Let the language tell its story? The role of linguistic theory in writing grammars

Keren Rice

It is frequently said about languages that each language has its story to tell, and, in a grammar of a language, its story should unfold. Given this perspective, what role does changing linguistic theory play in a grammar? Is there a basic linguistic theory that provides the theoretical background for a grammar? Do changes in linguistic theory affect the way that a language is viewed, and thus what its story appears to be?

Among the linguistic lore, one sometimes hears that language description, the essence of a grammar, does not require theory. However, as most recognize, this is not a tenable position, as one must have some view about what language is both formally and functionally to even think in terms of description; see, for instance, Dixon (1997), Gil (2001), and Hyman (2001) for recent discussion. Gil (2001: 125) heads a section ‘no description without theory, no theory without description,’ pointing clearly to the intimacy of the relationship between these. The expression ‘basic linguistic theory’ is often used to describe this framework that has been built up over the years to represent the kind of theory that is generally employed in grammars; see, for instance, Dixon (1997) on this term. Assuming the existence of basic linguistic theory, the question that underlies the claim that theory is not important in language description, and thus in grammar-writing, is not whether theory is relevant to grammar writing or not, but rather how ongoing theoretical developments affect grammars. More generally, one might ask if theoretical changes affect basic linguistic theory.

When linguists raise doubts about the role that theory should play in language description and grammars, these are usually directed at one type of theory, formal linguistics. Thus in this article I focus on the kinds of positive contributions that formal theory can make to grammars. It is, of course, difficult to isolate formal theory from the other developments in linguistics (e.g., functional theory, linguistic typology) over the past several decades, and my perspective comes from being trained in formal theory and working in a formal paradigm. I thus offer one view of how theoretical
developments have influenced grammar writing. I concentrate on decisions that I made in writing the Slave grammar, as there is no doubt that I was influenced by formal linguistic theory in writing this grammar and I continue to be influenced by formal theory as I think about ways in which I would change the grammar if I were to revise it today, some fifteen years after its publication. My perspective is a reflective one, developed after the passage of some years and much learning about what a good grammar is. It is also a personal one; writers of grammars may (likely will!) disagree about whether developments that I attribute to formal theory actually originated there, and about directions of influence. I focus on the contributions that formal theory made, and makes, to my own work as a grammarian. I hope to show that the interplay between formal theory and grammar-writing can be a healthy one that can result in quality language description.

In what follows, I examine several ways in which I believe that grammar writing has been positively affected by developments in theoretical linguistics, focusing, as indicated above, on my own work. I begin with what is perhaps the most obvious way, and to me the most important way, in which theory influences grammar writing, the expansion of the scope of grammars in both breadth and depth of content. This enriched coverage comes about because linguistic theory forces one to ask questions that likely would not have been asked otherwise. Such questions can lead to greater depth – as we will see, linguistic theory led me to probe wh-questions in Slave in a way that I likely would not have otherwise – and to greater breadth – a grammar written today must include a wider range of topics than a grammar written fifty years ago. A major influence of theoretical developments over the years has come through the introduction of representations: phrase structure trees, autosegmental representations, and metrical trees come to mind. These allow for a visual expression of insights that can enhance the understanding of processes in language. In addition, grammars are affected by terminological changes that have taken place over time.

Before examining these contributions, I begin with a basic question: what about a language should a ‘grammar’ represent?

1. **What should a grammar include?**

In order to discuss how theory influences language description, it is critical to determine what aspects of a language a grammar should include. This is
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an important topic, and one that I cannot begin to do justice to in this article.

In the largest sense, a grammar should express what Sapir (1921) refers to as the ‘genius’ of a language:

For it must be obvious to any one who has thought about the question at all or who has felt something of the spirit of a foreign language that there is such a thing as a basic plan, a certain cut, to each language. This type or plan or structural “genius” of the language is something much more fundamental, much more pervasive, than any single feature of it that we can mention, nor can we gain an adequate idea of its nature by a mere recital of the sundry facts that make up the grammar of the language.

This genius of a language, a phrase used often by Sapir (1921), is what the grammarian ultimately hopes to capture. What is this genius of language? How can one encapsulate it in a grammar?

There is general agreement, I believe, that a grammar should describe a language as it is spoken. This description might be called parole after Saussure or language performance following Chomsky or, in more recent terms, E(xternal)-language. Thus, in fieldwork, the need for working with spoken language of a variety of genres has long been recognized; grammars that do not draw richly from such material are probably unlikely to attain the goal of describing the genius of the language. The need to capture language in its cultural setting also cannot be overlooked in writing a grammar (see Hill, this volume). These are, I believe, absolutes, and are not my focus of discussion.

While parole, or language behaviour, is important to a grammar, a grammarian must also consider the role of a second aspect of language. While Sapir’s langue and Chomsky’s language competence or I(nternal)-language are not the same – langue concerns the linguistic system which exists as part of the social collectivity while competence is concerned with the individual speaker – both speak to the linguistic system. It is this system that is likely what Sapir refers to when he speaks of the genius of a language. This system does not necessarily emerge through the study of language in a variety of naturalistic settings, but is something that must be studied in and of itself.

A brief detour into fieldwork is helpful here (it is difficult to talk about writing grammars without talking about fieldwork, as the latter is frequently a prerequisite for the former). In fieldwork, research on language behaviour can be described as taking the study of naturalistic speech as its centrepiece; research on systems often uses elicitation as well as a key
component to gain insight into the knowledge of language held by a speaker. The centrality of elicitation in fieldwork is controversial among fieldworkers (see, for instance, many of the articles in Newman and Ratliff (2001); Mithun gives a nicely balanced perspective). Hyman (2001) presents oppositions between what he calls a fieldwork prototype and a fieldwork countertype; in terms of data he characterizes the fieldwork prototype as involving data that is naturalistic, while the fieldwork countertype involves data that is controlled (see Hellwig, this volume).

The naturalistic speech/elicitation issue in whatever guise is a source of debate among fieldworkers, and a similar question can be asked of grammars. What is to be included in a grammar? Is a grammar an analysis of natural speech, gathered from a wide variety of genres and supplemented with elicitation to, for instance, fill in paradigms? (See Mithun (2001) for detailed discussion of roles for elicitation.) Or is a grammar this plus an attempt to get at the underlying system, including what a person ‘knows’, in the abstract sense, about his or her language but may not actually use often, if at all, and thus is not part of a corpus?

In this debate, I take the latter position, the inclusion of both these parts of language in a grammar. Thus when I wrote the grammar of Slave I asked, in addition to what is used in the language, what does a speaker know about his or her language in this abstract sense? Elicitation and discussion with consultants about their language provided me a way of coming to an understanding of the language which, for me, was impossible working with corpora – elicitation took me to areas that I would not have found otherwise, and to a level of understanding about the language that I believe I could not have achieved without the close discussion with speakers about grammaticality judgments of aspects of the language that may never have been used. My discussion in this article is predicated on this assumption that such knowledge forms a vital part of a language, and thus deserves a role in a grammar.

