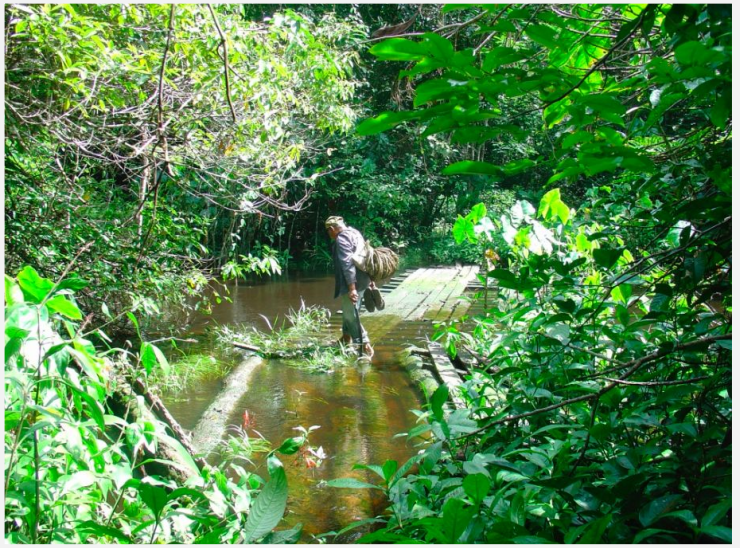


See the forest AND the trees

Domain-driven language documentation

Konrad Rybka

Language documentation

*The aim of a **language documentation** is to provide a comprehensive record of the linguistic practices characteristic of a given speech community... This... differs fundamentally from... **language description** [which] aims at the record of a language... as a system of abstract elements, constructions, and rules.*

Nikolaus P. Himmelmann (1998). Documentary and descriptive linguistics. *Linguistics* 36: 166.

Language documentation

comprehensive record linguistic practices of a speech community

Primary linguistic data

Replicable
Reusable
Applicable

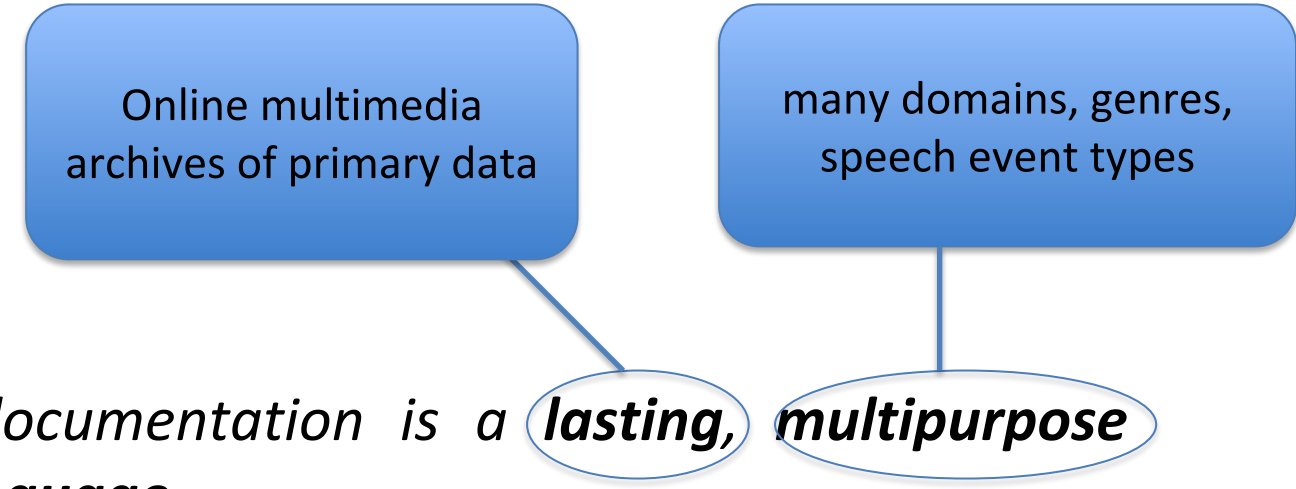
Language description

System of abstract elements, constructions, and rules

Grammar and dictionary

Not replicable
Not reusable
Not applicable

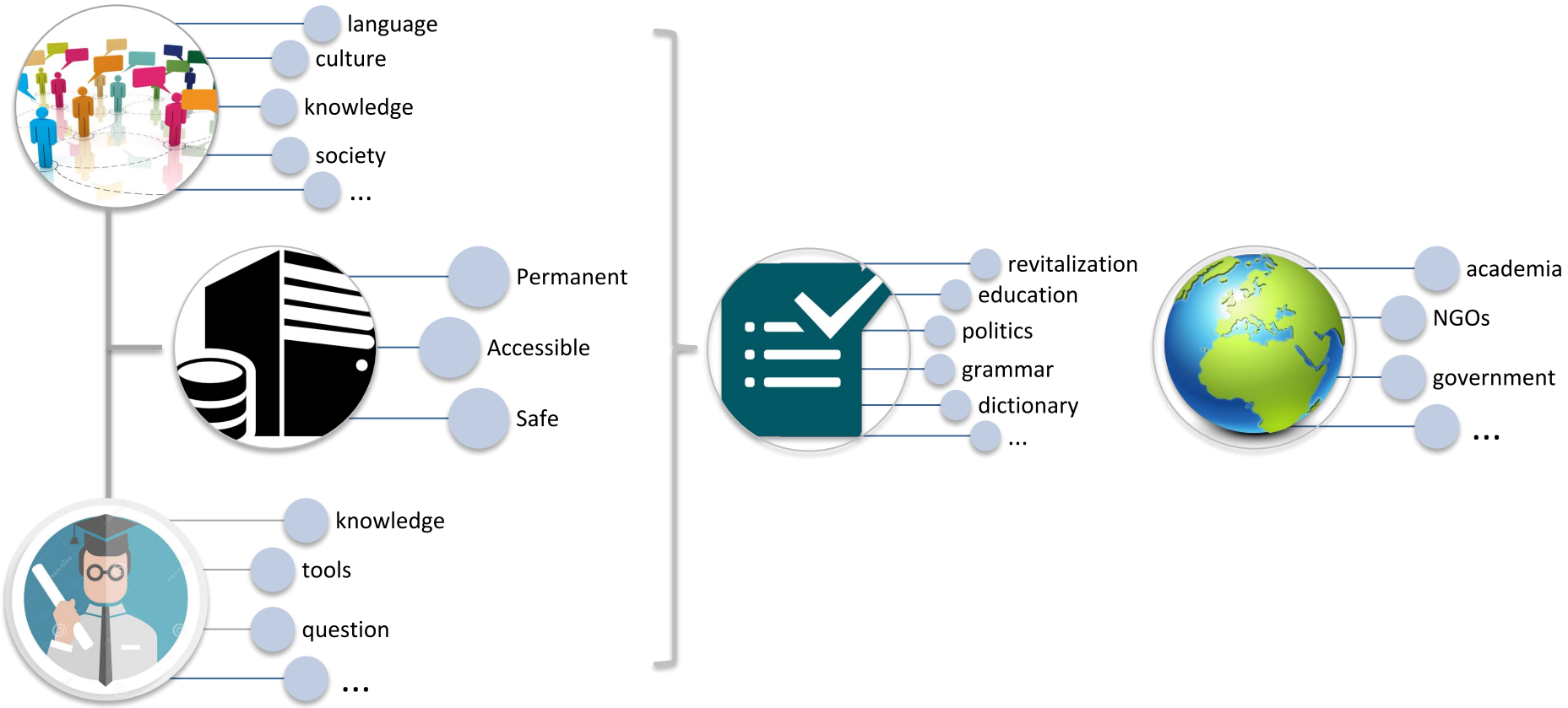
Language documentation



A language documentation is a ***lasting, multipurpose record of a language****.*

Nikolaus P. Himmelmann (2006). Language documentation: What is it and what is it good for? In: Gippert et al. (eds) *Essentials of Language Documentation*.

Language documentation



Domain-driven language documentation

NICLAS BURENHULT

Files

File	Size	Format	
26167.mp3	28.79 MB	MP3	View/Open

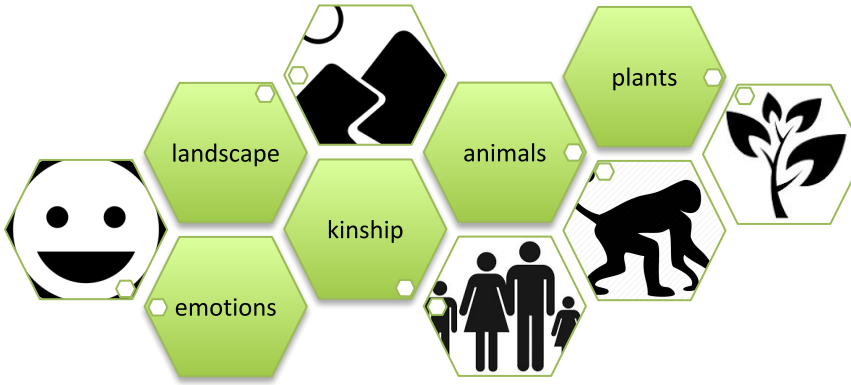
Item Summary

Title:	**Domain-driven documentation: The case of landscape**
Issue Date:	28-Feb-2013
Description:	I will present compelling linguistic reasons why landscape is a field worthy of in-depth exploration, and why it provides an effective and high-gain approach to language documentation. I will illustrate with examples from several endangered languages and also discuss GIS applications for data collection, analysis, and archiving.
URI:	http://hdl.handle.net/10125/26167
Rights:	Creative Commons Attribution-Noncommercial-Share Alike 3.0 Unported
Appears in Collections:	3rd International Conference on Language Documentation and Conservation (ICLDC)

What is a domain?

- a field of experience of importance to humans, and therefore...

- a target for representational strategies (e.g. language)
  - Plants
  - Animals
  - Landscape
  - Kinship
  - Emotion
  - ...



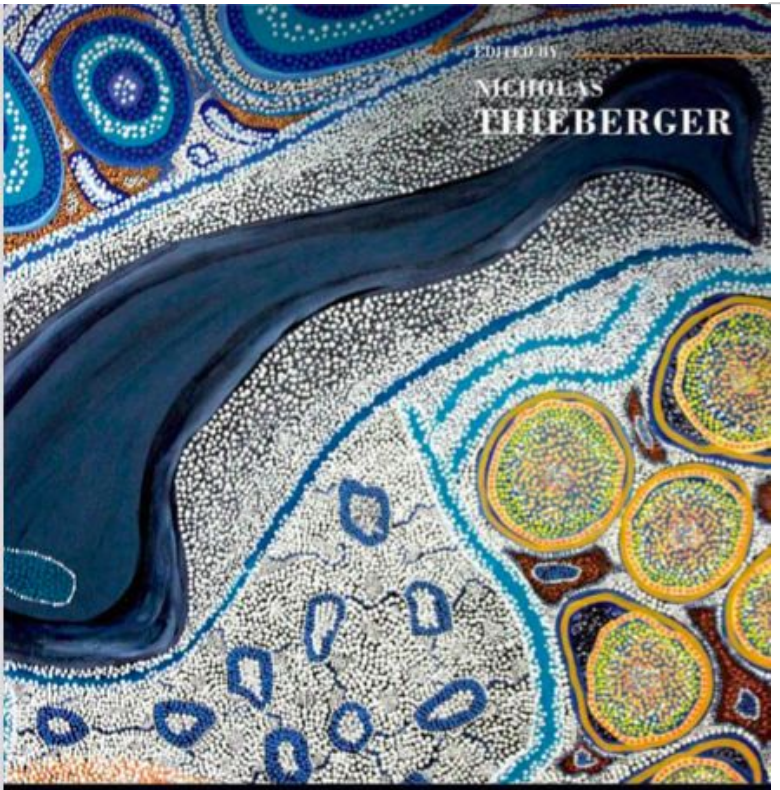
Domain-based research

Linguistic, Cognitive, Anthropological studies:

- plants and animals (Berlin 1992; Atran and Medin 2008)
- color (Berlin and Kay 1969; Kay et al. 2010)
- anatomy (Brown 1976; Majid et al. 2006)
- space (Levinson 2003; Levinson and Wilkins 2006)
- landscape (Burenhult 2008a; Mark et al. 2011a)
- senses (Levinson and Majid 2014)
- ....

Domain-driven documentation projects

Domain-driven fieldwork guides



The Oxford Handbook *of*
LINGUISTIC
FIELDWORK

PART III COLLABORATING WITH OTHER DISCIPLINES

Why domain-driven language documentation?

