Defaults and head marking:
maximal inheritance, minimal overriding

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Network Morphology views word structure as a group of nodes carrying different kinds of word-relevant facts, arranged in a network and connected by inheritance, more specifically inheritance by default. Such an approach has led to elegant accounts of inflectional phenomena including parsimonious representation of inflection classes, syncretism, deponency, and heteroclisis (see Brown and Hippisley 2012 and references therein). But default inheritance between nodes has also been used to good effect to model derivational morphology, particularly when treated as *derivational relatedness*. Overriding the default or inheriting the default correlates with the canonical expectation depending on *perspective*: from an inflectional viewpoint, inheriting the default is canonical; from the derivational viewpoint, overriding is canonical. Derivation that is non-canonical can be understood as canonical from the inflectional perspective. Headed expressions are products of just this kind of situation, and head-marked headed expressions a more extreme instance.

The derivation of Russian *grabitel´* 'robber' from *grabit´* 'to rob' is characterized as the relation that holds between these two words. When the word is conceived of as a *lexeme*, the unity of syntactic, semantic, phonological and morphological class properties that makes one word distinct from another, the deriving-derivative relation is expressible as changes (or not) at different lexemic levels of description.

(1)

GRABIT´		GRABITEL´	
syntactic level		*syntactic level*	
syn cat = V		syn cat = N	change
NP_NP			
semantic level		*semantic level*	
'rob'	>	'person who robs'	change
phonological level		*phonological level*	
stem 2 = /grabi-/		/grabi-tel´/	change
morphological level		*morphological level*	
mor class = V_II		mor class = N_I	change

The derivative lexeme can be represented as a node in a network of nodes that inherits certain facts from its base lexeme (here semantics and root), and other facts from a LEXEME FORMATION TEMPLATE (LFT) node (here syntactic category, semantics, suffix and declension class N_I), and this second inheritance brings about the changes (c.f. Krieger and Nerbonne 1993; Rieheman 1998; Deo 2007; Booij 2005, 2010 for similar inheritance-based approaches to derivation). Notably, syntactic level information from the base level lexeme (= verb) is overridden in favour of syntactic level information from the LFT (= noun), marking syntactic level change. Overriding in this way in fact partly defines what it means to be canonical derivation. This is understood if we compare inflection with derivation in how features get inherited from the base:

(2)

Inflection	*Derivation*
all base features are inherited	base features that are inherited are limited

The purpose of inflection is to create word-forms for the same lexeme; hence all base features are inherited. The purpose of derivation is to create a distinct lexeme albeit based on an existing lexeme, hence not all base features are inherited (2a). Crucially new morphosyntactic features signify new lexeme, and this is the threshold that determines that the product of a conversion type derivation attains lexeme-hood, even if it is not accompanied by an exponent. For example Russian *zolot(o)* 'gold N' > *zolot(oj)* 'gold A'. So *canonical* derivation includes the property that the deriving lexeme overrides the inheritance of syntactic level features from its base. And canonical inflection the converse. Therefore in inheritance terms, *non-canonical* derivation will mean inheriting, rather than overriding, base syntactic level features. Such inheritance defines 'category preserving derivation', schematized in (3).

(3)

	Canonical category changing		Non-canonical category preserving	
	source of inheritance			
lexemic level	*Base*	*LFT*	*Base*	*LFT*
syntactic	X	✓	✓	X
semantic	✓	✓	✓	✓
phonological	✓	✓	✓	✓
morphological	X	✓	X	✓

Syntactic features are inherited from the LFT and overridden from the Base in the canonical situation; and inherited from the Base (not the LFT) in the non-canonical. Category preservation is a hallmark of evaluative morphology (Stump 1993), an encoding of diminutive, augmentative, pejorative, or affectionate shades of meaning. Russian *dom* 'house' derives pejorative *domiško* where the syntactic category *and* gender feature are left intact, despite the pejorative declining like a neuter noun:

(4) ja viž-u bur-yj domišk-o
I see-1SG brown-ACC.SG.**M** house(**M**)-ACC.SG
'I see a brown house' (Gorky)

The product of a category preserving derivation is a *headed* expression (Stump 1993, 2001: ch4) with the base as head, and its syntactic features determining those of the whole expression, as with an endocentric compound. So *domišk(o)* is analyzed as [[dom_{HEAD}] ′ *išk*]. So a property peculiar to a category preserving rule is that it is transparent with respect to the morphosyntactic features of its input; and Network Morphology expresses this situation as inheritance, without overriding, from the base lexeme node. An even greater departure from canonical derivation than the *domišk(o)* case is where not just the base's syntactic features but also its morphological features get inherited, rather than overridden. In (3) this would be represented by a ✓ in every box, i.e. *maximal* inheritance from the base, *minimal* overriding. Such instances occur as a

sub-type of category preserving derivation: 'head marking' category preserving derivation (Stump 2001); and they manifest themselves as inflection (the base's inflectional paradigm) appearing inside derivation. Shughni, an East Iranian language spoken in Pamiri Tajikistan, has head marking evaluative morphology. In (5) 'little baby goat' is an expression with plural inside diminutive.

(5) čost wam gu̯ǰbuc-en-ik = en dis maɣʒůnǰ-idi
appear.PST her.OBL babygoat-**PL-DIM**=3.PL very hungry-INTENS
'The dear little kids appeared very hungry to her'

Non-canonicity to this extreme is reminiscent of inflection, precisely because in inflection maximal base inheritance is canonical behaviour (2). But overriding what is set up as inheritance by default from the base is *non-canonical* derivation. Such overriding of morphosyntactic features can itself be expressed as the default situation, for lexeme formation. When this lower level default is overridden, i.e. when inheritance from the base gets through, the result depends on perspective: from a derivational view point, something non-canonical, and from an inflectional view point, something canonical. The confusion that category preserving derivation, and particularly the head marking type, places on the delineation of inflection and derivation can be expressed elegantly as default inheritance and default overriding, behaviour which is itself highly dependent on domain.

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