2. Theory in grammar-writing: What does formal theory contribute?

Given this brief background, I am ready to address ways in which I believe linguistic theory has influenced grammars. I take as an assumption that there are several criteria that a grammar must meet: it should be comprehensive and complete, clear and accessible, and contain a wealth of authentic, accurate, and appropriate data; the argumentation should be coherent,
2.1. Theory and grammar 1: Scope and depth

What is the appropriate scope for a grammar? What does it mean for a grammar to be ‘complete and comprehensive’, a prerequisite noted in the above paragraph? There is probably little disagreement on the basics: a grammar should contain as full a description of a language as possible, including phonetics, phonology, morphology, syntax, semantics, and discourse functions. There might be other materials as well; these could include historical developments, orthography, and lexical semantics, among other topics. I emphasize these particular areas based on a survey of several grammars including my grammar of Slave (Rice 1989) and recent grammars by Aikhenvald 2003 (Tariana), Valentine 2001 (Nishnabemwin), and Watters 2002 (Kham); see Rice (2006) for discussion.

When one compares these relatively recent grammars with grammars written fifty or so years ago, some points about scope of coverage stand out. Perhaps most obvious is that syntax occupies a position in recent grammars that it did not fifty years ago. Many recent grammars also contain far more discussion of phonetics than do older grammars. The reasons for the increased inclusion of phonetics and syntax in grammars are probably different. For phonetics, the world has changed in terms of technology: today one basically needs a computer and software to do phonetic work; these technological advances have allowed phonetics to become a core part of linguistic training in a way that was difficult even fifteen years ago. The developments in phonetics allow for the careful examination of sounds, of phonetic variation, and also for a more in-depth study of prosodic properties connected both with sentence-type and discourse function. The change in syntax comes, I believe, from a different source, through the development of the generative paradigm, a paradigm that gave definition to what syntax is and provided a core set of questions to ask. Notions of basic phrase structure, constituency, and sentence types, while recognized earlier, were brought into centre stage through early generative grammar.

In this section, I focus on three areas of syntax, wh- questions, complementizers, and intransitive verbs. My knowledge of formal linguistics allowed me to address the first two of these topics in some depth in the Slave grammar; without this knowledge these topics would still have been ad-
dressed, but the discussion would have been far more superficial than it is. The third focus is one that is not discussed in a systematic way in the Slave grammar, but later research tells me that it should be. In the following, I concentrate simply on scope and not on presentation of the material in the grammar. I could easily have addressed many other topics; these are three that interest me and that illustrate, I believe, that formal theory generated a set of questions, questions that I suspect I would not have pursued if it were not for my formal training.

2.1.1. *wh*- questions

Probably all languages have an equivalent of *wh*- questions in English. The basic description of *wh*- questions in Slave is straightforward. There is a set of question words which I will call *wh*- words. These can occur in situ, as illustrated in (1).

(1) a. netá judóné radujá
   2sg.father when 3sgS.opt.return
   ‘When will your father return?’ 1159 (Hare dialect)

b. David ’ayíi ehtsi
   what 3S.imp.make
   ‘What did David make?’ 1160 (South Slavey dialect)

In addition, *wh*- words can occur at the beginning of the clause; equivalent sentences to those in (1) are given in (2).

(2) a. judóné netá radujá
   when 2sg.father 3sgS.opt.return
   ‘When will your father return?’ 1159 (Hare dialect)

b. ’ayíi David yehtsi
   what 3S.imp.make.3DO
   ‘What did David make?’ 1160 (South Slavey dialect)

Sentences such as those in (1) and (2) are heard in speech, and are easy to elicit. These might be considered the core set of facts of the system.

*Wh*- questions were a major topic of research in theoretical linguistics while I was involved in the fieldwork that led to the Slave grammar. The theoretical debates of that time made me interested in a set of questions that
drew me beyond this basic data set. The existence of both wh- questions with the wh- words in situ, as in (1), and at the front of the sentence, as in (2), made Slave an interesting language from a theoretical perspective. A seminal article by Chomsky, ‘On wh-movement’ (1977), appeared at the time that I was deeply engaged in fieldwork, and, as I recall, greatly affected my study of questions in Slave. This article raised many issues about the theory of transformations, and led to a general theory of wh- movement. In the article, Chomsky distinguished a constellation of wh- diagnostics to identify wh- movement. For instance, he argued that wh- movement leaves a gap, and that it observes subjacency restrictions but, in some instances, it appears to be unbounded. To illustrate these concepts, consider wh- movement in English. A sentence such as that in (3) illustrates that movement leaves a gap. The square brackets indicate the logical position of the wh-word.

(3) What did Mary buy [ ]?

Movement of the wh- word to the front of a sentence is unbounded, as the example in (4) illustrates.

(4) What did Susan say Mary thought John should persuade Bill to buy [ ]?

However, there are times in which movement of a wh- word to the front of a sentence is blocked, as in (5).

(5) *What do you believe the story that Mary bought [ ]?

In (5) movement creates what Chomsky called a subjacency violation. Without going into details, in this case the presence of the noun phrase ‘the story’ blocks the wh- word from moving.

I already knew that Slave exhibited a type of wh- movement based on sentences such as those in (1) and (2). Chomsky’s work and the writings of others, in particular of Schauber (1979) on Navajo, another Athapaskan language, led me to ask a number of questions about possible question forms in Slave. For instance, do all question words have the ability to occur both in situ and in sentence-initial position? (Yes.) Do sentence-initial question words leave a gap? (Yes and no: with arguments a pronominal occurs in the in situ position under a set of well-defined conditions, while with adjuncts a gap is found.) In considering the questions with displaced
question words, Chomsky raised the issue of whether all displaced elements pattern in a similar way. For instance, in Slave there is a construction that I was treating as a topicalized structure, with topicalized phrases placed at the beginning of the clause. This literature made me ask the following question: Do question words that appear in sentence-initial position pattern like other displaced elements? (Yes.) Issues of locality were also of interest in light of the discussion of subjacency. This led me to another question: When a question word is semantically part of an embedded clause, what are the possible positions in which it can occur; must it remain within the embedded clause, or can it appear at the front of the matrix clause as well? (This depends on the type of complement clause, as examined immediately below.)

The study of the position of wh- words in complex sentences presented a particularly interesting challenge, and I discuss this in more detail here. In general, when the wh- word is part of a complement clause, it can occur either in situ, as in (6a), or at the front of the complement, as in (6b), but not in the matrix (6c) on this reading.

(6) wh- words in complex sentences 1
a. Raymond [Jane [jenj [ri yijij]] kodjshq]
   where focus  3S.pf.be  3S.know
   ‘Where does Raymond know Jane to be? 1162 (Hare)

b. Raymond [jdenj [ri Jane yijiji] kodjshq]
   where focus  3S.pf.be  3S.know
   ‘Where does Raymond know Jane to be?

c. *jdenj [ri Raymond Jane yijij] kodjshq
   where focus  3S.pf.be  3S.know

However, in some cases a wh- word can occur in more possible positions: it can be in situ (7a), at the left edge of the complement (7b), or at the left edge of the matrix clause (7c).

