

FROM KNOWLEDGE TO POSSIBILITY: STRUCTURAL CORRELATES OF SEMANTIC CHANGE

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FORM AND MEANING OF COMPLEMENT CONSTRUCTIONS

- Languages typically have several types of complement clauses (CC)
- Correlation between syntactic and semantic integration (Givón 1990)
- Syntactic integration:
 - Presence of TAM marking, expression of arguments
- Semantic integration:
 - Independence of time reference, place and participants, presence vs. absence of truth value (Givón 1990; Cristofaro 2003; Wurmbrandt/Lohninger 2023)

FORM AND MEANING OF COMPLEMENT CONSTRUCTIONS

(1) a. *I think that cats are more intelligent than dogs*

b. *I started to learn Gaelic*

- Do CC types have meanings of their own? How specific are the semantic restrictions on different CC types in a language?
- Does the meaning of the complement construction result from the meaning of the matrix predicate plus the meaning of the CC or is it more idiosyncratic?

THE CONSTRUCTION

- Verb that can be used to express both knowledge of facts and skills or ability
→ different CC types
- Only interested in the skill/ability use

(2) Toqabaqita (Southeast Solomonian; Lichtenberk 2008: 991, 1012)

- a. *nau kwasi thaitoqoma-na [n=o mataqi]*
 1SG 1SG.NEG know-3SG.OBJ COMP=2SG.NFUT be_sick

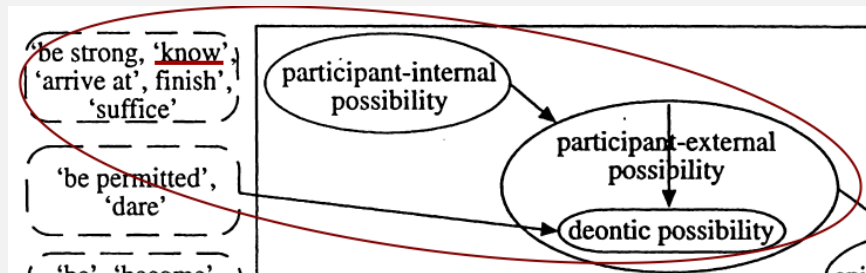
‘I didn’t know that you were sick.’

- b. *thaari naqi qe thaitoqoma-na qasia naqa [kuki-la-na raisi]*
 girl this 3SG.NFUT know-3SG.OBJ INT INT cook-NMLZ-3 rice

‘This girl knows very well how to cook rice.’

THE SEMANTICS OF KNOWING HOW TO

- Formal semantics, philosophy:
 - Long debate whether knowing how to is knowledge or ability (cf. Rumfitt 2003; Bengson et al. 2009; Schmitt/Sode 2018)
- Historical linguistics, typology:
 - 'know' common source for ability modals, may develop further to express different kinds of possibility (Bybee et al. 1994; Heine/Kuteva 2002)
 - Covering different parts of a scale from entirely to minimally cognitive (Sjöberg 2023: 14-17)



(van der Auwera/Plungian 1998: 91)