1. Convenient and interesting for the participants (feasibility)
2. Maximize speakers' participation (feasibility)
3. Easier to access by the researcher, hence more efficient (feasibility)
4. Ontologies around which data collection can be planned (feasibility)
5. Allow for a more in-depth analysis (quality)
6. Gateways to various types of genres and data types (comprehensive)
7. Reflect more general patterns of the language structure (comprehensive)
8. Linked to other domains (comprehensive)
9. Culturally entrenched (comprehensive)
10. Relevant to various linguistic communities (applicability)
11. Maximize community's interest in the deliverables (applicability)
12. Easier access to information (user-friendly)
13. Relevant to other disciplines (interdisciplinary)
14. Maximize interest of other parties (applicability)
15. Often critically endangered (urgency)
16. Clearer limitations of the end product (continuity)

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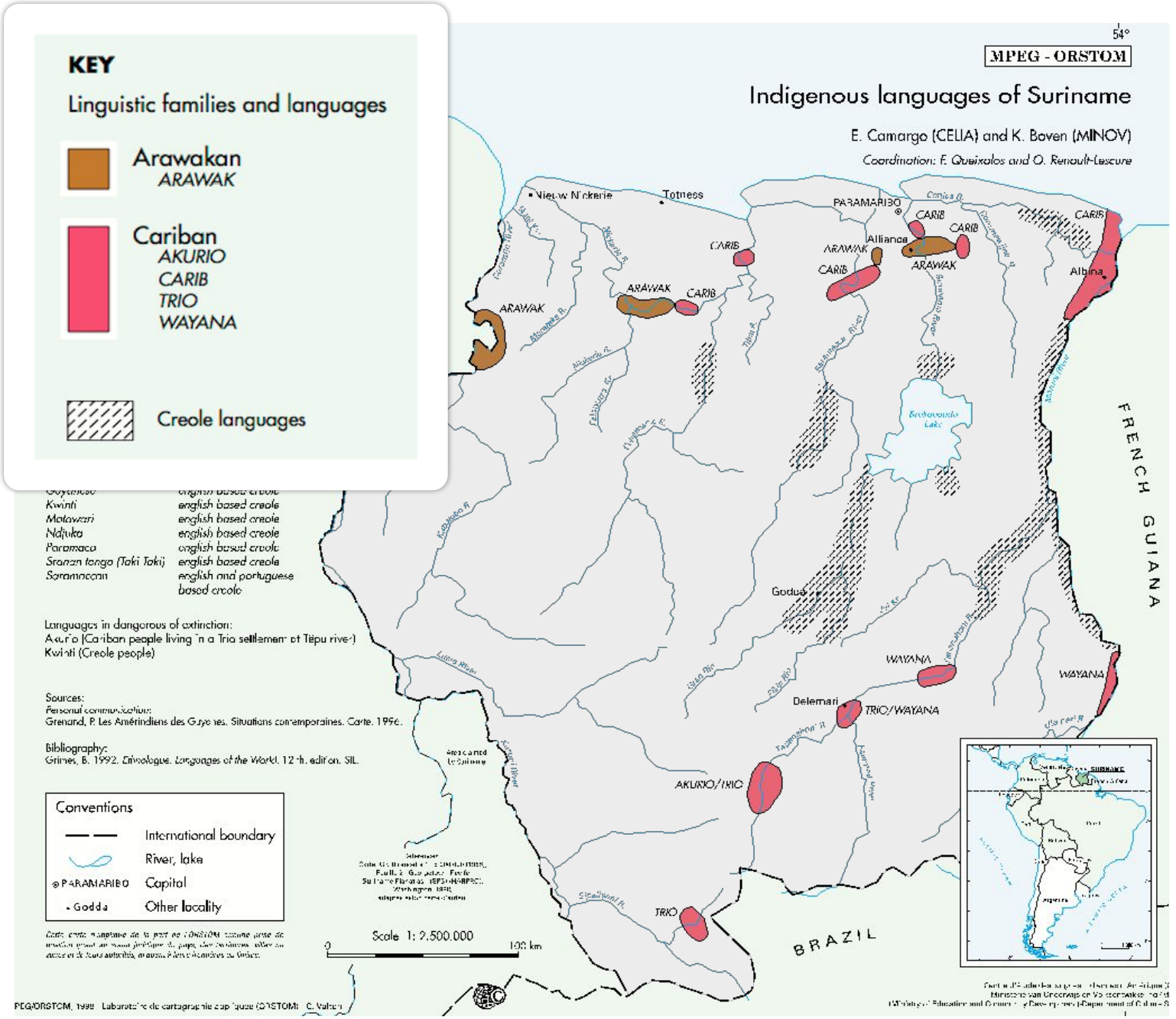

KEY
Linguistic families and languages
Arawakan
ARAWAK
Cariban
AKURIO
CARIB
TRIO
WAYANA
Creole languages
MPEG - ORSTOM
Indigenous languages of Suriname
E. Camargo (CELIA) and K. Boven (MINOV)
Coordination: F. Queixalos and O. Renault-Lescure
Nieuw Nickerie
Totness
PARAMARIBO
Alliance
Albina
Godda
Delemari
TRIO/WAYANA
AKURIO/TRIO
TRIO
WAYANA
FRENCH GUIANA
BRAZIL
Kwinti english based creole
Matawari english based creole
Ndjuka english based creole
Paramaca english based creole
Saramaccan english based creole
Languages in dangerous of extinction:
Kwinti (Creole people)
Sources:
Personal communication:
Bibliography:
Grimes, B. 1992. Ethnologue. Languages of the World. 12th. edition. SIL.
Conventions
International boundary
River, lake
PARAMARIBO Capital
Godda Other locality
Scale 1: 2.500.000
100 km
PEGIORSTOM, 1998 Laboratoire de cartographie appliquée (ORSTOM) C. Vaillant

Matta village, Suriname, 2009; Photograph courtesy of Cosma Makoshi

Matta village, Suriname, 2009; Photograph courtesy of Norma Bieswane

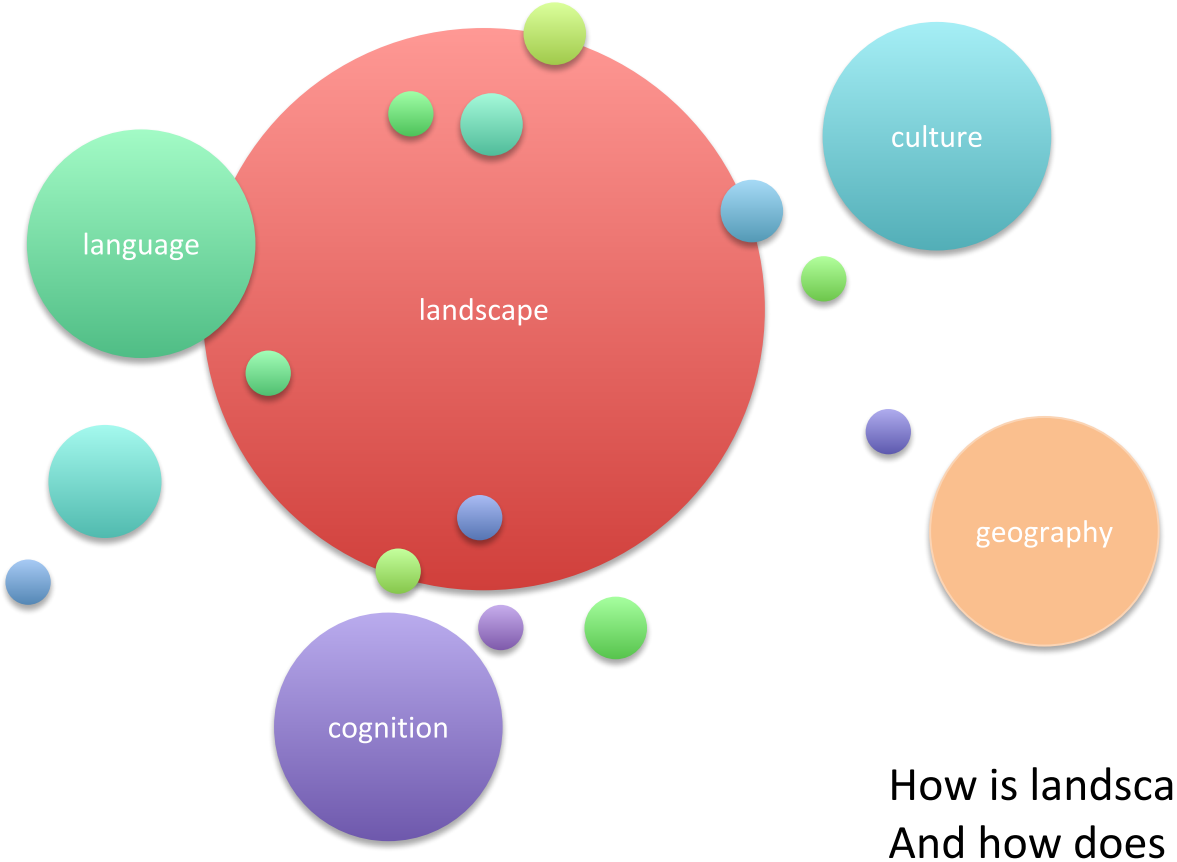
Matta village, Suriname, 2009; Photograph courtesy of Norma Bieswane

Matta village, Suriname, 2009; Photograph courtesy of Carl Orassie

Matta village, Suriname, 2009; Photograph courtesy of Cosma Makoshi

Matta village, Suriname, 2009; Photograph courtesy of Clemi Beswane

Domain-driven documentation: landscape



How is landscape categorized linguistically?
And how does this categorization relate to:

- the culture of the people
- the geography of the area
- the language system
- our cognition

Matta village, Suriname, 2009; Photograph courtesy of Sabajo Antonius

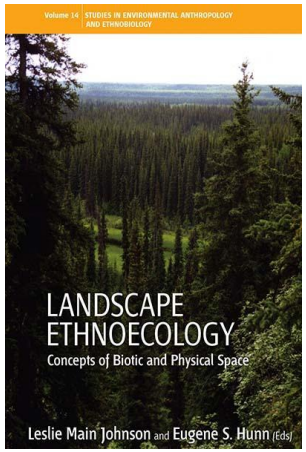
Cassipora Savanna, Suriname, 2012; Photograph courtesy of Cosma Macoshi

Korobali Creek, Suriname, 2012 (dry season); Photograph courtesy of Cosma Makoshi

Korobali Creek, Suriname, 2014 (wet season); Photograph courtesy of Cosma Makoshi

Ecotopes?

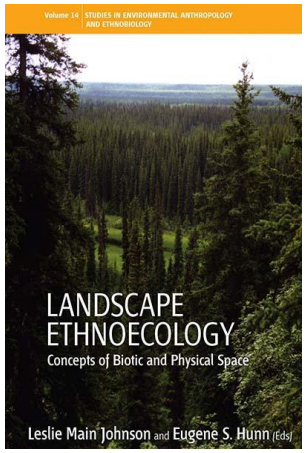
"smallest ecologically distinct landscape feature in a landscape classification system"



Eugene Hunn and Brien Meilleur (2010). Toward a Theory of Landscape Ethnoecological Classification. In: *Landscape Ethnoecology. Concepts of Biotic and Physical Space*. Edited by Leslie Main Johnson and Eugene S. Hunn.

Ecotopes

ecotope	meadow	marsh	mire
plants	grasses	reeds, rushes, shrubs	mosses, sedges, shrubs
animals	cattle, bird spp.	waterfowl, mammals, fish spp.	insects, bird spp.



Eugene Hunn and Brien Meilleur (2010). Toward a Theory of Landscape Ethnoecological Classification. In: *Landscape Ethnoecology. Concepts of Biotic and Physical Space*. Edited by Leslie Main Johnson and Eugene S. Hunn.

