

Chapter Six New Values for old Tokens

In this section, because ‘it is easy to remain unaware of the stories our grammar is telling us’ (Halliday 1992:32), I examine the way a common experiential resource of the grammar, the identifying relational clause, gives value to entities by conferring additional meaning on them, and how metalanguage, using the same everyday resource, deludes itself into imagining it can give further meaning and value to grammar.

Davidse points out that ‘The semantic models encoded by grammar ... involve highly general and abstract categories and this is, presumably, why linguists find it so hard to get a grasp of grammatical meaning and describe it accurately’ (1996:382). To gain this understanding we need to become aware of how much of our model is construed by our own metalanguage rather than being ‘objective description’. Halliday (1988a) elucidates the way grammatical categories become reified through the workings of the grammar itself, leading to fundamental confusions in linguistics (as discussed in 5.1, above). His arguments seem to me significant for understanding the limits of linguistic theory. In this chapter I refer to this article and set out my understanding of Halliday’s Token-Value analysis of the reification of grammatical categories, elaborating on some points. I then apply this understanding to the analysis of four small texts, from Chomsky (1965) and Chomsky and Halle (1968), to illustrate the way our own grammar can lead us to misapprehend the nature of grammar. I suggest that this is evidence of a failure to take into account the meaning- and value-conferring processes of our own language

Halliday explains that the ancient Greek grammarians derived names for grammatical categories from everyday language; for example *onoma*, ‘a name’, became the technical term for ‘a noun’. Then, ‘having reified these abstract categories by naming them, the Greek grammarians went on to ask what the names meant. What “is” a noun? they wondered’ (1988a:28). At first this question meant ‘How do I recognize a noun?’, but later it mutated into ‘What does it mean?’ Halliday explains that this subtle confusion can be understood in terms of the grammatical functions Token and Value. To demonstrate what appears to have happened, I will imagine a conversation, suggested by the question ‘What is a noun?’ It begins with a question about the grammatical category of – to take a famous Latin example – *mensa*:

- A: What is *mensa*?
 B: *Mensa*'s a noun.
 A: What's a noun?
 B: It's the name of a person, creature or thing.

For a grammarian, the obvious objection to B's second answer is that it is not a definition but merely a list of some semantic realisations of the category 'noun', and an incomplete list, because there are other realisations of this category, and even if we could list all the possibilities this would not tell us what the category itself *means*. A more accurate answer would be a morphological or syntactic one showing how we can *recognize* a noun, such as 'nouns are items which display certain types of inflection ... have a specific distribution ... perform a certain syntactic function' and so on (Crystal 1991:237). But a definition which tells us only how we can *recognize* the category is strangely unsatisfactory: we would like to be able to say more than just 'A noun is something we recognize because it displays the features by which we recognize a noun'. Like the Greek grammarians, we still wonder 'What "is" a noun?' and, aided and abetted by the ordinary English grammar that we use as metalanguage, we come to believe that we can talk about the *meaning* of grammatical categories. They become more than just the labels we give to the patterns we see in language. In some sense they come to exist independently of language, and I believe this is what licenses various attempts to find 'language-independent explanations' of the kinds Robinson identified (1975, listed in 5.2).

6.1 Explaining Token and Value

Halliday's Token-Value concept is a powerful tool for revealing how these enterprises can spring from the normal grammar of definitions in English. I will explain this in some detail. Token and Value are the terms Halliday uses to label the two participants in a relational identifying clause, typically used for definitions.¹ To define an entity is to describe it in terms of itself in another guise; for example, *Alice is the clever one*, *Fred is the treasurer*, *This offer is your best chance to win a prize*. When we come to think about it, dividing an entity into two versions of itself seems a strange procedure, but it is such a commonplace of language that we do not normally

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The concept of Token and Value is explained in Halliday (1967/8; 1994a:119-38;1998); Toolan (1992); Davidse (1992;1996); Thompson (1996); Martin (1996); Halliday and Matthiessen (1999:550;561); Harvey (1999) and Butt et al. (2000). A *participant* is what would be called an 'argument' in formal syntax. Examples in this paragraph, apart from the Damon Runyon one, are from Halliday (1994a:123-8).

notice its strangeness. It is the grammatical facility which allows us to give an entity more than one identity. Both participants (e.g. *Fred* and *the treasurer*) refer to the same entity, but the clause is not tautologous, because there is a difference in level of abstraction between the two (and, as Thompson observes, the Value is ‘potentially the more generalisable’ of the two (1996:91). For example, *This offer* (Token) is relatively less abstract than *your best chance to win a prize* (Value). The difference in level of abstraction may be quite small, but Token-Value clauses can, of course, realise an absolute distinction between a concrete and an abstract entity, such as *these faded carnations represent the only true sincerity*.²

TABLE 6.1.1 Concrete Token, abstract Value

<i>these faded carnations</i>	<i>represent</i>	<i>the only true sincerity</i>
Token / Identified	decode →	Value / Identifier

Put simply, a Token is how we *recognize* something, and a Value is how we *define* that something: the Value is the Token’s meaning. The Token-Value structure is an attempt to attach meanings to objects, and the most clear-cut form it takes is symbolism of the kind shown in TABLE 6.1.1. Complications arise when the thing to be given a meaning, the Token, is already abstract or generalizable, because the smaller the difference in abstractness or generalizability between the Token and the Value the more likelihood there is that they will swap places, i.e. that we will mistake one for the other. To demonstrate the possibility of confusion, Halliday gives the example of the clause *the best students are the greatest worriers* (1994a:27), which can be read both ways:

TABLE 6.1.2 Token-Value ambiguity in Halliday’s example (1994a:27)

<i>the best students</i>	<i>are</i> [represent, i.e can be defined as]	<i>the greatest worriers</i>
Token / Identified	decode →	Value / Identifier
<i>the best students</i>	<i>are</i> [are represented by, i.e. can be recognized as]	<i>the greatest worriers</i>
Value / Identified	encode →	Token / Identifier

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Damon Runyon, 1929, *The Brain Goes Home*, from *Guys and Dolls*.

Complicating the issue, as he explains (1994a:125; 1988a:33), is the fact that the verb *be*, the verb most commonly used in definitions, has no passive form, and this can make it difficult to distinguish the voice and therefore the directionality of the clause, i.e. whether it is encoding or decoding, which would be clear if the voice were overt. Supplying a Value for a Token is a ‘decoding’ direction (we identify a Token and supply a Value for it); supplying a Token for a Value is an ‘encoding’ direction (we identify a Value and supply a Token for it). (This directionality is explained in Halliday 1967/8:227-231.) We can distinguish the voice by substituting the verb *represent* (active or passive) for *be*, as shown in TABLE 6.1.2. Davidse explains that ‘the contrast between decoding and encoding construals is realized by how Identified and Identifier are mapped onto Token and Value. Decoding construals have a Value/Identifier, encoding construals have a Token/Identifier’ (1996:383). She calls the two directions *symptomatic* (encoding) and *diagnostic* (decoding) (1996:389-90). These variables – Token and Value, Identified and Identifier, voice, and directionality – produce a ‘four-cell’ selection of possible interpretations of these clauses, two encoding and two decoding, as shown in TABLE 6.1.3.³ The subtle differences in meaning are disguised by the use of the same form of *be* to realise all four variations (but made clear by intonation when spoken).

TABLE 6.1.3 Four-cell interpretation of Token and Value (Halliday 1994a:126, adapted slightly)

Which is [represents] Fred? (i.e. How do I recognize him? Identification by form.)

