A Theory Of Hierarchical Case Assignment

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1. Introduction

1.1 Abstract

Like most problems in the study of syntax, the issue of case assignment has not been completely explained either by Government and Binding (G&B) or by Optimality Theory (OT). As this paper will show, some structures that appear at first to be examples of inherent case marking are in fact tightly circumscribed by context. When pragmatic, lexical, and semantic issues are taken into account, case forms can be more fully accounted for by a motivated hierarchy of possible assigners.

1.2 Preliminary Research

Research began with the review of previous work done on case assignment problems in a textbook of the current standard syntactic theory, *Introduction to Government and Binding Theory* (Haegeman 1991). As demonstrated throughout Haegeman's text, G&B generally begins deducing principles of universal grammar based on English examples, which are ill-suited to the study of case forms. English retains a limited case system only for pronouns. The lack of morphologically distinct forms in English grammar's treatment of substantives makes English examples almost useless for deducing universal principles of case assignment. Furthermore, G&B discussions of problems rarely take into account differences in intended meaning that may be implied by certain "ungrammatical" forms. If a certain form of an utterance is produced by a native speaker and is understood by other native speakers, then it is automatically grammatical. It may well be non-standard, but the differences between intended meanings implied by standard or non-standard forms deserve to be taken seriously in a comprehensive theory of syntax. Most speakers are able to use standard and non-standard forms in appropriate contexts, and these contexts may well have an impact on intended meaning and thus on choice of morphological
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form. G&B, however, treats all ungrammaticality the same, causing dialogue about problems to gloss over what may be important aspects of speaker intuition.

The background research continued with a review of the competing theory in the volume Optimality-Theoretic Syntax (Legendre et al., 2001). Optimality Theory approaches to the problem of case assignment, though they more consistently and systematically explain the distribution of case forms, gloss over pragmatic issues of context and intended meaning in the same way as G&B approaches to the issue. Even studies (for example, Arnett and Masuda 2002) that take a primarily semantic view of the assignment of case forms can be hampered by the same methodological problems as structural theories, namely reliance on constructed data or data from a limited and prescriptivist context, and so miss certain aspects of the phenomenon. The perceived problems with both G&B and OT will be discussed in more detail in the next section.

2. Some Problems with Structuralist Approaches to Case Assignment

2.1 Problems with Case Assignment in Government and Binding

Case theory within the framework of Government and Binding (G&B) presents problems that are not resolved satisfactorily. G&B must resort to a priori assertions and exceptions to rules in order to explain certain kinds of case assignment. Starting from the generalization that transitive verbs and prepositions are followed by accusative pronouns in English, the theory concludes that heads assign case to constituents they govern, since transitive verbs govern their direct objects and prepositions govern their objects under X-bar theory (Haegeman 1991 p. 145). So far, this seems simple and straightforward. But what head assigns nominative to the subject of an independent clause? Since independent clauses do not have infinitives as main verbs, the only element they generally contain which could assign case (under the definition of government
modified by this particular phenomenon) is finite I, the head of IP (Haegeman 1991 p. 147-148). This solution presents many problems. The generalization that heads assign case was formulated based on case forms that are consistently associated with the complements of certain types of heads. The complement to I is VP. I cannot thus assign a case to its complement as the generalization would suggest and as economy would desire. In fact, G&B modifies the very definition of government under considerations from this problem, in order to allow I to govern the NP in the Spec position of IP (Haegeman 1991 p. 148, 152, 157). Furthermore, and perhaps most troubling, this means that the case of the subject is being assigned by a non-lexical head. The introduction of a non-lexical constituent, a head with zero realization (except as a verb affix, the mere existence of which hardly warrants status as a head) is unnecessarily complicated. Once an explanation requires the introduction of a phantom case assigner, the theory can no longer be considered comprehensive in its explanatory power.