(7) wh- words in complex sentences 2
a. in situ
   Mary hayi [John [jdenj [ri raraxuwo’i]] hadeyidi
   focus where focus  3Sopt.waitfor.1pl  3S.pf.say
   ‘Where did Mary say John will wait for us?’ 1161 (Hare)
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b. left edge of complement
Mary hayi [jundenj ri John raraxwoo’j] hadeyjdi
‘Where did Mary say John will wait for us?’ 1161

c. left edge of matrix clause
jundenj ri Mary hayi John raraxwoo’j hadeyjdi
‘Where did Mary say John will wait for us?’ 1161

The matrix verb in these sentences is ‘say’. Verbs meaning ‘say’ and ‘want’ in Slave and many other Athapaskan languages pattern differently from other complement-taking verbs in the languages, and are called direct discourse verbs (see Rice 1989 for discussion on direct discourse in Slave). Direct discourse verbs differ in many ways from regular complement-taking verbs; this patterning in questions is one of those ways; see Rice 1989 for more details.

In Rice (1989: 1162) I note that:

A question word can occur at the front of a matrix sentence containing a direct discourse verb. While this placement of the question word is optional, as the (a) versions of the above examples show, it is preferred for the interpretations given. The sentences in which the question word is syntactically part of the sentence that it is semantically associated with, or in situ, have a second interpretation, where the question is indirect.

For the example in (7), the most likely interpretation with the wh- word as part of the complement (7a, b) would be along the following lines: ‘Mary said ‘where will John wait for us?’’; i.e., the sentence will be interpreted as an indirect rather than a direct question. This interpretation is also available in (7c), although it is not the usual one.

It is unlikely that I would have come to this understanding of wh- questions in Slave without a background in formal theory: it was the formal literature that led me to ask questions that provided me with an understanding of the various questions above, and others. The work by Chomsky, Schauber, and others caused me to go beyond the simplex sentences in (1) and (2) and pursue the complex sentences in depth; their work led me to experiment with the placement of wh- words which are part of a complement clause semantically. Overall, the questions being asked at that time caused me to wonder how Slave fit in to the typology of questions that was proposed.

Question formation is an important part of the grammar of any language, yet I did not hear questions such as those given above being spoken around me all that often, if at all. However, by attempting to address issues
that were important in the theoretical literature, I found striking agreement on both readings and grammaticality judgments across speakers and dialects of Slave, suggesting that this information is part of the linguistic knowledge of the speaker and of the community. This literature directed me in doing fieldwork, and I decided that wh- questions deserved full and detailed discussion in the Slave grammar even though particular structures might be of vanishingly rare occurrence in spoken language. Interestingly, in grammars of other Athapaskan languages, the topic is not addressed (granted, many of these are grammars that cover little if any syntax), although every Athapaskan language in which the position of these words has received detailed attention (e.g., Schauber 1979 on Navajo, Denham 1997 on Witsuwit’en, Potter 1997 on Western Apache) exhibits variability in the placement of wh- words. Comprehensive comparative study of wh- question formation in Athapaskan languages is not possible, however, based on the grammars and dictionaries of the languages. This topic received consideration in the Slave grammar because, I believe, of my training in formal linguistics.

2.1.2. Complementizers

Many Slave dialects exhibit two complementizers, gú/gha and nj. In the Slave grammar, I say: “The complementizers nj and gú/gha (henceforth gú) can be used in sentences that are structurally identical. The difference between them lies not in structure but in meaning” (Rice 1989:1243). Consider the sentences in (8), the first with nj and the second with gú.

(8) a. sú [hejô sêhga rîrî nj] kodinehshô
   Q here sugar 1plS.pf.brought comp 2sgS.imp.know
   ‘Do you know if we brought the sugar?’ 1249 (Hare)

   b. sú [hejô sêhga rîrî gú] kodinehshô
   ‘Do you sg. know if we brought the sugar?’ 1249 (Hare)

These sentences appear to be identical in meaning based on the translations given here, and there did not seem to be any way to distinguish between them. The complementizers seemed rather parallel to the English complementizers that, at the time, were referred to as that, for-to, and poss- ing, where the choice of complementizer with a particular verb was re-
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garded as more or less arbitrary. Two things made me wonder whether this was really the case, however.

First, theoretical discussion of the time was focused on complementizers and whether the choice really was so arbitrary as had been claimed. As Schauber (1979) discusses in her dissertation on Navajo, complementizers were originally viewed by generative linguists as markers of syntactic subordination in Navajo. Schauber followed a different route, taking the lead of Bresnan (1970, 1972), Erteschik-Shir (1973), and others, that complementizers may have semantic content. This insight made me think that a deeper examination of this topic in Slave would be worthwhile. This then was the theoretical foundation for examining the complementizers in greater depth.

Second was an empirical foundation. While these two complementizers nį and gū appeared to be parallel in examples such as those in (8), there were other cases in which only one or the other could be used. For instance, nį also marks relative clauses with so-called ‘areal’ head nouns, while gū has a number of adverbial functions. (‘Areal’ is used to denote nouns that, in some sense, occupy space. In (9a) ‘the place where he drowned’ is considered to be areal, while the use of the complementizer nį in (9b) assigns an areal (place) reading to the numeral ‘five’.)

(9) a. judeni tu yewêhxį nį du gāra’eyïda yile where water 3S.pf.kill.3DO comp neg 1plS.pf.go there neg ‘We never went back to where he drowned.’ (literally: where water killed him) 1317 (Hare)

b. lák’e nį liyïdee five comp 1plS.pf.stop ‘We stopped at five places.’ 382 (Hare)

c. lát’e gū sâŋjle one comp 2sgS.imp.give plural objects to 1sgOO ‘You sg. give them to me one at a time.’ 382 (Hare)

In addition, gū occurs to the exclusion of nį with higher inchoative and causative verbs.

Thus, both theoretical and empirical reasons suggested that there was more to be known about the complementizers in sentences such as those in (8). Indeed, while it initially appeared that these sentences shared a meaning, deeper probing led me to learn that there are subtle differences between them. With the first question, the expected answer is ‘Yes, I know’ or ‘No,
I don’t know’; in the second case, the expected answer is ‘Yes, we brought it’ or ‘No, we did not bring it.’ As I say in the Slave grammar, “It is not surprising that nj is marked as a complementizer in ‘know if’ questions: the speaker will not receive much information in answer” (1250). Thus, while my initial observations of Slave did not lead me to think that there was a difference between the complementizers, the theoretical claim that complementizers might differ in semantic content, coupled with the clear differences between these morphemes in other situations, made me pursue this issue, and Schauber’s work on Navajo helped guide me to a hypothesis about what the difference between these complementizers might be. In Rice (1989) I concluded that the complementizer nj has a meaning associated with it, and is used when the complement has a contextual reference, or is presupposed, while gú is basically an indicator of subordination.

This is an issue that was not discussed in grammars of other Athapaskan languages that were available at the time (again, note that few of the grammars of Athapaskan languages include much information on syntax) beyond Schauber’s dissertation, and sentences such as that in (8b) would likely never occur; the topic found its way into the Slave grammar because the question of whether complementizers do more than mark subordination was important at the time. As more in-depth work has been done on complementizers in Athapaskan languages, similarities with Navajo and Slave have emerged, suggesting that this is a core distinction in the grammar of Athapaskan languages in general, and thus part of genius of this family.