<i>the tall one</i>	<i>is</i> [represents]	<i>Fred</i>
Token / Identifier	← encode	Value / Identified
<i>Fred</i>	<i>is</i> [is represented by]	<i>the tall one</i>
Value / Identified	encode →	Token / Identifier

Which is Fred? [which does Fred represent?] (i.e. What does he do? Identification by function.)

<i>Fred</i>	<i>is</i> [represents]	<i>the treasurer</i>
Token / Identified	decode →	Value / Identifier
<i>The treasurer</i>	<i>is</i> [is represented by]	<i>Fred</i>
Value / Identifier	← decode	Token / Identified

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Halliday (1967/8) and subsequently Davidse (1992) are able to find an eight-cell paradigm here.

In TABLE 6.1.4 I have used this format to analyse my imaginary conversation about *mensa*, modelling it on Halliday's analysis of *What is a noun?* as an identifying clause (1988a:28). The reification of categories starts with the naming process itself: the Greek grammarians 'reified these abstract categories by naming them' (1988a:28). This process is the beginning of becoming 'aware of language as an object' (1988a:30). The analysis in TABLE 6.1.4 of this imagined dialogue reveals one of the mechanisms by which this illusion is strengthened:⁴

TABLE 6.1.4 Reification of a grammatical category through Token-Value grammar

A	<i>What</i>	<i>is</i>	<i>'mensa'?</i>
	Value	← decode	Token
B	<i>It</i>	<i>'s</i>	<i>a noun.</i>
	Token	decode →	Value
A	<i>What</i>	<i>'s</i>	<i>a noun?</i>
	Value	← decode	Token
B	<i>A noun</i>	<i>'s</i>	<i>the name of a person, creature or thing.</i>
	Token	decode →	Value

In the circled section I have shown what has happened at the level of grammatical function: *noun* as Value has become *noun* as Token. In ordinary language usage such a change in function is usually unproblematic – it is a normal occurrence in the meaning-making process, as I show in TABLE 6.1.7 – but it becomes problematic when used in a metalanguage. When the function of a participant changes from Value to Token there is a change in level of abstractness: a Token is relatively less abstract than a Value. In the dialogue about *mensa*, *noun* is at first a Value: it is the meaning or definition of *mensa*. But A's second question makes it a Token, for which a further Value is supplied. The change from Value to Token is a small but significant step in the

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It might be objected that *A noun is a name* looks like an attributive rather than an identifying clause, because of the indefinite article. However, Halliday observes that the decoding identifying clause is intermediate between the attributive clause (*Pat is rich*) and the encoding identifying clause (*Pat is the millionaire* V/Id ^ T/Ir). In an attributive clause such as *Pat is a millionaire* the Attribute is often interpreted as 'in some sense the value of the entity that carries it' (1994a:129). This kind of clause is therefore analysable in terms of Token and Value, because it has the same function as a decoding identifying clause: that of defining one thing in terms of another that is potentially more generalisable: *Pat is (one example of) a millionaire.* (Tk/Id ^ V/Ir). It is an exemplifying rather than exhaustive process: it has an indefinite rather than definite Value (Martin 1992:280). (The symbol ^ means 'followed by'.)

direction of concreteness; and this may be sufficient to delude us into believing the category being defined is more ‘real’ than it actually is, relying as we do on a lifetime’s habit of using this grammatical process to give meaning to entities.

Reification of this kind is apt to happen when both Token and Value are extremely abstract entities. We take an abstraction and try to define it by supplying a more abstract or more general meaning for it as we would for a concrete thing. (For example, *A cat is a feline quadruped.*) The attempt to express the meaning of *noun* by saying it is ‘the name of a person, creature or thing’ is understandable, and has worked reasonably well at the level of school grammar, because these are likely realisations of the category, so little harm is done. But, as observed above, these are not real Values of *noun*; they are just Tokens in disguise, some ways we recognize a *noun*. Plainly this kind of (description disguised as) explanation becomes impossible with more complex categories and functions, such as *plural*, or *Subject*, as Halliday explains (1988a). This brings us up against the harsh fact that a grammatical category can be spoken of only as a Value: its only meaning is itself, and that meaning is, as Halliday puts it, ‘ineffable’. To take another example, we cannot say what the category Theme ‘is’ other than that it is the name for a pattern we can recognize: it is the starting-off point for a clause. As Halliday points out, his own statement that *The Theme of an English clause is the element that is put in first position* was commonly read as saying how Theme can be *defined*, when it was intended only to say how it can be *recognized* (1988a:33):

TABLE 6.1.5 *Define/recognize ambiguity, illustrating Halliday’s example (1994a:33)*

A	<i>The Theme of an English clause</i>	<i>is</i> [represents]	<i>the element that is put in first position</i>
×	Token/Identified	decode →	Value/Identifier
B	<i>The Theme of an English clause</i>	<i>is</i> [is represented by]	<i>the element that is put in first position</i>
✓	Value/Identified	encode →	Token/Identifier

A is the wrong interpretation; B is the intended one. A grammatical category can only be a Value. It cannot be a Token, because we cannot decode it. We can progressively *encode* it, however, by

means of a series of questions that ask ‘How do I recognize that?’, as I show in TABLE 6.1.6, using some of Halliday’s examples (1988a:28):

TABLE 6.1.6 Tokens of grammatical categories

Value	encode →	Token
<i>A noun</i>	<i>is</i>	<i>something that inflects for case.</i>
<i>Case</i>	<i>is</i>	<i>nominative, genitive, dative or accusative.</i>
<i>The accusative case</i>	<i>is</i>	<i>something indicated by the ending -n.</i>

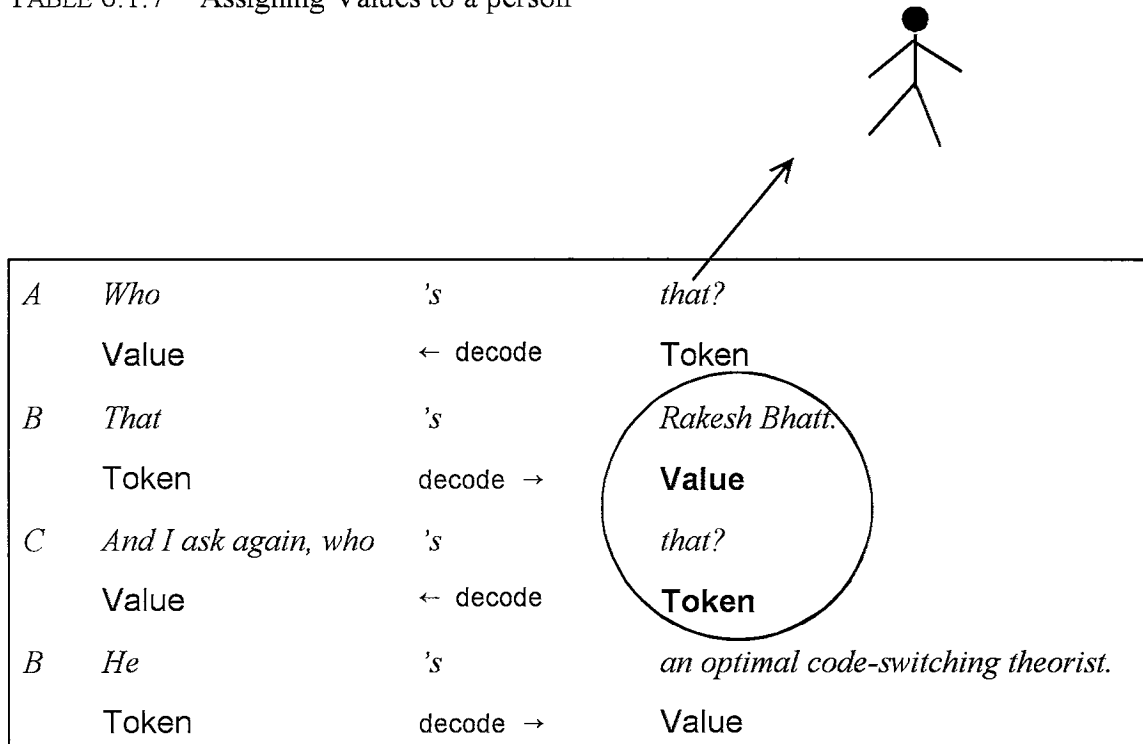
It is important to note that Halliday does not say grammatical categories have *no* meaning – ‘the category of Subject is no less meaningful than other functional categories in the grammar’ – just that we cannot express it:

It is just as impossible to arrive at an adequate gloss for functions such as Actor, Agent, Goal (‘logical direct object’), Range (‘logical cognate object’), Topic, Theme, New; or for grammatical features such as definite, passive, irrealis, equative, personal, human, modal – in fact more or less everything in the grammarian’s pharmacopoeia. (1988a:36)

To say we ‘cannot decode’ a grammatical category is a way to explain in explicit grammatical terms what Halliday means by saying it is ‘ineffable’. There is no other more abstract or more generalisable way of defining ‘noun’ or ‘Subject’, i.e. we cannot define it in terms of a Value. It is a kind of endpoint: *noun* is a label for a category, an abstraction from an abstraction, from which we can abstract no further. This, I believe, is a situation that is nearly intolerable to meaning-making creatures. We have got into the habit of meaning. We are driven by language, the meaning-making system we have evolved, to find meaning at all costs. One way we do this is by a process which I will call ‘progressive decoding’: a sequence of Token-Value clauses which builds up a progressively more meaningful picture of an entity by means of a series of questions that ask ‘What does that mean?’ The following linguists’ conversation from my own experience will serve to illustrate this process, and TABLE 6.1.7 gives the Token-Value analysis of this interchange, showing that the pattern is identical to that of the *mensa* one. Three delegates at a conference lunch are discussing the identity of a person walking by:

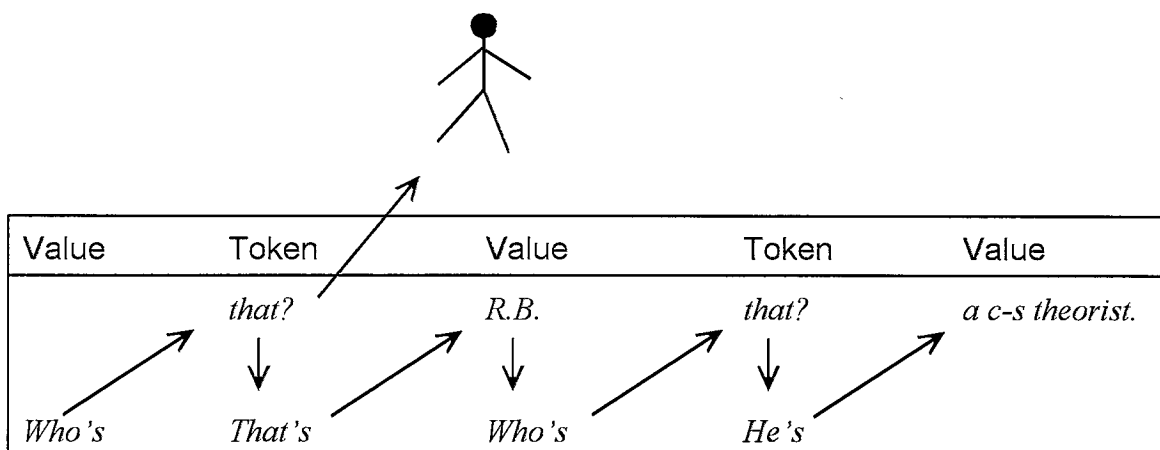
- A: Who's that?
 B: That's Rakesh Bhatt.
 C: And I ask again, who's that?
 B: He's an optimal code-switching theorist.

TABLE 6.1.7 Assigning Values to a person



Here the person's name gets switched from a Value to a Token, as happened to *noun* in the *mensa* dialogue, but in this case the switch is unproblematic, because there is a real entity behind the name, and we can go on finding many Values to define him and thereby give him more 'meaning'. The purpose of the second question, put by C, is clear: 'Okay, you've given me that person's name, but I want to know more. What is his occupation?' B then adds another 'meaning': he is an optimality theorist specialising in code-switching. We could diagram the process differently, to show how a succession of alternating Tokens and Values enables a progressive build-up of meaning (TABLE 6.1.8):

TABLE 6.1.8 Assigning a succession of Values to a person



In response to the first question, a visual Token (person walking by) is given a Value (name), and a further question produces a new Token (person+name), which is given a further Value (his occupation), leading to another new Token (person+name+occupation), which can then be given further Values (*He's the chair of...*; *He's the author of that article on...*), building up a progressively more detailed meaning for the original Token. In each case the Value/Identifier provides a more abstract or more generalizable meaning.

It seems to me that this habitual process of building up meaning through a progression of decodings (a technique we can observe small children using), would lead to error when taken over into metalanguage. Unless we consciously become aware that we are building our metalanguage on ordinary language and making it do things it was not designed to do, we are likely to be led into ways of thinking that do not accord well with the facts. (Or, to put it another way, they construe a scarcely believable kind of reality.) In the case of the *mensa* interchange, there is no 'noun' walking by. An unremarkable meaning-making device in everyday language can become, as Halliday observes of Reddy's conduit metaphor (1993[1979]), 'pathological' when it 'pervades the whole terminology of linguistics' (Halliday1988a:30).

A useful diagnostic aid for identifying and disambiguating the Token and Value structure, the traditional conjoining test, can help reveal this potential for deception in metalanguage. In the following I describe the application of this test to Token-Value clauses and then explore its relevance for helping us understand better the grammatical complexity of some real examples of metalanguage (Chomsky 1965; Chomsky and Halle 1968). This test allows us to see clearly

the separate functions of Token and Value by forcing them into combinations which are ‘unreadable as the distinct roles of Token and Value cannot combine’, as Martin’s (1996:352) conjoining of *The fastest was the fittest one* and *The fastest one was Ben* shows:

TABLE 6.1.9 Token and Value cannot be conjoined (illustrating Martin’s e.g., 1996:352)

<i>The fastest</i>	<i>was</i>	<i>the fittest one</i>	<i>and</i>	<i>Ben</i>
Token		Value		
Value				Token

Toolan (1992:95) also points out that ‘Certain combinations ... are extremely infelicitous and will surely not be adopted’, as in his example conjoining *Poe’s best work is the high point of the Gothic tradition* and *Poe’s best work is the last novel he wrote*:

TABLE 6.1.10 Token and Value cannot be conjoined (illustrating Toolan’s e.g., 1992:95)

<i>Poe’s best work</i>	<i>is</i>	<i>the high point of the Gothic tradition</i>	<i>and</i>	<i>the last novel he wrote</i>
Token		Value		
Value				Token

The test can be used to expose the oddity of clauses that set the reader up to expect a Token or Value and then reverse that expectation:

TABLE 6.1.11 Token and Value cannot be conjoined (illustrating Halliday’s e.g., 1994a:128 and Martin’s e.g., 1996:352)

	Expected	Unexpected
<i>The most important piece of equipment</i>	<i>is</i>	<i>a safety helmet?</i>
<i>What he did for a living</i>	<i>was</i>	<i>teach linguistics?</i>
Value	Token	Value
Token	Value	Token

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Martin’s example (from Damon Runyon) is highly marked, because the Wh- element in a thematic equative is standardly the Value.

