** semantic series (abstracted as semantic classes)



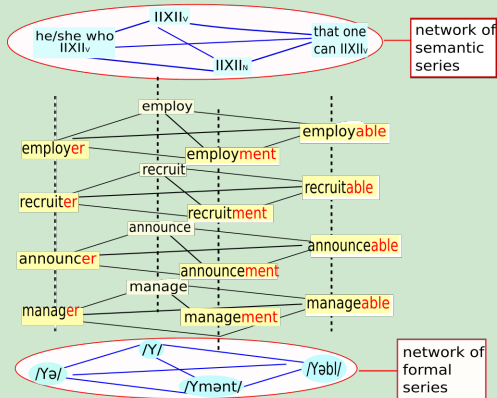
ParaDis: canonical paradigms (1)

- staked derivational families are fully isomorphic
- members with the same position in families form **formal** series (abstracted as formal patterns) **and** **semantic** series (abstracted as semantic classes)



ParaDis: canonical paradigms (2)

- abstract paradigms are **networks of series**
- in canonical paradigms, the graphs of formal and semantic series are **superposable**



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ParaDis: mismatched families (1)

- How to account for the form/meaning discrepancy for Italian **Priv_V**?

Prop _A	Prop _N	Caus _V	Priv _V
UMANO 'human'	UMANITÀ 'human'	UMANIZZARE make become 'human'	DISUMANIZZARE make become not 'human'
/W/	/Wi'ta/	/Widdzare/	/dizWiddzare/

- The network of semantic series ...
- is not isomorphic to the network of formal series

A: ||Y||_A
N: ||Y||_N
V+: make smth become ||Y||_A
V-: make smth become not ||Y||_A



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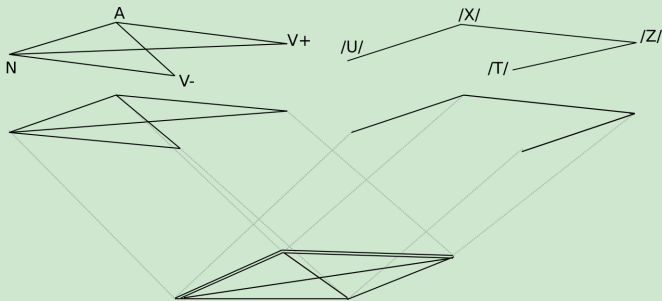
- The network of semantic series ...
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X: $\exists W, /X/ = /W/$
U: $\exists W, /U/ = /Wore/ \vee /Wetsa/ \vee /Wità/$
Z: $\exists W, /Z/ = /W/ \vee /Widdzare/ \vee /Wifikare/$
T: $\exists W, /T/ = /sW/ \vee /deW/ \vee /dizW/$



ParaDis: mismatched families (2)

- Two abstract networks: distinct formal and semantic motivations
- Here, asymmetry is made evident by the fact that some relations are formally and semantically motivated, while others are only formal or only semantic.



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Concluding remarks (1)

- ParaDis: a semantics-driven paradigmatic model of derivation
- The description unit is the family (formal, semantic, morphological)
- Family superpositions are paradigms
- Morphological paradigms **and** formal paradigms and semantic paradigms
 - ▶ formal and semantic paradigms not directly connected to each other
 - ▶ formal and semantic paradigms directly connected to the morphological paradigm
- ParaDis accounts for non-canonical derivational paradigms in a natural way
 - ▶ Appropriate tool for form-meaning discrepancies (privative verbs in Italian)
 - ▶ Affix competition
 - ▶ Overabundance
- ParaDis conception is completely cumulative [Bochner, 1993]
 - ▶ Uncomplete families (morphological gaps)
 - ▶ Partial family superposition

Concluding remarks (2)

- ParaDis: a “Families and Paradigms” approach.

	Word & Paradigms	Families & Paradigms
unit	word	families (formal, semantic, morphological)
concrete paradigm	structure of words	(3 types of) superposition of families
abstract paradigm	set of properties that define this structure	network of abstract formal and semantic series

References

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