

HELSINGIN YLIOPISTO
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Finnish hydronymic constructions

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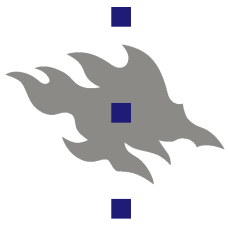
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Department of Computer Science

Department of Finnish

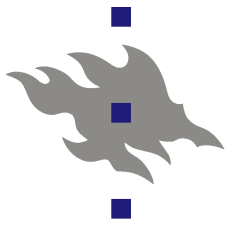
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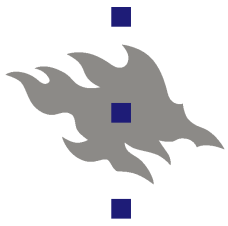
Background

- Before c. 1970, typologies of Finnish toponyms based mostly on meaning
- Since then, structural analysis of toponyms has been relatively stable
- Typology based on criteria like
 - number of elements
 - inductive vs. 'original'
 - epexegetis, ellipsis
- **Naming patterns** as per Šrámek et al.
 - Ausgangsstellungsmodell: semantic content
 - Wortbildende Modell: syntactic structure



What's new?

- What has changed in the last three decades?
- Computers
 - Electronic corpora allow searches that were too cumbersome with paper files
 - Exploratory data analysis provides methods suitable for such corpora
- Cognitive linguistics
 - Shows some promise for integrating onomastics with mainstream linguistics
 - Explains toponyms at least as well as the traditional approach

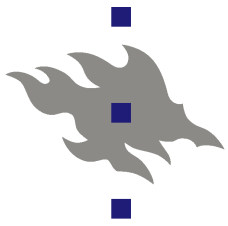


Finnish lake names

- Database of the National Land Survey
- Names that appear on the 1:20 000 Basic Map

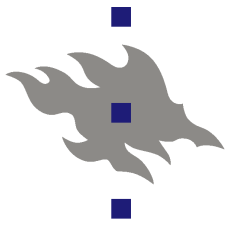
	Places	Names
All Finnish names	58 267	25 178
≥ 5 occurrences	29 170	1 492
≥ 20 occurrences	19 230	331
≥ 50 occurrences	12 580	111

- Prior work:
 - Some computer science to get pairs of names that are attracted to each other
 - Interpretation in terms of Construction Grammar



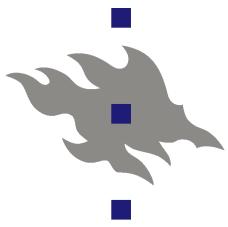
Cognitive linguistics

- No fundamental distinctions syntax~semantics or grammar~lexicon
- A linguistic theory should cope with peripheral phenomena ⇒ toponyms are a good test case
- This work mostly based on Radical Construction Grammar
 - Language is a collection of **constructions**: patterns that join form and meaning
 - Typological / taxonomic approach: a construction is a **generalisation** of more specific linguistic units that are **similar**
 - No syntactic relations: instead semantic and symbolic relations within a construction



Some refining

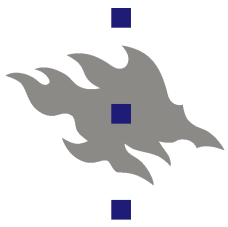
- Clustering approach to constructions: they can be viewed as an area around a prototype
- The borders of such an area are blurry
- No sharp division between a schematic construction and a specific construct
 - Any actual utterance can act as a prototype
 - The area around such a prototype is very small and the borders quite sharp, so this is generally quite rare and requires that the new construct is very similar to the old one
 - This is more common with toponyms than in everyday language use



Very crude typology

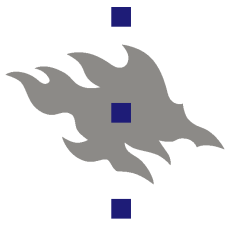
- Stand-alone names
 - Form does not require the presence of another toponym
 - eg. *Mustalampi* 'Black Lake'
- Inductive names
 - Apparently derived from another name
 - eg. *Pieni Haukilampi* 'Lesser Pike Lake'

	Places		Names	
	Number	%	Number	%
Stand-alone	48 889	84	17 915	71
Inductive	9 378	16	7 263	29