Lokono ecotopes

plant	+	suffix	=	ecotope
awarha	+	◉–*wkili*	=	*awarhawkili*
manaka	+	◉–*wkaro*	=	*manakowkaro*

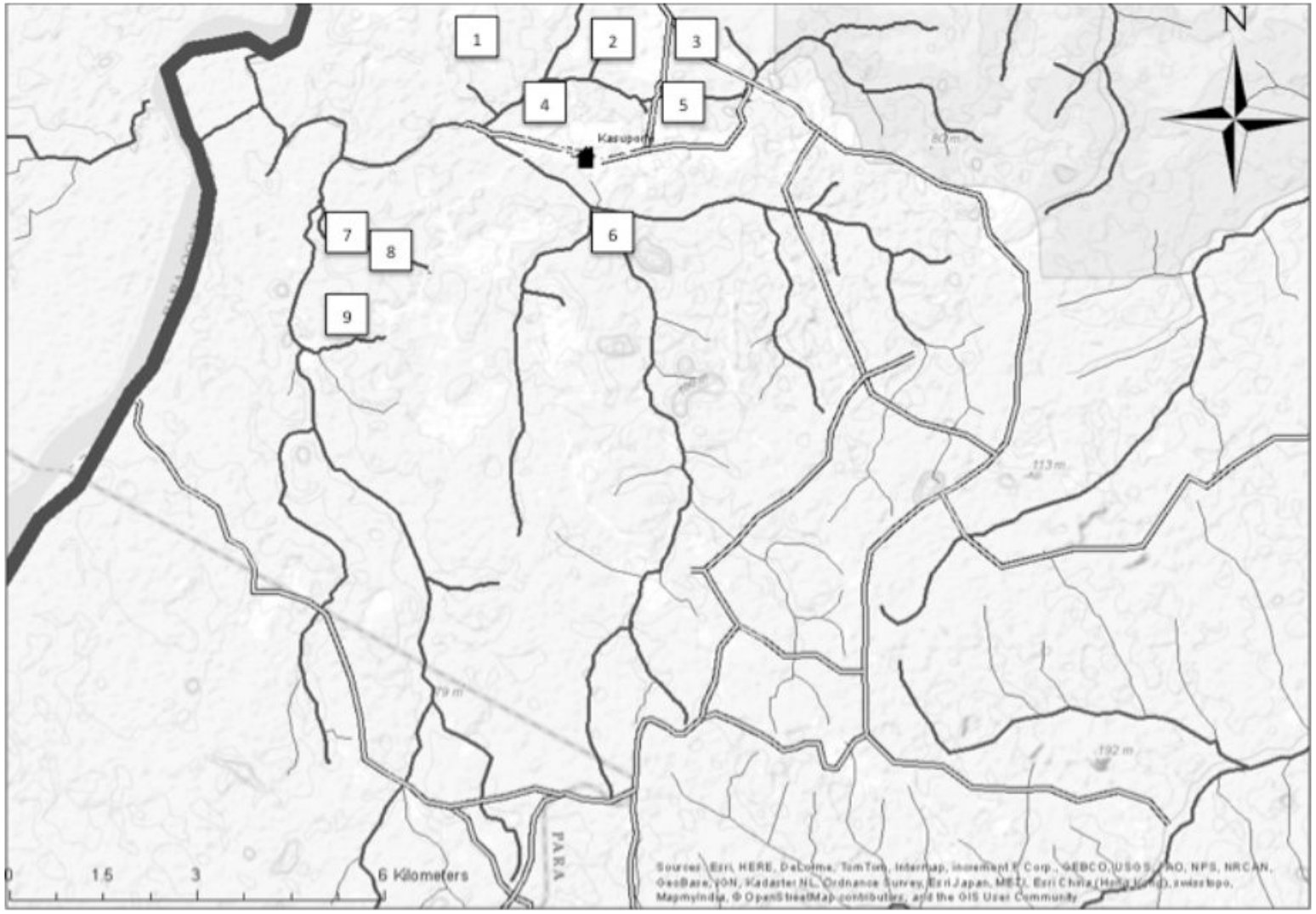
Extant ecotope names

Ecotope	Plant	Species	Family
beyokhowkili	*beyokha*	*?*	*Poaceae*
dakamawkili	*dakama*	*Dimorphandra coniugata*	*Caesalpinaceae*
walabawkili	*walaba*	*Couratari stellata*	*Caesalpinaceae*
korhwabanawkili	*korhwabana*	*Attalea sagotii*	*Arecaceae*
awarhawkili	*awarha*	*Astrocaryum vulgare*	*Arecaceae*
îtewkili	*îte*	*Mauritia flexuosa*	*Arecaceae*
manakowkaro	*manaka*	*Euterpe oleraceae*	*Arecaceae*
tiritiowkaro	*tiriti*	*Ischnosiphon arouma*	*Marantaceae*
mokorowkaro	*mokoro*	*Ischnosiphon* sp.	*Marantaceae*

In comparison

Nr. of ecotopes	Language (family)	Country (source)
69	Matsigenka (Arawakan)	Peru (Shepard Jr. et al. 2001)
90	Baniwa (Arawakan)	Brazil (Abraão et al. 2010)
36	Kayapó (Ge)	Brazil (Posey 1985)
89	Tsimane' (Mosetenan)	Bolivia (Riu-Bosoms et al. 2014)
47	Matsés (Panoan)	Peru (Fleck & Harder 2000)
59	Takana (Tacanan)	Bolivia (Wartmann et al. in prep.)

GIS mapping of ecotopes



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mokorowkaro	*mokoro*	*Ischnosiphon* sp.	*Marantaceae*

Wartmann et al. (in prep.)
Smith (2014)

Cultural significance

Species	shelter	Basketry	textile	food	instruments	hunting	beliefs
beyokha					✔		✔
dakama							
walaba	✔						
korhwabana	✔			✔		✔	
awarha		✔	✔	✔		✔	✔
îte			✔	✔		✔	
manaka	✔			✔		✔	✔
tiriti		✔					
mokoro		✔					

Lokono ecotopes

plant	+	suffix	=	ecotope
awarha	+	◉–*wkili*	=	*awarhawkili*
manaka	+	◉–*wkaro*	=	*manakowkaro*

Exp. 1: free listing

10 speakers listed as many plants as possible for each of the ecotopes

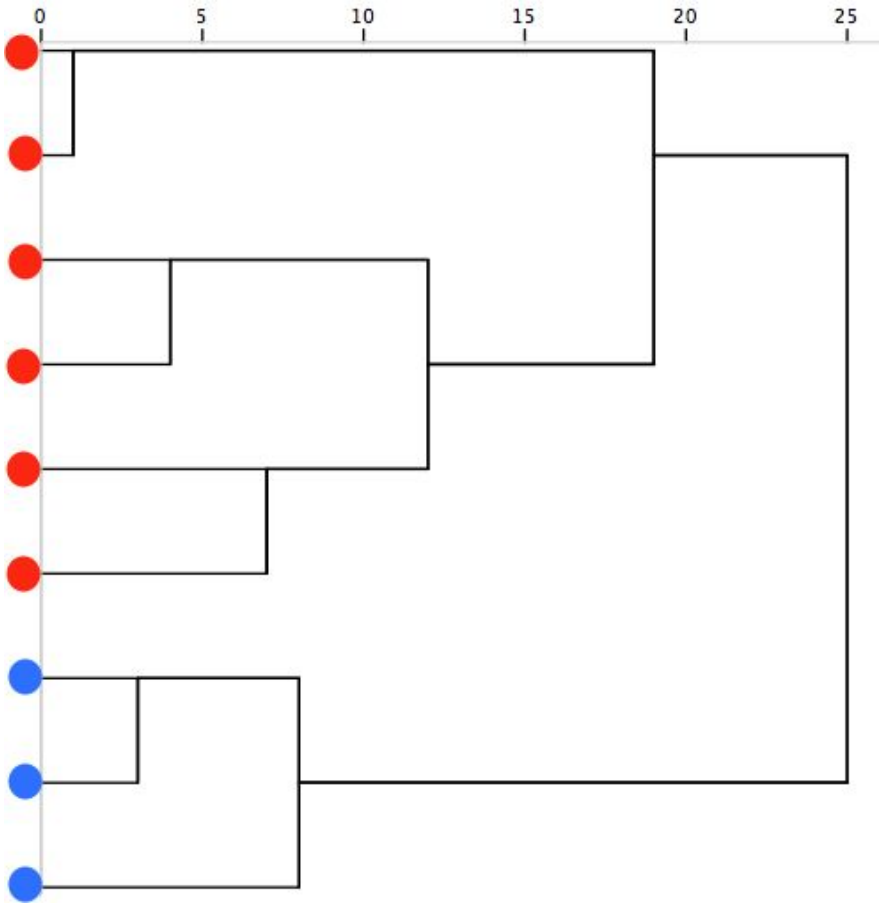
Exp. 1: free listing

10 speakers listed as many plants as possible for each of the ecotopes

Visible: 52 of 52 Variables

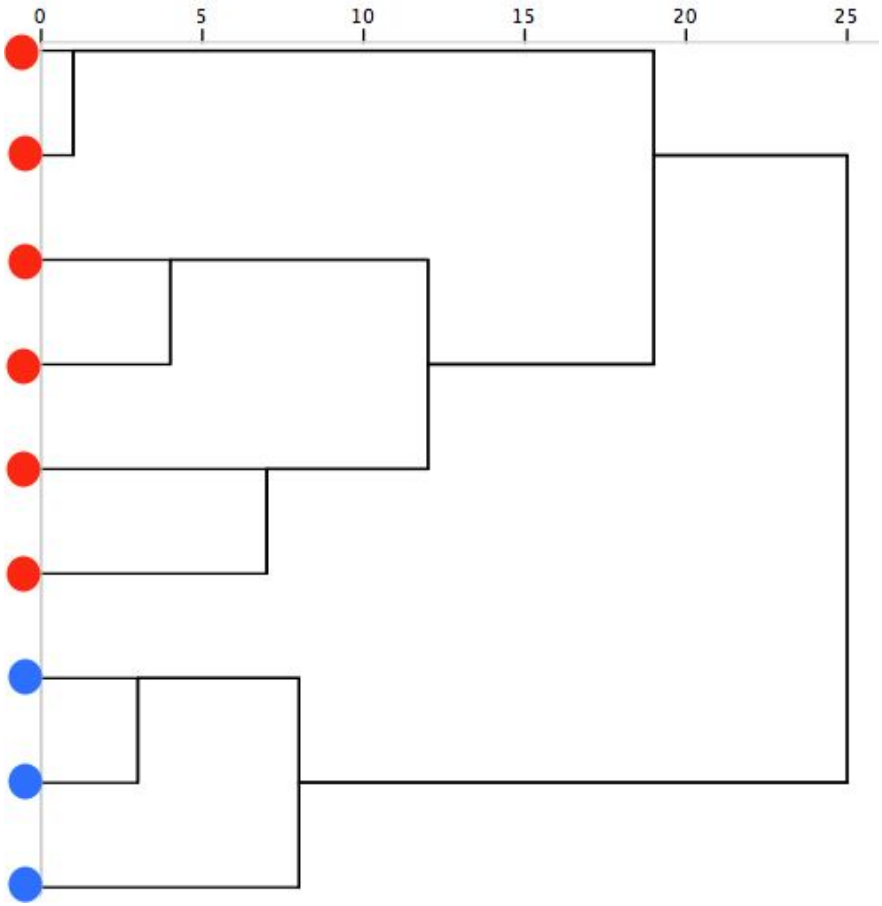
	Name	hobo	warhimia	rokoroko	manaka	lō	konana	awarha	kokor
1	Manakowkaro	0	0	0	10	2	0	0	
2	Mokorowkaro	0	0	0	8	4	4	0	
3	Tiritiowkaro	1	0	1	2	1	2	0	
4	Awarhawkili	2	1	0	0	2	0	10	
5	Beyokhowkili	0	0	0	0	0	0	0	
6	Dakamawkili	0	0	0	0	0	0	0	
7	Korhwabanawkili	0	1	0	1	2	0	0	
8	Walabwakili	0	1	0	0	1	0	0	
9	Itewkili	0	0	1	1	1	0	0	

Cluster analysis: floristic pattern



On the basis of plant composition
◉ *wkili*-ecotopes and ◉ *wkaro*-ecotopes
form different clusters

Cluster analysis: floristic pattern



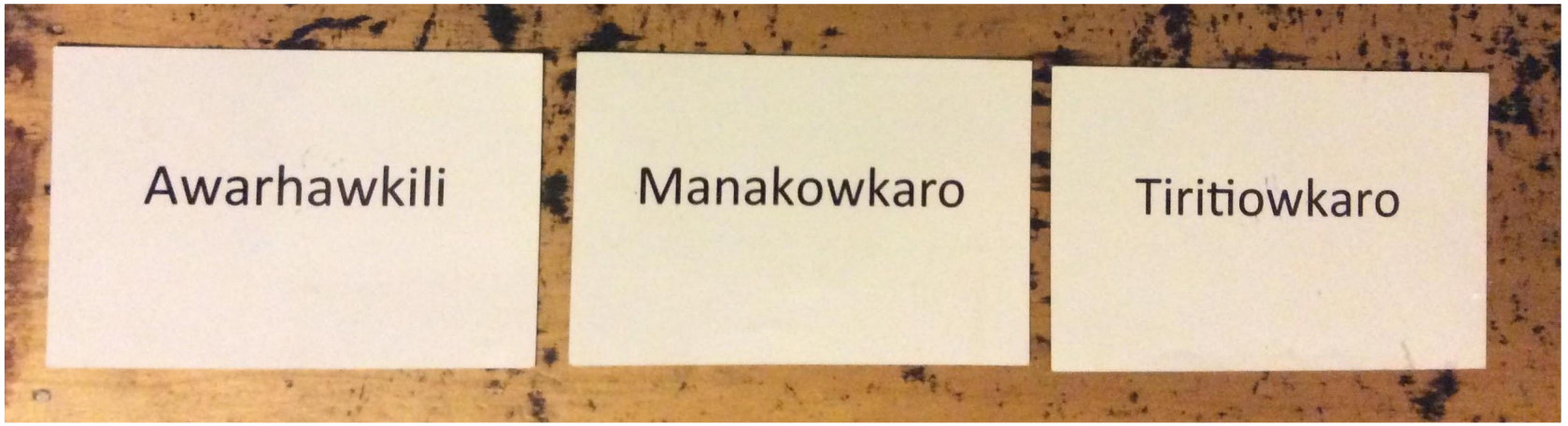
On the basis of plant composition ◉ *wkili*-ecotopes and ◉ *wkaro*-ecotopes form different clusters