2.1.3. Intransitive verbs

In the Slave grammar, although I identified characteristics of intransitive verbs, I did not specifically examine classes of intransitives. If I were to revise the Slave grammar, I would include a chapter on intransitive verbs, as intransitives in Slave, and other Athapaskan languages, have fascinating properties. Although much information about intransitive verbs is present in the grammar, my work on this topic in a sense really began in the late 1980’s, when I was asked to give a talk on noun incorporation in Slave at the University of Arizona. I had gathered considerable information about noun incorporation, both from texts and elicitation, but I had not looked in detail at the types of verbs that allowed incorporation, nor at the types of nouns that could not be incorporated as well as those that could be incorporated.
Work by Baker (1988) on incorporation caused me to revisit the material on intransitives in the grammar. I observed that all of the verbs that allowed incorporates were of a particular type, namely verbs that might be considered to be unaccusative. I then checked to see if verbs that would be considered to be unergative also allowed incorporated subjects, and found that they did not. Thus, it was the theoretical literature on noun incorporation – namely Baker’s claim that subjects could not be incorporated – that took me back to data with a question that I had not asked previously.

Having realized that there were two classes of intransitives on the basis of incorporation criteria, I then, aided by the theoretical literature on the differences between these classes (e.g., Perlmutter 1978, Baker 1988), extended the study and realized that the two classes differ in other ways as well: in addition to one class allowing incorporated nouns as subjects while the other does not, the class that allows incorporates participates in transitivity alternations and does not occur in an impersonal passive construction; the other class does not allow incorporated nouns as subjects, fails to participate in transitivity alternations in general, and occurs in impersonal passive constructions (Rice 1991). This finer delineation of properties of intransitives at that stage was driven by trying to understand such verbs within a framework of unaccusativity.

Over the next few years, I did more work on characteristics of subjects and objects, work that was stimulated by the theoretical literature that recognized more than one possible structural position for arguments (see Rice and Saxon 2005 for a recent overview with respect to Athapaskan languages). In Rice (2000b) I concluded that in order to understand which intransitive verbs were subject to causativization and which could take incorporated subjects, studying properties of the verbs alone was not fruitful; rather it is necessary to understand properties of the subjects such as agentivity and animacy. Basically, a verb with a non-agentive subject can be causativized; nonanimate agents and patients can be incorporated. The research on unaccusativity helped me to realize that not all subjects were patterning the same way, and it was deeper investigation of the language that helped me to see that grounding the difference in the verbs alone was not correct, and that properties of subjects required careful study as well.

While discussion of agentivity, animacy, and volitionality is found in the Slave grammar with respect to one property of intransitives, the choice of oblique object pronoun, the general role of properties such as humanness, animacy, and agentivity do not find a home together in the grammar as a set of intimately related properties. In revising the grammar, I would
add a chapter on this topic, as these notions have a pervasive effect on Slave grammar.

Interestingly, while the role of factors such as animacy and agenticity in grammar is a topic that has occupied functional linguists for some time, it is through reading formal linguistics that I came to appreciate what was going on in Slave and other Athapaskan languages. Thus, doors to new ways of thinking about things can open in many ways, and for me it was the literature on the positions that subjects could occupy that made me reflect carefully on what initially appeared to be different verb classes. The theory in a sense led the study, but the theory on its own did not provide what I now understand to be the best way of understanding intransitive verbs; it instead allowed me to define the question.

I could enumerate other topics in syntax in which I found theory and language working together; these include anaphora and the structure of complement clauses, among others, of the topics covered in the Slave grammar. The answers to the questions raised by a theory need not be those given by the theory, but the questions are ones that are critical to ask in helping to understand the system of a language. To me, the Slave grammar would be poorer if it did not include detailed discussion of the topics discussed in this section, and is poorer for not having a coherent discussion of the role of factors such as animacy and agenticity in Slave. While one might not find sentences such as some of those above in common use in discourse, they are clearly part of the linguistic competence of the Slave speaker.

Theoretical developments have an effect on coverage in areas other than syntax. I discuss two here, namely how my deepening understanding of aspectual systems has changed the way that I would approach writing on aspect, and how my recent work on morpheme order in the verb would affect the discussion of morpheme order.

2.1.4. Aspect system

There is a set of morphemes reconstructed as Proto-Athapaskan *n, *s, and *gh (I use the orthographic <gh> for a voiced velar fricative, following Athapaskan tradition). In some works on Athapaskan languages, these are recognized as having semantic content. Krauss (1969: 82) notes that for Athapaskan ‘ni- has the marked meaning ‘to a point, completive,’ ghi- has the marked meaning ‘from a point, inceptive,’ and si- is unmarked in this
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respect, ‘static.’” Young and Morgan (1986: 165) also provide meanings for these morphemes in Navajo: they call yi- completive, ni- terminative, and si- stative (y is the Navajo reflex of *gh). However, in general little was made of this identification of meanings of these morphemes, and instead we find terms such as n-imperfective, n-perfective, s-perfective, and gh-perfective in the literature (e.g., Sapir and Hoijer 1967), where n, s, and gh are used to mark arbitrary formal classes. Somewhat later, these forms were called conjugation markers (e.g., Kari 1976, Young and Morgan 1986: 112, Rice 1989), with each verbal lexical entry having one of these forms listed with it; a prefix also can have a conjugation marker as part of its lexical entry. Thus, the general treatment of these elements is that they are formal class markers.

While a conjugation analysis describes these forms, there are problems with it. First, a single verb can occur with more than one conjugation marker, with a different reading. The reconstructed morphemes are listed in the left column. (The abbreviation ‘O’ indicates that there is a nominal direct object of the verb.)

(10) a. *s: O thehk’é ‘s/he shot sg. O’ 891 (South Slavey)
   *gh: O jhk’é ‘s/he shot pl. O’
b. *s: O dedéde ‘s/he twisted it once’
   *gh O dedijdé ‘s/he wound it’

With the reflex of the *s conjugation marker, the object is interpreted as singular in number, while with the same verb with the reflex of the *gh conjugation marker the object is interpreted as plural in number. Similar facts hold true for verbs where number is lexicalized as part of the root; for instance, ‘kill singular object’ occurs (11a) with the Slave reflex of *s while ‘kill plural object’ (11b) requires the reflex of *gh.

(11) a. verb stem requiring singular object
   be-wi-h-xj ‘I killed it’ 792 (Hare)
   3DO-s conjugation/1sgS-valence-kill sg. object
b. verb stem requiring plural object
   ku-yi-ghø ‘I killed them’ 792 (Hare)
   3pDO-gh conjugation/1sgS-kill pl. object

Second, verbs within a particular semantic class occur with the same conjugation marker in the perfective aspect (see Rice 1989, chapter 24, unit
the conjugation marker is one of the indicators of what are called verb theme categories in Athapaskan languages (these are basically lexical entries; see, e.g., Kari 1979, Rice 1989). For instance, verbs of motion and verbs of handling all require n conjugation marker in the absence of other prefixes. Motion verbs include verbs such as ‘arrive’ and ‘handle object.’ Verbs that involve duration and telicity (e.g., ‘make singular object’, ‘boil,’ ‘melt’) occur with the reflex of *s in the perfective, while those involving durativity and non-telicity occur with the reflex of *gh (e.g., ‘comb’, ‘sing’, ‘make plural object’).

Third, prefixes with semantically similar aspectual properties require the same conjugation marker. (12a) shows a verb with the prefix ní- ‘to a point, terminative’ while (12b) has a prefix tj- ‘start’ and the third a prefix ts’e- ‘awaken’. These verbs all involve activities that are non-durative, and punctual. This is marked by the prefix n or nasalization.