Typical stand-alone name

- Most common construction: identifying element followed by type of place
 - Adjective — mostly a notable feature of the lake
 - Noun — often related to the use, shape or near-by feature
 - Noun in genitive case — often, but by no means always personal names or references to a near-by place
 - Verb stem — usually related to the use of the lake



The *identifier + type of place* construction

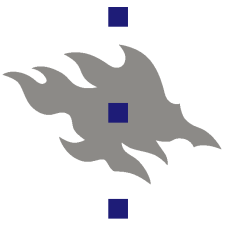
lake name	
ROLE identifier SEM descriptive feature	ROLE classifier SEM type of place

<i>Mustalampi</i>	
<i>musta</i> ROLE identifier SEM 'black'	<i>lampi</i> ROLE classifier SEM 'pond'

<i>Ahvenlampi</i>	
<i>ahven</i> ROLE identifier SEM 'perch'	<i>lampi</i> ROLE classifier SEM 'pond'

<i>Likolampi</i>	
<i>liko-</i> ROLE identifier SEM 'retting'	<i>lampi</i> ROLE classifier SEM 'pond'

<i>Ukonlampi</i>	
<i>ukon</i> ROLE identifier CASE genitive LXM <i>ukko</i> SEM 'old man's'	<i>lampi</i> ROLE classifier SEM 'pond'

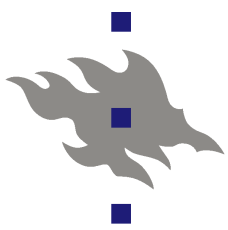


Suffix instead of compounding

- Less common, but still noticeable: identifying element followed by a derivational suffix
 - The identifying can be adjective or noun
 - Diachronically, the *-nen* names are mostly contractions: **Valkeajärvi* > *Valkeinen*
 - The *-kkV* names are rare and largely opaque; those should perhaps not be classified here

<i>Valkeinen</i>	
<i>valkea</i> ROLE identifier SEM 'white'	<i>-nen</i> ROLE classifier

<i>Suolikko</i>	
<i>suoli</i> ROLE identifier SEM 'intestine'	<i>-kko</i> ROLE classifier

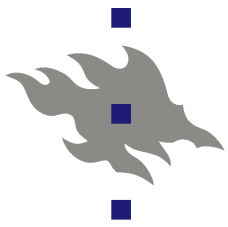


How common are they?