Conjoining the expected Token to the unexpected Value reveals the clash of functions: *The most important pieces of equipment are the one you can least afford and a safety helmet* (Halliday 1994a:128); *What he did for a living was teach linguistics and the best he could* (Martin 1996:352). Halliday points out the ‘possibility of co-ordination within but (except zeugmatically) not across types’ (1967/8:71), and the oddity of mixing encoding and decoding directions in a single clause is evident in the above examples. However, when it comes to metalinguistic definitions such oddities may go undetected unless they are subjected to careful scrutiny.

6.2 A Token-Value analysis of Chomsky’s ‘systematic ambiguity’

Chomsky’s writing provides interesting examples, as he has gone further than others in attempting to give a language-independent explanation for grammar. It is instructive to consider the way Token-Value ambiguity (i.e. examples in which it is difficult to tell which is which, as in TABLE 6.1.5) and inappropriate Token-Value conjoining (as in TABLES 6.1.9, 6.1.10 and 6.1.11) go unnoticed in the following:

- 1 We use the term “grammar” with a systematic ambiguity. On the one hand, the term refers to the explicit theory constructed by the linguist and proposed as a description of the speaker’s competence. On the other hand, we use the term to refer to this competence itself. The former usage is familiar; the latter, though perhaps less familiar, is equally appropriate. (Chomsky and Halle 1968:3)
- 2 To summarize, then, we use the term “grammar” to refer both to the system of rules represented in the mind of the speaker-hearer, a system which is normally acquired in early childhood and used in the production and interpretation of utterances, and to the theory that the linguist constructs as a hypothesis concerning the actual internalized grammar of the speaker-hearer. No confusion should result from this standard usage if the distinction is kept in mind. (Chomsky and Halle 1968:4)
- 3 A grammar of a language purports to be a description of the ideal speaker-hearer’s competence. (Chomsky 1965:4)
- 4 Using the term grammar with a systematic ambiguity (to refer, first, to the native speaker’s internally represented ‘theory of his language’ and, second, to the linguist’s account of this), we can say that the child has developed and internally represented a generative grammar. (Chomsky 1965:25)

In these examples Chomsky exploits various resources of the grammar to persuade readers it is a reasonable scientific enterprise to posit a description of the grammar as representing not just the ‘rules’ he has described in (a sample of a certain kind of) language but also, and without any further explanatory steps, the ‘rules’ in the speaker’s mind that allow the speaker to produce language. He does this primarily by forcing an inappropriate conjoining of encoding and decoding directions, with the word *grammar* doing duty simultaneously as Token and Value – functions which in everyday language are mutually exclusive. Halliday observes that ‘Any identifying clause with *be ...*, if constructed out of context and presented in written form, is obviously highly ambiguous. In real life, there is usually some relevant context, and misunderstanding seldom occurs’ (1994a:127). However, if the context is highly abstract (linguistic theory, rather than ‘real life’), it will not help us disambiguate, because it is so far removed from reality that even a linguist’s sensitivity to grammatical oddity may be temporarily put out of commission.

Using the ‘inappropriate conjoining’ test described above (and other probes for the way the grammar and the lexicon allow us to construe meanings that are either ambiguous or not logically defensible), I have examined Examples 1 and 2 to discover the way they work to persuade us to accept the dual significance Chomsky is giving to the word *grammar*. In Example 1 there is apparently some tentativeness about combining these two meanings: *we use the term* might suggest that Chomsky is pointing this out as his own specialised use (and that of other linguists who see things his way); yet *we* is ambiguous: it can also mean ‘all linguists’. The contrastive conjunctions *on the one hand... on the other hand* suggest that at this point ‘grammar as theory’ and ‘grammar as competence’ are being kept apart. However, the paratactic addition in the second sentence (*and proposed as a description of the speaker’s competence*) already begins to bring the two together: the *grammar* is not just the linguist’s theory but is *proposed as a description of the speaker’s competence*. If Chomsky were to say that the term *grammar* means *on the one hand* the explicit theory constructed by the linguist (the study of the phenomenon), X, and *on the other hand* the speaker’s ability to produce language (the phenomenon itself), Y, he would not be saying anything revolutionary. *Grammar* is famously ambiguous, like *psychology*, and *on the one hand* and *on the other hand* should suggest an intention to keep its two meanings apart. However, the added paratactic extending clause sneaks in an equating of the two: despite appearances, he is not saying *On the one hand X and on the other hand Y*, but *X is proposed as Y*. *On the one hand* and *on the other hand* are bogus signposts, because the equation

has happened in between them. The next trick of Chomsky's language is the uncertainty of the referents for *the former* and *the latter*. They seem to refer to *the explicit theory* and *this competence itself* respectively, but if this is so it is surely not necessary to suggest that the latter is less familiar. An ordinary dictionary gives these as two definitions of *grammar*, giving the latter first.⁶ What *is* startlingly less familiar is the claim that the linguist's theory is *proposed as a description of the speaker's competence*. But the vagueness of the uncertain reference, the ambiguous *we*, the contrastive conjunctions *on the one ... on the other...*, and the reassuring *equally appropriate* all combine to make it appear that nothing very contentious is being said. I would suggest, however, that underlying all this is an invalid syllogism:

1. *Grammar* is the speaker's competence.
2. The linguist's description is *grammar*.
3. The linguist's description is therefore the speaker's competence.

The problem is that the middle term, *grammar*, is only nominally the same entity in the two premises. Owing to a defect of the English language, we use the same name for two different things:

TABLE 6.2.1 Lexical and Token-Value ambiguity combined

<i>The linguist's description</i>	<i>is (called)</i>	<i>grammar</i> ₁
<i>The speaker's competence</i>	<i>is (called)</i>	<i>grammar</i> ₂
Token		Value

As is the case with a grammatical category such as *noun*, as explained above, there does not seem to be anything further we can say about *grammar*, in either sense, that could constitute a further decoding. It remains a Value, for which we can find only Tokens. (FIGURES 6.1 and 6.2 at the end of this chapter illustrate this.) Chomsky's proposal, however, attempts to escape this impasse by saying that the one *grammar is* the other, which allows him in effect to interpret it in any of the ways shown in the four-cell model in TABLE 6.1.3:

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grammar 2. the abstract system of rules in terms of which a person's mastery of his native language can be explained 3. a systematic description of the grammatical facts of a language (*Collins Concise Dictionary*)

TABLE 6.2.2 Token-Value tautology

<i>grammar₁</i>	<i>is</i>	<i>grammar₂</i>
T/lr	<i>represents</i>	V/ld
V/ld	<i>is represented by</i>	T/lr
T/ld	<i>represents</i>	V/lr
V/lr	<i>is represented by</i>	T/ld

If the linguist's grammar is said to be the same entity as the 'grammar in the head', then we have a truly tautologous statement in which the concepts of Token and Value no longer have any meaning, because we cannot distinguish which is an encoding and which is a decoding direction.

