
ZERO DERIVATION AS A THEORETICAL CHALLENGE TO MORPHEME-BASED MODELS OF ENGLISH MORPHOLOGY

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Email: 25011702-038@uog.edu.pk**Abstract**

The study explains the place of zero derivation (conversions) in English morphology in general, as well as its representation in the theory of the zero morpheme ($\emptyset$) in IA models, particularly in Distributed Morphology (DM). Whereas IA theories assume that any category change requires the presence of structure and licensing by means of morphemic insertion, even in cases where no phonology is provided, the present study questions whether the existence of such structures has been considered necessary. The research utilizes the qualitative theoretical comparison of conversion examples in English under two different theoretical constructs: Item-and-Arrangement (Distributed Morphology) and Word-and-Paradigm (A-Morphous Morphology). Two theoretical constructs are discussed regarding structural assumptions, descriptive adequacy, and the theoretical economy of both models. Results indicate that, while IA/DM models rely on null categorical heads to sustain structural homogeneity, they have been considered by increased theoretical complexity. Word-and-Paradigm models do not involve zero morphemes in their explanations of conversions since they rely on the notion of lexical relatedness; however, descriptive adequacy is characteristic of both models, therefore Word-and-Paradigm models prove more economical.

Keywords: English conversion, zero morpheme, distributed morphology, Word-and-Paradigm, lexical multifunctionality, theoretical parsimony

1. Introduction**1.1 Background of the study**

Morphology plays an integral role in the construction of linguistic theory, as traditionally, morphological theories have involved the use of Item-and-Arrangement models, whereas morphemes are regarded as the fundamental building blocks of words. The theory behind such models presupposes that any alternation in the grammatical category or meaning must involve alteration in morphemes. Morphology itself involves the breaking down of a word's structural composition into smaller segments to arrive at a complex word. Zero derivation, sometimes referred to as conversion, poses a continuous challenge to Item-and-Arrangement models where words change their grammatical category in the absence of morphological modification. Such changes can be seen in the following English examples: email (noun) to email (verb), text (noun) to text (verb), walk (verb) a walk (noun), Google (proper noun) to google (verb).

Although the phonological/orthographic form remains the same, the syntactic category of a word is changed in its syntactic environment. In linguistic analysis, this phenomenon is highly productive in English and contributes to its flexibility. Morpheme-based models of morphology, especially Distributed Morphology (e.g., Halle & Marantz 1993), usually account for this kind of process through introducing a zero morpheme $\emptyset$. In other words, even though there is nothing to show in terms of pronunciation and orthography, some structural elements are assumed to be introduced into the analysis, accounting for the category change. This brings

us to the following theoretical problems: if there is no phonological, orthographic, or prosodic realization of a morpheme, on what empirical basis can we assume its existence? Does the existence of a zero affix serve an explanatory purpose, or is it just another instance of maintaining the coherence of the model?

Other theories of morphological description, such as Word and Paradigm and A-Morphous Morphology (Anderson, 1992; Aronoff, 1994), offer a fundamentally different ontological basis to account for this morphological phenomenon. While the IA theories assume words to be composed of minimal morphological units, the WP approach believes that morphology is essentially a set of relationships among whole words. In this sense, the process of conversion might not necessitate the presence of any additional structure; rather, it is seen as a relationship among lexemes based on phonological and syntactic criteria. The fundamental opposition between these two theoretical approaches results in an interesting issue of contemporary morphology. Conversion in English serves an especially effective subject for exploring the advantages and disadvantages of each approach.

1.2 The Problem Statement

One of the main problems investigated in this research is associated with the nature of the zero morpheme in English morphology. Models based on the concept of morpheme assume that any change in categories requires structural representation. In instances of overt derivation (happy to happiness), the validity of such an approach is easily justified owing to observable morphemes. With conversion, however, there is the problem of their absence, thus the need to posit the concept of zero morpheme to preserve the integrity of the system. It has been seen that the problem in question is connected with what may be called invisibility:

- There is no phonological form of the zero morpheme.
- The morpheme does not leave any trace in orthography.
- The morpheme can neither be perceived directly nor proved empirically.

