Abstract

This paper focuses on interactions between phonology and morphology in present-day English and their implications for the shape of the morphology-phonology interface in natural language. The generalizations about morphology made are quite preliminary. Since the tasks of morphology and phonology are potentially Conflicting, there are bound to be tensions. It focuses on facts that have figured prominently in the wider theoretical debate, but also pay some attention to phenomena that seem peculiar to English. The morphology presented is primarily that which is necessary to account for the words of twenty-five minutes of recorder representative texts. The term ‘lexical phonology’ is used for two different but related purposes. First, it refers to the range of phonological processes or constraints in a language that pertain to the domain of the word.

Key Words: Morphology, Syntax, Pragmatics, Models, Phonological Constraints

1 Introduction

Phonology is the study of how sounds are organized and used in natural. The phonological system of a language includes: 1. an inventory of sounds and their features, and 2. rules which specify how sounds interact with each other.

Phonology is just one of several aspects of language. It is related to other aspects such as phonetics, morphology, syntax, and pragmatics.

Different models of phonology contribute to our knowledge of phonological representations and processes:

1. In classical phonemics, phonemes and their possible combinations are central.
2. In standard generative phonology, distinctive features are central. A stream of speech is portrayed as linear sequence of discrete sound-segments. Each segment is composed of simultaneously occurring features.
3. In non-linear models of phonology, a stream of speech is represented as multidimensional, not simply as a linear sequence of sound segments. These non-linear models grew out of generative phonology.
The word phonology comes from Greek word ‘phone’ "voice, sound," and the suffix -logy (which is from Greek word ‘logos’, "word, speech, subject of discussion"). Definitions of the term vary. Nikolai Trubetzkoy in *Grundzüge der Phonologie* (1939) defines phonology as "the study of sound pertaining to the system of language," as opposed to phonetics, which is "the study of sound pertaining to the act of speech." (the distinction between *language* and *speech* being basically Saussure's distinction between *langue* and *parole*). More recently, Lass (1998) writes that phonology refers broadly to the sub discipline of linguistics concerned with the sounds of language, while in more narrow terms, "phonology proper is concerned with the function, behavior and organization of sounds as linguistic items."

The history of phonology may be traced back to the Ashtadhyayi, the Sanskrit grammar. In particular the Shiva Sutras, an auxiliary text to the Ashtadhyayi, introduces what can be considered a list of the phonemes of the Sanskrit language, with a notational system for them that is used throughout the main text, which deals with matters of morphology, syntax and semantics.

Natural phonology was a theory based on the publications of its proponent David Stampe in 1969 and (more explicitly) in 1979. In this view, phonology is based on a set of universal phonological processes which interact with one another; which ones are active and which are suppressed are language-specific. Rather than acting on segments, phonological processes act on distinctive features within prosodic groups. Prosodic groups can be as small as a part of a syllable or as large as an entire utterance. Phonological processes are unordered with respect to each other and apply simultaneously (though the output of one process may be the input to another). When the plural of a noun like nation is formed, the phonology leaves the stem segmentally unaltered (other than, in informal speech, perhaps suppressing the schwa, as in the case of the basic form of the noun, too) and regularly places stress on the first syllable (just as with the basic form of the noun itself: pluralisation doesn't add a syllable here that would have to be taken into account in stressing)

The term' morphology’ is Greek and is a makeup of ‘morph- meaning 'shape, form', and –ology’ which means 'the study of something'. The term is used not only in linguistics but also in biology as the scientific study of forms and structure of animals and plants, and in geology as the study of formation and evolution of rocks and land forms. We are going to stick to morphology in linguistics, as the scientific study of forms and structure of words in a language. Morphology as a sub-discipline of linguistics was named for the first time in 1859 by the German linguist August Schleicher who used the term for the study of the form of words. Today morphology forms a core part of linguistics. Furthermore, non-word processing is suggested to be relevant for morphological theories, if the non-words are made from morphemes. Other relevant properties are proposed for methodologically specified situations. For example, if stimuli are fully visible, morphological priming effects are only proposed for semantically related words, and inflectional priming yields greater effects than derivational priming. In contrast, in masked priming, morphological effects are comparable in magnitude for semantically transparent and opaque words. Also, inflectional and derivational priming is suggested to yield comparable effect sizes.

In linguistics, morphology is the identification, analysis and description of the structure of a given language's morphemes and other linguistic units, such as root words, affixes, parts of speech, intonation/stress, or implied context (words in a lexicon are the subject matter of
lexicology). Morphological typology represents a method for classifying languages according to the ways by which morphemes are used in a language—from the analytic that use only isolated morphemes, through the agglutinative (“stuck-together”) and fusional languages that use bound morphemes (affixes), up to the polysynthetic, which compress many separate morphemes into single words. (One of the definitions for Morphology). The history of morphological analysis dates back to the ancient Indian linguist who formulated the 3,959 rules of Sanskrit morphology in the text Astadhyayi using a constituency grammar. The Greco-Roman grammatical tradition also engaged in morphological analysis.

2 The purposes of studying morphology and phonology
The internal structure of words and the segmentation into different kinds of morphemes is essential to the two basic purposes or morphology: 1. the creation of new words and 2. the modification of existing words. Think about it, we create new words out of old ones all the time.
Part of the phonological study of a language therefore involves looking at data (phonetic transcriptions of the speech of native speakers) and trying to deduce what the underlying phonemes are and what the sound inventory of the language is. The presence or absence of minimal pairs, as mentioned above, is a frequently used criterion for deciding whether two sounds should be assigned to the same phoneme. However other considerations often need to be taken into account as well. Different linguists therefore take different approaches to the problem of assigning sounds to phonemes. For example, they differ in the extent to which they require allophones to be phonetically similar. There are also differing ideas as to whether this grouping of sounds is purely a tool for linguistic analysis, or reflects an actual process in the way the human brain processes a language.