Moving on to the next Example, we find that the tentative bringing-together of linguist's description and internal grammar that is *proposed* in Example 1 (on page 3 of Chomsky and Halle 1968) has become an unexceptionable procedure in Example 2 (on page 4). The inappropriate conjoining of Token and Value in the first sentence of Example 2 can be analysed as follows:

TABLE 6.2.3 Inappropriate Token-Value conjoining

<i>the term "grammar"</i>	<i>we use ... to refer [= is, or represents]</i>	<i>both to <u>the system of rules represented in the mind of the speaker-hearer, a system which is normally acquired in early childhood and used in the production and interpretation of utterances,</u></i>	<i>and to <u>the theory that the linguist constructs as a hypothesis concerning the actual internalized grammar of the speaker-hearer.</u></i>
Token	Value		Token
Value			

Whereas in Example 1 (on page 3) the authors have used the contrastive conjunctions *On the one hand ... on the other hand*, in Example 2 (on page 4) they use the conjoining pair *both ... and*, making the conjoining explicit and giving up any pretence at keeping the two meanings of *grammar* separate. To make the point more emphatically, in the second element of the conjoined pair (*the theory that the linguist constructs as a hypothesis concerning the actual internalized*

grammar of the speaker-hearer) the equation is repeated in a rank-shifted clause (i.e. one that has been reduced from clause to group rank by embedding):

TABLE 6.2.4 The persuasive power of embedding

<i>the theory</i> [[<i>that the linguist constructs</i>]]	<i>as a hypothesis concerning</i> [= <i>perhaps represents?</i>]]	<i>the actual internalized grammar of the speaker-hearer</i>]]
Token/ld	decode →	Value/lr

The *as* construction here is a kind of reduced relational clause. It is more powerfully persuasive than the full relational clause because it is less contestable, owing to the Finite being removed. (The Mood Block – Subject and Finite – invites negotiation: *The theory is a hypothesis concerning ... No, it isn't ... Yes, it is ...*.) The impression is given that there can be no reason for constructing a linguistic theory *other than as a hypothesis concerning ...* etc. Despite all this subtle use of grammar to convince us of the plausibility of his claim, Chomsky warns that: *No confusion should result from this standard usage if the distinction is kept in mind.* This warning will give him a way out when the inevitable confusion does result: it will be our fault for not keeping the distinction in mind. (If my assessment seems harsh, we should note that he is indeed obliged to take this way out some years later, as explained at the end of this section, quoting from Chomsky 1986.)

The deceptiveness of Examples 1 and 2 arises from the complexity of their construction, but simplicity can also be deceptive. Example 3 is a simple clause that has a matter-of-fact look to it because the Token-Value clause and the nominalisations are entirely normal constructions in the grammar of definitions. We forget the original two meanings of *grammar*. Chomsky has said he will use them with systematic ambiguity, and here he can be seen doing exactly that. The linguist's description and the speaker's competence are no longer two separate things: the description of the language *is* a description of the competence, and the fact that this is a perfectly tautologous clause, like saying *my brother is my brother*,⁷ has been hidden from view.

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As Halliday explains, we identify something 'by assigning it to a class of one member. But if the one-member class is at the same level of abstraction as its member, then we have a tautology: *my brother is my brother*' (Halliday 1994a:128). (We could of course remove the tautology by intonation, implying a difference in the levels of abstraction of Token *brother* and Value *brother*.)

‘Competence’ is no longer a mystery, something we cannot describe in any meaningful fashion: it is as plain as the linguist’s description. We do not even have to test the description to see whether it matches processes in a speaker’s mind, because by definition the description *is* the competence.

Analysis of Example 3 is problematic in a number of ways. The first problem is that in the traditional sense of the word a *grammar* of a language *is* a description, so *purports to be* is an odd wording. However, the Qualifier (*of the ideal speaker-hearer’s competence*) explains what Chomsky is claiming it to be a description of and this explains the oddity. *Purports* is typically used pejoratively, carrying the suggestion ‘claims falsely’, but, as that cannot be what is intended here, it is perhaps better interpreted as grammatical metaphor, for which the congruent version would be *I am claiming that a grammar of a language is...* . The second problem is that *a description* should be Token, because it is less abstract than *a grammar*, which therefore must be Value. However, *the ideal speaker-hearer’s competence* must be something more abstract than *a grammar*. TABLE 6.2.5 shows what has happened:

TABLE 6.2.5 Inappropriate Token-Value conjoining

<i>A grammar of a language</i>	<i>purports to be</i>	<i>a description of the ideal speaker-hearer’s competence.</i>
Value	[is represented by]	Token
Token	[represents]	Value

Two identifying clauses have been fused into one, again with inappropriate conjoining of Token and Value. Ignoring the difference in function between Token and Value allows Chomsky to claim that by describing the thing we *can* get at – the patterns we see in language that we generalise by the term *grammar* – we can claim to be describing the thing we *cannot* get at – the workings of the brain that enable us to produce these patterns. The rank-shifted nominalisation ^ qualifier structure – *a description of the speaker’s competence* – completes the ratification of what started off as merely speculative: Token and Value have merged into one entity, so that to describe a language is automatically also to describe the workings of our minds when we produce language. The linguistic deception is helped along by the change in meaning (without change in form) of the term *grammar*. The ineffable has become effable by lexical and grammatical sleight-of-hand.

Finally, Example 4 brings off some even more startling tricks. The native speaker's internal grammar is now referred to as a 'theory', which makes it seem plausible that it is the same kind of entity as the linguist's description. Once again, as with the use of contrastive conjunctions *on the one hand ... on the other hand*, a show is made of keeping the two meanings apart, this time by the temporal signposts *first ... second*. But whereas in the other Examples (1, 2 and 3) we had the *linguist* attempting to 'develop and represent' a grammar that will look like the speaker's competence, here the *child* has 'developed and represented' a grammar that looks like the (generative) linguist's description (*the child has developed and internally represented a generative grammar*, Chomsky 1965:25). TABLE 6.2.6 shows that this is a reversal of the coding direction of TABLE 6.2.4. (Halliday's comment on this kind of mistake is that 'the grammatics is parasitic on the grammar – not the other way round', 1996:32.)

TABLE 6.2.6 Child as grammarian

<i>the theory that the linguist constructs</i>	<i>as a hypothesis concerning</i> [= <i>is perhaps represented by</i>]	<i>the actual internalized grammar of the speaker-hearer</i>
Value/Id	encode →	Token/Ir

It seems to me that if we were not so bemused by the ease with which the subtle grammar of definitions allows us to say such things, we would realise that this semantic and grammatical obfuscation prevents us ever testing our theories in any methodical and scientific way. If we cannot, for example, distinguish the two meanings of *grammar*, how will we know how much success we are having in mirroring the speaker's internal grammar in our formal description? Chomsky's formulation ensures that we can never be sure what success might look like, because the description automatically *is* the explanation; the encoding *is* the decoding. As Roy Harris observes, 'this is simply a licence to print your own money' (1987:135).