If certain types of plants grow in ◉ *wkili*-ecotopes but not in ◉ *wkaro*-ecotopes and *vice versa*, the two clusters:

- differ from one another in terms of physical parameters
- share similar physical parameters within the cluster

Exp. 2: similarity judgments (triads)

9 speakers were asked to make similarity judgments of 24 triads



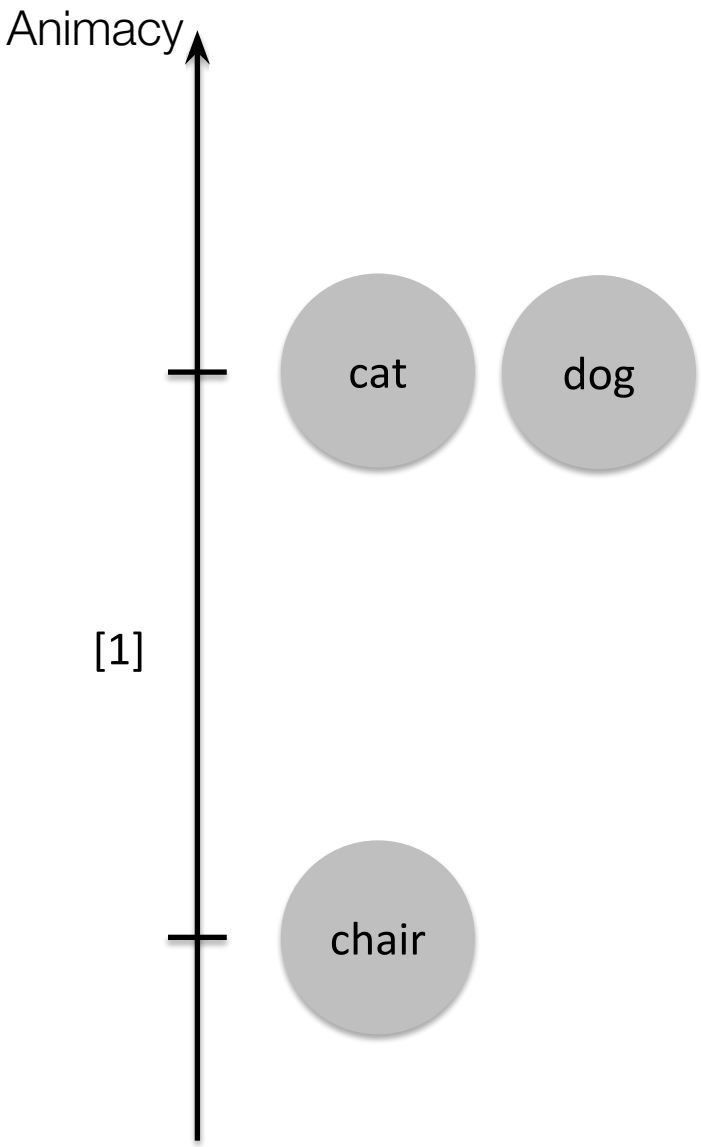
Burton and Nerlove (1976) *Balanced Designs for Triads Tests*

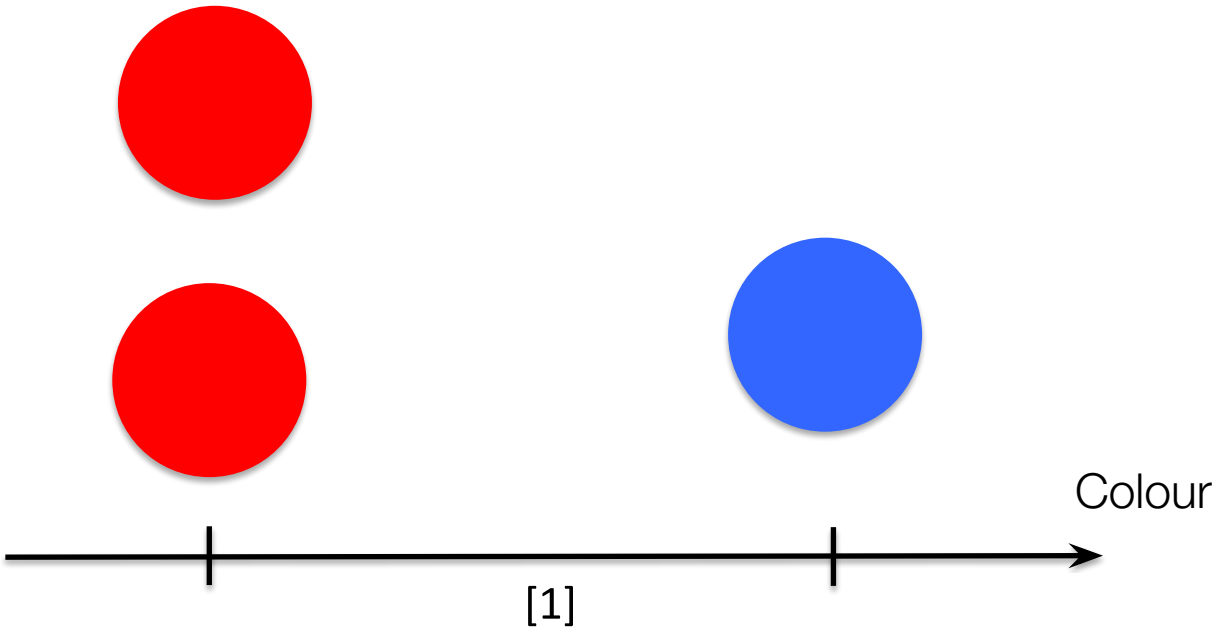
Exp. 2: similarity judgments (triads)

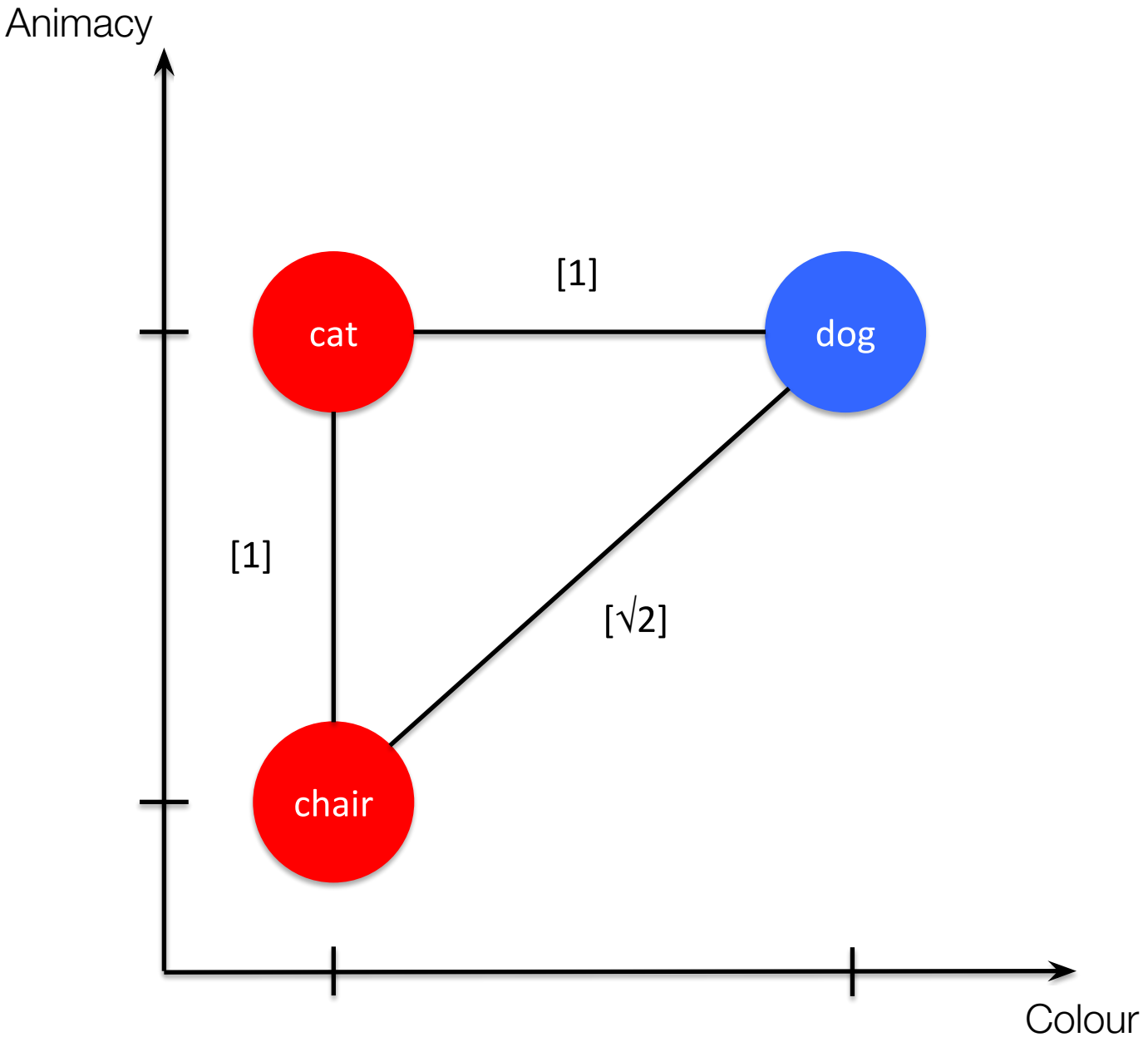
	Manakowkaro	*Mokorowkaro*	*Awarhawkili*	*Tiritiowkaro*	*Beyokhowkili*	*Dakamawkili*	*Korhwabanawkili*	*Walabawkili*	*Itewkili*
Manakowkaro		15	0	16	3	1	0	4	11
Mokorowkaro			0	15	2	1	2	1	9
Awarhawkili				1	8	2	10	11	2
Tiritiowkaro					7	0	4	0	13
Beyokhowkili						4	5	5	3
Dakamawkili							10	8	6
Korhwabanawkili								10	3
Walabawkili									0
Itewkili									

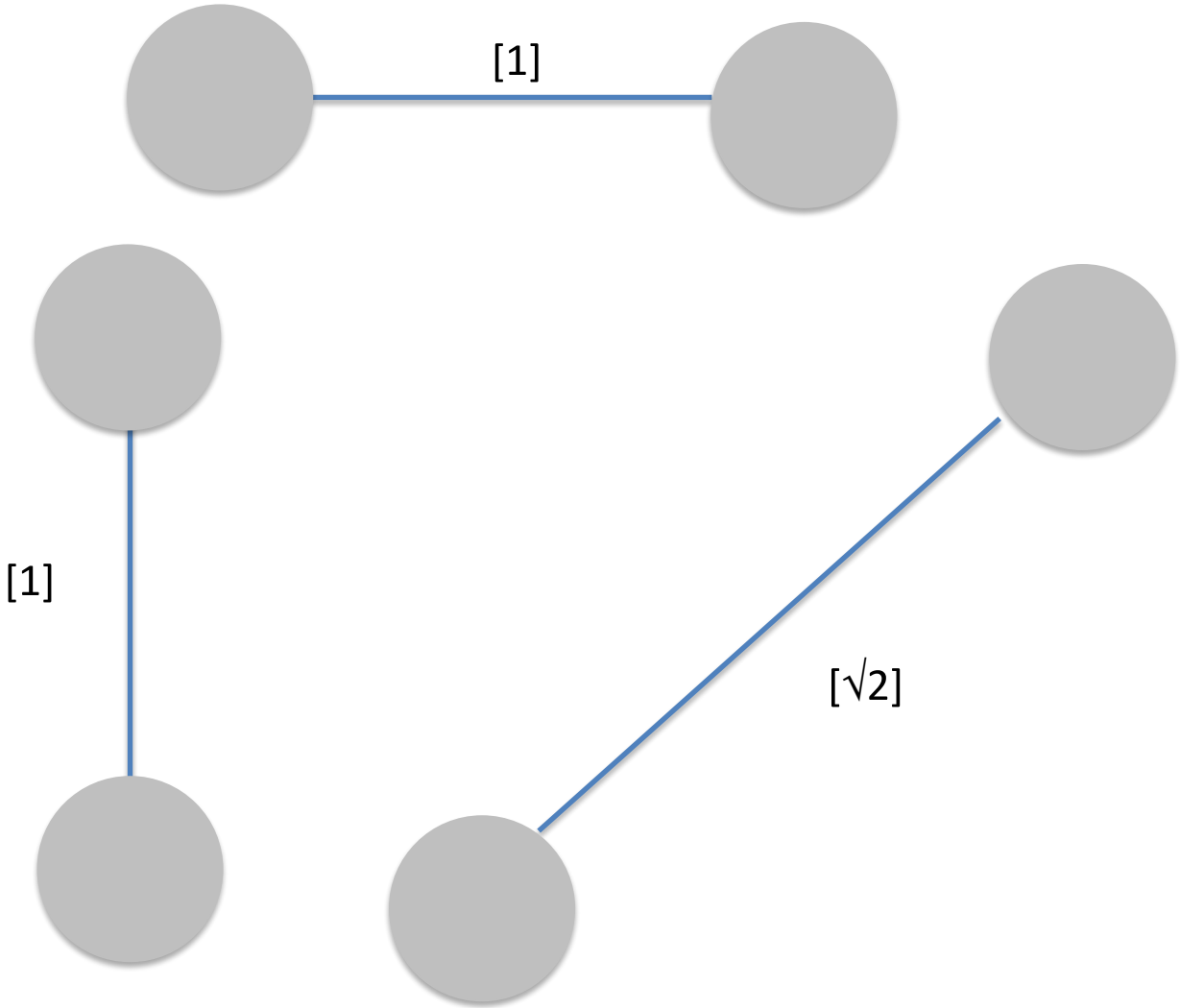
Multidimensional scaling (MDS)