3 Models of Morphology
There are three principal approaches to morphology, which each try to capture the distinctions above in different ways. These are,

- Morpheme-based morphology, which makes use of an Item-and-Arrangement approach.
- Lexeme-based morphology, which normally makes use of an Item-and-Process approach.
- Word-based morphology, which normally makes use of a Word-and-Paradigm approach.

 Morpheme-based morphology
In morpheme-based morphology, word forms are analyzed as arrangements of morphemes. A morpheme is defined as the minimal meaningful unit of a language. In a word like independently, we say that the morphemes are in-, depend, -ent, and -ly; depend is the root and the other morphemes are, in this case, derivational affixes. In a word like dogs, we say that dog is the root, and that -s is an inflectional morpheme. In its simplest (and most naïve) form, this way of analyzing word forms treats words as if they were made of morphemes put after each other like beads on a string, is called Item-and-Arrangement. More modern and sophisticated approaches (among them, Distributed Morphology) seek to maintain the idea of
the morpheme while accommodating non-concatenative, analogical, and other processes that have proven problematic for Item-and-Arrangement theories and similar approaches.

➔ Lexeme-based morphology
Lexeme-based morphology is (usually) an Item-and-Process approach. Instead of analyzing a word form as a set of morphemes arranged in sequence, a word form is said to be the result of applying rules that alter a word form or stem in order to produce a new one. An inflectional rule takes a stem, changes it as is required by the rule, and outputs a word form; a derivational rule takes a stem, changes it as per its own requirements, and outputs a derived stem; a compounding rule takes word forms, and similarly outputs a compound stem.

➔ Word-based morphology
Word-based morphology is (usually) a Word-and-paradigm approach. This theory takes paradigms as a central notion. Instead of stating rules to combine morphemes into word forms, or to generate word forms from stems, word-based morphology states generalizations that hold between the forms of inflectional paradigms. The major point behind this approach is that many such generalizations are hard to state with either of the other approaches. The examples are usually drawn from fusional languages, where a given "piece" of a word, which a morpheme-based theory would call an inflectional morpheme, corresponds to a combination of grammatical categories, for example, "third person plural". Morpheme-based theories usually have no problems with this situation, since one just says that a given morpheme has two categories. Item-and-Process theories, on the other hand, often break down in cases like these, because they all too often assume that there will be two separate rules here, one for third person, and the other for plural, but the distinction between them turns out to be artificial. Word-and-Paradigm approaches treat these as whole words that are related to each other by analogical rules. Words can be categorized based on the pattern they fit into. This applies both to existing words and to new ones. Application of a pattern different from the one that has been used historically can give rise to a new word, such as older replacing elder (where older follows the normal pattern of adjectival superlatives) and cows replacing kine (where cows fits the regular pattern of plural formation).

4 Examples of Phonology Sentence

- After some introductory remarks, the chapters cover phonology, morphological processes, morph syntax, and syntax.
- Phonology of intonation, it seems unnecessarily abstract and categorical.
- Articulatory phonology does not take the goal to be auditory.
- The theoretical status of morphologically conditioned phonology: A case study from dominance.
- The examination papers are: General phonetics and phonology experimental phonetics and phonology of English Option.
- You will have to produce four or five written assignments during the course which will include a test of grammar and/or phonology.
The examination papers are: General phonetics and phonology Experimental phonetics Phonetics and phonology of English Option.

5 Examples of Morphology Sentence

- Low sperm count, poor motility, or abnormal morphology of sperm can make it very difficult to conceive using your partners sperm.
- In order to determine the surface morphology and orientation texture of the films, scanning electron microscopy, SEM, was performed.
- Understanding large-scale coastal morphology: a study of Winterton Ness, UK Information on this project will be online shortly.
- Fact sheets describe the morphology of each tree in text and in photographs of bark, twigs, fruits and leaves.
- It is well known that dendritic morphology plays an important role in neuronal function.
- They are divided into the following three groups on the basis of their colony morphology on blood agar plates.

6 Conclusion

In addition to the minimal units that can serve the purpose of differentiating meaning (the phonemes), phonology studies how sounds alternate, i.e. replace one another in different forms of the same morpheme (allomorphs), as well as, for example, syllable structure, stress, accent, and intonation. Phonology also includes topics such as phonotactics (the phonological constraints on what sounds can appear in what positions in a given language) and phonological alternation (how the pronunciation of a sound changes through the application of phonological rules, sometimes in a given order which can be feeding or bleeding, as well as prosody, the study of supra segmental and topics such as stress and intonation. The principles of phonological analysis can be applied independently of modality because they are designed to serve as general analytical tools, not language-specific ones. The same principles have been applied to the analysis of sign languages, even though the sub-lexical units are not instantiated as speech sounds. There is a further distinction between two kinds of morphological word formation: derivation and compounding. Compounding is a process of word formation that involves combining complete word forms into a single compound form; dog catcher is therefore a compound, because both dog and catcher are complete word forms in their own right before the compounding process has been applied, and are subsequently treated as one form. Derivation involves affixing bound (non-independent) forms to existing lexemes, whereby the addition of the affix derives a new lexeme. One example of derivation is clear in this case: the word independent is derived from the word dependent by prefixing it with the derivational prefix in-, while dependent itself is derived from the verb depend.

7 References