In the above discussion I have attempted to reveal the mechanism of the 'printing process'. However, I do not want to suggest that Chomsky has been guilty of deliberate duplicity. It is more likely, as Hodge and Kress suggest, that he is unconsciously taking advantage of the language of 'normal science': 'He can exploit the mystification his community is habituated to for his own purposes; though this does not mean that he need be aware of what he is doing' (1993[1979]:33). The duplicity the grammar allows might be described in lay terms as 'being carried away by your own words'. The powerful resources of the grammar have developed as a

response to our need to understand and talk about certain areas of experience, partly reflecting and partly constructing that experience.⁸ (In this way, for example, nominalization developed in response to the needs of science writing, Halliday 1988b.) However, when a resource of the grammar is applied ready-made to areas of experience that it was not originally a response to, then it may be over-powerful, and may function mostly as construction and hardly at all as reflection. We then have a situation where, as Hodge and Kress observe, we have to accept ‘an unreal world where principles construct sentences, where investigations have goals, and sincerity might well play golf’ (1993[1979]:31).

There are still further implications of the Token-Value clause to be considered in relation to metalanguage and how we interpret *grammar*. Its two directions may be interpreted as agnate to restrictive and non-restrictive clauses, and the distinction between these can be used to disambiguate a Token-Value clause and provide further insight into the difference in meaning between the encoding and the decoding directions. Toolan illustrates by rewording the two versions of Halliday’s sentence *The best students are the greatest worriers* (TABLE 6.1.2, above) to show that restrictive is to decoding as non-restrictive is to encoding:⁹

- (i) *Those kids who are the greatest worriers are the best students* (T/Id ^ V/Ir – decoding)
- (ii) *Those kids, who are the greatest worriers, are the best students* (V/Id ^ T/Ir – encoding)

Toolan uses these agnate forms to show that in version (i) ‘being a great worrier is needed or pre-conditional identification of those students whom we can go on to characterize as the best’, whereas in (ii) ‘it just happens, in a non-consequential way, that the best students are also the greatest worriers’. Relevant to my discussion (here and in 3.2, above) is his characterization of (i) as ‘explanatory’ and (ii) as ‘descriptive’ (1992:87). He observes that ‘decoding and encoding orientations’ relate to more than just clause-level semantics: on a broader scale they are different

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The favoured SFL term for this dual process is *construe*: the grammar *construes* experience.

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I notice that in this paper Toolan has reversed the labels ‘encoding’ and ‘decoding’, apparently using ‘code’ in a different sense. I have relabelled his examples to bring them in line with Halliday’s usage, e.g. 1967/8:227. As I understand Halliday’s use of ‘code’ here, it is as though the things we see and experience are ‘codes’ – we do not understand them until we give them a meaning: a name, a label, a further description, an explanation, which is their Value.

ways of seeing the world (1992:94). The encoding orientation describes things in terms of how we recognize them, whereas the decoding orientation finds a meaning or explanation for these things. The significance of this is that science typically sees description as a step towards explanation and hence, as Toolan observes, there is a tendency to think of Values as somehow 'better': 'There is considerable pressure to assert a kind of evaluative ranking of tokens and values, where, e.g., one might be tempted to claim that tokens are more superficial, outward marks, while values by comparison are more inherent and deeper features of the entities described' (1992:89). Put in other terms, the decoding, restrictive (explanatory) mode is valued above the encoding, non-restrictive (descriptive) mode.

This seems to be the evaluation made by Chomsky in his well-known contempt for 'mere' description,¹⁰ and his setting up of a hierarchy of levels of scientific approach to language: *observational*, *descriptive* and *explanatory* adequacy, with the implication that only the third is a really respectable goal. Haegeman says that 'a theory reaches explanatory adequacy if it can account for the fact that the principles of the internal grammar can get to be known by speakers' (1994:10): the word 'reaches' makes it clear that she has in mind explanation as something that goes 'beyond', or 'higher' – or, in Chomsky's metaphor, 'deeper' – than the previous stages, the 'mere' description. The problem arises in linguistics when the preliminaries are dismissed as trivial and we jump straight to the explanation, bypassing the usual painstaking description of the data, or taking the description to *be* the explanation (Token to be Value, *grammar*₁ to be *grammar*₂). Toolan, however, observes further that 'it may be more useful to think of token and value as mutually-supportive contrasting ways of viewing an entity; both are needed in our descriptions of people and things' (1992:89). Another viewpoint is that there are cases where we may be forced to be content with description because explanation is inherently beyond our reach. At any rate, we might do better to be content with a good description than to be led into dubious explanations that derive their credibility largely from a trick of the grammar.¹¹

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Passim, but the following remarks are representative: 'normal science is still basically natural history. ... it is still largely descriptive work. Our first revolution will come when normal science becomes work that is involved in deepening explanatory theories and that is still a pretty exotic enterprise in linguistics'; 'A test for when it happens is when these centrifugal forces, the pull towards descriptivism, lose their attraction' (Huybregts and van Riemsdijk 1982:40; 58).

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And also from a narrowing of the reference of *observational* etc., as discussed in 3.2.4 above.

I have attempted to illustrate this in FIGURES 6.1 and 6.2 (at the end of this chapter), to show what happens when we are misled by our dissatisfaction with not being able to define *grammar* but only to recognize it by Tokens, which have an inconsequential feel, and how Chomsky has been tempted to look for a 'deeper' explanation. FIGURE 6.1 is my representation of the situation Halliday (1988a) describes: the difficulty of defining a grammatical category other than in terms of the Tokens by which we recognize it. I have shown my understanding of what Halliday says we are trying to do in terms of Token and Value when we look for the meaning of a grammatical category such as *noun*. When we try to define it, we have a selection of Tokens available, which are all ways we recognize a *noun*: by its inflections; by its functions; by examples of real world objects it refers to, such as tables (*mensae*); and so on: all the signs of 'nouniness'. All these are relabellings of the category (Halliday 1988a:42), not explanations. But the decoding direction is problematic. *Noun* is the Value of these Tokens, but what Value can we find for *noun* itself? It seems to have a meaning, but how can we say what it is?

In FIGURE 6.2 I have shown the same problem on a broader scale, to illustrate how I would explain Chomsky's attempts to find a language-independent explanation for *grammar*. It seems to me to be the same kind of thing as the attempt Halliday describes to find meaning for a grammatical category; *grammar* being just the superordinate term for all the categories, structures and functions of language. I have found it helpful to use Halliday's Token/Value grammatics to explain why I find Chomsky's theory so puzzling. Because it is a representation of a puzzle, my Token/Value illustration in this figure remains a puzzle. What is puzzling is that Chomsky seems to be looking for a further Value for *grammar*, but if *grammar* is itself a Value, then we cannot find a Value for it without first finding a new Token (as in the 'Rakesh Bhatt' conversation in Tables 6.1.7 and 6.1.8, above), something other than the things we recognize it by, which lead back to the Value *grammar*. The entities Chomsky postulates – Deep Structure, the Language Organ, and so on – look superficially as though they might be Tokens (i.e., less abstract than *grammar*), but they are in fact extremely nebulous, and likely to remain mere speculation because they are unfalsifiable.¹² This suggests that they must be Values (i.e., more abstract than

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'Chomsky's so-called generative grammar assumes that syntax is independent of semantics and that the language faculty is independent of external cognitive capabilities. This definition of grammar is impervious to any attempts to disconfirm it by referring to facts about cognition in general' (Edelman 1992: 243).

grammar), and Token/Value grammar insists it makes no sense to try to get a Value from a Value. We are in the realm of unsolved mysteries.