Furthermore, there are instances of case assignment G&B does not even make up a new rule or definition to explain. These are examples of Exceptional Case Marking, (ECM) where the specific case of some constituent is assigned in spite of the rules already adopted to explain other examples. For example, consider the sentences:

2.1a. John believes the stories.
2.1b. John believes them.
2.1c. John believes him to be a liar.

Based on examples (a) and (b) "believes" seems to assign accusative case to the pronoun that follows it. But what about (c)? What is responsible for the accusative case of "him?" G&B has argued based on other phenomena (Haegeman 1991 p.157, 159) that infinitive I cannot assign case. But neither can "believes" assign the case here since "him" is separated from the verb by
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an IP projection. Being a maximal projection, it ought to block the finite verb from governing
“him” and thus from assigning case. All G&B can do is assume that in this case IP is not a
barrier to government (Haegeman 1991 p. 158-160). If exceptions can be introduced at will in
order to explain anomalous examples, the relevant theory must be seen as inadequate.

If G&B is inadequate to explain something so basic to the problem as why subjects of
finite clauses have nominative case in English (and in many other languages), or why subjects of
infinitive clauses have accusative case, then we should not expect a forthcoming explanation of
the variation in case assignment phenomena cross-linguistically. Amalgamation of new
definitions and non-lexical heads will not be sufficient to interpret the variety of basic structural
case systems and of inherent case assignment phenomena in the world’s languages.

2.2 Problems with Case Assignment in Optimality Theory

Ideally, Optimality Theory (OT) provides an alternate approach to syntax problems that
allows rules to be more streamlined than in G&B. OT specifically discourages the building up of
rules and principles and definitions and modifications because any constraint introduced must
theoretically apply to all languages, even if in most it will be ranked so lowly as to be irrelevant
(Legendre 2001). One approach to case theory in an OT framework is given by Ellen Woolford
(2001) in her contribution to the book Optimality-Theoretic Syntax, edited by Legendre,
Grimshaw, and Vikner.

Woolford begins her discussion by admitting that there are other OT approaches to the
problem possible, but that hers “maintains the principles of the Case theory of Chomsky (1981,
1986, 1995) as universal and inviolable.” Her account attempts to explain “cross-linguistic
differences in Case patterns with a supplementary set of ranked violable markedness and
faithfulness constraints” (Woolford 2001 p. 509-510). In other words, this explanation takes as
already given that case must be licensed by a head and that nominative is licensed by finite I. This should make us skeptical given the problems previously pointed out with these features of G&B case theory. The set of ranked constraints, the hallmark of an OT solution, is only supplementary. It might as well be another modified definition, assumption, or exception tacked onto G&B.

Even so, for its inherent flaws the constraint ranking does account for some forms that G&B by itself is unable to explain. The constraints relevant to this approach can be generally stated as (a) the case which surfaces should be minimally faithful to the case expected based on phrase structure or lexical entry and (b) dative is more marked than accusative is more marked than nominative. This allows a fairly coherent explanation of situations where the case of one constituent depends on the case of another (dependency effects, also referred to as inherent cases). Inherent cases surface when the constraint “check a lexically specified inherent case” outranks the markedness constraints. With one faithfulness constraint Woolford has done what G&B could not do even with several exceptions and modifications.

However, this approach does not do well at explaining situations where there is a choice of licensed cases, or situations for which G&B must resort to ECM, as in the example given in section 2 above. In fact the author unquestioningly accepts ECM when she refers to “the impossibility of structural accusative on external subjects (outside ECM constructions)” (Woolford 2001 p. 511). And, as we might expect, she does not address anything like the problems with case assignment of subjects (structural case) presented in the previous section. Since she already assumes the principles of G&B, it is not an issue. By trying to maintain the weaknesses of G&B and simply sticking on tableaux of ranked constraints, this particular OT approach does not go far towards solving any problems.
2.3 Methodological Problems in Structural Approaches