- A couple of constructions cover most names

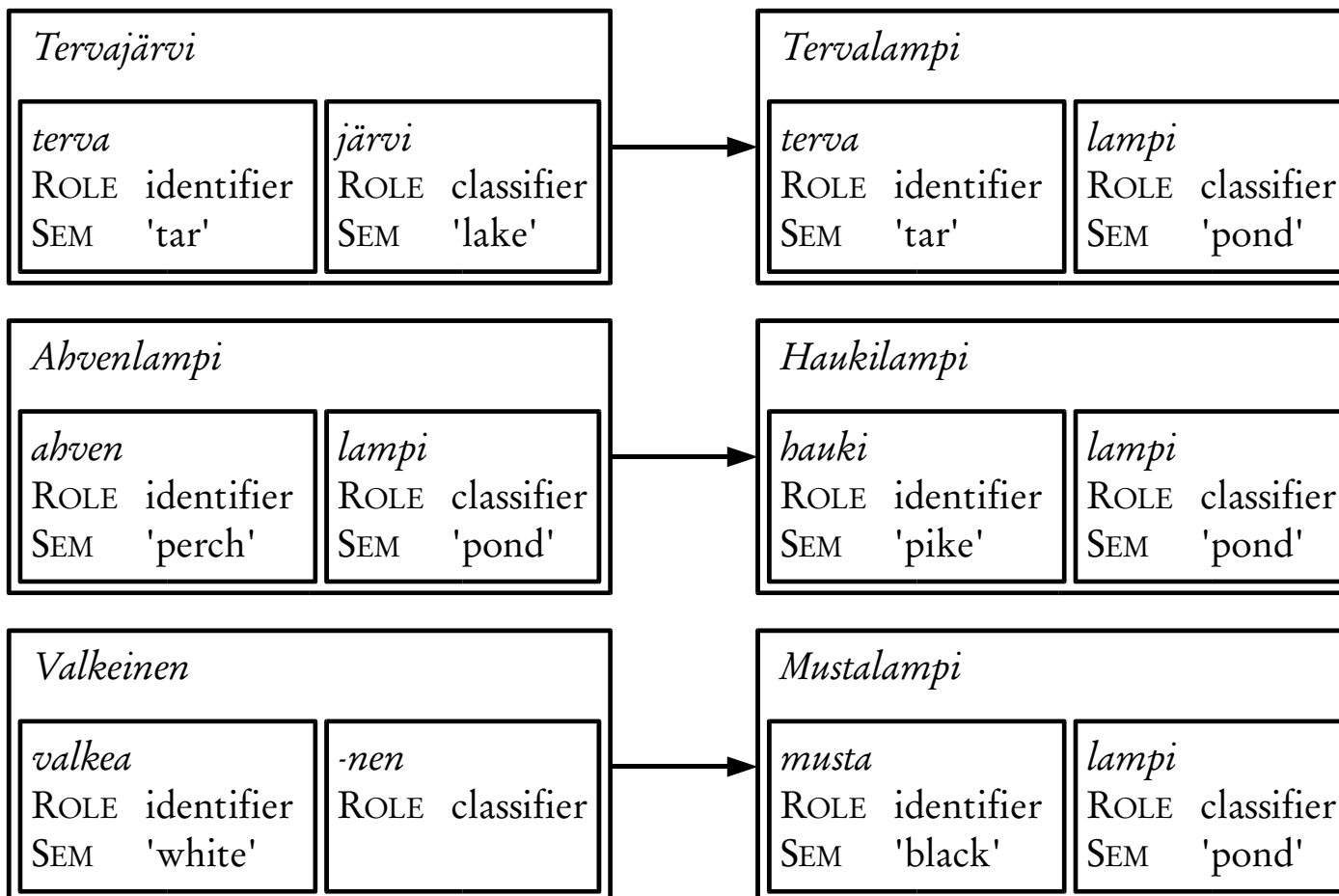
	All		Stand-alone		In inductive			
	Places	Names	Places	Names	Places	Names		
		%	%	%	%	%		
<i>-lampi</i> 'pond'	35 626	61	11 975	48	65	53	37	33
<i>-järvi</i> 'lake'	14 095	24	6 951	28	24	29	25	25
<i>-vesi</i> 'water'	214	0	180	1	0	1	0	0
<i>-nen</i>	2 966	5	1 705	7	4	4	13	13
<i>-kkV</i>	634	1	511	2	1	1	4	4
Other	4 732	8	3 856	15	6	12	20	24

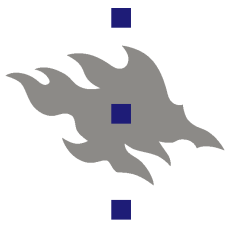
- What about the »Other» names?
 - Common nouns (eg. *Kaakkuri* 'Loon', 8 lakes)
 - Some adjectives (eg. *Hoikka* 'Thin', 26 lakes)
 - Some less common compounds or suffixes (eg. *Peipposenmeri* 'Chaffinch's Sea', 13 lakes)
 - A few opaque names (eg. *Päijänne*, 21 lakes)



