Inchoativization across languages: Morphology vs. Type-shift

Observation Languages differ with respect to the relationship between words that serve as translational equivalents of English adjectives (property concept lexemes, henceforth PCLs) and words describing changes of state. One group of languages exhibits a relationship which we call *labile*, where there is no surface morphophonological difference between PCLs expressing a stative meaning and lexemes expressing change of state (COS) semantics. This is illustrated by Mandarin in (1) (Tham 2013), in which a rate adverbial like *fast*, in combination with a stative predicate, gives rise to a COS meaning (1b). In the absence of a rate adverbial or other material selecting a dynamic event predicate, no COS meaning is present (1a). Lability is not attested in all languages: for example, in Japanese, stative PCLs do not have a COS meaning in the presence of a rate adverbial, and are in fact unacceptable in their presence. Instead, Japanese requires the use of a verb derivationally related to the PCL to express COS (2). Crucially, such overt derivational morphology is absent in languages that show state/COS lability: lability and the existence of such morphology appear to be in complementary distribution.

Proposal We propose an analysis of lability in terms of *type shifting*: in languages with no overt inchoative morphology, a type shifting operation introducing inchoative semantics applies where type-mismatches would occur. Together with a Blocking Principle (cf. Chierchia 1998), this explains why COS meaning in labile languages only arises in certain grammatical contexts and why such type-shifting is in complementary distribution with inchoative morphology cross-linguistically. Our analysis thus improves on previous accounts based on coercion (Koontz-Garboden 2007), as it makes a testable cross-linguistic prediction: languages without inchoative morphology, and only these, allow stative verbs to shift to a change-of-state meaning in appropriate contexts.

Lability as type-shifting On our analysis, there is no morpheme, either overt or covert, encoding COS semantics in labile languages. Instead, state/COS lability arises via a *type-shifting operation* that applies to stative verbs and returns an event predicate. This operation takes a predicate of states, existentially closes the state argument, and introduces a BECOME relation between an event and the state. We term this operation *Inchoative Shift* (3). Following much work in the type-shifting literature (Partee & Rooth 1983, Chierchia 1998, Bittner 1999, a.o.), Inchoative Shift applies only as a *last resort* mechanism to repair local type mismatches. This property of type-shifting explains the restriction of COS readings with stative predicates to cases where the VP would serve as an argument of an event modifier: rate adverbs only compose with predicates of dynamic eventualities; composition with a predicate of states would fail if no type-shifting occurred. In the absence of a function demanding an eventive argument, no type mismatch arises, Inchoative Shift does not apply, and COS semantics is absent.

Blocking Principle The type-shifting perspective on coercion also lends itself to an explanation for *why* such a type shift is available in labile languages, but not non-labile languages: the latter possess overt morphology expressing COS semantics, as (4) shows, while labile languages do not. This is analogous to Chierchia's (1998) explanation for the availability of the \exists and ι type-shifters in Mandarin, which lacks determiners that would otherwise express such meanings, but not in English, which makes use of *a* and *the* instead. We can thus extend Chierchia's Blocking Principle to account for blocking effects with type-shifting outside of the nominal domain.

Outlook In our talk, we elaborate on additional restrictions on Inchoative Shift, including its restriction to verbal predicates (cf. state/COS lability is found with verbal PCLs cross-linguistically; Koontz-Garboden et al. 2022) and the sensitivity of the Blocking Principle to the structural complexity of inchoative expressions (cf. periphrastic inchoatives do not block Inchoative Shift (5); cf. Katzir 2007). More generally, our talk highlights that the source of COS semantics varies across languages (cf. Matthewson et al. 2015).

Examples

- (1) Mandarin
 - a. wo de toufa hen *chang* 1.SG DE hair very be.long 'My hair is long.'
 - b. wo de toufa *chang* de hen kuai 1.SG DE hair be.long DE very fast 'My hair **gets long** very fast.'
- (2) Japanese
 - a. #kawa-ga hayaku *hiro-i* river-NOM quickly wide-PRS 'The river is quickly wide.'
 - b. kawa-ga hayaku *hiro-gar-u* river-NOM quickly wide-INCH-PRS 'The river is quickly widening.'
- (3) *Inchoative Shift*: For a verbal constituent V of type $\langle s,t \rangle$, SHIFT(V) = $\lambda e.\exists s[BECOME(e,s) \land V(s)]$
- (4) *Generalized Blocking Principle with structural alternatives* For any type-shifting operator τ and any X: $*\tau(X)$ if there is an expression Y such that Y is *at most as complex* as X and $[Y] = [\tau(X)]$
- (5) Wo de toufa bian chang le 1.SG DE hair become long PRF 'My hair got longer.' (Mandarin)

References Bittner, M. 1999. Concealed causatives. *Natural Language Semantics* 7, 1-78. • Chierchia, G. 1998. Reference to kinds across languages. *Natural Language Semantics* 6, 339-405. • Katzir, R. 2007. Structurally defined alternatives. *Linguistics and Philosophy* 30, 669-90. • Koontz-Garboden, A. 2007. Aspectual coercion and the typology of change of state predicates. *Journal of Linguistics* 43(1), 115-52.• Koontz-Garboden, A. et al. 2022. State/change of state lability and the meaning of verbhood. Paper presented at GLOW45, Queen Mary University of London. • Matthewson, L. et al. 2015. Inchoativity meets the perfect time span: The Niuean perfect. *Lingua* 168, 1-36. • Partee, B. 1987. Noun phrase interpretation and type-shifting principles. In J. Groenendijk et al. (eds.), *Studies in Discourse representation theory*, 115-43. Dordrecht: Foris. • Partee, B. & M. Rooth. 1983. Generalized conjunction and type ambiguity. In R. Bauerle et al. (eds.), *Meaning, use and interpretation of language*, 361-83. Berlin: de Gryuter. • Tham, S. W. 2013. Change of state verbs and result state adjectives in Mandarin Chinese. *Journal of Linguistics* 49(3), 647-701.