These structural approaches are hindered at the outset by the methodology employed in gathering and examining the data that their practitioners use to draw conclusions. How can we pretend to understand human language when we only examine created examples? All the explanations we have considered here have been based on isolated examples constructed to illustrate the theory. They conform to rules of Written Standard English, a constructed medium that allows language to be understood in a different type of context than spoken discourse, but which is not the primary form of language use. (Every neurologically healthy human being acquires a spoken language, but literacy is not strictly necessary for socialization.) Written discourse necessarily lacks the contextual assumptions of conversation. It must be constructed to be understandable to multiple readers who may not necessarily share the same background knowledge on the topic. Constructing examples of certain sentence forms, even producing formal written text at all, involves a relatively conscious process of accessing a more stable grammar of language...which may be fixed, often prescriptive (Sadler 61). If linguistics has any pretensions of being a (social) science, then we should begin with observed data and deduce explanations from it, instead of making up data as we go along.

Furthermore, the conceptual framework of structural theories, of G&B certainly and OT insofar as it does not question the assumptions of G&B, is based on generalizations drawn from English grammar. The notion that heads assign case to their complements is one interpretation of English sentence structure, and yet practitioners of G&B attempt to explain a variety of grammatical structures involving case in a variety of languages based on this idea. Perhaps using English as Procrustean standard causes theorists to overlook simpler and more comprehensive explanations because they do not fit into the conceptual framework of G&B. For
example, Woolford assumes that certain verbs in Japanese license dative subjects when they are used transitively (Woolford 2001 p. 513-515). This neatly explains the data she gives:

2.3a. Taroo ni eigo ga hanaseru.
     Taro DAT English NOM speak-can.
     Taro can speak English.

2.3b. Sensei ni okane ga iru.
     Teacher DAT money NOM needs.
     The teacher needs money.

But obviously this data is not sufficient to prove her interpretation. One would like to see an example of the same verb being used in an intransitive clause and in a transitive clause, the former with a nominative subject and the latter with a dative. One may also expect sentences roughly equivalent in meaning but with different lexical verbs, one of which requires a dative subject and is ungrammatical without it but the other of which is ungrammatical without a nominative subject. These, however, are not provided. And in fact Sadler (discussed below) is able to provide abundant data from spoken discourse which shows that this sort of data cannot exist and thus Woolford’s explanation is insufficient.

For many decades linguistics, and especially the study of syntax, has been dominated by structural theories. Every variation in the form of a sentence has had to be explained in terms of heads and complements and how they move around the branches a theoretical tree structure. Often the demands of this theory require the introduction of absurdities like null elements, heads of phrases that have no realization, and exceptions so frequent that the notion of “exception to the rule” gets an abbreviation. If theories in the physical sciences, or even other social sciences, were allowed to resort to a priori assertions and exceptions anytime data could not be accounted for they would quickly become irrelevant.
3. A Semantic Approach to the Dative Subject Problem

The chapter by Ellen Woolford in *Optimality-Theoretic Syntax*, which dealt specifically with case patterns, brought up the interesting problem of so-called “dative subjects” in Icelandic and Japanese. Since linguistic information on and native speakers of Icelandic proved difficult to come by, we decided to focus on the dative subject construction in Japanese. We examined a semantic approach to the problem of this seemingly exotic case marking in Arnett’s and Masuda’s paper “On German and Japanese Dative Constructions” (2002). The authors of this paper focus on categorizing the semantic features of participants that appear with a dative marking. First of all, referring to an “archetypal model,” they identify the dative constituent generally with the experiencer participant. They cite the notion of “an archetypal experiencer,” which is defined as “a sentient entity engaged in a mental activity.” This model “focuses on the interaction of clause participants and on the metaphor of energy transmission” (Arnett and Masuda, 2002). In these terms, the experiencer is an active participant but an energy sink (as opposed to an energy source). This neatly distinguishes the experiencer both from the agent, which is active and an energy source, and from the patient, which is passive and an energy sink.