Finally, there is a prefix referred to as the distributive in the Athapaskan literature. This morpheme, yá in Slave, indicates that the actions involved are performed separately, sequentially, or in a number of locations, that a number of agents are each carrying out an action on their own, working as individuals rather than a group, or that the action is performed on a number of objects, each independently (see Rice 1989: 677). In Slave, the addition of this prefix to a verb often requires the presence of the *s conjugation marker in the perfective. An example is given in (13).

While the facts are more complex than presented here, the basic picture here is that the distributive requires s conjugation marking in the perfective. The above is an abbreviated sketch of this system in Slave. I was aware of these different properties of the morphemes under discussion, but in the
Slave grammar I treated these morphemes as idiosyncratic, conjugation markers, following the literature of the day. When I read work by Smith (1991) on what she calls ‘situation aspect’, her work opened my eyes to a very different way of thinking about these prefixes, one that unites the various properties discussed above. I came to see that using the insights of the literature on aspect, a more perceptive analysis was available, one in which the conjugation markers were viewed as having basic aspectual properties rather than being arbitrary. If I were to revise the Slave grammar, this is an area I would redo as I have come to appreciate that there is systematicity here, and that it is fairly straightforward which of these morphemes a particular verb will occur with and what the meaning of a verb with a particular one of these morphemes will be.

I will briefly review the research that caused me to see these morphemes as an integral part of the aspect system. Smith (1991) takes up on work on Aktionsart by Vendler (1967) and others. She argues that there are four basic types of Aktionsart, or what she calls situation aspect, activities (durative, atelic), accomplishments (durative, telic), achievements (non-durative, telic), and semelfactives (non-durative, non-telic). (There is another class, statives, which I set aside in discussion here.)

Individual verbs can be thought of as having intrinsic aspectual content. Thus, for instance, ‘arrive’ indicates an event that has no duration and happens at a point in time, while ‘comb’ indicates an event that has duration and has no natural endpoint, and ‘melt’ also takes place over time, but has an endpoint.

In addition to verbs having intrinsic aspectual content, material in the predicate can refocus the verb so that a different situation type is found. To take one example from Smith (1997:20), the sentences in (14a) and (14b) differ in their situation type.

\[(14) \quad \begin{align*}
    \text{a.} & \quad \text{He played sonatas.} \quad \text{activity: durative atelic} \\
    \text{b.} & \quad \text{He played a sonata.} \quad \text{accomplishment: durative telic}
\end{align*}\]

The choice of object noun – a bare plural in (a) or a singular count noun in (b) – determines the situation type of the sentence. Similarly, prepositional phrases, adverbs, and other predicate material can interact with situation aspect, with situation aspect for a sentence computed at the predicate level.

It has long been recognized in the Athapaskan literature that verbs can be divided into aspectual classes; these are the verb theme categories identified above. It was through Smith’s work on situation aspect in English,
with her detailed discussion of the role that the predicate plays, that I came to regard the Slave morphemes in question, the conjugation markers, as themselves carrying meaning. This rethinking did not involve collecting new data, but rather organizing my thinking in a different way by pulling together strands that intersect with one another, but that had seemed to be independent. Thus, although lexical idiosyncrasies exist, there is, overall, a regular association of form and meaning, which I summarize in (15); I omit the semelfactive.

(15)  *n non-durative, telic
      *s  durative, telic
      *gh durative, non-telic

An analysis that treats these morphemes as situation aspect markers is more uniform and, I believe, more insightful than one that considers them to be conjugation markers. It treats as a single constellation of properties the fact that interpretation of object number varies systematically depending on the particular marker (similarly to English, there is a correlation between plural number and activities, and between singular number and accomplishments) and the fact that verbs with similar aspectual meaning appear with the same situation aspect marker. The fact that other material in the verb word (in the predicate) can affect situation aspect, causing a change in situation aspect marker from that found with the verb alone, also falls into place.

  Studying the Slave aspect system through the lens laid out by Smith allowed me to see things that I had been unable to see previously – the coupling of the facts of the language with the theoretical insight revealed the pattern.

2.1.5. Morpheme order in the verb

Morpheme order in the verb is another topic that has occupied me over the past several years (e.g., Rice 2000a). Morpheme ordering in the verb in Athapaskan languages is generally treated as controlled by a template, where the template stipulates where each morpheme or morpheme type falls relative to other morphemes. In the Slave grammar, I follow this practice. I devote a chapter to each position of the template, discussing the form and function of morphemes in that position, as well as the complex mor-
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phophonemics that morphemes in adjacent positions enter into. The template provides an extremely useful descriptive device, and is a traditional means of expressing morpheme order in the Athapaskan literature.

Despite the utility of the template for any individual language, I became concerned with two issues. First, within Slave, and within other individual Athapaskan languages, some variation in morpheme order was reported. Second, and the larger driving force that led me to reconsider the template analysis, various facts in Slave and other Athapaskan languages just did not fit general observations about cross-linguistic patterning of morpheme orderings. For instance, why was Navajo one of the few languages identified as having template morphology in the textbooks? Why was there variation in the order of some morphemes but not of other morphemes in the Slave verb? Why, looking across the Athapaskan language family, is the cross-language variation in morpheme ordering quite restricted? These observations had been made in the literature, but had received no satisfactory answer to my mind.

I recall vividly what led me to believe that it was worthwhile to pursue a hypothesis that ordering of morphemes was not random, but had an explanation. Chomsky was giving a talk in Toronto, and provided those of us in my department with our first real exposure to functional categories and their ordering. I remember listening to him talk, and having one of those ‘eureka’ moments: the order of the functional elements in the Slave verb exactly fit the order in which Chomsky proposed these elements occurred universally! It was this talk that led me to pursue cross-family similarities and differences in morpheme ordering, and led me more deeply into the literature on various factors that can control morpheme ordering. Based on the insights from the theoretical work I have done on this topic (Rice 2000), while I would still use a template to organize the discussion of morpheme ordering in the verb, at the same time I would incorporate into the section on verbs additional discussion of morpheme order, bringing together in a systematic way what the usual order is and what generalizations can be made about this, and also observing where violations of the usual order exist. In the Slave grammar I discuss the phonological factors involved in morpheme ordering (e.g., within a particular set of prefixes, d always precedes n), but the semantic factors that enter into morpheme ordering (e.g., the relationship between subject and aspect), are not touched. A discussion of why some ordering is rigidly fixed and other ordering is freer would, I think, enhance our understanding of the language in a way that would be valuable in a grammar.
2.1.6. Summary: the questions asked

I have identified several ways in which the content of the Slave grammar was affected, or would be affected in a revision, by formal linguistic theory. Theoretical developments caused me to ask questions that I would not have posed otherwise (e.g., wh- questions, complementizers) and to rethink analyses (e.g., aspect). My research in recent years would lead me to add several topics to the Slave grammar if I were to revise it, and to expand on topics that are present there. These topics include, in addition to those discussed above, more detailed work on the position of adverbs, driven by research by Cinque (1999) and others on adverb position and adverb order. Research on lexical semantics by researchers such as Smith (2000) and Pustejovsky (1995) makes me want to add detailed discussion of the lexical semantics of verb stems, and especially of what might be considered to be light verbs. I have identified these topics through the language, and through the theory, working in tandem. Formal theory thus may lead to new questions, forcing one to push, probe, and pursue topics to a depth beyond what may be found in naturally occurring speech.