As pointed out by Gaeta (2024), the problem is also associated with theoretical uncertainty about whether conversion should be considered derivation or lexical multifunctionality. In addition, some recent studies in psycholinguistics have suggested that speakers might treat morphological relations in such a way that contradicts the strict analysis of affixes. Thus, it becomes evident that there is a disparity in morphological processes in relation to morphological theory. Thus, the question the current study poses does not deal with the existence of zero derivation itself, since this phenomenon exists beyond doubt, but with whether it is the best solution for its explanation through a zero morpheme.

1.3 Research Gap

While many researchers have extensively explored the concept of zero derivation within morphology, some gaps persist:

1. Numerous studies have relied on the use of the zero morpheme as a starting point without questioning its ontological significance.
2. Very few studies have compared Item-and-Arrangement and Word-and-Paradigm theories concerning their assumptions by applying them to identical sets of English conversion pairs.
3. There is a lack of connection between morphological theory and cognitive psychology. The present research seeks to address these problems.

1.4 Research Objectives

1. To provide a critical evaluation of the theoretical necessity of the zero morpheme ($\emptyset$) in Item-and-Arrangement theories, specifically Distributed Morphology, in explaining English conversion.

2. To compare how Item-and-Arrangement (IA) and Word-and-Paradigm (WP) theories account for English conversion.
3. To establish whether one of these approaches is more theoretically economical in its account of English conversion.

1.5 Research Questions

1. What is the degree of necessity of a postulated zero morpheme ($\emptyset$) in the context of IA theories in explaining English conversion?
2. How do IA and WP theories differ in their treatment of English conversion in relation to category shift?
3. Which approach is more economically sound in its account of English conversion?

1.6 Importance of the Study

The significance of the study adds to the discussion in the discipline of morphology about the essence of the morpheme, which offers a benchmark against which we can gauge the advantages and disadvantages of various theoretical approaches. These findings contribute to ongoing discussions within morphology concerning the nature of the morpheme and provide a point of reference against which we can compare and contrast the advantages and disadvantages of various theories, and it also bridges theoretical morphology and psycholinguistic research. As opposed to discarding theories involving the morpheme, this study aims to examine their relevance and scope within the particular area under discussion, namely, English conversion.

2 Literature Review

In this chapter, the most important theoretical and empirical studies relating to English conversion and zero derivation have been examined. This chapter considers theories of morphology through different methodologies, such as morpheme-oriented theories like Item-and-Arrangement theory and Distributed Morphology, as well as word-oriented theories, including Word-and-Paradigm and Construction Morphology. Additionally, psycholinguistic studies have been discussed to examine the plausibility of each approach in terms of cognitive processing. The purpose of this chapter is to position the current study within the ongoing debate regarding the nature of the morpheme and zero derivation analyses.

2.1 Morpheme-Based Morphology and Structure-Based Approach

The field of morphological analysis has historically been based on the belief that words consist of the smallest meaning-bearing elements known as morphemes. For example, Bloomfield (1933) has made one of the early systematic studies of morphology by focusing on linguistic segmentation. This structuralist approach has had considerable influence on the subsequent development of generative linguistics, where morphology is seen as a combinatorial structure regulated by specific rules. More recently, Matthews (1991) has advanced morphological theory through the stress on the form-to-meaning relationship, and Katamba (2006) gives an excellent introduction to morpheme-based morphology in English. All these books emphasize the fundamental decompositional nature of morphology. In accordance with this tradition, category change should be associated with some formal morphological modification. Yet, this view does not seem to hold for English conversion, where category changes take place in the absence of any morphological modifications (Carstairs-McCarthy, 2002).

2.2 Item-and-Arrangement and Distributed Morphology

A recent version of the Item-and-Arrangement framework can be found in the theory of Distributed Morphology proposed by Halle & Marantz (1993). In this model, roots are not specified for any syntactic category, but they are assigned their category via functional heads n^0 and v^0 . The idea behind Embick's (2010) approach to the problem is an extension of the

Distributed Morphology theory with the inclusion of locality restrictions on morphological processes. Thus, according to the approach, morphology is inherently connected to syntax, and conversion is typically realized with the help of empty morphemes representing different categories. As Bauer (2003) and Plag (2003) demonstrate in their analyses of English word formation, including conversion, while zero-derivation seems to be accepted by most scholars, its theoretical nature is highly debatable. The use of null morphemes in Distributed Morphology allows achieving theoretical consistency at the expense of empirical accessibility.