To investigate further the properties of dative marked constituents, the authors collected data from newspapers and analyzed the corpora for examples of dative subjects. Then they applied certain parameters of semantic analysis to these examples. For example, 95% of the dative constituent from the Japanese corpora were “animate, and thus experiencers of the action designated by the verb.” These datives can therefore fairly be said to be active, and so consistent with the archetypal model. They also grouped the dative examples by location on the Empathy
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Hierarchy, a semantic rank of entities “according to...ability to attract a speaker's empathy”:

speaker > hearer > human > animal > object > abstract entity. Seventy-six percent of their
equems fell in the first three categories of the hierarchy. Furthermore, they concluded that
subjects marked by the dative postposition tended to be definite rather than indefinite. The one
consistent exception in the data they presented was examples of nouns designating a location
used in a dative subject construction. However, in their discourse contexts, these examples were
shown to actually be instances of metonymy where the name of the place referred to people
associated with that place.

The authors concluded that dative marked subjects in Japanese can be generally
characterized as experiencers, high on the Empathy Hierarchy, and usually definite. Their
analysis had an advantage over some previous studies in that it used natural language data
instead of examples created for this specific discussion. (However, their exclusive use of
newspaper corpora necessarily limited the pragmatic and stylistic contexts of their examples and
may have biased the results.)

4. An Alternative Explanation of Case Assignment

We tried to reproduce data from these previously published sources by eliciting sentences
from a native speaker, hoping that any information she could provide would support one account
of the construction over another. However, we were surprised to discover that what our native
Japanese-speaking informant reported about the grammaticality of certain sentences stood
starkly in opposition to the discussions in the sources we had reviewed. The data we gathered
left us with the conclusion that there is a pragmatic aspect to the problem of case assignment that
the syntactic approaches have not considered, and more of one than the semantic approach has
accounted for. None of the discussions we had been able to find matched what our informant
could tell us about the grammaticality of certain sentences. The conflict between what had been
written regarding case assignment in Japanese and what we understood from interviews with a
native-speaking Japanese informant led to the proposal of a new way of looking at case
assignment. This new approach is centered around the assumption that pragmatic context
(assumptions made by speaker and hearer in specific communicative exchanges) is central to
understanding how linguistic structures are constructed. Indeed, once we had a clear idea of the
potential of pragmatic context for influencing structures such as case, a new search led us to a
very recent publication discussing the Japanese construction from a very similar perspective.

4.1 Elicited and Original Japanese Data

These sentences appeared in Woolford (2001) as examples of dative subjects in transitive
clauses. They are the only examples of this construction given and are reprints of data from

4.1a. Taroo ni eigo ga hanaseru.
Taro DAT English NOM speak-can.
Taro can speak English.

4.1b. Sensei ni okane ga iru.
Teacher DAT money NOM needs.
The teacher needs money.

When asked to translate the English given back into Japanese (and without knowing what form
of the sentences we were hoping to see and without having seen the original Japanese above),
our informant produced:
4.1c. Taro wa eigo ga hanasemasu.
   Taro TOP English NOM speak-can-polite.
   Taro can speak English.

4.1d. Sensei wa okane ga hitsuyodesu.
   Teacher TOP money NOM needs.
   The teacher needs money.

We asked for an alternate version of 4.1d and our informant obliged, producing:

4.1e. Sensei wa okane ga hitsuyo ni narimasu.
   Teacher TOP money NOM need DAT becomes.
   The teacher needs money.

Here she used the verb “naru,” which she translated for us as “become.” This alternate construction is interesting in its own right, and it may be worth investigating the semantic role of the seemingly dative marked “hitsuyo.” However, it is certainly worth noting that given the neutral context of simple translation, she did not choose to use the verb “iru.” We asked specifically for a translation of the sentence with this verb, and she still preferred the pattern “Sensei wa okane ga” (Haruyama, N. Personal communication 2005).