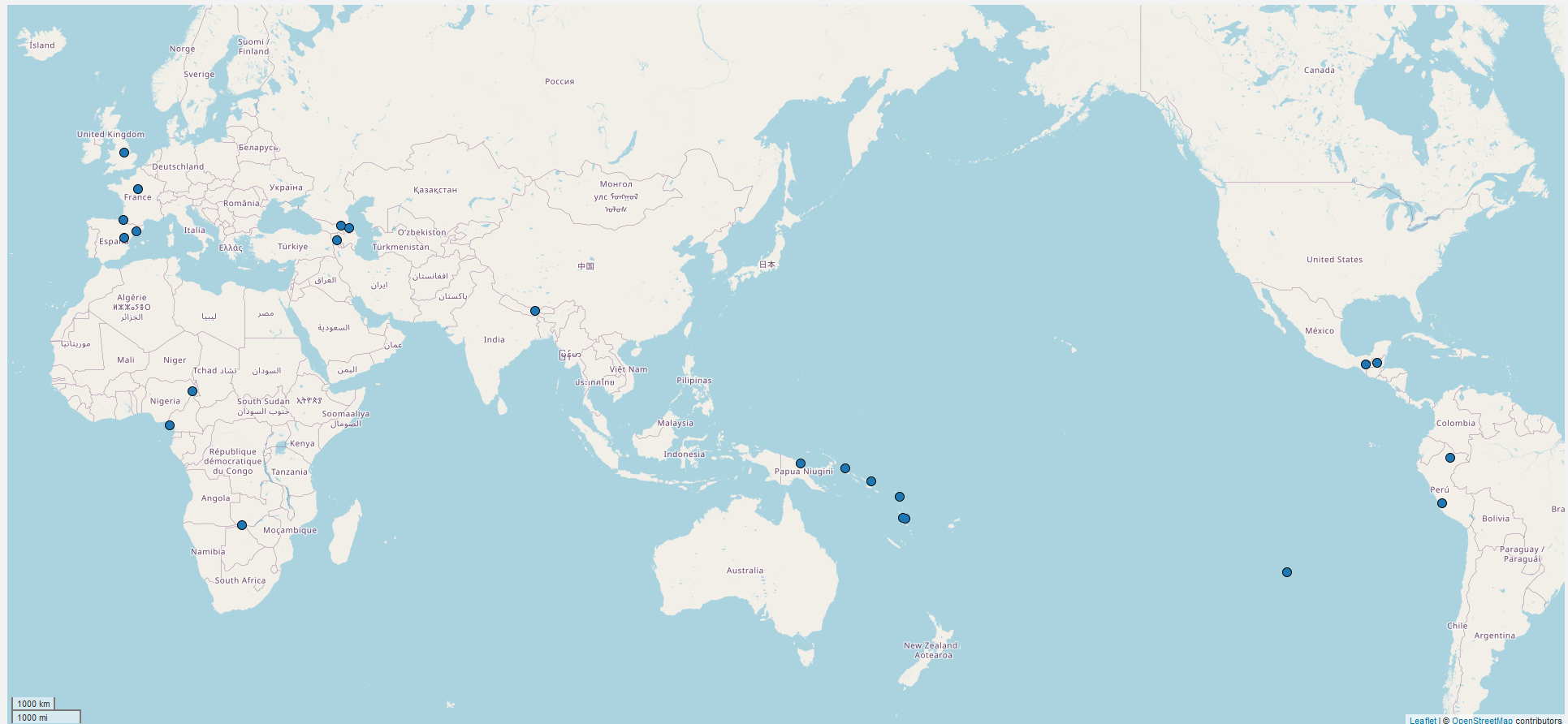
THE SEMANTICS OF KNOWING HOW TO

- Semantically/ conceptually close to modal verbs but still somewhat different → constructions formed in analogy with constructions with modal verbs (Sjöberg 2023: 222)?

Questions:

- Does the construction ‘know how to’ generally pattern with modal verbs or other semantic classes of CEPs?
- Is there a correlation between the semantic and the morphosyntactic “modal-likeness” in a language?

