Late Vocabulary Insertion

# The reinvention of late lexical insertion

## Anderson 1992 came up with the proposal that lexical items are inserted not at D-structure, but at S-structure

### he argued that while it is clear that languages have systematic morphological structures, based on the kind of principles which build syntactic structures, it is not always the case that the morphological form of lexical items reflects this morphological structure in any straightforward way.

### Take, for example, English tensed verbs. Syntactically, we can analyse a past tense verb as the verb stem adjoined to the tense inflection (we might go further and argue that there is also an agreement morpheme or two also attached). But many tensed verbs do not reflect this: irregular verb forms do not look like a stem plus an inflectional morpheme

### In this theory (Amorphous morphology), there are no affix morphemes which are separate ‘lexical items’, only stems. These can be manipulated by word formation rules in the lexicon to form all the different morphologically distinct elements. These are inserted into a structure to match the MorphoSyntactic Representation (formed by syntactic rules)

## Halle and Marantz (1993) came up with an even more radical theory (Distributed Morphology) which adopted Anderson’s late insertion idea, but rejected his ‘no-affix’ stance.

### in their theory, the syntax builds structures out of abstract morpho-syntactic units

### these structures can undergo certain morphological processes

#### fusion: two adjacent morphemes (pre-terminal nodes on a tree) can be fused into one morpheme

#### fission: one morpheme can be split into two separate ones

### once the syntactic structure is formed and adjusted by morphological rules, ‘vocabulary insertion’ takes place

#### a vocabulary item is an association between a phonological form and a syntactic environment

#### there is no guarantee that there will be an exact vocabulary item for all possible syntactic environments

#### If there is no exact match, the closest available will be chosen

### the theory assumes underspecification

#### vocabulary items tend to be associated with fewer morphological material than they are used to spell out

### the choice of vocabulary item is controlled by the subset principle

#### chose the vocabulary item which is specified for the largest subset of the morphological material to be spelled out

#### for example English tense affixes work like this:

|  |  |  |
| --- | --- | --- |
|  | +3rd | -3rd |
| +past | -ed | |
| -past | -s | ∅ |

#### this suggest the following vocabulary entries:

##### -s ↔ -past, +3rd

##### -ed ↔ +past

##### ∅ ↔

#### The exponent ‘-s’ will only be used to spell out present 3rd person tense

##### as it is associated with exactly these morphemes

#### -ed will be used to spell out all past tense cases

##### -s is associated with –past

##### ∅ is associated with nothing, so –ed will always be associated with the larger subset of all past tense situations

##### ∅ will be used everywhere else

### Syntax First Alignment

#### The first attempt to adopt a late insertion approach in Alignment syntax was Maunulla 2007. Newson 2008 treated English modals in a more developed system and in 2010 the current system (Syntax First) was produced.

#### Assumptions

##### there is no lexicon

###### in OT it is assumed that linguistic difference derives from constraint ranking, the input and the actual constraints are the same in all languages (Universal Base Hypothesis). But if there is a lexicon and this supplies material for inputs, inputs will differ from language to language.

###### if we assume instead that inputs are made up of abstract semantic/syntactic elements (Conceptual Units = CUs), then these will be universal and language differences will be entirely due to constraint ranking

##### CUs come in two types

###### a large set of syntactically homogenous roots

###### a smaller set of syntactically heterogeneous functional CUs

##### constraints order CUs and the optimal ordering is grammatical (as usual)

##### as there is no structure to outputs, there are no ‘bundles of sub-lexical elements’ = words

###### there are just CUs which are adjacent or not to each other with no other organisation than linear arrangement

##### the optimal ordering is ‘spelled out’ with reference to the vocabulary – similarly to DM, though minus structure

##### spell out operates in accordance with the following principles

###### Minimal Vocabulary Access

spell out the maximum number of CUs with a single exponent

###### contiguity

only contiguous CUs can be spelled out by a single exponent

###### root centricity

spell out the roots first along with any contiguous functional CUs

remaining functional CUs will be spelled out separately

# Analysis of the Causative constructions

## the two causatives in English have the following patterns

### arg [cause] √ arg => he melted the ice (verb spells out both [cause] and root

### arg [cause] arg √ => he made the ice melt (verb spells out root and ‘make’ spells out [cause]

## we have pointed out that these are not semantically equivalent

### the periphrastic causative involves an indirect causer while the lexical causative involves a direct causer

### Suppose we suggest two domains

#### argument domain = all arguments directly involved

#### extended argument domain = all arguments involved

## so the more accurate representation is

### argd [cause] √ argd

### argi [cause] argd √

## the pattern is straightforward:

### the root is second in the argument domain

### [cause] is second in the extended argument domain

## Spell out

### lexical causatives are associated with both [cause] and root content

### make is associated with [cause]

### when these CUs are contiguous we have a choice of spelling out

#### [cause] √ => make verb

#### [cause] √ => verb

### the second option satisfies MVA

### when the CUs are not contiguous there is only one choice

#### [cause] ... √ => make ... verb