

## From knowledge to possibility: structural correlates of semantic change

A verb ‘know’ that can combine both with a complement clause (CC) expressing a fact (‘know that something is the case’) and a different CC expressing an action (‘know how to do something’) seems to be very widespread cross-linguistically. The construction ‘know’ + action, in addition to procedural knowledge (as in ‘know how to build a tree house’), typically also expresses at least learned ability (like ‘know how to read’) and in some languages proceeds further to participant-external possibility (cf. Bybee et al. 1994: 190-194; van der Auwera/Plungian 1998). Little attention has, however, been paid so far to the morphosyntax of these constructions.

It is well documented that the form of a CC and the meaning of the clause-embedding predicate (CEP) are connected (e.g. Givón 1990; Schmidtke-Bode 2014; Wurmbrandt/Lohninger 2023). Given that ‘know’ + action tends to take on modal semantics, this raises the question whether the construction also patterns with modal verbs regarding structural properties like the type of CC they combine with, and to what extent this correlates with the semantic range of the construction in the language in question.

In order to determine the structural modal-likeness of the construction in a given language, I compare the **CC type** used with ‘know’ to representatives of five semantic classes of CEPs which may behave similarly to ‘know’ + action because, like the latter, they take complements with dependent time reference and (exclusively or typically) the same subject as the CEP, namely modal verbs (like ‘must’), phasal verbs (like ‘begin’), verbs of intention (like ‘intend’), implicative verbs (like ‘manage’) and the desiderative verb ‘want’.

The **semantic range** of the construction, on the other hand, is classified into procedural knowledge, learned ability, inherent ability, circumstantial possibility and permission.

Comparing the **correlation** between the modal-likeness of the CC and the semantic range of the construction in 20 languages from 10 families and 5 macroregions (Table 1) based on data from grammars and dictionaries, the pattern that emerges is that although learned ability is found in all types of constructions, further semantic extension to modal meanings appears only in languages treating ‘know’ as modal-like morphosyntactically, suggesting that the structural similarity to modal verbs is a prerequisite for the extension. Conversely, having the same CC type as modals does not necessarily imply modal meanings other than learned ability.

It is striking that in all languages in the sample that treat ‘know’ + action as modal-like, modals do not form an exclusive **paradigm** of their own but share their CC type with at least one other class of CEPs, which might make their class more open to less prototypical members like ‘know’, in contrast to languages with a very distinct class of modals like the semi-auxiliaries in Basque (Ortiz de Urbina 2003: 300).

Thus, the semantic extension of ‘know’ + action seems to be constrained by morphosyntactic properties of the construction, which are in turn conditioned by properties of the modal paradigm. This study offers thus further insights on the link between form and meaning of complement constructions as well as facilitating and inhibiting structural factors in semantic change.

## References

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Language	Semantic range					CC
	PROC	L-AB	I-AB	POSS	PER	
Armenian	X	X				MOD, DES, (PHA), INT, IMP
Basque	X	X				PHA, (INT)
Daakaka			X	X	X	MOD, INT
English	X	X				(INT)
French	X	X	(X)			MOD, DES, (INT)
Fwe		X				MOD, DES, PHA, IMP
Hdi	X					MOD, DES
Hinuq	X	X	X			MOD, DES, (PHA), INT, IMP
Itzá	X	X				–
Mauwake	X					DES
Neverver			X	X		(no other modals)
Pichi	X	X				MOD, PHA, (IMP)
Rapanui	X	X				(PHA)
Sanzhi Dargwa	X					MOD, PHA
Teanu	X	X	X	X	X	MOD, DES
Teop		X	X			MOD, DES, PHA, INT, IMP
Toqabaqita	X	X	X			MOD, INT, IMP
Tzeltal	X	X				DES, PHA, INT
Yakkha	X					MOD, DES, PHA, INT, IMP
Yauyos Quechua	X	X	X			MOD, DES, PHA, INT

**Table 1:** Semantic range of construction and modal-likeness of CC.