THE SAMPLE



Language	Family	Macroregion	Sources
Hdi	Afro-Asiatic, Chadic	Africa	Frajzyngier 2002 (grammar), Frajzyngier p.c.
Fwe	Atlantic-Congo, Bantu	Africa	Gunnink 2022 (grammar)
Neverver	Austronesian, Central Vanuatu	Papunesia	Barbour 2012 (grammar)
Daakaka	Austronesian, Central Vanuatu	Papunesia	von Prince 2015 (grammar), von Prince 2017 (dictionary)
Teop	Austronesian, NW Solomonian	Papunesia	Mosel 2019 (dictionary)
Rapanui	Austronesian, Polynesian	Papunesia	Kieviet 2017 (grammar), Nancy Weber p.c.
Toqabaqita	Austronesian, SE Solomonian	Papunesia	Lichtenberk 2008 (grammar)
Teanu	Austronesian, Temotu	Papunesia	François 2021 (dictionary)
Pichi	English-lexifier creole	Africa	Yakpo 2019 (grammar)
Eastern Armenian	Indo-European, Armenian	Eurasia	Bararanonline (dictionary), EANC (corpus)
English	Indo-European, Germanic	Eurasia	OED, Cambridge Dictionary (dictionaries)
French, Catalan, Spanish	Indo-European, Romance	Eurasia	Académie française 2021, Institut d’Estudis Catalans 2021, Real Academia Española 2014, (dictionaries)
Basque	isolate	Eurasia	Euskaltzaindiaren hiztegia (dictionary), EPG (corpus)
Itzá	Mayan	North America	Hofling 2000 (grammar), Hofling/Tesucún 1997 (dictionary)
Tzeltal	Mayan	North America	Polian 2013 (grammar), Polian 2020 (dictionary)
Hinuq	Nakh-Daghestanian	Eurasia	Forker 2013 (grammar)
Sanzhi Dargwa	Nakh-Daghestanian	Eurasia	Forker 2020 (grammar)
Mauwake	Nuclear Trans New Guinea	Papunesia	Berghäll 2015 (grammar)
Yauyos Quechua	Quechuan	South America	Shimelman 2017 (grammar)
Yakkha	Sino-Tibetan, Kiranti	Eurasia	Schackow 2015 (grammar)
Iquito	Zaparoan	South America	Michael/Beier 2021 (dictionary)

SEMANTIC RANGE

knowledge	procedural knowledge	'I know how to build a tree house'
internal ability	learned ability	'She knows how to speak Spanish' 'The child can already walk'
	inherent ability	'The girl can run fast' 'Earthquakes can shake houses'
external ability	possibility	'We can go there by bus (because there is a bus going there)' 'When he is in town, you can talk to him'
	permission	'You may come in' 'Can I borrow your phone?'

TYPE OF COMPLEMENT CLAUSE

Morphosyntax

- Always reduced in some way compared to CC of ‘know’ + fact
- But morphosyntactically rather diverse: balanced clauses (less frequent), VP nominalisations, bare VPs ...

(2) Neverver (Central Vanuatu; Barbour 2012: 153)

ni-rongil *me* [*nib-lav* *nitvilam* *ang* *nib-lik* *i-okh*]
1REAL:SG-know just 1IRR:SG-get mat ANA 1IRR:SG-pass PSNPR-2SG

‘(If I had a mat,) I could just give the mat to you.’

TYPE OF COMPLEMENT CLAUSE

- (3) Rapanui (Polynesian; Kieviet 2017: 526)

ko 'ite 'ā (...) [i te vānaŋa i tētahi 'arero]

PRF know CONT ACC ART speak ACC other tongue

‘He could (...) speak other languages.’

- (4) Pichi (English-lexifier creole; Yakpo 2019: 330, 168)

di mán e nó sabí [tók Panyá]

DEF man 3SG.SBJ NEG know talk Spanish

‘The man doesn’t know how to speak Spanish.’

TYPE OF COMPLEMENT CLAUSE

Semantics

- Comparison with five other classes of CEPs that take same-subject action complements

Semantic class	CEPs
desiderative (DES)	'want'
intention (INT)	'intend', 'plan', 'try'
implicative (IMP)	'remember', 'forget', 'manage', 'fail'
phasal (PHA)	'begin', 'stop', 'continue'
modal (MOD)	'can', 'must'