However, mystery has its attractions, and many have felt that there ought to be more to *grammar* than just the things we recognize it by. Robins refers to early complaints about the empiricism of the *Téchnē* of Dionysius Thrax:

This controversy ... may be perceived as one of the first shots in a continuing dispute, very active still today, between (a) those who see linguistics as essentially the accurate recording and meticulous analysis of languages as they are revealed in the speech and writing of native speakers and (b) those who look more deeply for a theory of language able to explain and justify the very existence of grammars, and to account for the capacity of human beings for the acquisition and use of their native language, and to reveal in part the nature and working of the human mind or brain. (1990:36-7)

He observes that the latter group drew on an ascending scale of accomplishments (*peîra* ('skill'); *empeiriā* and *téchnē* ('science'); *epistēmē* ('understanding')) and believed that the study of grammar should reach the highest level, aiming, as Chomsky does, for 'explanatory adequacy'. Huybregts and van Riemsdijk, introducing a section of their interview with Chomsky, say that the 'most fundamental change' in linguistics 'has to do with the explanatory goals that generative linguists have set themselves' and that 'to [them] it appears that a completely new dimension has been added to linguistic research by insisting on far-reaching ideals of explanation' (1982:27). Chomsky speculates about its possibilities:

What do we mean for example when we say that the brain really does have rules of grammar in it. We do not know exactly what we mean when we say that. We do not think there is a neuron that corresponds to "move alpha". So we are talking somehow about general structural properties of the brain, and there are real nontrivial questions about what it means to say that the brain, or any system, has general properties. It is like saying, what do we exactly mean when we say this computer is programmed to do arithmetic? We say that, and we understand it – it certainly has some meaning. But we do not mean there is a neuron in there that says "Add 1" or a diode or something that says "Add 1". (Huybregts and van Riemsdijk 1982:32)

It is the uncertainty about the ontological status of the 'rules of grammar in the brain' in the above quotation that I have represented as Token/Value uncertainty in FIGURE 6.2. Chomsky comes very close here to admitting that the meaning of grammatical categories is ineffable;

nevertheless, he insists that 'if you do not accept the realist point of view' you are just 'play[ing] with linguistic materials', and that 'there are really serious questions here that people should investigate'. One might speculate about the motivation for this continuing search for the psychological/physiological reality of rules of grammar in the brain: A desire to gain for linguistics the respect accorded to the natural sciences? A refusal to accept that knowledge may have limits? A delight in the idea of a hidden reality that may be brought to light if we can find the right formula? Dislike of circularity must be a factor: to say a *noun* is 'something we recognize by certain features' is unexciting. Another may be the pressure of Chomsky's rhetoric, which suggests that it is anti-intellectual to give up on the search: 'it just seems to me to indicate a certain lack of curiosity as to why things are the way they are' (Huybregts and van Riemsdijk 1982:31-2).

A more basic motivation may be pragmatic: having proclaimed their reluctance to prescribe, linguists have lost their consultant role and have been forced to seek a new one as bona fide scientists. So the search continues for a *meaning* for grammatical categories. Grammar is detached from language and located elsewhere; perhaps in the brain or in the genetic code, and once it is relocated an expressible meaning is found, for which other sciences and technologies provide ready-made labels: 'organ' and 'instinct', 'machine' and 'diodes' and 'switches'.¹³ Lightfoot, for example, can confidently talk about 'a biology of grammars' (1983:sub-title of book) and say that 'the formulation of generative grammars can be shown to provide explanatory models and therefore to have empirical consequences', the most important being 'insight provided into the acquisition of grammars' (1983:98-99). Grammatical categories are no longer just (the grammarian's description of) the patterns of grammar the child learns, they have become the 'Language Acquisition Device'— a term which seems to mean 'the patterns that enable the

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'We may think of the language faculty as a complex and intricate network of some sort associated with a switch box consisting of an array of switches that can be in one of two positions. Unless the switches are set one way or another, the system does not function. When they are set in one of the permissible ways, then the system functions in accordance with its nature, but differently, depending on how the switches are set. The fixed network is the system of principles of universal grammar: the switches are the parameters to be fixed by experience. The data presented to the child learning the language must suffice to set the switches one way or another. When these switches are set, the child has command of a particular language and knows the facts of that language: that a particular expression has a particular meaning, and so on' (Chomsky 1988:62-3).

child to learn the patterns'. (As Bulley observes, this is 'the fallacy that what is made possible must resemble what makes it possible', 1998:49.)

To return to Halliday's point mentioned above: to say that grammatical categories 'have evolved in order to say something that cannot be said in any other way; hence, they are strictly ineffable' is not to say they have no meaning; only that we cannot express the meaning. He continues: 'it is absurd – not to mention arrogant – to assert that because you cannot define something, therefore it has no meaning' (1994a:xxvi). The problem is that it is the grammar itself that must provide the access to the grammar; it does not exist prior to the search; rather, it is the search that brings it into being. There is no getting outside the circle (Halliday 1988a). This situation is the nature of the enterprise for the linguist, but some choose not to accept it. The natural language we use as metalanguage tempts us to go further: 'the idea of a grammar as "a device for producing sentences"' was not at all what the normal linguist would have accepted as an account of grammars' (Hodge and Kress 1993[1979]:32).

In searching for a language-independent explanation of language, Chomsky has turned his back on language. When problems arise, however, he is obliged to pay attention to it. He is on record as having had second thoughts about the wisdom of his 'systematic ambiguity':

Some questionable terminological decisions also contributed to misunderstanding. In the literature of generative grammar, the term 'language' has regularly been used for E-language in the sense of a set of well-formed sentences, more or less along the lines of Bloomfield's definition of 'language' as a 'totality of utterances'. The term 'grammar' was then used with systematic ambiguity, to refer to what we have here called 'I-language' and also to the linguist's theory of the I-language; the same was true of the term UG [Universal Grammar] ... Because the focus of attention was on I-language, E-language being a derivative and largely artificial construct, we find the paradoxical situation that in work devoted to language, the term 'language' barely appears ... It would have been preferable to use the term 'language' in something closer to the intuitive sense of informal usage; that is, to use the term 'language' as a technical term in place of '(generative) grammar' (in the sense of I-language) while adopting some technical term (perhaps 'E-language') for what was called 'language'. The term '(generative) grammar' would then naturally have been used for the linguist's theory of the (I-) language ... Much confusion might have been spared in this way. I suspect that the debate in past years over the alleged problems concerning

the concepts grammar and knowledge of grammar may in part be traced to these unfortunate terminological choices. (Chomsky 1986:28-9)¹⁴

This retraction is phrased so as to imply that the confusion is the fault of those who did not heed the warning to keep the distinction in mind. ('No confusion should result from this standard usage if the distinction is kept in mind' – Chomsky and Halle, 1968:4, quoted earlier.) But lexical ambiguity is liable to provoke objection even when it is called *systematic* ('methodical'? 'consistent?'). (Itkonen, for example, points out the way Chomsky's exploitation of the double meaning of the word *know* also props up his case, 1978:82.) What is less likely to be objected to, because less easy to expose, is the *grammatical* ambiguity which underpins it in this case; a kind of ambiguity which is more insidious because it really is 'systematic', or rather *systemic*, in that it springs from a basic system of the grammar. Had it not been for this support from the grammar, it is doubtful whether Chomsky's lexical ambiguity would have gained as much acceptance as it did.