2.3 The Issue of Zero Derivation and Conversion

Conversion, also known as zero derivation, is the process whereby a word changes class but not form. For example, words such as "email" and "text" have been converted from nouns to verbs, whereas words such as "run" and "drive" have undergone conversion from verbs to nouns. According to Aronoff (1994), morphology can occur independently of morphemic analysis, which means that the significance of words lies in their contribution to morphology. Furthermore, Aronoff and Fudeman (2011) indicate that conversion poses issues to morpheme-based morphological theories since it lacks formal affixation. According to Haspelmath (2002), morphology also needs to consider linguistic differences when analyzing structures, observing that certain languages are characterized by extensive conversion without derivation. This phenomenon brings up various problems regarding whether conversion can be considered a type of derivation or a lexical feature.

2.4 Word-and-Paradigm and Construction-Based Approaches

The WP morphology can be regarded as an alternative to decompositionist approaches. According to Anderson (1992), morphological structures should be considered in relation to entire words, not combinations of morphemes. Thus, morphological rules apply to entire paradigms instead of being applied internally to a word. Stump (2001) builds upon this notion by stressing the importance of paradigmatic organization for the theory of inflectional morphology. WP models do not have to assume the existence of zero morphemes and other invisible elements since variation is viewed relationally. In Construction Morphology, Booij (2010) suggests that morphology is constructed based on constructional schemas rather than morphemic structure. Consequently, shifts between categories become possible without insertion operations. Blevins (2006) supports a similar conception, stating that morphological systems are better described with analogical patterns of lexical association.

Several unresolved inconsistencies exist in the literature: Morpheme-based models (e.g., Halle & Marantz, 1993; Embick, 2010) make use of null morphemes to explain conversion, whereas Word-based models (e.g., Anderson, 1992; Booij, 2010) refrain from employing null morphology, though at the cost of internal representation of morphological structures. Psycholinguistic findings (e.g., Rastle & Davis, 2008; Bybee, 2010) on the other hand, favor a combinational approach in explaining word processing. There is plenty of research in the domain of conversion, but relatively limited comparisons. The present study, therefore, tries to fill that gap by comparing the two competing theoretical models in their adequacy in analyzing the phenomenon of conversion.

3 Theoretical Framework

This chapter presents the background theory upon which this study is based. Here, a careful comparison of the theories of morphology that have been examined throughout the research is conducted. This chapter contrasts two morphological theories: The Item-and-Arrangement (IA) view as presented by Distributed Morphology (DM) and the Word-and-Paradigm (WP) or A-Morphous theory. The primary concern of this study is an ontological investigation into the existence of zero morphology in English conversion. To discuss its existence and importance

to conversion, it is necessary first to understand the ontological commitments of each theory regarding: the atomic morphological unit, the correlation between sound and sense, category shift, and invisible morphology

Thus, this chapter provides the necessary theoretical framework to conduct the comparison in Chapter 5.

3.1 The Ontological Basis for Morphological Theory

3.1.1 The Morpheme as the Base

In the IA approach, the morpheme is considered the smallest possible unit of form-meaning correspondence. The structure of morphology is compositional since complex structures are formed by combining smaller elements. This ontology implies that each meaning distinction corresponds to a structural distinction, each structural distinction corresponds to some morpheme and category changes are licensed via morphological structure. The result of this is a piece-based theory of morphology where words are analogous to constructions made out of pieces.

3.1.2 The Word as the Base

In WP approaches, however, the word but not the morpheme is taken as the primitive unit of morphology. Morphological patterns are defined in terms of relations between words within paradigmatically structured sets. In other words, WP approaches focus on correspondences between words rather than breaking words down into their components.

In terms of its ontology, the WP approach implies that morphology is relation-based and not an additive structure, category changes need not involve structural addition and paradigmatic relationships replace affixes in triggering category changes.