PATTERNS

Language	KNO	L-AB	I-AB	POSS	PER	N. of examples	CC type
Hdi						2+7	MOD, DES
Fwe						2	MOD, PHA, IMP, DES
Neverver						10	DES, (no other MOD)
Daakaka						11	MOD, INT
Teop						12	MOD, PHA, IMP, INT, DES
Rapanui						4+8	PHA / MOD, INT, DES
Toqabaqita						4	(MOD), IMP, INT
Teanu						23	MOD, (IMP), DES
Pichi						2	MOD, PHA, (IMP)
Eastern Armenian						11	MOD, (PHA), IMP, INT, DES
English						8	-
French, Catalan, Spanish						19	MOD, (INT), DES
Basque						15	PHA, (INT)
Itzá						8	-
Tzeltal						4	PHA, INT, DES
Hinuq						3	MOD, (PHA), IMP, INT, DES
Sanzhi Dargwa						1	MOD, PHA
Mauwake						3	DES
Yauyos Quechua						4	MOD, PHA, INT, DES
Yakkha						1	MOD, PHA, IMP, INT, DES
Iquito						5	?

PATTERNS

- Modal-like CC

Language	KNO	L-AB	I-AB	POSS	PER	N. of examples	CC
Hdi						2+7	MOD, DES
Fwe						2	MOD, PHA, IMP, DES
Daakaka						11	MOD, INT
Teop						12	MOD, PHA, IMP, INT, DES
Rapanui						1+3	MOD, INT, DES
Teanu						23	MOD, (IMP), DES
French, Catalan, Spanish						19	MOD, (INT), DES
Hinuq						3	MOD, (PHA), IMP, INT, DES
Sanzhi Dargwa						1	MOD, PHA
Yauyos Quechua						4	MOD, PHA, INT, DES

PATTERNS

- Partly modal-like CC

Language	KNO	L-AB	I-AB	POSS	PER	N. of examples	CC
Toqabaqita						4	(MOD), IMP, INT
Eastern Armenian						11	MOD, (PHA), IMP, INT, DES
Yakkha						1	MOD, PHA, IMP, INT, DES

- CC unlike modal

Language	KNO	L-AB	I-AB	POSS	PER	N. of examples	CC
Rapanui						3+5	PHA
English						8	-
Basque						15	PHA, (INT)
Itzá						8	-
Tzeltal						4	PHA, INT, DES
Mauwake						3	DES

PATTERNS

Semantically conditioned split in Rapanui (Polynesian)

(5) a. The pattern of modals (Kieviet 2017: 526):

¿Te ηā poki e ko riva [mo o'o ki te kona aŋa vaka]?
 ART PL child IPFV NEG.IPFV good **for** enter to ART place make canoe

‘Can’t the children enter the canoe building site?’

b. The pattern of *'ite* ‘know’ expressing procedural knowledge and learned ability (ibid.):

ko 'ite 'ā [...] [i te vānaŋa i tētahi 'arero]
 PRF **know** CONT ACC ART speak ACC other tongue

‘He could [...] speak other languages.’

c. The pattern of *'ite* expressing inherent ability (Nancy Weber, p.c.):

ko 'ite 'ā te poki vahine [mo tahuti hōrou]
 PRF **know** CONT ART child female **for** run fast

‘The girl can run fast.’

CONCLUSION

- Languages usually do not distinguish between procedural knowledge and learned ability → 'know' + action CC semantically close to ability modals
- Still morphosyntactically different from modal verbs in many languages
→ Know-how and ability difference in semantic integration? Or is there more in the semantics of CC types?
- General patterns in the sample suggest that semantic extension beyond learned ability is found only when the construction is morphosyntactically modal-like
- Data from Rapanui suggests that the construction is morphosyntactically treated as modal as soon as it expresses inherent ability
→ Morphosyntactic modal-likeness prerequisite for semantic extension? Or morphosyntax adapted to semantics?
- Needs to be further tested with diachronic data and data on variation within one language or between closely related languages, more data on semantic range in the languages and more representative sample also desirable

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