It became obvious that we could not think of what to ask for that would cause her to spontaneously produce these sentences with “ni” instead of “wa.” This is definitely not what one would expect if the verbs were licensing dative subjects based on their lexical entries.

4.2 Pragmatic Considerations in Japanese Data

Eventually, we decided to give our informant the Japanese sentences with “Taro” and “sensei” followed by “ni.” She agreed that they were grammatical, but that they implied very specific contexts and she would never utter them without knowledge of the situation to which they applied. She produced:

4.2a. Taro ni nara Eigo ga hanaseru.
Taro DAT [emphasis] English NOM can speak.

She agreed that this is a grammatical sentence that on the surface says the same thing as example 4.1c. But she insisted that it has the very specific implication that “Taro can speak English but there another person who can’t; so I can speak to Taro in English but I can speak in English to this other person.” She also agreed that example 4.1b was grammatical, but that it suggested a situation like “Some teachers and students are going on a field trip and the teachers will be responsible for everyone money. So we should all give our money to the teacher. The teacher needs the money.” She noted that each version of the sentence, with “wa” after “sensei” (4.1d) and with the dative “ni” after “sensei” (4.1b) could have each meaning, the specific contrastive meaning or a more neutral meaning like “The teacher is poor and needs money.” Yet she preferred the dative subject for the meaning in which the teacher is responsible for everyone’s money (Haruyama, N. Personal communication, 2005).

This data suggests that there is a pragmatic aspect in the assignment of dative to the subjects of these sentences. They are not being assigned dative under the government of I, because two different grammatically correct cases are possible. We could make up a rule specific to Japanese that I can assign “wa” or “ni,” but we would still have to explain under what circumstances each case would be realized. By the same token, it is not plausible that dative is being assigned to the subject by the lexical entry of the verb, since it was the native speaker’s first impulse not to mark these subjects as dative.

In these examples, however, the subjects can perhaps be characterized as experiencers. Taro experiences the mental state of being able to speak English; the teacher experiences the mental state of needing money. Yet the mere fact that their semantic role as experiencer was not enough to induce to native speaker to mark them as dative. The characterization that experiencer
subjects are marked for dative is not sufficient, because the dative is not obligatory and implies some broader discourse context beyond the single sentence in which it appears. In this sense, the exceptions in Arnett and Masuda (2002) in which a location noun appeared with the dative as a subject and which were shown to be examples of metonymy may actually be closer to the rule.

In fact, this conclusion is supported by Mitsumi Sadler's extensive study of the dative subject construction. By examining copious amount of natural language discourse, both written and spoken in several different genres, Sadler concludes that, first of all, the construction is much rarer than previous work on the topic would give the impression of, and secondly, it did in fact evolve from the locative use of the dative marker through the use of metonymy. This metonymic use of “ni” served diachronically to defocus the agentivity of the noun phrase and “avoid the explicit mention of an individual worthy of respect” (Sadler 2002 p. 293).

Furthermore, Sadler finds as we did, that dative marking of the apparent subject of the clause is never obligatory. The same clauses in which dative subject marking may occur would be perfectly grammatical with some other kind of case marking, or no case marking at all, on the subject NP. Thus the dative marking must be conveying some other type of information than grammatical relation to the predicate of the clause (Sadler 2002 p. 137-138).

4.3 Hindi Core Case Assignment

The dative subject in Japanese is not the only case assignment phenomenon which is not satisfactorily explained by current theories of case assignment. Core case assignment in Hindi exhibits two different kinds of split that cannot be consistently explained either by G&B or OT accounts of case marking. In most descriptions, certain Hindi verbs are said to exhibit an
ergative pattern in the simple past tense, that is, they take a nominative subject in any non-past
tense but a so-called ergative subject in simple past tense. However, this scheme unnecessarily
complicates the morphological pattern. In addition, common nouns can have different but still
correct forms when they are the direct object of a sentence. In one case form they must be
interpreted as definite nouns, in the other form, as indefinite.