3.2 Item-and-Arrangement and Distributed Morphology

3.2.1 Basic Principles of Distributed Morphology

Distributed Morphology (Halle & Marantz, 1993) offers an up-to-date IA model wherein the root is category-free, functionals specify category membership and lexical items undergo insertion post-syntactically.

The morphological structure under DM theory is syntactically derived. Categorical modification involves the combination of functional elements are n^0 (nominalization), v^0 (verbalization) and a^0 (adjectivalization). When morphological form is not apparent, DM suggests that the corresponding functional is instantiated by a zero exponent.

3.2.2 Modelling Conversion in DM

Compare the following two:

4 e-mail (N)

5 to e-mail (V)

Under DM analysis, the noun is formed via affixation, where the root $\sqrt{\text{E-MAIL}}$ combines with n^0 . The verb is formed via affixation, where the root $\sqrt{\text{E-MAIL}}$ combines with v^0 . If v^0 is not phonologically realized, then the surface form does not change at all.

Grammar structure (simplified):

Verb: [vP v^0 [$\sqrt{\text{EMAIL}}$]]

When $v^0 = \emptyset$, then the surface form is “email.”

This analysis helps maintain theoretical equivalence between overt and covert derivations. This analysis, however, entails a constituent that carries no phonology.

3.2.3 Advantages of DM

The following are some advantages of the DM approach:

Morphology has a unified structure.

It links morphology to syntax.

It creates a clear hierarchy.

It can easily be integrated into feature-based grammar models.

3.2.4 Theoretical Challenges

Nevertheless, about the phenomenon of conversion, DM depends on invisible exponents. The theoretical challenges stem from the following factors:

The unobservability of the phenomenon: The empty category cannot be perceived.

The feasibility of cognitive processes: It remains unknown whether speakers have such mental representations of the affixes.

3.3 Word-and-Paradigm and A-Morphous Morphology

3.3.1 Morphology as a Relational System

In Anderson's (1992) A-Morphous Morphology and Aronoff's (1994) morphological theory, words are viewed as paradigm members. The morphological processes are described in terms of rules that establish a link between two words.

Whereas traditional morphologies focus on internal structure, WP analyses focus on lexical relationships, paradigmatic arrangements and morphological structures within families of words.

From this perspective, conversion is a relationship between two lexical items that have identical phonological structure but different syntactic distributions.

3.3.2 Modeling Conversion under WP Theory

Under WP theory:

email (noun) and email (verb) are two distinct lexical entries, but are in a relationship with each other. The relationship is based on a productive lexical rule. No extra structural element needs to be added.

The process does not involve the addition of elements but a change in relationship.

Not $\sqrt{\text{EMAIL}} + v^0$

But $N \leftrightarrow V$ (relation of conversion)

3.3.3 Scope of Explanation for WP Approaches

WP approaches seem especially appropriate for:

Morphological affixal neutrality

Morphological category fluidity in English

Non-concatenative morphology

Morphological lexical multifunctionality

This is because, in WP approaches, no assumption is made that changes in grammatical categories must be morphologically motivated. As a result, conversion is viewed as an attribute of the lexicon rather than a derivation process within the structure.

3.4 Conceptual Model of Comparison

The comparison paradigm in this study consists of three criteria:

Structural Assumptions

Is the introduction of empty elements necessary?

Descriptive Adequacy

Is the account capable of accounting for semantic changes and productivity?

Explanatory Economy

In comparing both IA and WP approaches, each of the 50 conversion examples chosen from the corpus has been represented within the model based on both IA and WP paradigms.

4. Methodology

Qualitative and theoretical analysis form the basis of this research design. It does not attempt to quantitatively determine the extent of productivity or frequency of occurrence of processes,

but tries to test the explanatory power and theoretical elegance of alternative theories in explaining the phenomenon of conversion in English.

4.1 Research Design

This research has used a comparative theoretical analysis research design. This research design is concerned with the modeling of some selected English conversions through two different theories, namely:

1. Items and Arrangements theory, particularly Distributed Morphology theory
2. Word and Paradigm theory/A-Morphous morphology

Each pair has been analyzed twice, using the two different theories mentioned above. The analysis is qualitative and interpretive in nature.

