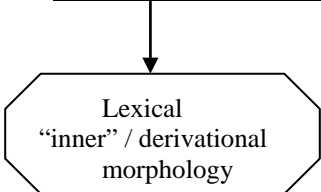


- Lexical vs. Syntactic Causatives in Japanese, Malagasy, Omoro, Tagalog, etc.
ex. *tob-ase* “fly-make” = demote to a remote post (idiomatic)
suw-ase “smoke-make” = make someone smoke (not idiomatic)

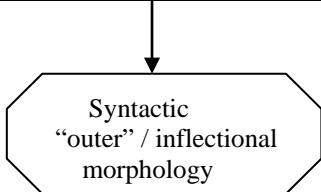
- Correlation of properties:

Table 1: Properties of Statives and Passives

Adjectival Passive (Stative)	Syntactic Passive (Passive)
idiomatic / special meaning ex. <i>the hung jury</i>	can't create idioms (Ruwet 1991)
changes lexical category (verb to adjective) ex. <i>a very driven worker</i>	does not change category
cannot interact with syntactic rules ex. No raising to object followed by Passive construction <i>*John remained believed to be sick</i>	can interact with syntactic rules ex. Raising to object followed by Passive construction <i>John was believed to be sick</i>



Lexical
“inner” / derivational
morphology



Syntactic
“outer” / inflectional
morphology

Strict Lexicalist Analysis

There is only one place for formation of verbs → Lexicon

Both derivational and inflectional morphology are handled in the lexicon (Bresnan, Lieber 1992, Levin & Rappaport Hovav 1996)

Problem

- If both are formed in the lexicon, then it does not explain the different properties in Table 1, where ‘lexical’ properties correspond to *inner* morphology and ‘syntactic’ properties correspond to *outer* morphology.

(2) Lexicon/Syntax dichotomy

Same meaning is realized as morphological in some languages (or syntactic contexts) and phrasal in others.

Lexicalism:

words can have special meaning (idiomatic) → Lexicon

phrases are compositional in meaning → Syntax

Distributed Morphology:

No sharp divide between word-level and phrasal special meanings (Marantz 1997)

→ special meaning of a derived word such as “nationality” or “transmission” is not different from special meaning of phrases such as “take a break”, “take heart”, etc.

Evidence

- Complex predicates or light verb constructions in Persian, Urdu, Hindi, ...
- Causative constructions:
causatives are formed morphologically in some languages and formed periphrastically in others but have the same meaning.

- (2)
- a. *suw-ase* (Japanese)
 - b. *faire fumer* (French)
‘make smoke’

- Periphrasis alternations:
similar meanings are realized as a morpheme in one syntactic context and as periphrastic words in another syntactic context.
- (3)
- | | | |
|----------------------------|-----|----------------------------------|
| a. John cried . | vs. | Did John cry? |
| b. John is bigger . | vs. | John is more intelligent. |
| c. John leapt . | vs. | John took a leap . |

Problem:

- why should the same meaning be derived in the Lexicon in one language and in the Syntax in another?
- a unified analysis would be more interesting

(3) Complexity of the Lexicon and the Computational system

- Event Structure Templates + Lexical rules (that are used to derive new verb forms)
- Rules in the lexicon distinct from principles in syntax
- Inflectional morphology (which interacts with syntax) is in the lexicon
 - ⇒ richly annotated lexical entries where syntactic information is abundant
- Redundancy: the lexicon duplicates the work done in syntax (or the principles available to syntactic items)

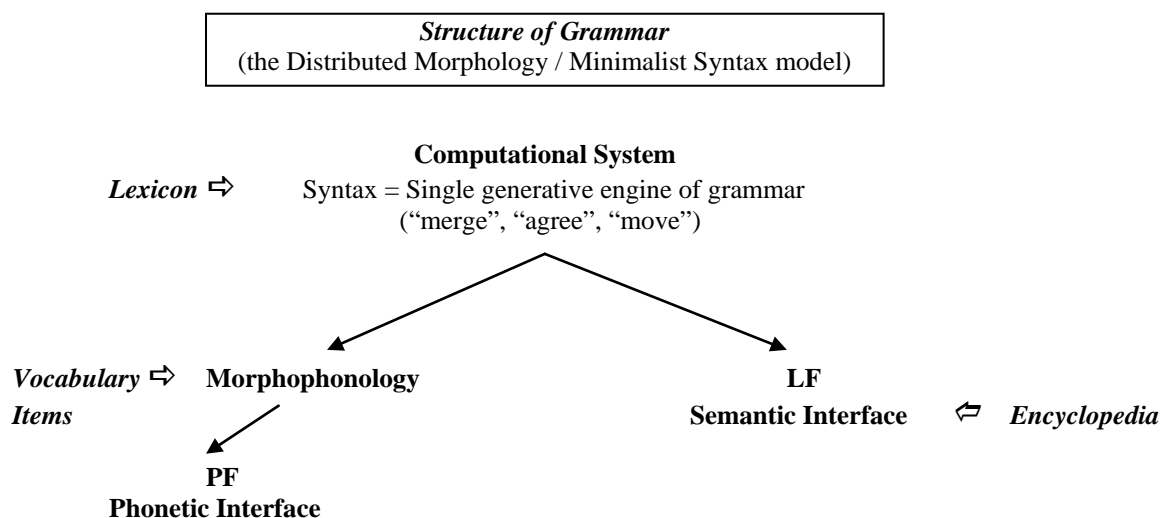
4 Predicate-based approaches

(Borer 1994, Ghomeshi and Massam 1994, Hale and Keyser 1993, Marantz 1997, Vergnaud 2000, Vahedi-Langrudi 1996, among others)