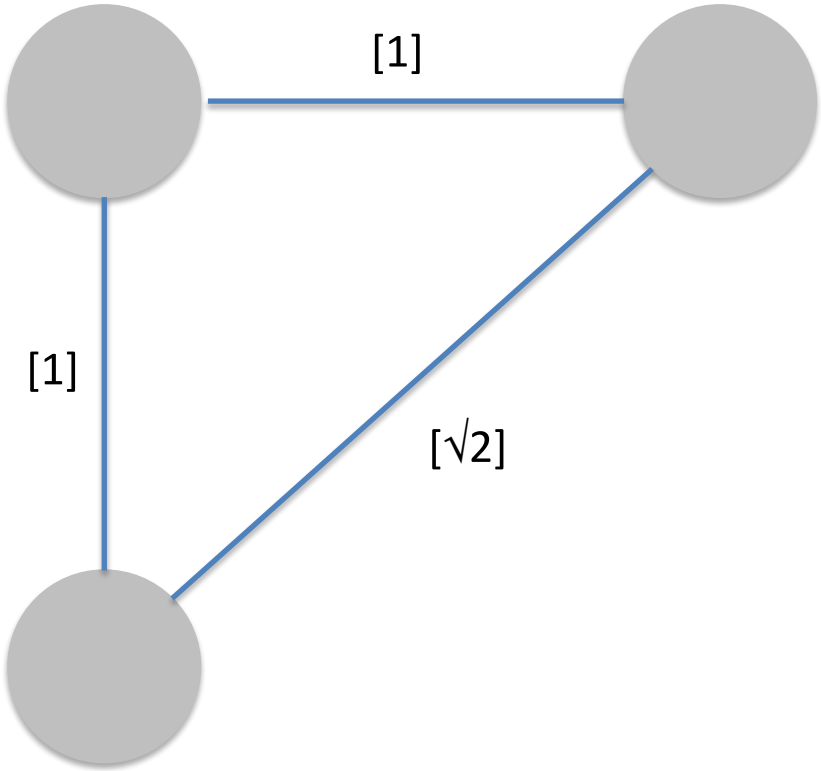

cat
chair
dog


Animacy
cat
dog
[1]
chair


Colour
[1]


Animacy
cat
dog
chair
[1]
[1]
[√2]
Colour


[1]
[1]
[√2]


[1]
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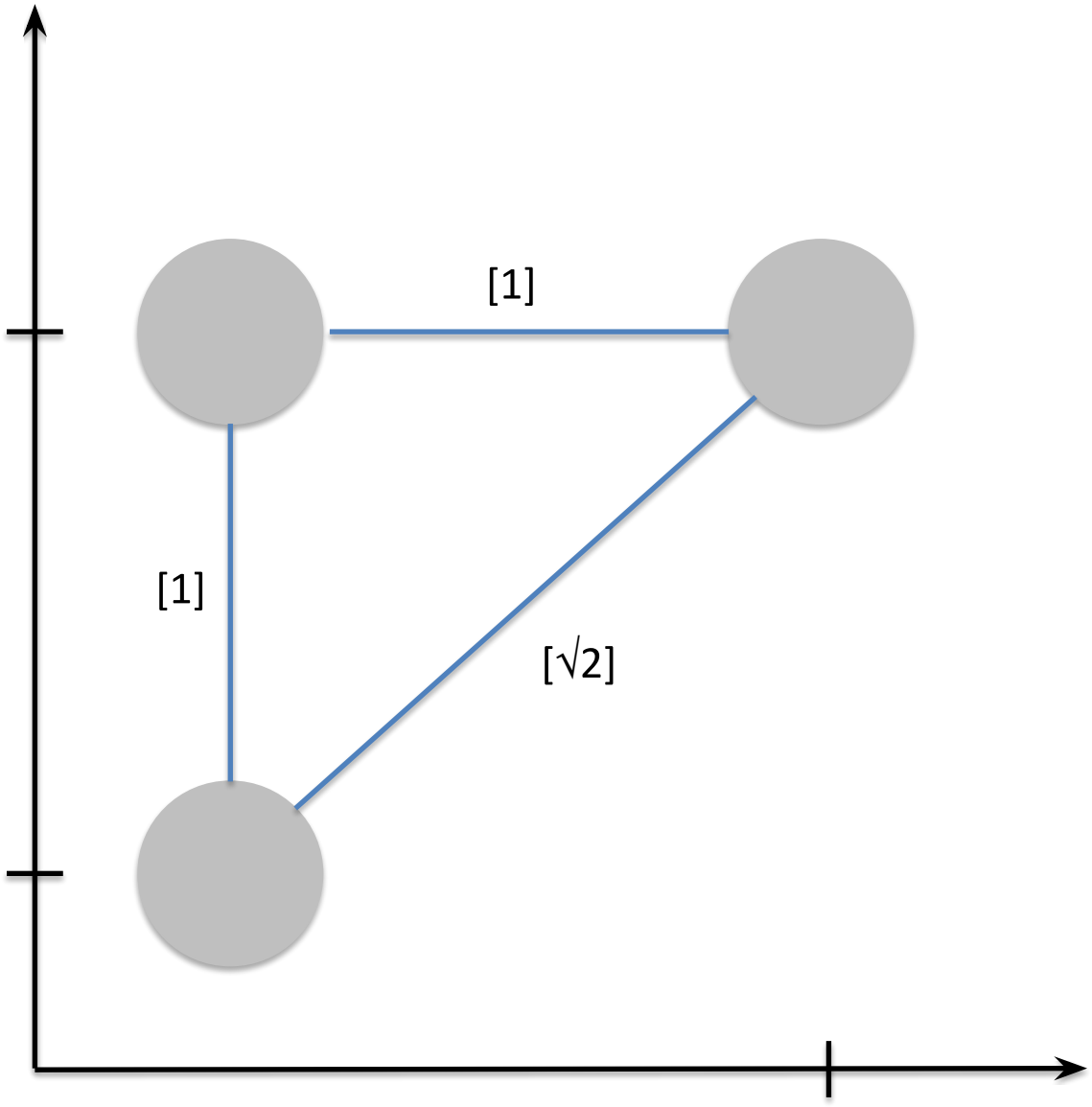
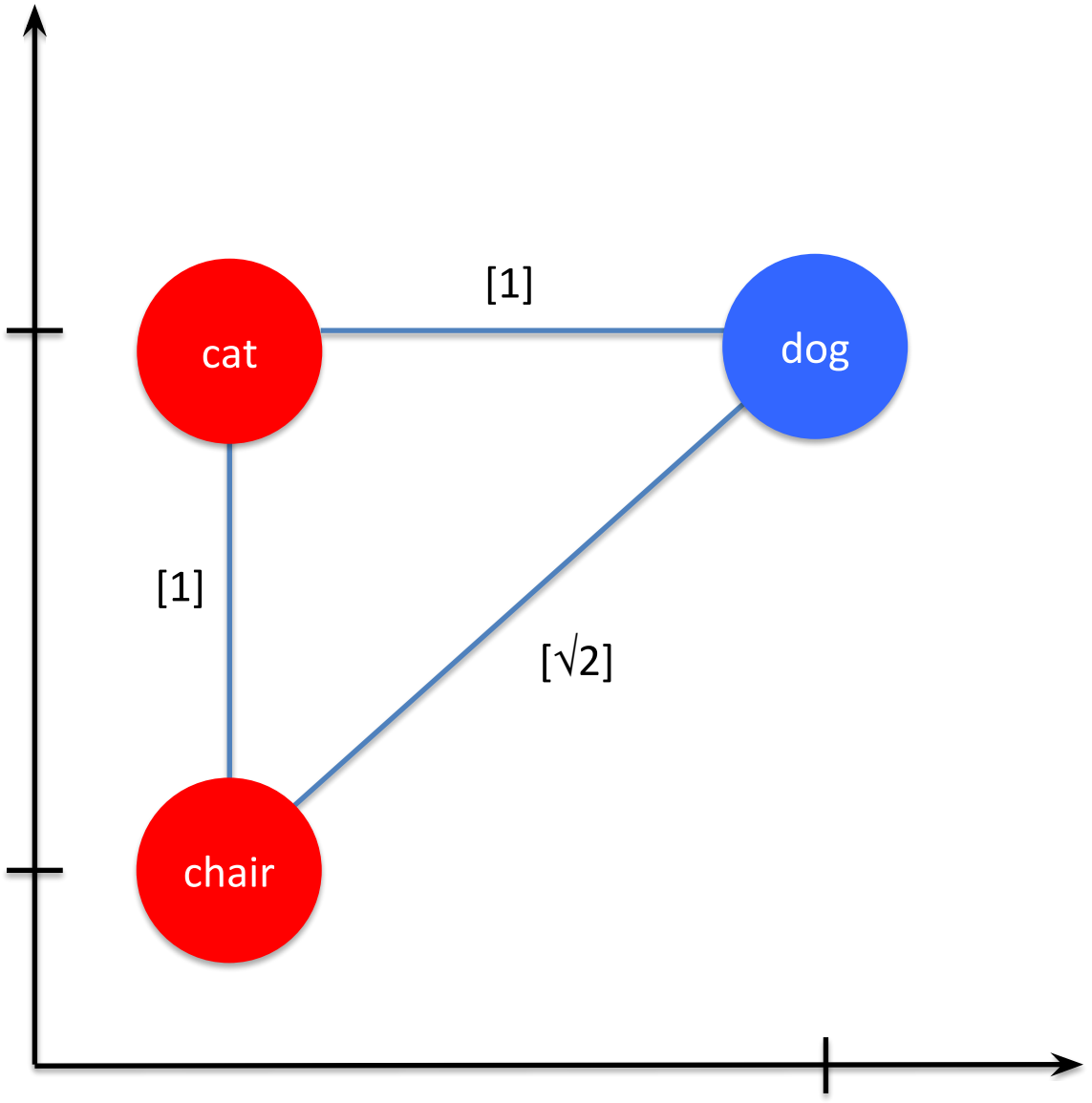
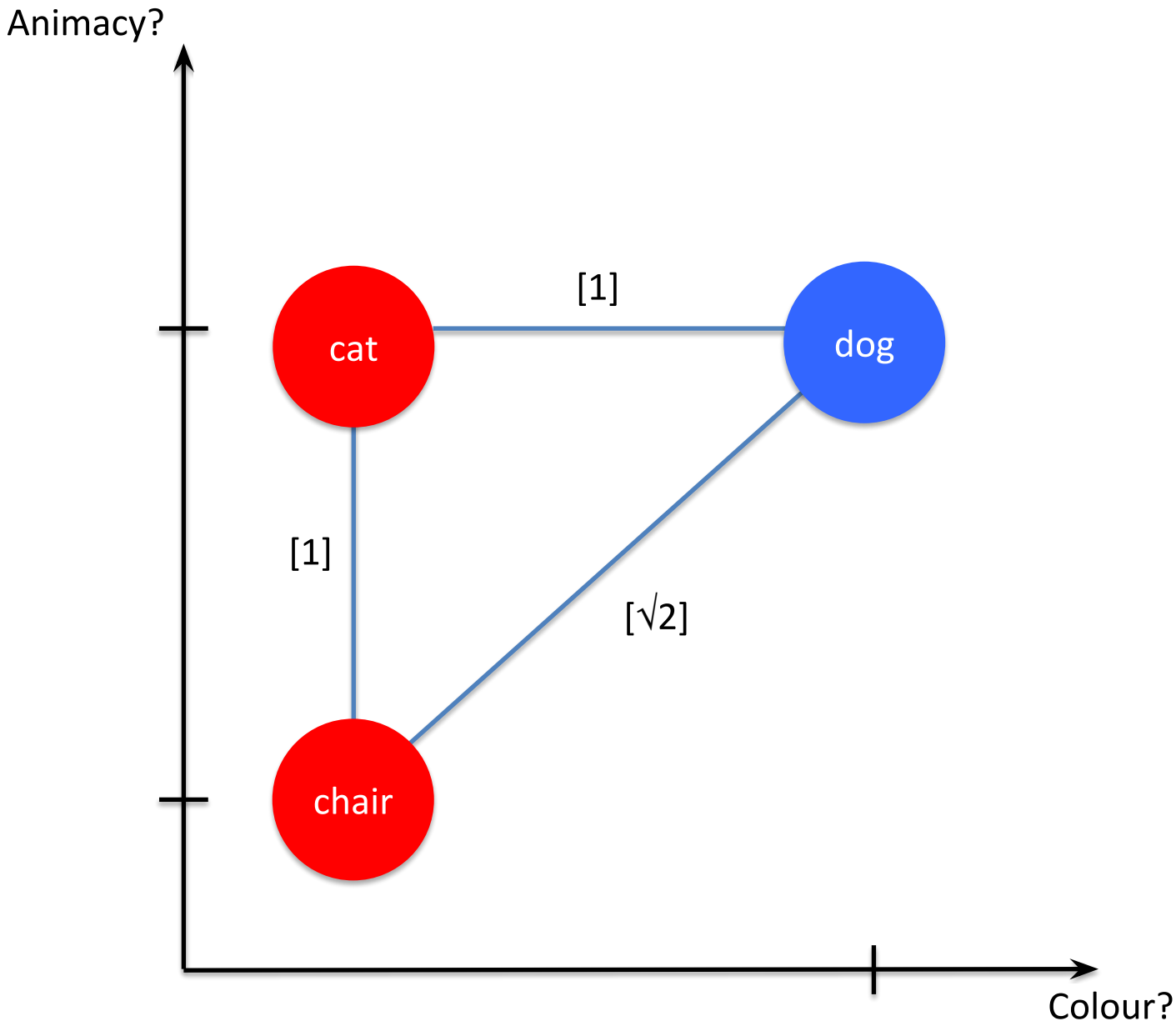