4.2 Data Selection

4.2.1 Characteristics of the Dataset

The dataset is made up of 50 well-established conversion pairs of English, comprising:

Noun to Verb (hammer, text, email, host)

Verb to Noun (run, drive, call, walk)

Adjective to Verb (calm, empty)

Instead of obtaining the data from one corpus, the following were considered:

Often cited in morphological textbooks

Found in conventional grammars

Popularly used in the contemporary English language

Evident category shift without explicit morphology

In this way, the data remain descriptively adequate yet suitable for theoretical analysis.

4.2.2 Sampling Methodology

A purposive sampling technique was used. The requirements for each pair are as follows:

Same phonological and orthographic forms regardless of category

Syntactic category shift

Semantic connection among related words

No derivation morphology

4.3 Analytical Procedure

Every conversion has gone through the following stages of analysis:

Step 1: IA/Distributed Morphology Analysis

Root identification ($\sqrt{\text{ROOT}}$)

Categorial head assignment (n^0 , v^0 , a^0)

Decision on overt/null exponent

Simplified structure depiction

Step 2: WP/A-morphous Approach

Lexical units identification

Identification of paradigmatic relationship

Rule definition (N/V conversion)

Evaluation of structure-related assumptions

Step 3: Comparative Analysis

Every pair has been compared on the following criteria:

1. Structural Simplicity

Counting abstract components involved.

2. Descriptive Adequacy

Capturing the semantic change.

3. Theoretical Simplicity

Models minimize the unseen assumptions' ability.

4.4 Evaluative Framework: Parsimony Principle as Analytical Criterion

The principle of theoretical parsimony is used as the key criterion for evaluation. The concept of parsimony is understood in terms of the following:

Absence of invisible or unverifiable structures

Theoretical redundancy minimization

Maintaining descriptive adequacy despite structural economy

However, one should keep in mind that parsimony is secondary to descriptive adequacy. A more parsimonious model is preferable when it describes the same phenomenon.

4.5 Issues of Reliability and Validity

Methodological considerations, when it comes to theoretical work, still have a critical role to play.

4.5.1 Reliability

To improve reliability:

The same approach is used for all 50 pairs, morphological structures use conventional symbols based on DM and WP literature and criteria for analysis stay the same throughout the process.

4.5.2 Validity

This work guarantees:

Theoretical validity, using a sound basis for theory, including such sources as Halle and Marantz (1993), Anderson (1992), and Aronoff (1994). Conceptual validity of the three terms, "zero morpheme," "conversion," and "parsimony."

5. Analysis and Findings

The current chapter describes the comparative analysis of conversion phenomena in English based on two opposing morphological theories – namely, Item-and-Arrangement, more precisely, Distributed Morphology (DM), and Word-and-Paradigm / A-Morphous Morphology. The goal of the present chapter is not to prove the existence of conversion per se, but rather to investigate how each theory addresses this issue and what its costs are. On the basis of the methodology described in Chapter 4, some examples of conversion are described from the perspective of each theory. These analyses have been evaluated against three criteria:

- Structural assumptions made
- Descriptive accuracy
- Theoretical simplicity

The goal of this comparison is to establish whether it is theoretically necessary to assume zero affixes in cases of conversion, or whether it could be explained through another concept.

5.1 Nouns Converted into Verbs

5.1.1 Type 1: email (N) → to email (V)

IA/Distributed Morphology Analysis

Under DM theory, the root $\sqrt{\text{EMAIL}}$ is assumed to be categorially neutral.

Formation of a noun:

- $\sqrt{\text{EMAIL}}$ combines with n^0
- n^0 has zero exponent

Formation of verb:

- $\sqrt{\text{EMAIL}}$ combines with v^0
- v^0 has a zero exponent

Representation (abbreviated):

Structure of verb:

vP

→ v⁰ (∅)

→ √EMAIL

Email is hence formed by inserting a verbalizing head without phonetic content.

Evaluative comments:

- The need to posit a zero v⁰.
- Ensures consistency with overt derivational process.
- Involves invisible elements to represent categories.