2.2. Theory and grammar 2: Representations

The contribution of formal theory to broadening the scope of a grammar is a significant one. Formal theory affects grammars in other ways as well. One strength of generative theory, to my mind, is the development of representations. Tree notation, showing constituency and hierarchy, or the use of labeled brackets, provides, at least for me, a natural way of understanding sentence structure. In phonology as well, the use of representations has allowed for a simplification of discussions of tone and stress. In this section I examine one of these representational devices, autosegmental representations in phonology. I illustrate here with a single example, the patterning of verb stem tone in the Hare dialect of Slave.

Many Athapaskan languages are tonal, with a high-low contrast. At the time that I was working on tone, Michael Krauss’s (1979/2005) seminal paper on tone in nouns in Athapaskan languages was available, but little was published on tone in verbs. I was aware of one property of verb stems in Hare from 1929 notes on this dialect by Fang-Kuei Li. In these field-notes, Li indicated contrasting tone on noun stems (e.g., sá ‘beaver’ vs. sa
‘sun, month’), but all verb stems have low tone. Given this, I was predisposed when I heard the language to hear low tone on verb stems. Based on Li’s transcriptions, I also had certain expectations of tone on verb prefixes, namely that an individual prefix would be, by and large, invariant in its tone.

This is what I heard at first, under influence of Li’s notes. However, as time went on, I was sure that I was hearing different tones on prefixes. Several facts were puzzling. Why, when a particular stem was used as a noun, might it bear high tone while that same stem used as a verb would have low tone? Further, why, when the noun stem had high tone, did the syllable before the stem carry a high tone in the verb? Some examples are given in (16), where the verb stems are separated from the prefixes by a hyphen for ease of comparison.

(16) i. a. noun stem
   -fi ‘head’ 110
   b. verb stem
   k’ínak’ohé-fi ‘s/he turns his/her head’ 110
ii. a. noun stem
   dzé(h) ‘gum’ 111
   b. verb stem
   hjí-dzeege ‘be gummy’

Another question was also troublesome: why are there prefixes that vary between low tone and high tone, as in (17)?

(17) a. prefix we-
   O we-h-dzo ‘s/he trapped O’ 108
   O wé-h-k’é ‘s/he shot O’ 108
b. prefix go-
   go-h-dee ‘I talk’ 108
   gó-h-ts’i ‘I lie’ 108

Finally, there was a third tone, beyond the expected high and low tones, that had me baffled for some time (in fact, it took me some time to even hear this tone; see below). This tone is illustrated in (18), where I use a double acute accent to mark it. The tone is phonetically extra high.

(18) yé-h-k’é ‘s/he shoots it’ 123
    yé-h-k’é ‘s/he shot it’ 123
Two different things gave me insight into the tonal system of Hare. First was work with a consultant who kept at me to hear the difference between a prefix high tone and a prefix extra-high tone, as in (18). And second was autosegmental phonology, and, in particular, an article by Clements and Ford (1979) in which they discuss tone in Kikuyu. Clements and Ford show that, essentially, Kikuyu tones are displaced one syllable to the right from the tones in related languages. Something similar is found in Hare: the tone that is lexically associated with the verb stem, and which appears on the stem in the closely related Slave dialects, is generally displaced one syllable to the left in Hare. Thus, it becomes clear, using autosegmental phonology, why related nouns and verbs might differ in tone: in the nouns, the tone is actually phonetically associated with the stem, while in the verbs, it associates one syllable to the left of the stem. This is illustrated in (19), repeated from (16i) above.

(19) -fí ‘head’ k’ína-k’oh-é-fi ‘s/he turns head’

Autosegmental representations are provided in (20). Following Rice (1989) and other work on Athapaskan languages, I ignore the low tone, assuming that it is a default. See Rice (1989) and Rice (2005) for discussion.

(20) fi ‘head’ k’ína-k’oh -e -fi

\[
\begin{array}{ccc}
| & H & H \\
\end{array}
\]

The autosegmental representations show in what I believe to be an intuitively satisfying way just what is going on in these two cases. In both words the high tone is lexically affiliated with the stem. In the noun, it associates to that stem, but with the verb, it associates instead with the pre-stem syllable, being lost from the stem itself.

Autosegmental representations also demonstrate clearly why the same prefix sometimes has a low tone and sometimes a high tone. This prefix is not lexically variable in tone; instead one stem has a low tone and the other a high tone. The prohibition on high tones on verb stems, coupled with the requirement that the tone surface, forces it to be displaced, occurring phonetically on the prefix.

(21) we-lu ‘s/he snared’ we-lu
we-lu wé-hk’e ‘s/he shot’ we-hk’e

\[
\begin{array}{ccc}
\hat{\ } \ \ \ \ H
\end{array}
\]
In addition, such representations are illuminating as to why an extra-high tone might appear. Here the prefix has a lexical high tone (this high tone is an allomorph of the s situation aspect marker discussed earlier).

\[
\begin{array}{c}
\text{yé-lu} \\
\text{ye-lu} \\
\text{H}
\end{array} & \quad \text{‘s/he snared it’} & \quad \begin{array}{c}
\text{yé-hk’e} \\
\text{ye-hk’e} \\
\text{H} \quad \text{H}
\end{array} & \quad \text{‘s/he shot it’}
\end{array}
\]

In the former case, only one high tone is lexically present in the verb and it is associated with the prefix; in the latter, there are two high tones, one lexically associated with the prefix and the other with the stem. As in the previous example, the stem high tone is unable to surface on the stem itself, and both high tones associate phonetically with the prefix to create an extra high tone.

In Hare, there are a number of cases in which surface tones appear other than on the morpheme they are associated with lexically. This general phenomenon is captured elegantly in autosegmental terms, and these representations to me are a true aid in understanding exactly what is happening.

Grammars often make use of representations developed in formal linguistic theories, and these representations can aid the user of the grammar in envisaging structures and processes. Devices such as trees and autosegmental and metrical representations do not find their way into grammars immediately when they are proposed in a theory – in the early stages, they are simply regarded as part of the theory. However, some of the representational devices that are designed for theoretical purposes become absorbed into the descriptive system. What will happen with representations in current theories? Will syntactic trees with hierarchically arranged functional categories which do not occur as independent words become part of basic linguistic theory? In a different formalism, will Optimality Theory tableaux make their way into the descriptive framework of grammars? It is too early to judge whether these particular representational systems will have staying power. The grammarian must at one and the same time have both feet firmly on the ground and be a visionary, building on insights of current theories in terms of how a language works but taking care with formalisms. I return to this theme after examining terminology.
2.3. Theory and grammar 3: Terminology

Terminology is a persistent source of concern in linguistics. The same technical term is often used in different ways depending on various factors including linguistic tradition and language family. While one might think that this is inconsequential, in fact it can lead to misunderstandings of various sorts.