[1]
[1]
[√2]

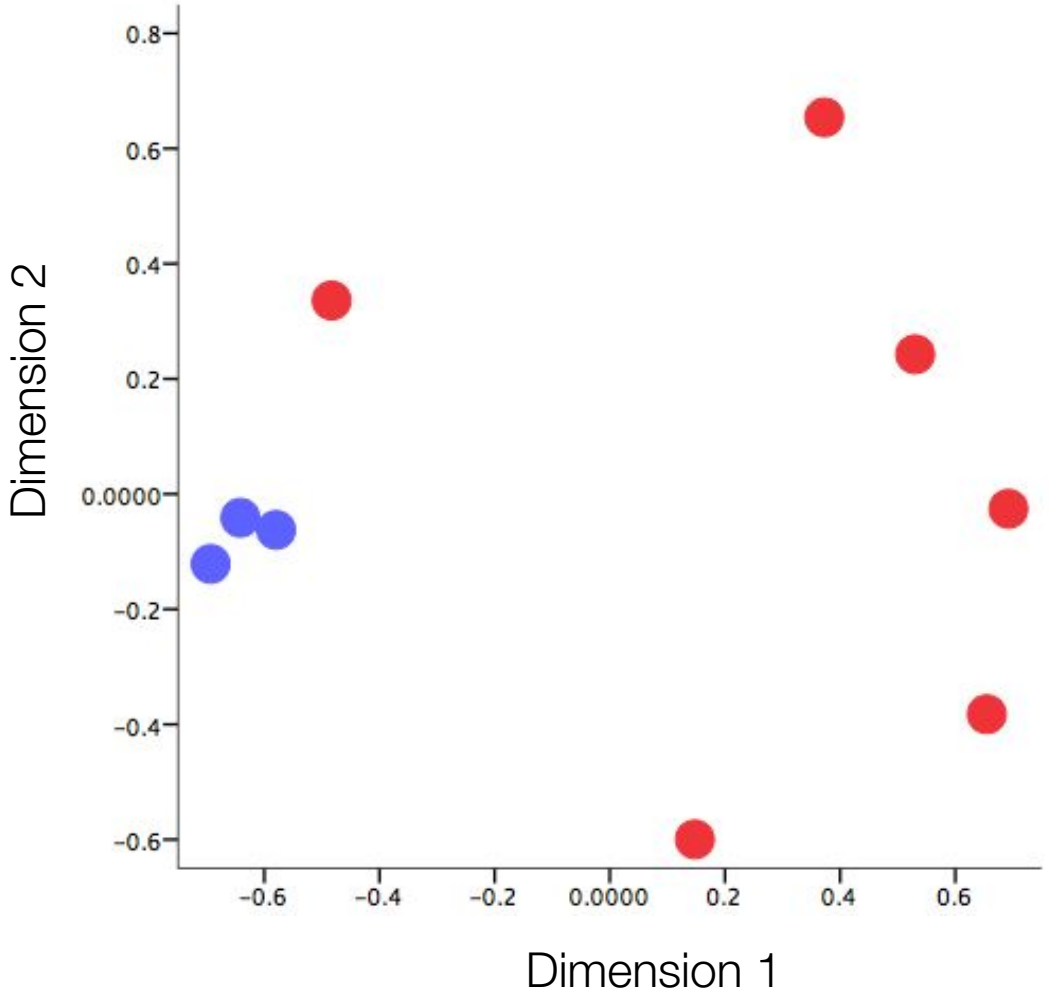

cat
dog
chair
[1]
[1]
[√2]


Animacy?
cat
dog
chair
[1]
[1]
[√2]
Colour?

Exp. 2: similarity judgments (triads)

	Manakowkaro	*Mokorowkaro*	*Awarhawkili*	*Tiritiowkaro*	*Beyokhowkili*	*Dakamawkili*	*Korhwabanawkili*	*Walabawkili*	*Itewkili*
Manakowkaro		15	0	16	3	1	0	4	11
Mokorowkaro			0	15	2	1	2	1	9
Awarhawkili				1	8	2	10	11	2
Tiritiowkaro					7	0	4	0	13
Beyokhowkili						4	5	5	3
Dakamawkili							10	8	6
Korhwabanawkili								10	3
Walabawkili									0
Itewkili									

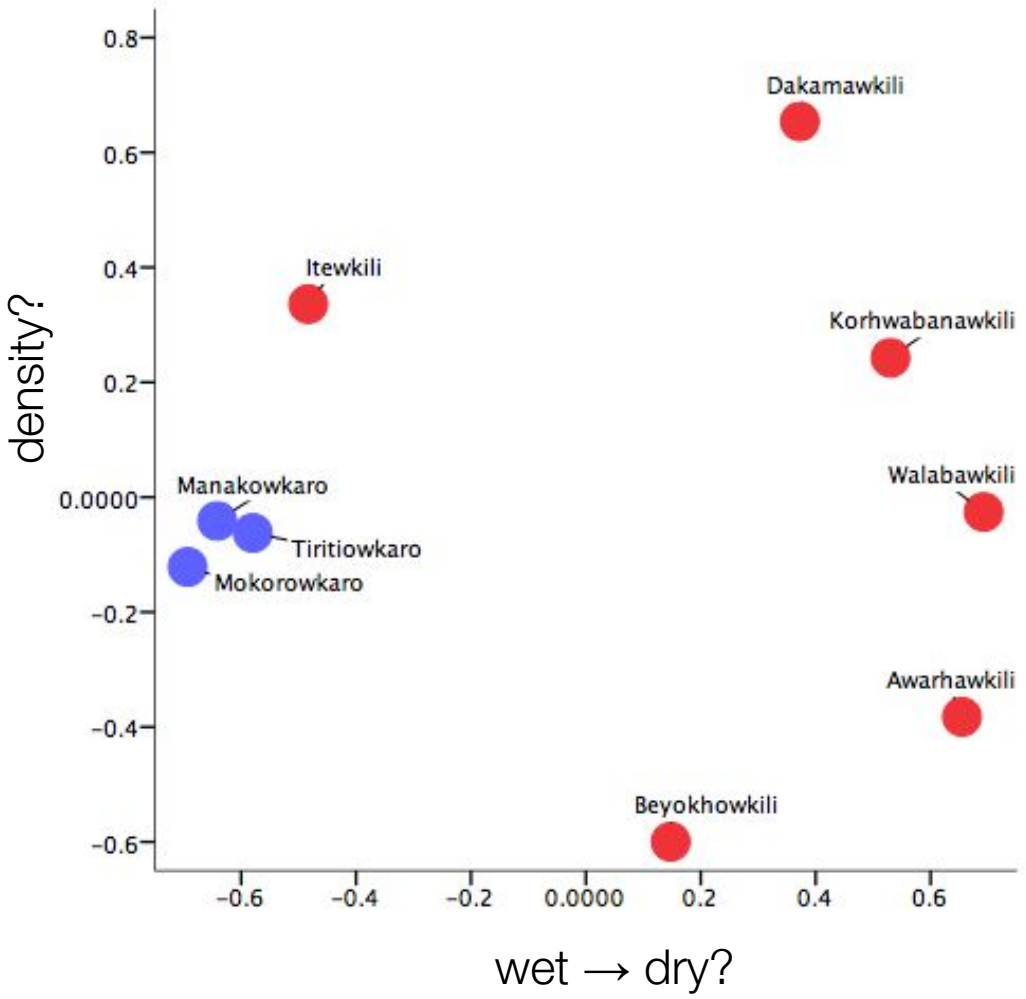
How are ecotopes similar to each other?



