## Animating the Narrow Syntax

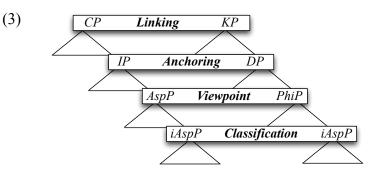
Martina Wiltschko (UBC) & Elizabeth Ritter (Ben Gurion University & University of Calgary)

**Problem:** Both Folli and Harley (2008) and Ramchand (2008) assume that animacy is outside the narrow syntax, and that it constitutes part of encyclopedic knowledge. This assumption appears to be correct for languages like English, where (with the exception of 3rd person pronouns) animacy has no direct morpho-syntactic expression in either nominal or verbal inflectional paradigms. However, it is problematic for Algonquian languages, such as Blackfoot, which clearly manifest animacy distinctions in both nominal and verbal paradigms. Observe that the form of the nominal plural marker depends on whether the noun is animate or inanimate (1); and that the form of the stem final morpheme on verbs depends on transitivity and animacy of one of the arguments (2):

(1)	NOUN CLASS	Plural Suffix	Example
	animate	-iksi	saahkomaapi- <b>iksi</b> 'boys'
	inanimate	-istsi	míín-istsi 'berries'
(2)	VERB CLASS	ARGUMENT	EXAMPLE 'to terminate, end'
	transitive animate (TA)	object	ssik <b>-áaaatsi</b>
	transitive inanimate (TI)	object	ssik <b>-áaa'tssíoo</b>
	intransitive animate (AI)	subject	ssik <b>-oo</b>
	intransitive inanimate (II)	subject	ssik <b>-áaa'si</b>

Thus, there is no doubt that animacy is a grammatically active feature in Blackfoot. This raises the following questions: (i) How do we represent the difference between Blackfoot and English? (ii) What are the grammatical consequences of this difference?

**Background:** Following Ritter & Wiltschko 2009, Wiltschko in press, we assume that UG provides a UNIVERSAL SPINE - a set of hierarchically organized functional categories, each with an associated interpretive function, but no intrinsic content, i.e. no formal features. Cross-linguistic variation arises from different language-specific choices in the features that substantiate these functions, and that structural parallels between DPs and CPs follow from the assumption that both types of constituents are realizations of the same universal spine.



The challenge for this model is to identify the interpretive functions that define the categories of the universal spine, and to determine the formal features that realize these categories.

**Proposal:** We interpret the facts in (1) and (2) as evidence that animacy constitutes the ontological basis for aspectual classification in both the nominal and the verbal domain in Blackfoot. In this respect, it contrasts with English where boundedness constitutes the ontological basis for such classification, cf. Bach, 1986; Gruber, 1967; Harley, 2003; Jackendoff, 1991, Magerdoomian 2008. Given the Universal Spine hypothesis, we attribute this contrast to variation in the formal feature that substantiates, inner Aspect (iAsp), the category responsible for the classificatory function. *i*Asp is a category of the verbal spine (cf. Travis 2010, MacDonald 2008) and of the nominal spine (cf. Wiltschko 2012). According to

our proposal, both nominal and verbal *i*Asp are specified for [animate] in Blackfoot and [bounded] in English.

**Analysis:** The feature [bounded] underlies the classification of both nominal and verbal constituents in English. As a nominal feature it gives rise to the distinction between count and mass nouns; as a verbal feature it gives rise to the distinction between telic and atelic predicates. The hypothesis that Blackfoot lacks the feature [bounded] predicts that there will be no evidence of either count-mass or telicity. These predictions are borne out. For the nominal domain, Wiltschko (2012) shows that all nouns can be pluralized, including nouns that refer to substances; Blackfoot determiners are not sensitive to the distinction between count and mass nouns; Blackfoot has no strategies for reclassifying mass nouns (e.g. two *drops* of blood); and the availability of bare NP arguments is not correlated with the count mass distinction. For the verbal domain, Ritter & Rosen (2009) show that the alternation between transitive and intransitive predicates fails to signal a shift in telicity, nor does it give rise to an imperfective paradox. Moreover, the language makes no distinction between time frame (in X time) and durative (for X time) adverbials.

**Consequences:** The proposal that nominal and verbal inner Aspect can be substantiated by either the feature [bounded] or the feature [animate] has consequences for the featural makeup of adjacent functional categories. For English, there is a well-known dependency between the mass/count distinction in *i*Asp and number marking in *Phi* such that [+bounded] nominals display a [±plural] contrast whereas [-bounded] nominals display no such contrast (4).

(4)

4)		iAsp	Phi	Example
	count nouns	[+bounded]	[+plural] or [-plural]	spoon/spoons
	mass nouns	[-bounded]	default [-plural]	sugar/*sugars

Strikingly, we find a similar dependency between the features in iAsp and Phi for Blackfoot. However, in this language iAsp is substantiated by [animate] and Phi by [±proximate]. In this case the dependency manifests itself in that only [+animate] nominals display a [±proximate] contrast whereas [-animate] nominals display no such contrast (5).

(5)		iAsp	Phi	Example
	animate nouns	[+animate]	[+proximate] or [-proximate]	<i>imitaawa/imitaayi</i> 'dog'
	inanimate nouns	[-animate]	default [-proximate]	owááyi 'egg'/*owááwa

The analysis of animacy as iAsp is superior to the widely held view that animacy is a type of gender (Corbett 1991, Frantz 2009). In particular, if animacy were a form of gender, the existence of animacy based verb-classification would be completely unexpected. Moreover, such a treatment would also miss the complementarity between [±animate] in Blackfoot and [±bounded] in English. Thus, while [±animate] is indeed outside the narrow syntax of English, it is part of the narrow syntax of Blackfoot. The difference between the featural make-up of iAsp in English and Blackfoot provides support for the Universal Spine Hypothesis according to which functional categories are substantiated on a language-specific basis.

Selected References: CORBETT, G. 1991. *Gender*. CUP. FOLLI, R. & H. HARLEY. 2008. Teleology and animacy in external arguments. *Lingua* 118. FRANTZ, DONALD. 2009. *Blackfoot Grammar*. UofT Press. RAMCHAND, G. 2008. Verb Meaning and the Lexicon. CUP. RITTER, E. & M. WILTSCHKO. 2009. Varieties of INFL: TENSE, LOCATION, and PERSON. In Craenenbroeck (ed.) *Alternatives to Cartography*. Berlin: Mouton de Gruyter, 153-202. WILTSCHKO, M. In press. *The Universal Structure of Categories: Towards a Formal Typology*. CUP.