WP/A-Morphous Theory

In WP, email (N) and email (V) have been analyzed as two different entries in the lexicon, which have become interrelated due to the existence of an active productive conversion relationship in English.

Representation:

N ↔ V (conversive relation)

This analysis does not involve any new syntactic structure but relies on a lexical item's participation in different forms.

Evaluative comments:

- Does not require a zero element.
- Categorical shift is accounted for through relations.
- Makes minimal structural assumptions.

5.1.2 Example 2: Text (N) → To Text (V)

This case is similar to the previous one.

IA Analysis:

- √TEXT + v⁰ (∅)
- Null exponent is obligatory.

WP Analysis:

- Paradigmatically related N and V entries.
- No structural addition.

Similarly, IA adheres to the principle of derivational uniformity, whereas WP avoids structural modifications.

5.1.3 Example 3: Hammer (N) → To Hammer (V)

This time, there is a semantic extension (instrument to action).

IA Analysis:

- √HAMMER + v⁰ (∅)
- Semantic reading is inferred from morphology compositionally.

WP Analysis:

- Morphologically related lexical entries: conversion of an instrument noun into a verb meaning “perform action using instrument X”.

In both cases, semantics are transparently derived. In IA, however, there is another instance of a null verbalization morpheme.

5.2 Noun-to-Verb Conversion

5.2.1 Example 4: Run (V) → A Run (N)

IA/DM Analysis

Verb:

√RUN + v⁰

Noun:

√RUN + n⁰ (∅)

Derivation of the nominal requires inserting a nominalizing morpheme with zero exponent.

WP Analysis

Two lexically related items:

- V: run
- N: run

Connected by productive conversion.

Discussion:

The IA model necessitates a null n^0 ; no extra structure needed in WP.

5.2.2 Example 5: drive (V) → a drive (N)

The structure is identical.

IA:

- $\sqrt{\text{DRIVE}} + n^0 (\emptyset)$

WP:

- Relational shift in lexical category

Similarly, there is a high degree of descriptive adequacy, but structural economy is distinct.

5.3 Adjective-to-Verb Conversion

5.3.1 Example 6: calm (Adj) → to calm (V)

IA/DM

Verb:

$\sqrt{\text{CALM}} + v^0 (\emptyset)$

The conversion process is represented by verbalization of the head.

WP

Lexical rule connecting the adjective and verb entries.

The semantic shift from state to cause is captured relationally, without structural change.

5.4 Overview of Structural Constraints

Across all examined cases, the following generalizations have been made:

Conversion Type	IA Constraint	WP Constraint
$N \rightarrow V$	Null v^0	Lexical relation
$V \rightarrow N$	Null n^0	Lexical relation
$\text{Adj} \rightarrow V$	Null v^0	Lexical relation

IA necessitates the presence of a categorial head.

WP needs only a paradigmatic relation.

5.5 Evaluation in Terms of Parsimony

5.5.1 Structural Parsimony

IA posits invisible morpheme structure for each example of conversion.

WP creates mappings between relations without increasing structural complexity.

Strictly speaking, from the perspective of parsimony, WP uses fewer postulated entities.

5.5.2 Descriptive Adequacy

Both IA and WP are equally successful at accounting for:

- Category change
- Semantic clarity
- Productivity

Neither framework had any significant gaps in description for the data analyzed.

5.5.3 Ontological Parsimony

Ontologically, the difference is mainly in terms of structural consistency:

- IA keeps structural consistency but uses null exponents.
- WP rejects consistent affixation but avoids invisible morphemes.

The issue thus revolves around structural parity versus invisible entities.

5.6 Findings

The results of the comparison study include conversion in English requires null categorial heads according to IA/DM, the WP accounts for all the data mentioned above without assuming zero morphemes, no descriptive gain from the use of IA was noticed in the examples considered, WP is more economical in terms of structure due to the principle of parsimony and the usage of null exponents in IA seems to be motivated by architectural reasons rather than empirical ones. It is thus clear that the zero morpheme could serve as a theoretical tool for keeping model uniformity, but not as an empirical concept. Nevertheless, one should note that IA possesses other features making it an effective way of accounting for overt derivation processes.