2 dimensions best fit the data

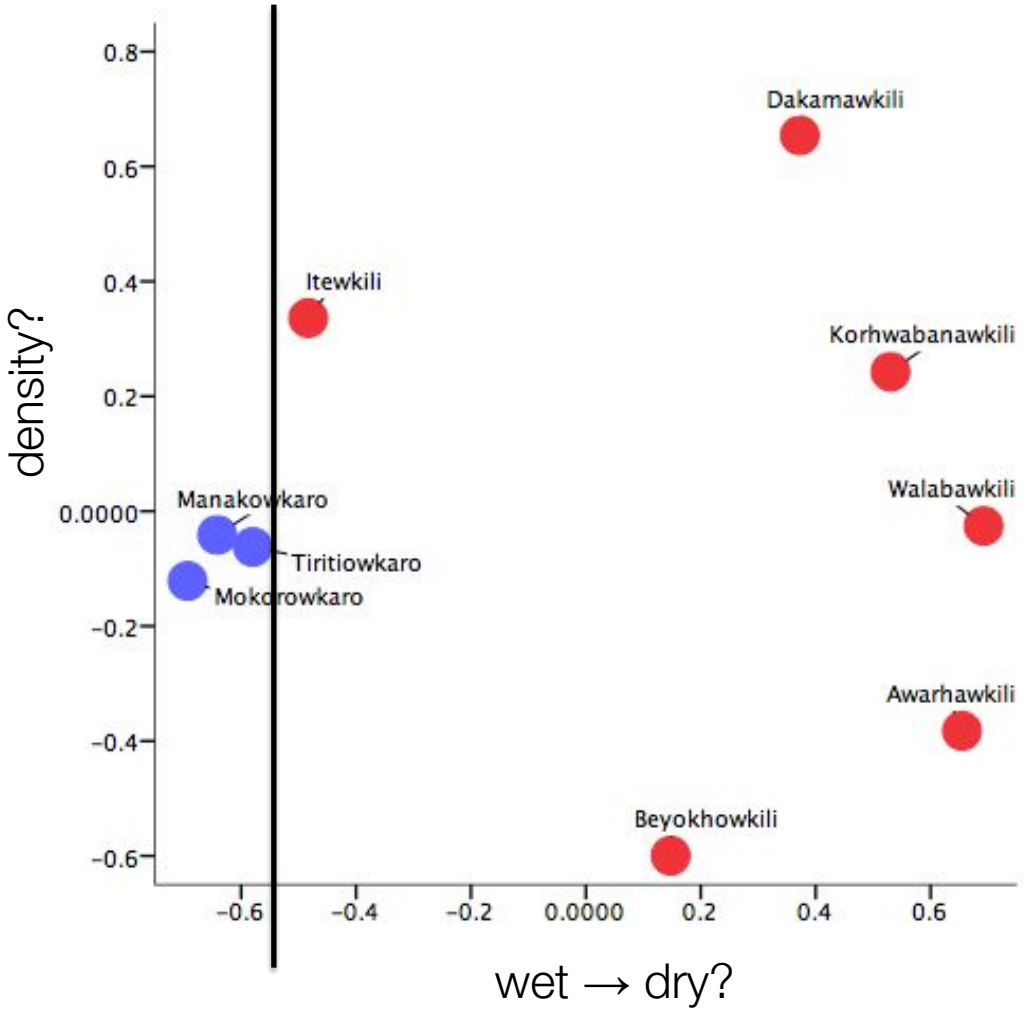
wkaro-forms cluster together

Parameters underlying the domain



By analyzing the outliers we can try hypothesize what the two parameters are

Parameters underlying the domain



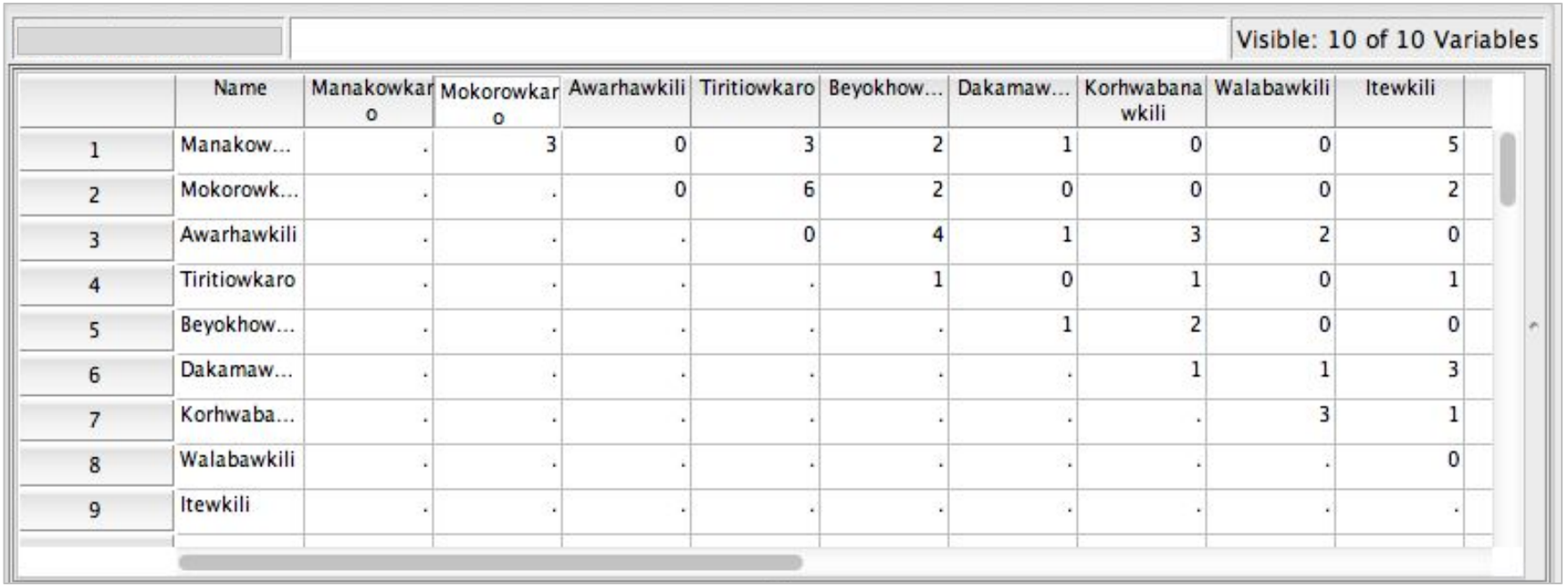
By analyzing the outliers we can hypothesize what the two parameters are

Exp. 3. similarity judgment (pile sorting)

10 speakers divided the ecotopes into as many piles as they wanted and then commented WHY they chose the particular distribution

Exp. 3. similarity judgment (pile sorting)

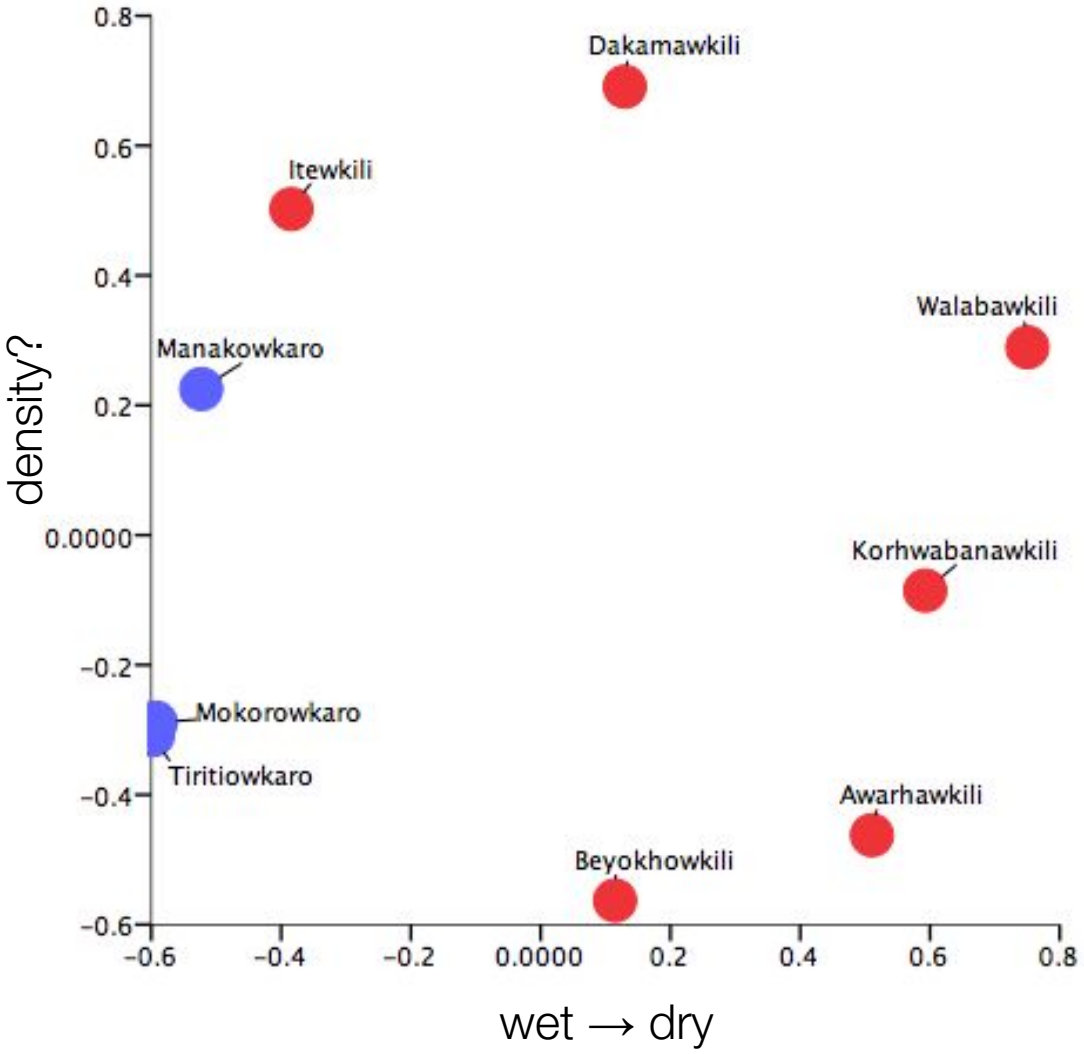
10 speakers divided the ecotopes into as many piles as they wanted and then commented WHY they chose the particular distribution



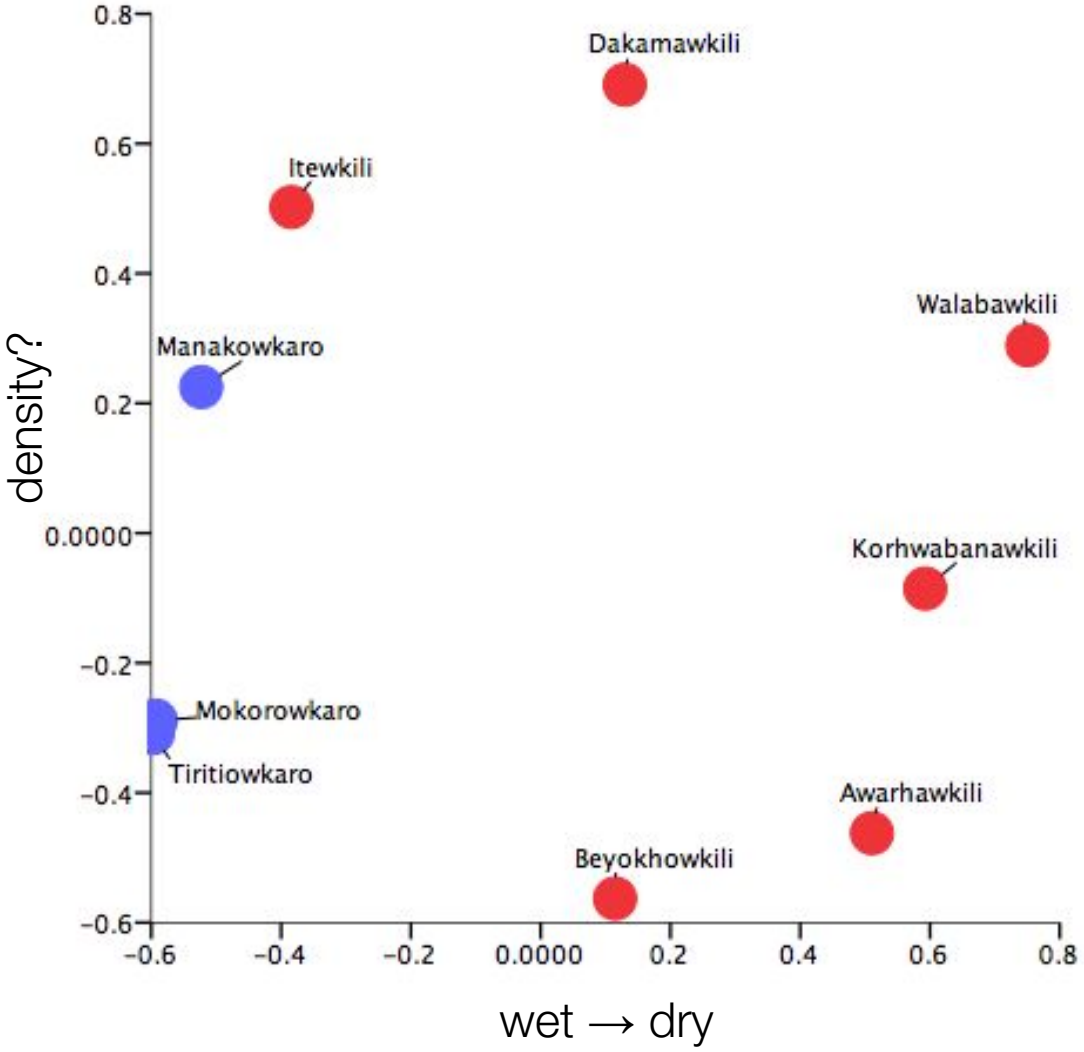
Visible: 10 of 10 Variables

	Name	Manakowkaro	Mokorowkaro	Awarhawkili	Tiritiowkaro	Beyokhow...	Dakamaw...	Korhwabanawkili	Walabawkili	Itewkili
1	Manakow...	.	3	0	3	2	1	0	0	5
2	Mokorowk...	.	.	0	6	2	0	0	0	2
3	Awarhawkili	.	.	.	0	4	1	3	2	0
4	Tiritiowkaro	.	.	.	.	1	0	1	0	1
5	Beyokhow...	.	.	.	.	.	1	2	0	0
6	Dakamaw...	.	.	.	.	.	.	1	1	3
7	Korhwaba...	.	.	.	.	.	.	.	3	1
8	Walabawkili	.	.	.	.	.	.	.	.	0
9	Itewkili	.	.	.	.	.	.	.	.	.