In the usual terminology of Hindi grammar, "direct" is the basic structural case. A
transitive sentence can have both arguments in the direct case:

4.3a. Woh paani peeta hai.
    s/he(DIR) water(DIR) drinks aspect.
    He drinks water.

"Indirect" is the oblique case. Indirect nouns can be followed by particles (which have meanings
like AGENT or ACCUSATIVE or INSTRUMENT). Without particles, they are vocatives.

4.3b. Unho-ne khidki tod di.
    They(INDIR)-AGENT window(DIR) broke aspect.
    They broke a window.

Direct nouns cannot be followed by particles.

4.3c. *Woh ne
    s/he(DIR) AGENT

The following examples show the split in subject marking in the simple past tense of
certain verbs:

4.3d. Main kutte ko dekh raha hoon.
I(DIR) dog(INDIR) ACC see(present) ASPECT.
I see the dog.

4.3e. *Main kutte ko dekha.
I(DIR) dog(INDIR) ACC saw(simple past).
I saw the dog.

4.3f. Maine kutte ko dekha.
I(INDIR)-AGENT dog(INDIR) ACC saw(simple past).
I saw the dog.

In the split in direct object marking, the form “indirect case + accusative particle” is required for arguments which are proper nouns. Similarly, this construction implies a definiteness or "properness" that a plain direct case direct object lacks. For example:

4.3h. Maine kutte ko dekha.
I(INDIR)-AGENT dog(INDIR) ACC saw(simple past).
I saw the dog.

4.3i. Maine kutta dekha.
I(INDIR)-AGENT dog(DIR) saw(simple past).
I saw a dog.

Sentence 4.3i implies some situation in which the listener should or would expect more information about this dog that I saw; the topic of this dog certainly has not been previously introduced in the discussion. There is no overt definite marking on the direct objects of these sentences, but the pragmatic implications of definite/indefinite are there. It is the type of case marking which signals what type of information the listener expects to follow. If the direct object is in the indirect case, and thus definite, then it has already been introduced into the discourse. If it is in the direct case, implying indefiniteness, then it presumably is new information in the conversation. This is an example of two grammatically correct case forms occurring with the same lexical verbs but in different pragmatic contexts. Since there is more
than one possible grammatical form, it cannot be that the verb is licensing a more marked case form. The only difference between the sentences is the discourse context in which they would be expected to occur.

5. Hypothesis: A Hierarchy of Case Assignment

Each approach to case assignment examined here – Government and Binding, Optimality Theory, and semantics – partially explains the data it examines. But each approach ignores some aspects of the data, and therefore none of them completely capture the phenomena. We have shown that the assignment of dative case to subjects in Japanese is based on contextual factors and it remains to be seen whether these factors can be summarized by rules. If no one theory rigorously explains the many types of phenomena associated with case assignment, then perhaps a synthesis will be more useful. Ideally, one theoretical framework should be able to explain case assignment cross-linguistically, and we suggest a very minimal frame on which to build a theory: case is assigned by three levels of possible assigners following a motivated hierarchical pattern.

As seen in the Japanese examples examined here, some case assignment is based on the pragmatic context of the utterance. It has more to do with the implications than with the literal meaning or the grammatical well-formedness of the sentence. In some instances, case is assigned by pragmatics. This type of assignment may not occur in all languages, but since we are trying to create a universal framework, it should be the first level of assignment. In the languages in which it does occur, a case that signals a specific pragmatic context will supersede a case expected in a more pragmatically neutral context, such as formal written text.
If case is not assigned based on pragmatics, it will be assigned by argument structure in the lexicon. This allows a broad range of inherent case phenomena to be accounted for.

Furthermore, it is important that case be assigned by lexical argument structure rather than by semantic argument structure. We are attempting to create a cross-linguistic framework, but there can be no semantic reason why, for example, the verb meaning “to help” requires an accusative object in English but a dative object in German. This is a difference in the lexicons of the two languages. Also, the interface between semantic roles and syntactic structures always seems to have exceptions. For example, as noted in Arnett and Masuda (2002) most dative constituents are experiencers, but that is still only most. One wonders if all experiencers are marked for dative.

