

### 3/What Is A Language?

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*In the following selection, Neil Smith and Deirdre Wilson of University College, London, focus on one of the fundamental ideas of contemporary linguistics—that of language as a rule-governed system. To claim that a language is rule-governed is also to claim that it can be described in terms of a grammar. Thus, the grammar of a language is a description of the rules of the language, rules of a kind that human beings are innately disposed to learn. These rules distinguish grammatical from ungrammatical sentences, and provide explicit descriptions of grammatical sentences, including their meaning and pronunciation. Although every individual has his or her unique grammar, all grammars have some things in common because of genetic constraints on the kinds of grammars, and hence languages, that human beings can learn.*

At different times, different features of language have struck people as particularly significant, typical or worthy of attention. Any system as complex as a human language is bound to lend itself to a variety of independent approaches. For example, languages are used to communicate; one obvious line of research would be to compare human languages with other systems of communication, whether human or not: gestures, railway signals, traffic lights, or the languages of ants and bees. Languages are also used by social groups; another line of research would be to compare languages with other social systems, whether communicative or not: economic, political or religious, for example. Again, languages change through time: comparison of languages with other evolutionary systems, organic and inorganic, might also be pursued. While all of these approaches have undoubted appeal, there is an obvious logical point to be made: one must be able to describe a language, at least in part, before going on to compare it with other systems.

It seems to us that there is no way of describing or defining a given language without invoking the notion of a linguistic rule. If this is true, it is clearly important, since by investigating the nature and variety of linguistic rules we may be able to provide quite detailed evidence about points of comparison between human languages and other systems. It is for this reason that we have chosen [first] to . . . justify the claim that a language is definable in terms of a set of rules, arguing against

some alternative conceptions of language, and examining the nature and status of linguistic rules.

## Linguistic Rules

Within modern linguistic theory, to claim that a language is rule-governed is to claim that it can be described in terms of a grammar. A grammar is conceived of as a set of rules which have two main tasks. They separate grammatical from ungrammatical sentences, thus making explicit claims about what is "in the language" and what is not. They also provide a description of each of the grammatical sentences, stating how it should be pronounced and what it means. In other words, linguistic rules are not just the isolated and scattered maxims we memorized at school ("Prepositions are things you shouldn't end sentences with"); they combine with each other to form a system—a grammar—which gives an explicit and exhaustive description of every sentence which goes to make up a language. . . . We shall use "grammar" to mean a set of rules with this dual function.

It is easy to see that speakers of a language often behave as if their language were rule-governed. Fluent speakers may nonetheless make mistakes in speaking, and when they do, they have no hesitation in correcting themselves. Utterances like (1) and (2), for example, are commonplace:

- (1) The thought of those poor children were really . . . *was* really . . . bothering me.
- (2) Even though they told me to, I didn't sit down and be quiet . . . *was* quiet . . . I mean I didn't sit down and I wasn't quiet.

Such examples give clear evidence that speakers have some means of distinguishing grammatical from ungrammatical sentences, and are prepared to correct their mistakes even when no threat to communication is involved.

It is also possible for a speaker to feel that others around him are making mistakes—although his willingness to correct them will, in many cases, be tempered by considerations of politeness at least. An English speaker who hears (3), for example, will probably agree with the message it conveys, regardless of whether he interprets it as (4a) or (4b):

- (3) Ze pound are worthless.
- (4) a. The pound is worthless.  
b. The pound is worth less.

However, he will simultaneously recognize that the pronunciation of *the* is incorrect, and that *are* should have been *is*. In other words, he knows not just *that* a mistake has been made, but also *what* the mistake is.

When speakers of two different dialects of English meet, each is likely to feel that the other is making some mistakes. Readiness to correct what sounds like a mistake is affected here, not just by considerations of politeness, but also by the fact that certain dialects are generally considered superior to others, so that speakers of standard dialects will be more likely to correct those of nonstandard dialects than vice versa. In any case, the speaker of standard British English who hears (5a) and (5b) is likely to feel that they are incorrect:

- (5) a. Mr Zed's done gone mental.  
b. Lord God, I done made a mess.

In most cases, he could also supply the standard equivalents (6a) and (6b):

- (6) a. Mr Zed has gone mental (mad).  
b. Lord God, I've made a mess.

Similarly, speakers of the dialect which permits (5a) and (5b) would regard (6a) and (6b) as needing some correction. This case seems to show, not just that speakers of a language possess a set of rules, but that not all speakers of a language possess the same set of rules. In fact, as we shall show in the next section, it is probably quite fair to say that no two speakers of a language possess exactly the same set of rules: in other words, the rules which adequately describe a language are not the simple, prescriptive maxims of the classroom, but a far more complex and subtle set of constructs.

The speaker who is willing to correct himself and others gives evidence that there is, for him, a right and a wrong way of saying things. However, it does not necessarily follow that in making these corrections he is applying a set of linguistic rules. He might, for example, be following a set of linguistic conventions, or habits, or customs, which he dislikes seeing disrupted. In claiming that a language is rule-governed, we are also claiming that languages are not definable in terms of linguistic habits, conventions or customs; to see why, it is necessary to look a little more closely at what linguistic rules, embodied in grammars, actually do.