Exp. 3: verbalizing the parameters



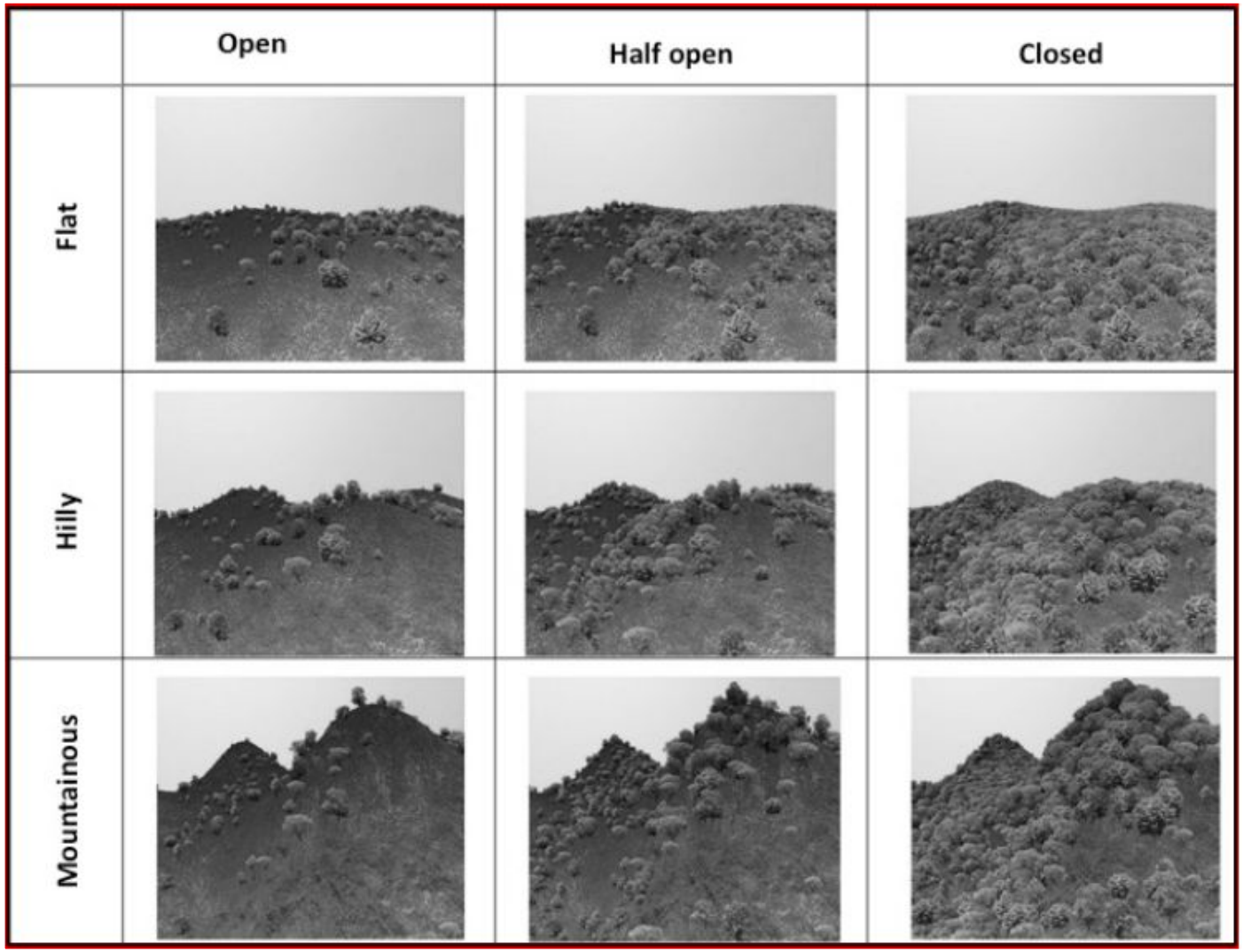
Exp. 3: verbalizing the parameters



The named parameters:

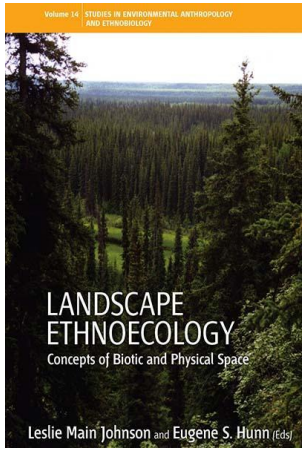
- wet/dry
- dense/open
- forest/savanna
- close to/far from each other

Landscape preference study



Ecotopes?

"smallest ecologically distinct landscape feature in a landscape classification system"



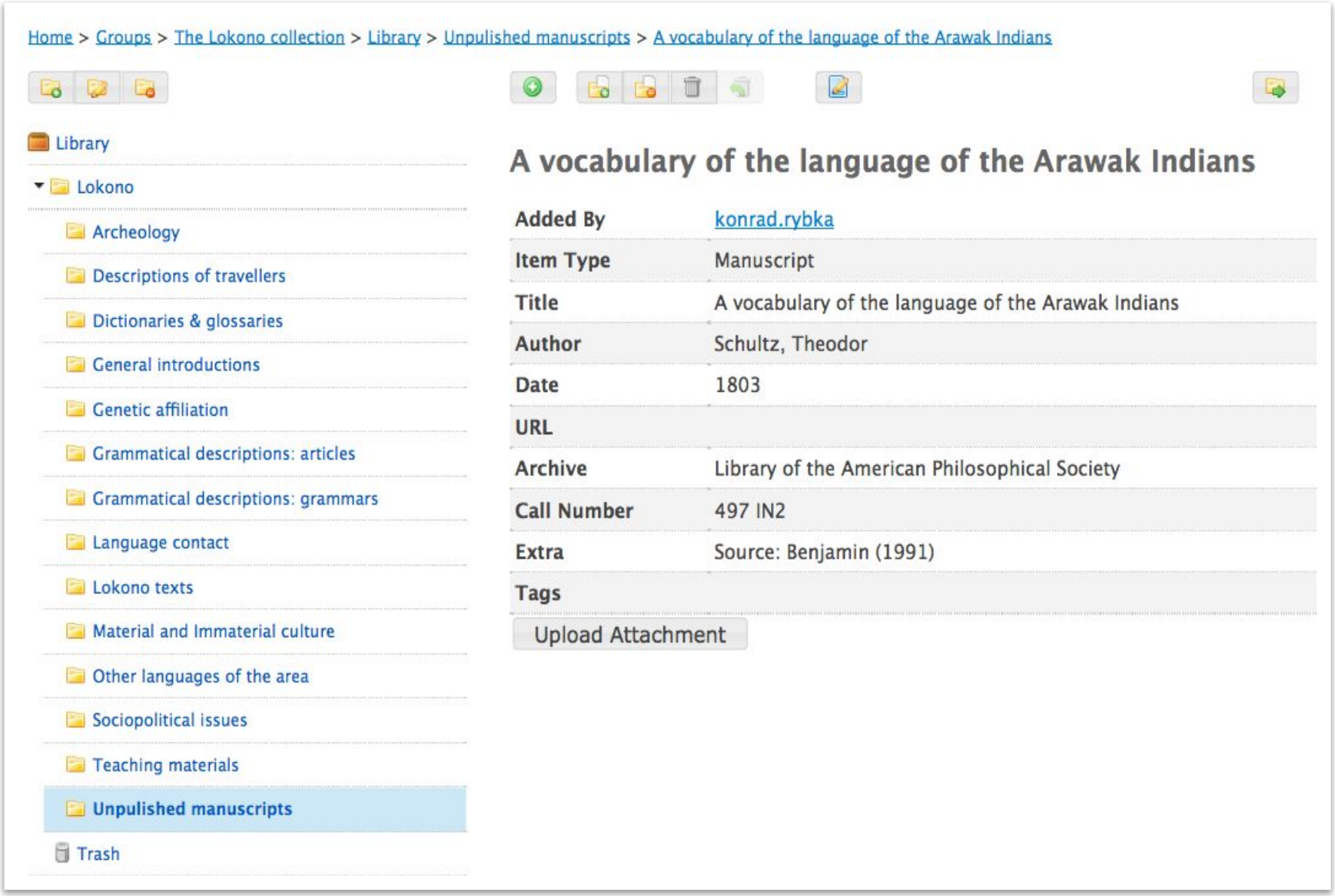
Eugene Hunn and Brien Meilleur (2010). Toward a Theory of Landscape Ethnoecological Classification. In: *Landscape Ethnoecology. Concepts of Biotic and Physical Space*. Edited by Leslie Main Johnson and Eugene S. Hunn.

Applicability

- Primary data
- Other materials
- Methodology
- Theory
- Network
- …

Library workshop and the Lokono Catalogue

- quantity: 300 publications (including lost manuscripts)
- time depth: over 2 centuries
- topics: language, material culture, history, religion, Bible
- types: articles, grammars, dictionaries, manuscripts, legal texts
- language: English, Dutch, French, German, Spanish
- availability: depends


Home > Groups > The Lokono collection > Library > Unpulished manuscripts > A vocabulary of the language of the Arawak Indians
Library
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Grammatical descriptions: articles
Grammatical descriptions: grammars
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Lokono texts
Material and Immaterial culture
Other languages of the area
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A vocabulary of the language of the Arawak Indians
Added By konrad.rybka
Item Type Manuscript
Title A vocabulary of the language of the Arawak Indians
Author Schultz, Theodor
Date 1803
URL
Archive Library of the American Philosophical Society
Call Number 497 IN2
Extra Source: Benjamin (1991)
Tags
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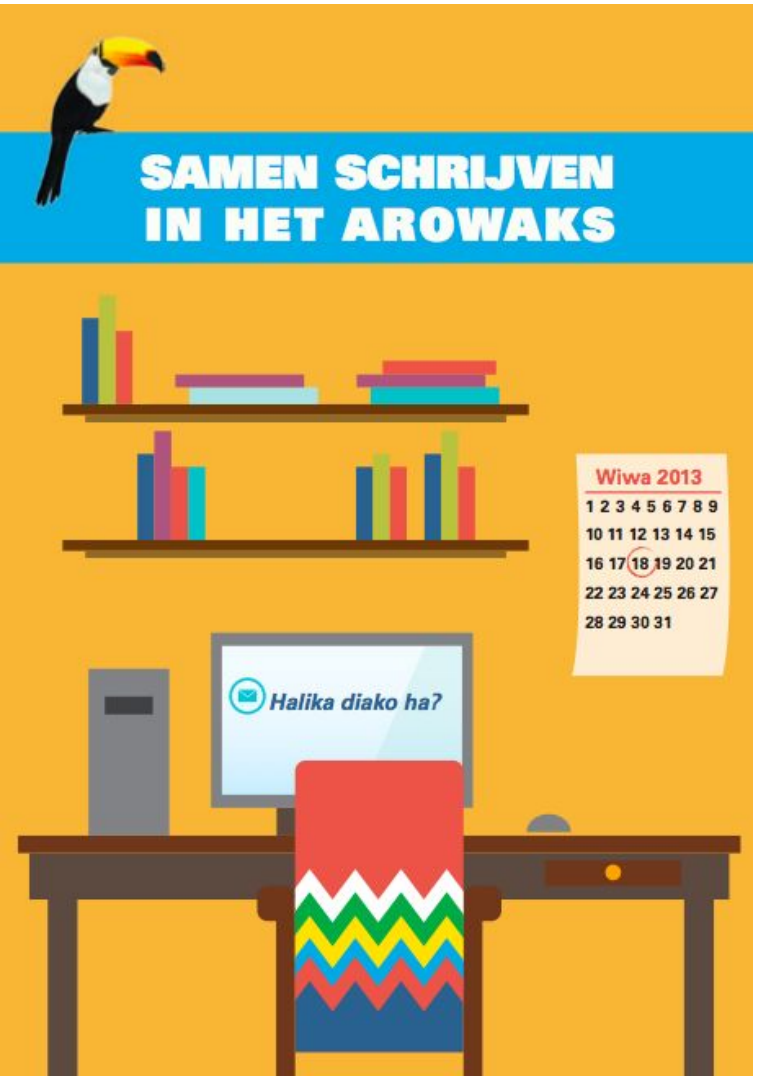
Lokono orthography project



- Lack of a common orthographic standard
- Obstacle to language revitalization
- Numerous workshops in French Guiana, Suriname and Guyana
- Publication grant form the Society For Endangered Languages
- Explanations in layman's language, exercises, summaries, key
- Distributed during one-day orthography workshops

Hollandse Kamp, Suriname, 2013; Photograph courtesy of Martin Purci & Egnatius Beswane

Archive of the Lokono Language

Archive of the Lokono Language (ALL)

- Max Plank Institute for Psycholinguistics, Nijmegen, NL
- digital archive of primary Lokono data
- audio, video, text, annotations, metadata
- various topics: landscape, family, subsistence, material culture, spirituality etc.
- narratives, elicitations, stories, etc.