Consider, for instance, the use of the words ‘aspect’ and ‘mode’ in the Athapaskan literature. Terminology around tense, aspect, and mode is fraught with problems in much of the linguistic literature, and the Athapaskan literature is no exception. In the Slave grammar, I point out that these terms are used structurally rather than semantically in the Athapaskan literature. The term ‘mode’ is used in much of the Athapaskan literature to refer to prefixes that mark imperfective, perfective, optative, and future. The term ‘aspect’ is used for categories called such things as momentaneous, continuative, repetitive, conclusive, durative, semelfactive, neuter, transitional, comparative, progressive, customary, and distributive. Elsewhere in the Athapaskan literature, these terms are basically interchanged. Simply to illustrate the variation, Li (1946: 410) uses the terms modal and aspect in Chipewyan, with modal referring to what Hoijer (1946: 56) calls adverbial prefixes and aspect referring to what Hoijer calls tense-modal prefixes for Chiricahua Apache. Cook (1984: 126) uses aspect1 (mode) and aspect 2 for Sarcee, where aspect1 corresponds with Hoijer’s tense-modal prefixes and Li’s aspect; see Cook (1984: 122) for discussion about the frustration that this causes. In the Slave grammar, I used mode and aspect/derivation to refer to what Hoijer called adverbial and aspect, but I added the term conjugation, a term which was not used in the descriptions of the other languages (although the morphemes were identified).

While different Athapaskan languages may well demand different accounts, it is not so clear that this is the case based on the discussions of the languages in the sources, although this possibility can certainly not be discounted. Someone studying the Athapaskan literature would be forgiven if they had considerable difficulty in determining just what these words mean. It would also be unsurprising to find that the languages were inappropriately categorized in typological work. The terms are ever so familiar, but at the same time are totally mystifying. In my 2000 book on morpheme order in the verb of Athapaskan languages, I changed this terminology, using the term viewpoint aspect for imperfective and perfective and situation aspect for the items discussed in section 2.1.4 that indicate durativity and telicity; I
used sub-situation aspect for what I had previously called aspect/derivation, adopting this terminology from Smith (1991). If I were to revise the Slave grammar, I would use this terminology in it and I would define the terms on first introduction, with definitions repeated at various spots where the terms were reintroduced. This would help clarify the terminology both for people familiar with the vocabulary used in the Athapaskan literature and for those trying to learn the Athapaskan literature. (Of course, whether this would become standard terminology in the Athapaskan literature is another issue, as is whether it will remain standard terminology in linguistic theory.) The complex and non-standard terminology can serve as a barrier to the person who does not control the literature. In addition, it can hold back comparison of the phenomenon within the particular language family by obscuring comparison of analyses with those already developed for other languages.

2.4. Theory and grammar-writing: Summary

In the above sections, I hope to have shown that ongoing advances in linguistic theory have an influence on the basic linguistic theory in which grammars are usually framed. Grammarians may seek to express insights that go beyond what is found in a corpus, a consequence, at least in part, of formal linguistic theory. Developments in theory force one to ask different questions, and allow for new ways of conceptualizing familiar material. This suggests that there will continue to be changes over time in what is considered to be essential in a grammar and in how particular topics are treated.

3. Theory in grammar writing: What of theory is not in a grammar?

In the previous section I identified several ways in which I believe that linguistic theory has strengthened grammars. In this section, I ask a different question: are there ways in which theory can impact negatively on grammars? Just as the answer to the question of whether theory can enhance grammars is yes, the answer to the question of whether theory can lead to worse grammars or be inappropriate in grammars is yes as well.

The role of linguistic theory in grammar writing is to inform the grammarian about topics to be investigated, topics to be pursued in greater
depth, and topics to be included in a grammar. Basically, the more a grammarian knows about language, the better the grammar of a particular language that grammarian is capable of writing. Theory provides one important vehicle to learning about language.

What should formal theory not do? One prerequisite of a grammar is that it be accessible. Thus a formal theory is helpful in the presentation in a grammar in as much as it contributes to accessibility, not just at the time that the grammar is written but over time as well. The presentation in a grammar thus should not be straitjacketed by the formalism of a theory. As an example of the kinds of difficulties a formalism can present that perhaps most linguists would agree with today, consider grammars written in tagmemic theory. These grammars are close to impossible for me to read – the formalism that was enlightening at the time is out of date, and serves, for me, to make the language under discussion inaccessible. Many formal devices – for instance, generative phonology linear rules embracing notation such as curly brackets and angled brackets – hinder the accessibility of what they are meant to simplify, and are extremely difficult to read today as well. A grammar that draws heavily on the terminology of the current syntactic theory of minimalism (terms such as probe and merge, weak features and strong features) would probably not fare well as these terms are not part of common linguistic parlance. Similarly a grammar with Optimality Theory tableaux, constraints, and vocabulary would likely not receive widespread acceptance as a step forward today. Terms such as NP and VP probably are in general use today. Other terminology from formal grammar may make its way into basic linguistic theory; the use of DP to replace NP is perhaps one place to look for this (thank you to Alan Dench for this observation). What is important is that a grammar be written in such a way that it remains useful and comprehensible for years down the road; as I wrote earlier, a grammarian needs to be a visionary, thinking of the grammar as a lasting document, one that can be read for many years to come.

Let me now revisit one of the topics discussed in section 2.1.1, wh-questions, to see how it is actually presented in the Slave grammar, and provide a lesson in how not to use a theory in writing a grammar.

3.1. wh-questions

A ten-page section of the chapter on questions in the Slave grammar is devoted to strategies of question formation. The first subsection examines
question words in situ, providing a number of examples of question words of all types. When sentences with question words in an embedded clause are presented, square brackets are used to enclose the embedded sentence. The next subsection examines sentence-initial question words, focusing first on simplex sentences and then on complex sentences, giving numerous examples. Frequency of the different types is addressed, as well as potential ambiguities.

There is discussion of theoretical constructs: “Such sentences suggest that there are two possible ways in which question words can achieve sentence-initial position: first they can be moved to that position (as with the adverbial question words) and second they can be generated in that position (as with the nominal question words). There is a rule that moves prominent question words into question complementizer position and there are also question words base generated in question complementizer position” (1163). This is followed by a presentation on moved question words where the syntax and semantics of movement are considered and finally base-generated question words are treated. Some theoretical terminology is present in this discussion: movement, base-generation, rule. At this point of the section, the discussion becomes more technical in terms of formal theoretical constructs: I introduce the terms ‘subjacency’ and ‘trace’ without much explanation.

Looking back on this part of the grammar, I believe that I should have avoided the use of such terms. Many of these terms have not come to be part of general linguistic lexicon; this is something that I was too inexperienced to understand at the time that I wrote the Slave grammar (despite good advice that I was unable to hear) as I had not yet lived through a period of major paradigm shift. That adverbial question words and nominal question words pattern differently, and that the locations in which displaced question words can appear depends on the verb, remain interesting observations that deserve a place in a grammar but such observations can be presented independently of the formal vocabulary of the theory.

