## Cross-linguistic problems with ordering Passive morphology

**Background.** Passive morphology is problematic for the following reasons: (i) being a category changing affix (i.e.  $V \rightarrow A$ ) seems to require a derivational status, which in turn leads to ordering problems (e.g. 'derivational' passive occurs outside 'inflectional' thematic vowels in Slavic, cf. Haspelmath (1996)); (ii) being a 'mixed category' (cf. Lefebvre and Muysken (1988), Spencer (1999)) it constitutes a major problem for (at least) the strict version of The Lexicalist Hypothesis (cf. Chomsky (1970), di Sciullio and Williams (1987)) (vide (1a), where syntactic adverbial attachment has access to verbal event structure embedded under an adjective); (iii) being notoriously polysemous/ syncretic cross-linguistically with a restricted set of other uses (i.e. stative/adjectival passive (cf. (2)), resultative participle of unaccusative verbs (cf. (3b)), perfect active participle (cf. (4a)), nominalization (cf. (5b))) raises a question how this syncretism should be accounted for. **Problem.** Taking (ii) as crucial evidence in favor of the null hypothesis to the effect that wordinternal structure is guided by syntactic principles and the order of morphological operations reflects this fact (cf. The Mirror Principle in Baker (1988)), one might conceive of 'PASSIVE' as a functional head of sorts. Furthermore, assuming the existence of some universal hierarchy of functional heads ( $f_{seq}$ ) (cf. Cinque (1999)) one might try to establish a universal position of PASSIVE in this hierarchy. Unfortunately, this task is rendered impossible by the cross-linguistic differences in PASS morphology ordering. Even putting aside the cases of so-called Mediopassives, where the relevant morphology is either a clitic or appears outside Tense morpheme (e.g. Swedish (6)), unreconciliable ordering paradoxes arise. E.g. cross-linguistic problems in unrelated languages include ordering <sub>1</sub>-PASS-Benefactive in Tariana (Aikhenvald (2003, 253)) vs Chichewa ordering \_/-Benefactive-PASS (cf. Hyman (2003, (11a))). Related languages like Russian and Polish display different ordering of PASS morphology with respect to the Secondary Imperfective morpheme: PASS is possible outside SI in Polish ((7a)), but ungrammatical in Russian ((7b)), whereas in Japanese the Progressive (i.e. one of the two uses of Slavic SI) occurs outside Passive (cf. (7c)). Finally, ordering paradoxes arise on an intra-linguistic level, as in Sakha (8), where the same PASS

**Solution** The above ordering paradoxes might indicate:

morpheme can occur on both sides of the Distributive (cf. (8)).

(1) that the Mirror Principle does not hold: morphology is guided by its own rules distinct from syntax; (2) that the order of syntactic operations differs from language to language (i.e. there is no universal hierarchy of functional heads); (3) that the functional head hypothesis is wrong w.r.t. the passive morphology.

I will argue in favor of (3), i.e. there is no functional head with the semantic content Passive/Voice. Instead, the passive morphology is inserted for negative values of various functional projections. This position requires a very fine-grained decomposition of the universal functional sequence. Following Starke's idea, I will explore a hypothesis about insertion where morphemes can not only be inserted into syntactic terminals, but also spell out various subsequences of  $f_{seq}$ . In this kind of system the aforementioned cross-linguistic ordering paradoxes are simply a language-specific lexical accident: a given passive morpheme can be specified to spell out various levels in  $f_{seq}$ . Furthermore, the system accounts for the polysemous nature of Passive morphology due to the fact that item insertion is flexible (i.e. an item can be inserted for a subset of its lexical specification). Finally, the system predicts certain types of syncretism but not others (cf. Bobaljik (2007), Caha

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(1)	<ul><li>a. the problem was solve-d in 5 minutes</li><li>b. *the problem was obvious in 5 minutes</li></ul>	
(2)	lang-as ne-už-skleis- <b>t</b> -as window-NOM.SG.M not-PERF-close-PASS-NOM.SG.M 'the window is not closed.' (Geniušiene (2006, (45a)))	Lithuanian
(3)	<ul><li>a. kır-ık 'broken' aç-ık open'</li><li>b. sol-uk 'wilted' değiş-ik 'changed'</li></ul>	Turkish
(4)	<ul> <li>a. Jô móm tạ białkã bi-t-é.</li> <li>I have PRES.1SG this woman ACC.F.SG beaten SG.N</li> <li>'I have beaten this woman.' (Migdalski (2006, (14b)))</li> <li>b. To dziecko je bi-t-é.</li> </ul>	Cashubian
	this $_{NEU}$ child $_{NEU}$ be $_{3SG}$ be at en $_{SG,NEU}$ 'This child is (being) be at en.' (Migdalski (2006, (17)))	
(5)	<ul> <li>a. rozbi-t-y 'broken', schowa-n-y 'hidden'</li> <li>b. rozbi-c-ie 'breaking' (t→c), schowa-n-ie 'hiding'</li> </ul>	Polish
(6)	I natt öppna- <b>de-s</b> den nya vägbron. at night open-PAST-PASS the new bridge 'Tonight the new bridge was opened.'	Swedish
(7)	a. Wszystkie projekty zostały po-roz-rysow- <b>ywa-n</b> -e. all projects become <sub>3pl.pst</sub> DISTR-out-draw-SI-PASS-PL.NONV 'All the projects have been (distributively) sketched out.'	Polish ⁄IR
	b. *Vse projekty po-raz-rabat- <b>yva-n</b> -y. all projects DISTR-out-work-SI-PASS-PL intended: 'All the projects have been (distributively) worked out.'	Russian
	c. Taro-ga nagur- <b>are-te i</b> -ru Taro-NOM hit-PASS-PROG COP-PRES 'Taro is being hit.'	Japanese
(8)	a. Oloppos-tor %aldjat- <b>ylyn-ytalaa</b> -ty-lar/*aldjat-ytala-n-ny-lar. chair-PL break-PASS-DISTR-PAST-PL/*break-DISTR-PASS-PAST-Chairs were broken one after another.'	Sakha Γ-PL
	b. Oloppos-tor-u %aldjat- <b>ytala-n</b> -na/*aldjat-ylyn-ytalaa-ta. chair-PL-ACC break-DISTR-PASS-PAST.3/*break-PASS-DISTR-PAS 'Chairs were broken one after another.' (Vinokurova (2005, 336))	S.3