6. Discussion and Theoretical Implications

Interpretation of the results obtained from the analysis conducted in Chapter 5 is undertaken in the present chapter in light of wider controversies in morphological theory. It is not meant to show any superiority of one model over the other. Instead, it aims to investigate what emerges from the comparative study in terms of the theoretical implications of treating zero morphemes in English conversion.

6.1 Rethinking the Ontological Status of the Zero Morpheme

The comparative study showed that in the DM model, the application of the principle of morphological unification would make it mandatory to insert a zero categorial head (n^0 or v^0) in each case of conversion. This makes the model coherent from the point of view of its architecture since it assumes that category assignment can only be done through the structural device. Nonetheless, the research also discovered that the null morphemes have no independent phonological or morphological basis. The existence of the null morphemes is merely assumed due to the premise that the change in the categories would always entail structural changes. This poses the ontological problem: Is the zero morpheme empirically justified, or is it an analytical construct employed to maintain the symmetry of the model? This indicates that the role of the zero morpheme is largely structural in the IA framework. Even though this observation does not undermine the theoretical validity of the zero morpheme, it underscores the dependence of the concept on previous assumptions regarding the structure of morphemes.

6.2 Parsimony and Theory Economy

The criterion of parsimony has been used in evaluating both IA and WP accounts of conversion in English. While both accounts adequately captured the descriptive regularities in the English conversion process, the two theories varied in explanatory costs.

In IA/DM:

- Null heads must be postulated for each conversion pair.
- Change of category is mediated by structural mechanisms.
- Morphological invisibility is assumed.

In WP:

- The conversion process is defined in terms of lexical relations.
- No extra structures are needed.
- Neutral affixation has been maintained without structural inflation.

On grounds of parsimony, WP theory postulated fewer theoretical entities than IA theory, yet explained the same phenomena without unnecessary multiplication of invisibilities. It has been noted that parsimony itself is not a decisive factor in establishing the validity of a theory. A more complicated theory may well be acceptable if it explains more phenomena. In the current

dataset, however, there appeared to be no descriptive superiority of IA over WP in accounting for conversion processes.

6.3 Lexical Multifunctionality as a Result of Conversion

The results seem to indicate that English conversion has been interpreted as lexical multifunctionality instead of affixation. The English language typologically lacks inflectional morphology and features permeable category borders. Words often occur in different syntactic functions without any morphological modifications. Gaeta (2024) considers conversion as something standing somewhere in-between derivation and multifunctionality. The results of the current investigation seem to corroborate this notion insofar as it is shown that category shifts do not necessarily imply the need for morphological markers, as well as the ability of words to participate in various paradigmatic relationships.

The treatment of conversion as multifunctionality implies certain theoretical insights the focus of attention should be shifted from morphemic units to lexical structures. There is no need to consider such morphemic units as invisible. It takes into account the stability of converted words' surface structures. The syntactic context plays an important role in category determination.

Thus, the interpretation of conversion as lexical multifunctionality does not rule out derivational morphology but emphasizes its unnecessary use in some cases.

6.4 Structural Uniformity versus Empirical Economy

Among the main conflicts pointed out by this analysis lies the question of how to balance structural uniformity and empirical economy. Structural uniformity is preferred in IA/DM that category assignment is always structural, explicit and implicit derivation are architecturally identical and morphology stays closely linked to syntax. Empirical economy is favored in WP as the basic unit is a word, the relation replaces structural addition and the flexibility of categories is lexically realized. In essence, the selection of an approach comes down to underlying assumptions about linguistic structure. For IA, structure is inherently compositional; for WP, relations have taken over decomposition at certain stages. This investigation makes no claim regarding which position universally overrules the other. However, it highlights that English conversion may prove resistant to purely morphemic models.

6.6 The Issue of Falsifiability

Falsifiability is a problem that has often arisen within theoretical linguistics. Since there is no phonological content associated with the zero morpheme, its existence cannot be empirically confirmed. This raises a problem known as an "epistemological asymmetry" that when conversion happens, the explanation lies in the zero morpheme as proposed by IA and in the case where no overt morphemes can be identified, it supports the null hypothesis.