To conclude: in this section I have discussed one of the grammatical processes through which a linguistic myth (as discussed in 5.1, above) comes to be created. Human beings have a need to convert mere identification into meaning and value, and Token-Value grammar has no doubt developed out of this need. Interestingly, some lexical items also exhibit this tendency to slide from 'knowing identity of' to 'expressing value of'. The original meaning of the word *recognize*, for example, was no more than 'identify' (etymologically, *re-cognize*: 'know again'), but it has acquired the secondary meaning 'appreciate or honour'; i.e. it has added a Value meaning to the original Token one.¹⁵

This dual meaning gives added point to Roy Harris's words: 'What is important is that people should come to *recognise* and understand the mythological processes which language itself engenders' (1987:174; italics added). If we can *recognize/identify* the meaning-making processes of our own grammar we can at the same time *recognize/give value to* them, rather than

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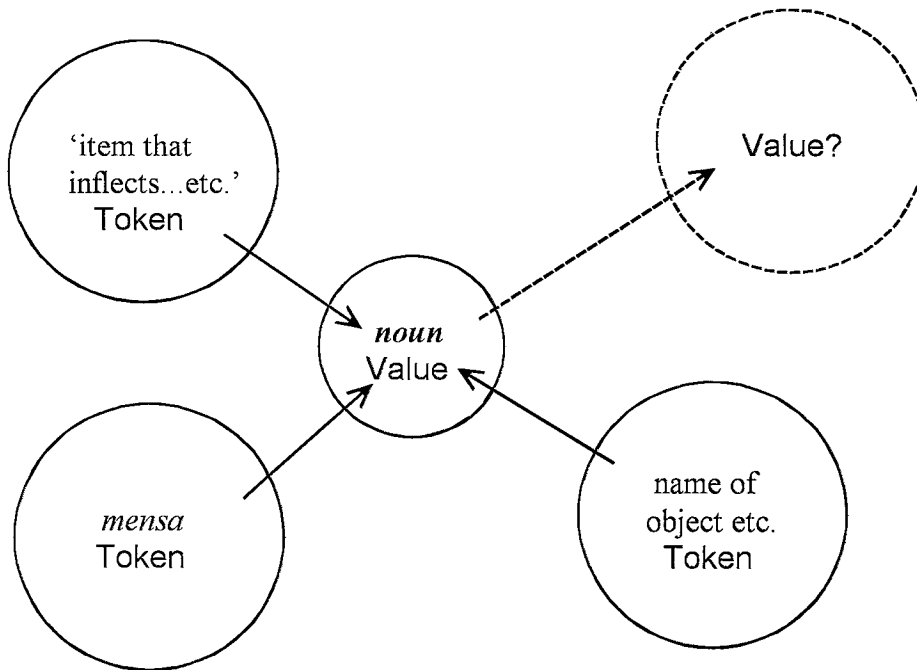
I am indebted to Nigel Love for supplying this quotation. (Personal communication.)

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Regard, *distinguish*, and *discern* have moved in a similar direction, sliding from 'noticing/identifying' to 'valuing' (*highly regarded*, *distinguished*, *discerning*). As Halliday puts it, the grammar 'moves across' to lexis (2002).

subscribing to the belief that one way of making meaning is as good as another and that it is the meaning 'behind' the words that counts. We need to revalue language *in itself*. As a step towards this, we need to revalue our metalanguage, paying attention to the ways it makes meaning. This would involve taking a new perspective on what *theory* means in linguistics.

FIGURE 6.2.1 Searching for a Value for *noun*



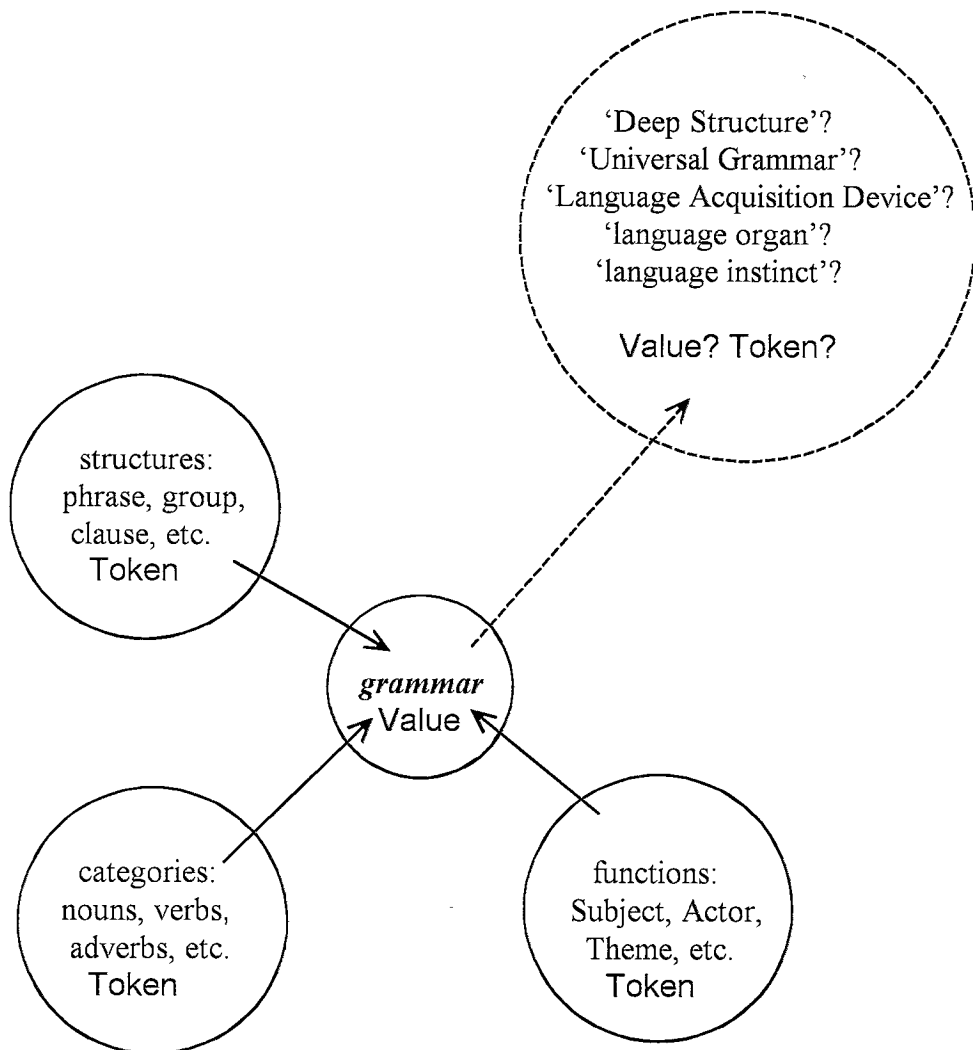
The arrows in the above figure represent an identifying relational process:

<i>Mensa</i>		
<i>The name of an object</i>	<i>is [represents]</i>	<i>a noun.</i>
<i>A word that inflects for case and number</i>		
Token/Identified	decode →	Value/Identifier

The invalid process (because we cannot decode a *noun*) is:

<i>A noun</i>	<i>is [represents]</i>	?
Value/Identified	*decode →	*Value/Identifier?

FIGURE 6.2.2 Searching for a Value for *grammar*



As in FIGURE 6.2.1, an 'illegal' attempt is being made to decode *grammar* (a Value) further

<i>Grammar</i>	<i>is [represents]</i>	?
Value/Identified	*decode →	*Value/Identifier?