When I wrote the Slave grammar, terms such as movement, base-generation, and subjacency provided a convenient vocabulary to characterize the differences between the types of question words, and it was the existence of these theoretical constructs that pushed me to think about the differences between them as well as the similarities. However, I would revise this section of the grammar; it is far too tied to theoretical constructs of its day, and the detailed discussion does not stand up well only fifteen years later. Imagine how it will read another fifty years from now!
3.2. Summary: The grammar/theory interplay

Not all grammarians will agree that the topics of most interest to linguists working in a formal framework belong in a grammar in as much as such topics often go far beyond the textual record (see, for instance, Heath (1984) on Nunggubuyu for a grammar that does not use non-corpus data). Most will likely agree that the grammar is very quickly dated if it is too embedded in a particular theoretical framework in terms of questions, formalism, and terminology; theory must first become part of description. Nevertheless, formal linguistic theory is important to a grammar. A formal theory, like any theory, allows one to discover things about a language and to express insights into that language; its goal is not, and never has been, to provide a framework for a description of a language. Theory and description are involved in a complex interplay, a give-and-take: the theory leads us to investigate topics we might not look at otherwise, the description makes demands on the theory to examine and account for phenomena that it has not previously encountered. In this interchange between formal theory and grammar, formal theory has an important role in guiding content and analysis, in contributing to basic linguistic theory, and in framing and deepening analyses, but it does not frame the presentation. The theory informs and shapes, but does not control.

4. Summary

I began this paper by talking about how a grammar should serve to let a language tell its story, or express its genius. Each language has its genius about it. Perhaps reinforcing this point, Martin Joos (1957: 96) once said in a now famous (or perhaps infamous) statement, talking about the American (Boasian) tradition in North American linguistics, ‘languages could differ from each other without limit and in unpredictable ways …’ Few would agree with this statement in its strongest form; some would reject it altogether. Yet at least on the surface, languages continue to take us by surprise in the previously unobserved properties that they reveal and in how they combine familiar properties in unfamiliar ways. This is the story that needs telling. How does formal theory help the grammarian to let the language tell its story, to express its genius, to bring out its essence? Concretely, setting the
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grammarian aside for the moment, I have suggested that the theory and the
description work hand-in-hand to create the grammar; it is difficult to sepa-
rate them. More abstractly, and again leaving the grammarian aside, per-
haps the theory can be likened to a ghostwriter – its job is to allow the story
of the language to be told, bringing out that story in a compelling way. The
theory should let the language reveal itself. Too blind adherence to a the-
ory, any theory, will not allow that genius of the language to shine through.
But without the theory, one may not even be able to see aspects of a lan-
guage. The theory provides a set of questions to ask; theoretical changes
often force one to raise a new set of questions or to look at old questions in
a new way. With any language the investigator will certainly come across a
range of characteristics: well-known and understood features, known prop-
erties packaged in a different way, and features that are, at least to the in-
vestigator, unanticipated. The patterning of wh- words in simplex questions
in Slave was, for me, not surprising. The patterning of wh- words in com-
plex sentences took a set of familiar properties, combining them in an un-
familiar way. The characteristics of direct discourse (not discussed in this
paper) took me totally by surprise, and my knowledge of linguistic theory
guided me in trying to understand what was going on. Recent work on di-
rect discourse in Navajo (Speas 2000) has made me ask new questions
about Slave direct discourse, and realize that, despite the Slave grammar
being almost 1500 pages, there is much that I do not know about how direct
discourse functions.

Theory of all kinds can help in understanding this complex object we
call language. Formal theory is just one of the tools that a grammarian has
at his or her disposal to help the language to tell its story; it assists in un-
covering the genius of that language by serving to amplify our hearing to
make out the subtleties of the story. It is the job of the grammarian to use
theories, formal theory included, wisely to let the language speak out. Dif-
ferent grammarians will likely view a language in different ways depending
on their training, their interests, and their expertise. Similarly, over time
one and the same grammarian will understand different things about a lan-
guage. In this sense, the grammarian has a large responsibility. The gram-
marian interprets the language and brings it to life for those not acquainted
with it, and helps those acquainted with it to understand its messages. The
grammarian must be able to see beyond the trends of the time at which the
grammar is written, to weigh what is most important as a grammar is lim-
ited in scope in a way a language is not (after the Slave grammar was pub-
lished, I found myself unable to open it for about two years, as I was con-
scions of what was not there, and had lost sight of what was there). The more informed the grammarian is about language – through knowledge of theories of all sorts – the more she or he can help the language to tell its own story rather than the story of the grammarian.

Notes

1. Slave (slevi) is an Athapaskan language of northern Canada. The grammar of Slave was published in 1989. All data in this article is from the Slave grammar. The dialects do not differ with respect to the facts discussed here.

2. Grammars also contain other material: ethnographic information, texts, and word lists, to name a few. What a grammar should be is, of course, the topic of many papers in and of itself.

3. This was clearly not the only reason that syntax has come to occupy a prominent position in grammars. However, in terms of my own development, it is clearly the generative paradigm that led me to look in-depth at syntax and defined the questions about syntax that have occupied me over the years.

4. Abbreviations used in this paper are: sg: singular; pl: plural; S: subject; DO: direct object; OO: oblique object; imp: imperfective; pf: perfective; opt: optative. I use the orthography of Rice (1989). Note that e=[e], ee=[e] ~ [ei], a hook under a vowel indicates nasalization, and an acute accent marks high tone (low tone is not indicated in the orthography). A raised comma is used to represent a glottal stop and consonantal glottalization. Symbols d, dz, dl, j, g represent voiceless unaspirated stops and affricates; t, ts, t˘, ch, k are voiceless aspirated stops and affricates.

5. An example like (6c) is grammatical, but only on a reading where the location of Raymond when he is doing the questioning is under consideration; it is not Jane’s location that is questioned. This particular case is not the best, being semantically odd in both Slave and English: a translation would be something along the lines of ‘where is Raymond located while knowing that Jane is/exists.'
References

Aikhenvald, Alexandra Y.

Baker, Mark

Bresnan, Joan

Bresnan, Joan

Chomsky, Noam

Cinque, Guglielmo

Clements, G.N. and Kevin C. Ford

Cook, Eung-Do

Denham, Kristin

Dixon, R.M.W.

Erteschik-Shir, Nomi
1973  On the nature of island constraints. Ph.D. diss., MIT.

Gil, David

Heath, Jeffrey
Hellwig, Birgit
2006  Field semantics and grammar-writing: Stimuli-based techniques and the study of locative verbs, [this volume.]

Hill, Jane H.
2006  Writing culture in grammar in the Americanist tradition, [this volume.]

Hoijer, Harry

Hyman, Larry

Joos, Martin

Kari, James M.

Krauss, Michael

Li, Fang-Kuei
1929  Hare field notes. unpublished.

Mithun, Marianne

Perlmutter, David
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Potter, Brian
1997  Wh indefinites and the structure of the clause in Western Apache. Ph.D. diss., University of California, Los Angeles.

Pustejovsky, James

Rice, Keren
2000a  Morpheme order and semantic scope: word formation in the Athapaskan verb. Cambridge: Cambridge University Press.
2005  Prominence and the verb stem in Slave (Hare). In Athabaskan prosody, Sharon Hargus and Keren Rice (eds.). 345-368. Amsterdam/Philadelphia: John Benjamins.

Rice, Keren and Leslie Saxon

Sapir, Edward

Sapir, Edward and Harry Hoijer

Schauber, Ellen
1979  The syntax and semantics of questions in Navajo. New York: Garland (revision of 1975 MIT Ph.D. dissertation Theoretical responses to Navajo questions)

Smith, Carlota
Smith, Carlota  

Speas, Margaret  

Valentine, J. Randolph  

Vendler, Zeno  

Watters, David  

Young, Robert W. and William Morgan Sr.  