At such times, the theoretical concept runs the risk of being unfalsifiable. Although that does not render the concept useless for theories, it poses problems in terms of testing the theory. WP theories appear less vulnerable to this specific problem, as they do not rely on hypothetical structural elements in their explanations. From the results obtained from this study, it is said that within the area of English conversion, the null morpheme lacks motivation.

7. Conclusion

The thesis has focused on the status of the zero morpheme in the process of conversion in English and considered the possibility of postulating the zero morpheme in current morphological theory. By comparing the accounts offered by Item-and-Arrangement (IA), in particular, DM, with those offered by the Word-and-Paradigm (WP) approach, it was tried to find out which one provides a better analysis of zero derivation. Conversion represents a

problem in morphological theory based on morphemes in English. The phenomenon has been illustrated by such conversions as email (N) → to email (V) and run (V) → a run (N). In IA/DM theory, this problem is solved by introducing an unpronounceable categorial head into the structure, thus keeping category change morphology. However, such a solution creates problems with invisible constituents that have no phonological form at all. Comparing the representations of conversion cases qualitatively and quantifying them, this investigation considered the representation of category change in IA/DM vs. WP frameworks, their assumption sets, and whether the hypothesis about the zero morpheme is necessary from a theoretical perspective.

The results show that the category models within IA are designed to contain zero elements in order to have the same structural configuration. On the other hand, WP covers the same facts with only lexical and paradigmatic relationships without involving extra structural components. Both approaches seem to be equally good in terms of descriptive adequacy. Nevertheless, applying the criterion of parsimony, the WP approach has been found to contain fewer hypotheses. It does not include non-observable morphological structure and therefore does not require a hypothesis about the zero morpheme. This finding thus lends weight to the idea that English conversion has been regarded as a manifestation of lexical multifunctionality and not as covert derivational affixation. Rather than considering conversion to be a process of null-morpheme inclusion, it may be considered a process of extending the paradigm of a particular word by syntactic category membership. This interpretation fits well with the analytical nature of English and its capacity for flexible category assignment. On a wider scale, this research also addresses theoretical disputes within morphology more generally. By highlighting the ontological foundations of each model, this current study shows how differences in these foundations lead to divergent results. The dispute over the use of zero morphemes goes beyond being purely technical in that it concerns the very nature of morphology itself: Is it compositional or relational?

Here, the idea of parsimony proves to be a valuable evaluative principle. While structural regularity is an appropriate aim for theory building, it should be moderated by considerations of simplicity of explanation. In the case of English conversions, the inclusion of zero morphemes may appear as a mere case of theoretical speculation. Despite the predominantly theoretical nature of the research in question, it is worth mentioning that some ideas in the realm of psycholinguistics claim the role of frequency effects in morphological acquisition (Korochkina & Rastle, 2025). Although the present study does not offer an experimental investigation of morphological processing models, the agreement between relational analysis and usage-based findings seems reasonable enough to consider alternative approaches. The phrase "the ghost in the machine" contained within the title of this thesis encapsulates the tension highlighted by this research. Zero morphemes constitute a hypothetical invisible element that upholds the structure but fails to produce any sound. This research does not deny the consistency of such analyses. However, what needs to be pointed out is that the zero morpheme is only required due to certain theoretical limitations. Once the alternative theoretical model has explained the same phenomena in the absence of the unseen structure, its ontological status has become questionable. To summarize, this thesis has proven that English conversions offer a great opportunity for evaluating fundamental theoretical presuppositions underlying morphological theory. By contrasting the analyses offered by the Item-and-Arrangement and Word-and-Paradigm approaches, the study reveals the possibility of dispensing with the need to invoke invisible explanations.

7.1 Limitations of the Study

Several limitations should be recognized.

1. The investigation considered only typical cases, not the whole corpus.
2. The investigation took into consideration only the English language, so it may be irrelevant for morphologically complex languages.
3. The study is purely theoretical and does not involve experimental psycholinguistic investigation.
4. The productivity and frequency were not quantitatively evaluated.

These limitations do not affect the theoretical significance of the study but determine its boundaries. Thus, the results cannot be extrapolated beyond this domain.

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