Spatial collocations

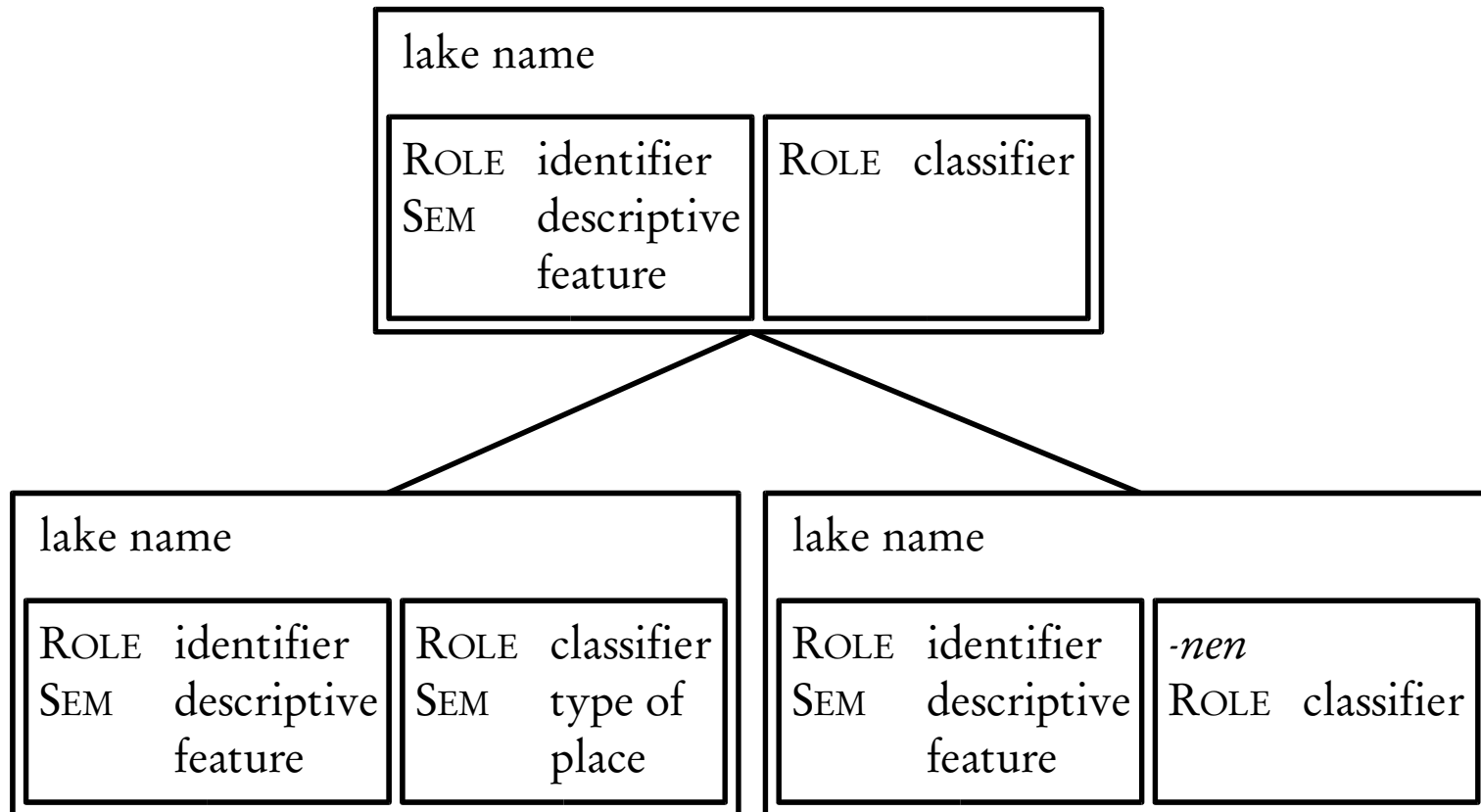
- Pairs of names that systematically appear near each other
- So common that using single names as prototypes cannot be labeled exceptional

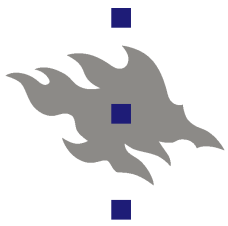




Top-level generalisation

- Based on cases like the last example, it seems plausible to postulate a family of constructions like





Inductive names

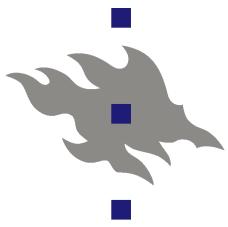
■ Modifier + existing name

<i>Pieni Haukilampi</i>	
<i>pieni</i> ROLE modifier SEM 'small'	<i>Haukilampi</i> ROLE head SEM 'Pike Pond'

■ Existing name in genitive + type of place

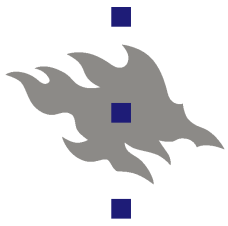
<i>Kalettomanlampi</i>	
<i>Kaleton</i> ROLE identifier CASE genitive LXM <i>Kaleton</i> SEM 'Fishless'	<i>lampi</i> ROLE classifier SEM 'pond'

These are not always inductive: structurally similar stand-alone names exist as well, especially as a result of epexegetis.



Summary

- Names are modelled after existing ones (as we all knew already).
- However, it is often difficult to distinguish between semantic and syntactic patterns.
- There are degrees of productivity.
Partial productivity is normal.
- **Prototypes** are good.
- However, some concept of **range** is also necessary: one can't go arbitrarily far from the prototype.
- It is possible to find a general linguistic theory that can cover onomastics.
Names are a proper part of language.



Thank you

