




- 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**

<b>Adjectival Passive (Stative)</b>	<b>Syntactic Passive (Passive)</b>
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 <b>cried</b> .     | vs. | <b>Did</b> John cry?             |
| b. John is <b>bigger</b> . | vs. | John is <b>more</b> intelligent. |
| c. John <b>leapt</b> .     | vs. | John <b>took a leap</b> .        |

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)

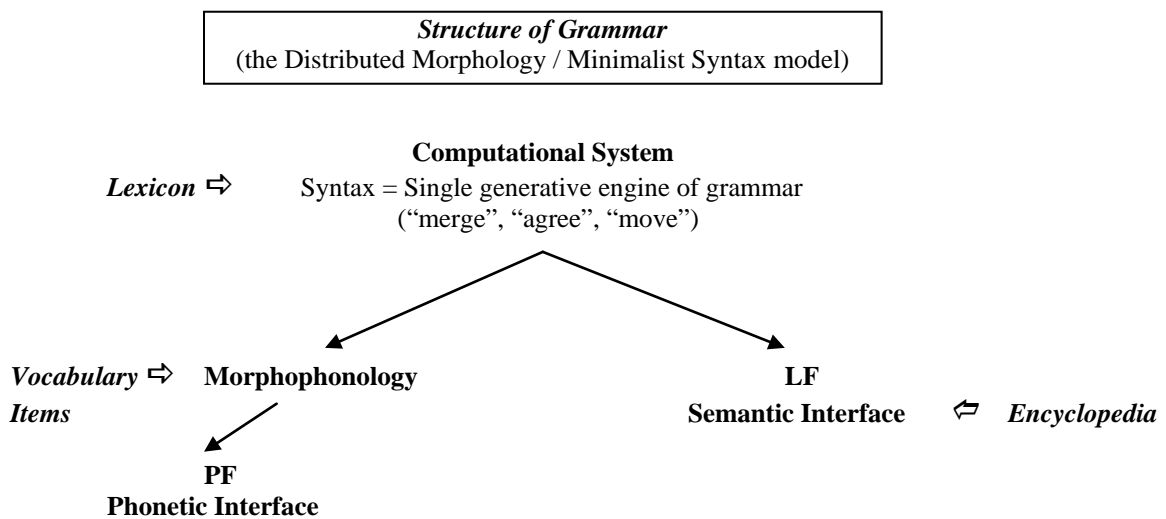
**4 Predicate-based approaches**

(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

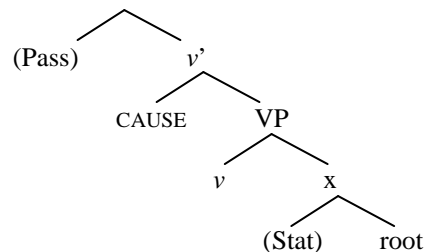
- Derivational morphology is related to ‘inner’ morphology and structure
- Inflectional morphology is related to ‘outer’ morphology and structure

**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*

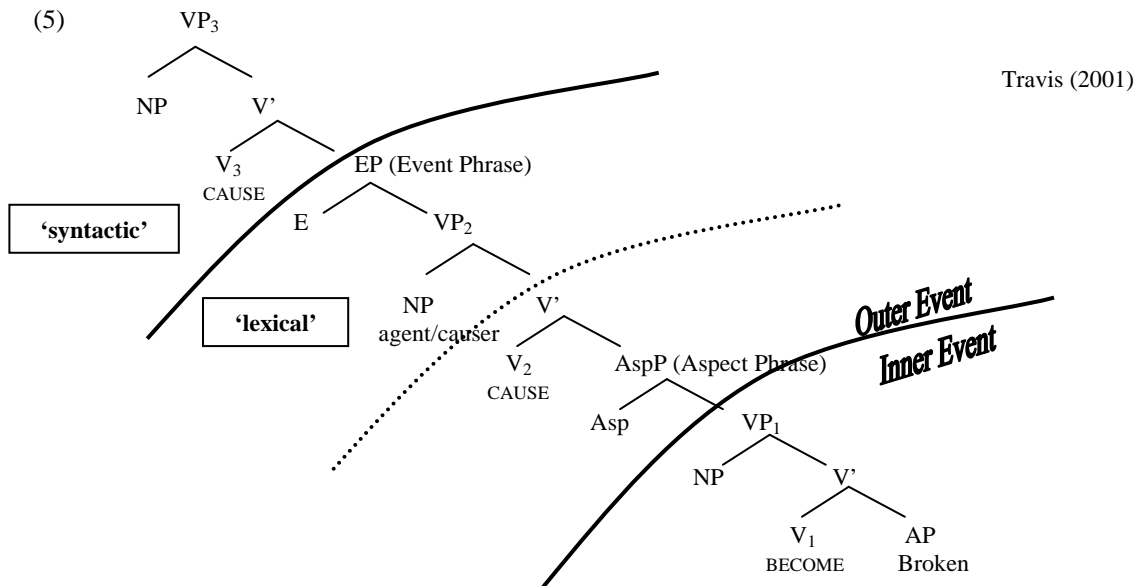
Passive = voice = attaches above little *v*

#### 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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