The Empirical Content of Competition for Insertion

0. In the framework of Distributed Morphology (henceforth DM), the phonological substance of functional categories (INFL, Tense, Number, Gender, etc.) is introduced only *after* all syntactic computation has been completed. This is the Late Insertion Thesis of DM. As an example, English Past Tense verbs will be represented as, e.g. *play*+PAST, *eat*+PAST, *leave*+PAST, etc. throughout the syntax. Only at the interface with the phonological component will the various exponents, the *signifiants* of PAST – /ed/, /ø/, /t/, etc. – be inserted. Under Late Insertion, the challenge is to make sure the exponents are inserted into the PAST nodes of the 'right' verbs : *play*+/ed/, not **play*+/ø/ ; *leave*+/t/, not **leave*+/ed/, etc. The insertion procedure is reputed to unravel in competitive fashion ('exponents compete for insertion'). The competition metaphor adequately reflects the fact that /ed/, /ø/, /t/, etc. are all candidates for insertion into similarly defined nodes, +PAST in this case. *Note that saying that those exponents 'compete for insertion into similarly defined nodes' (essentially 'the same' node) is equivalent to saying that they stand in a mutual relation of allomorphy.*

1. In a first part, I demonstrate how competition results in the insertion of English Past Tense exponents and I spend some time showing how the Elsewhere Condition proposed by Kiparsky (1973) [and inspired by the Sanskrit scholar Pāṇini (4th century BCE)] successfully and elegantly regulates the management of the 'special' cases (strong and irregular weak verbs, e.g. *eat*, *hide*, resp.) as against the management of the 'general' case (regular verbs). Essentially, the Elsewhere Condition forces the rules to apply a) in the order in (1), b) in such way that the application of 1i. – the more 'specific' rule – blocks the subsequent application of 1ii., the less specific one.

(1) i. /t,ø/ ↔ [$_{TP}$ [$_{T}$ + PAST _] [$_{V}$ V 'Special' Groups]]
ii. /ed/ ↔ [$_{TP}$ [$_{T}$ + PAST _]]

2. I then examine a genuine DM innovation proposed in Halle & Marantz (1993) as an alternative to Kiparsky's Elsewhere Condition, viz. the so called 'Pāṇinian Principle'. Supposedly, the Pāṇinian Principle runs competition by ordering rules along a scale of decreasing specificity (a system to be described in the course of the presentation). Much like the Elsewhere Condition, the Pāṇinian Principle appears to be capable, as we will see, of enforcing the order in (1) where the first rule is indeed more 'specific' than the second one.

3. But, quite disturbingly (I explain why it is disturbing in 4. below), the Pāṇinian Principle also seems to be capable of managing in competitive fashion the insertion of the Subject Agreement inflection exponents of the Perfective paradigm of Biblical Hebrew, bold in (3). Halle (2000) produces the list of insertion statements in (4), claiming that they have been ordered according to decreasing specificity by the Pāṇinian Principle.

(3)

1s	šāmar-**ti:**	1p	šāmar-**nu:**
2ms	šāmar-**ta:**	2mp	šāmar-**tem**
2fs	šāmar-**t(i)**	2mf	šāmar-**ten**
3ms	šāmar-**ø**	3mp	šām$^{(ə)}$r-**u:**
3fs	šām$^{(ə)}$r-**a:(t)**	3mf	šām$^{(ə)}$r-**u:**

(4)

a.	/ten/	↔	[+PSE, –Author, +F, +Pl]	in env. __$_{+PERF}$]
b.	/tem/	↔	[+PSE, –Author, +Pl]	
c.	/t/	↔	[+PSE, –Author, +F]	
d.	/ta:/	↔	[+PSE, –Author]	
e.	/nu:/	↔	[+Author, +Pl]	
f.	/ti:/	↔	[+Author]	
g.	/u:/	↔	[+Pl]	
h.	/a:/	↔	[+F]	
i.	NULL	↔	[ ]	

4. The reason this is disturbing is this : the insertion statements in (1) and (4) are similarly ranked according to specificity. But in the first case (English Past Tense verbs), we have exponents competing for insertion into the *same* node – differently put, they are allomorphs and they compete with each other. In the case of Biblical Hebrew, in sharp contrast, we have exponents seeking insertion into the 12 (!) different terminal nodes listed in (5), where the the insertion site is marked by the empty space between square brackets – by no stretch of imagination can those exponents be viewed as allomorphs. Each one will be inserted into a different node ; in other words, they do *not* compete.

(are track athletes competing when they run in separate races?)

(5)

1SgM	1SgF	1PLM	1PLF	2SgM	2SgF	2PLM	2PLF	3SgM	3SgF	3PLM	3PLF
[_]	[_]	[_]	[_]	[_]	[_]	[_]	[_]	[_]	[_]	[_]	[_]
+Auth	+Auth	+Auth	+Auth	-Auth	-Auth	-Auth	-Auth	-Auth	-Auth	-Auth	-Auth
+PSE	+PSE	+PSE	+PSE	+PSE	+PSE	+PSE	+PSE	-PSE	-PSE	-PSE	-PSE
-F	+F	-F	+F	-F	+F	-F	+F	-F	+F	-F	+F
-PL	-PL	+PL	+PL	-PL	-PL	+PL	+PL	-PL	-PL	+PL	+PL

5. In the rest of the presentation, I show what trick has been played with the differential specification of the exponents in (4) to make them look like genuinely competing allomorphs ranked according to specificity by the Pāṇinian Principle.

In a nutshell : English /t/ or /ø/ in (1) are ordered before /ed/ because they are more specific ; but the only reason /ten/ in (4a) is more specific than /tem/ is… that it is ordered before it. That is, contrary to what is claimed, the Pāṇinian Principle does not order items according to specificity. It **manufactures** specificity! To support this claim, I show that one could rewrite the list in (4) in such way that /ten/ is the least specific item. No such manipulation is possible with the English facts. I conclude that the Paninian principle as construed in DM has zero empirical content.

Halle, M. (2000) Distributed Morphology : Impoverishment and Fission, *Research in Afroasiatic Grammar* (J. Lecarme, J. Lowenstamm, U. Shlonsky, eds.), John Benjamins, 125-151.

Halle, M. & A. Marantz (1993) Distributed Morphology and the Pieces of Inflection, *The View from Building 20* (K. Hale & S.J. Keyser, eds.), MIT Press, 111-177.

Kiparsky, P. (1973) 'Elsewhere' in Phonology, *A Festschrift for Morris Halle*, S.R. Anderson & P. Kiparsky, eds. Holt, Reinhart andWilson, 93-106.