Proposal

- No syntax / lexicon dichotomy:
 - words and phrases are formed following syntactic principles
 - derivational and inflectional morphology in syntax
- Economy and simplicity:
 - word formation phenomena follow already existing syntactic constraints and principles
- Small lexicon
 - only the primitive elements of ‘events’ are listed in the lexicon

5 Distributed Morphology



Distributed Morphology (Halle and Marantz 1993, Marantz 1997) explodes the lexicon into three distributed, non-computational lists:

- Lexicon: contains the basic units of language → atomic roots, bundles of functional features (T, V)
 - functional features* combine with *roots* to form a category:
 - in the context of *v* the root becomes a verb
 - in the context of *n* the root becomes a noun
 - T provides the tense information
 - etc.
 - The items in this lexicon are used to form words, phrases and sentences in syntax.
 - Vocabulary: a list that provides the phonological forms for the terminal nodes in syntax
 - Encyclopedia: the list of special meanings
- Information available in the lexicon:
The lexicon does not contain full syntactic, semantic information on verbs but contains the basic atomic units that combine to form verbs.
- Not a computational lexicon:
No lexical rules to generate words within the lexicon.
All computation is performed in syntax.
- Principles of composition for words and phrases are the same.
Whether the result is a word or a phrase depends on the constituents involved not on the operation itself.

Derivational vs. Inflectional Morphology

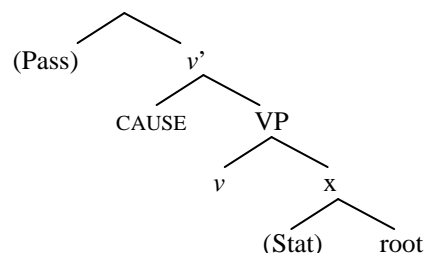
- Derivational morphology is related to ‘inner’ morphology and structure
- Inflectional morphology is related to ‘outer’ morphology and structure

Inner domain: the domain of the root → attaching a morpheme to the root before attaching a functional head that determines the syntactic category of the word (N, V, Adj).

In the Inner domain, there is a close relation to the head → If a head attaches to a root, its selectional requirements must be satisfied by the idiosyncratic properties of the root.

Outer domain: the domain outside the functional head that determines syntactic category, e.g., *v*.

(4)



Stative = root formation = attaches below little *v*

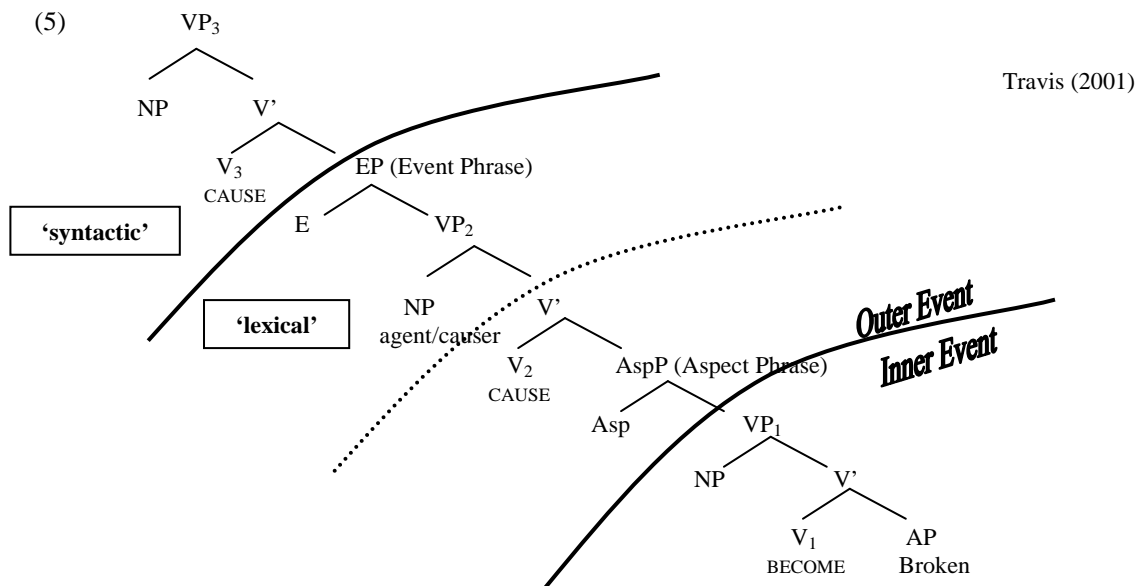
Passive = voice = attaches above little *v*

Special meaning

Idiomatic readings are available up to the projection of the agent argument (Ruwet 1991, Marantz 1997), so if a construction is formed below the external argument projection (agent) then it can have a special or idiomatic meaning, whether it is a ‘word’ or a phrase.

'Lexical' vs. 'Syntactic' Properties

(5)



Note: No predicate can have more than one Agent or CAUSE

Summary

- A unified analysis for building words and phrases
- Simpler computational system; economy.

Challenges

- (i) to show that words can be formed using the same principles that already exist in syntax
- (ii) to determine what the primitive elements of 'events' are

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