If case is assigned neither by pragmatics nor by the lexicon, it will be assigned by phrase structure rules. These rules should be simple and specific. They should be based on observed data and not taken to be predictive of what structures will be correct. Since phrase structure is the lowest level of case assignment, correct structure may be assigned at higher levels. They should not be deduced by generalization or by analogy with other structures, because those structures may be results of different levels of assignment.

This hierarchy, that case is assigned by pragmatics, then by the lexicon, then by phrase structure, should apply to all languages. But the specific rules that are generated for one language within this framework do not necessarily apply to all languages. For example, based on English data, we can say that subjects of finite verbs are nominative and that subjects of infinitives are accusative. These are two simple phrase structure rules that, within this theory, do not need recourse to spurious abstractions like “government by I.” But these rules would be meaningless for a language that had a different kind of split in the cases of subjects, for example,
an ergative language where the case of the subject is based on a verb transitivity, not tense or lack thereof. Finally, if no phrase structure rules apply, a default case will be assigned.

This framework is only a hypothesis, and remains to be elaborated by examination of more and different data. But since it is so minimal and since it reaches into different areas of linguistics – syntax, lexical semantics, and pragmatics – perhaps it will be flexible enough to support the range of phenomena of case assignment.

6. Further Research

The most obvious avenue of further research on this problem would be to uncover more examples of case assignment phenomena in different languages that cannot be fully accounted for by the structural rules of Government and Binding or the constraints of Optimality Theory. Any patterns that do not fit these established theories may not necessarily fit this theory. A theory of syntax that claims universal applicability should be based on the widest possible survey of cross-linguistic data. New data may force the revision of the theory proposed here. Furthermore, new data should be based on original research and not taken from work analyzing different phenomena or from analyses of case assignment under a different rubric. As was found in the research for this project, data is sometimes merely reprinted from paper to paper, or is presented selectively in ways that distort the grammatical intuitions of native speakers.

The data examined in this paper should also be further investigated to check that the interpretations presented are not based on an incomplete account of the relevant grammar. G&B and OT can be criticized for focusing on syntactic explanations for all grammatical phenomena at the expense of semantics and pragmatics. Similarly, there may be other considerations in the
interpretation of the data presented in support of this theory that have not been sufficiently addressed by this analysis.

The impact of pragmatics and contextual considerations on other grammatical problems should also be considered in light of this research. It may be the case that the pragmatic context of discourse also influences other kinds of morphological forms, such as verbal categories. Approaching other problems from this angle may similarly lead to explanations that are at once simpler and more coherent than current theoretical accounts.

7. Conclusions

The data presented in this paper has shown that not all phenomena of case assignment can be accounted for by the structural theories of Government and Binding and Optimality Theory. Rather, the choice of case form is often dictated by the pragmatic context of the discourse. This aspect of language cannot be codified by the kinds of rules and constraints of syntax theories which focus primarily on the formal structures of sentences. These structural theories have been shown to be inadequate for explaining something as basic to language production as the choice of one morphological form of a noun over another.

However, noun case phenomena can more thoroughly and logically explained by a theory that takes into account many different levels of linguistic analysis rather than insisting on forcing the entire problem into the domain of syntax. After analyzing data from languages with different types of case assignment phenomena, we propose a theory of a motivated hierarchy of case assignment. The case of a noun may be assigned first by the pragmatic context of the discourse, next by the lexical properties of its environment, and finally by the basic phrase structure rules of the language. If none of these apply, the noun will be assigned a default case form. Further
research should focus on trying to apply this model to other types of case assignment than what has been examined here, with an aim to verifying or modifying the theory. It may also be worth investigating the impact of pragmatic context on other kind of morphological choices.
References