So far, we may have seemed to imply that a grammar simply provides a means of registering and correcting mistakes. This copy-editing function is an important one; however, grammars are also concerned with the description of sentences which contain no mistakes at all. As

mentioned earlier, a grammar must provide a means of associating each sentence of a language with its correct pronunciation and meaning. Now speakers of a language are capable of pronouncing and understanding sentences which they have never heard before. For example, many readers of this book will be encountering at least one of the following for the first time:

- (7) a. I can see a robin pecking around the ashes of the bonfire.  
 b. Would you let us have poached egg for elevenses\* please, Mummy?  
 c. If you tell that joke again I shall divorce you.

However, none of these sentences is likely to present the slightest difficulty of understanding. It follows that one's ability to understand a sentence does not depend on custom, convention or habit, all of which would imply that repeated encounters with a sentence would be necessary before its correct interpretation could be established. Neither the ability to recognize a sentence as grammatical, nor the ability to produce or understand it, seems to depend on prior encounters in this way.

Conventions are social constructs: it takes at least two people to establish and operate a system of conventions. Rule-systems, on the other hand, could easily be constructed and operated by a single individual. There exist two main types of case where single individuals do seem to operate their own private linguistic rules: the case of children learning their first language, and the case of adults with idiosyncratic speech patterns. Both provide arguments against linguistic conventions, and in favor of linguistic rules.

Children learning their first language seem to construct rules for themselves—but they often get them wrong: they produce utterances which are ungrammatical from the adult point of view. The sentences in (8), produced by a three-year-old, are examples; the adult equivalent is given on the right:

- (8) a. What that was? [What was that?]  
 b. Where it is? [Where is it?]  
 c. Where Amahl can write?<sup>1</sup> [Where can Amahl write?]

That many children pass through a similar phase is not surprising, since they will have heard adult sequences exactly parallel to their own, as in (9), for example:

- (9) a. I don't know *what that was*.

\* Editor's note: *Elevenses* is a British term for a late morning breakfast or snack.  
<sup>1</sup> *Amahl* is the name of the child speaking.

- b. Tell me *where it is*.  
 c. I think that is *where Amahl can write*.

However, the fact remains that the child who says one of the sentences in (8) is using a different grammatical rule from those of the adults around him, and which he seems to have made up for himself.

Another case where the child's system may differ from the adult's is when the child has learned a linguistic rule, but has not yet learned that it has exceptions. On the analogy of (10), for example, children regularly produce forms such as those in (11):

- (10) a. I talked, he danced, she moved, they waited, etc.  
 b. One car, two cars; an elephant, lots of elephants, etc.  
 (11) a. I comed, John runned, they singed, she teached me, etc.  
 b. Two sheeps, lots of tooths, some mouses, etc.

In other words, the child has overgeneralized the rules for regular past-tense and plural formation to cases where in the adult system they do not apply. This again indicates that the child makes up rules of his own, which only he actually follows.

The number of verbs with an irregular past tense, and of nouns with exceptional plurals, is rather small: the resulting overgeneralizations are hardly surprising. However, children seem able to construct generalizations, make up rules, on the basis of extremely limited data. For example, *in newen times for nowadays* has been found on the sole analogy of *in olden times*, and *twoth* and *threeth*, with the sense of *second* and *third*, have been recorded from a child who could only count up to four. Moreover, examples of this kind are not limited to word-formation. On the analogy of such regular adult examples as (12), children will frequently supply the missing fourth item in (13):

- (12) a. Pick the book up.  
 b. Pick it up.  
 c. Pick up the book.  
 (13) Pick up it.

(13) is, of course, ungrammatical from the adult point of view, and the child is most unlikely ever to have heard it. Other examples of the creative use of language by children provide further evidence of their ability to control regularities: the following pairs were all taken from children aged between two and three:

- (14) a. Pick me up. (and when the adult obliges)  
 b. Pick me down.  
 (15) a. Plug the light in.

- b. Plug the light out.
- (16) a. Amahl wakened up. (raising his head from the pillow)  
 b. Amahl wakened down again. (putting his head back on the pillow)

Perhaps the clearest example, and the one most frequently commented on, is provided by the two-year-old who on seeing his uncle for the first time asked his mother:

- (17) *What's that, Mummy?*,

using *what* as a cover term for both humans and things. Two days later he was addressing his uncle as "Mummy."

As a last example of how children construct rules for themselves, consider the following solution to the problem of how to pronounce long words with an unstressed initial syllable, taken by one three-year-old. Observing that many such words were complex, consisting of a prefix *re-* and a stem, he generalized this pattern to all of them, with the result that while *recorder* and *remember*, for instance, were pronounced correctly, the following forms—which he clearly could not have imitated from those around him—also occurred:

- (18) attack—pronounced *retack*  
 disturb—pronounced *resterve*  
 elastic—pronounced *relastic*  
 enjoy—pronounced *rejoy*  
 guitar—pronounced *retar*  
 conductor—pronounced *reductor*, etc.

On this occasion, as on many others, the child's hypothesis is wildly out, but the regularity with which the forms appear shows that he is constructing rules. That they are the wrong ones merely makes it more obvious that linguistic rules are not always shared rules, and that the child can operate a rule-system which diverges markedly from the systems of those around him.

Divergencies between rule-systems are not just found in the case of children who are still learning their language. Perfectly fluent adults may find idiosyncrasies in their own speech. The most common of these are in pronunciation and vocabulary. It seems clear that no two adults possess exactly the same set of vocabulary items, pronounced in exactly the same way. This is true of syntactic rules too. A very few readers may find that they regularly produce sentences like (19b), on the analogy of (19a) (as does one of the authors):

- (19) a. He is happy, isn't he?  
 b. I am happy, amn't I?

Others will find themselves reluctant to produce (19c), on the same analogy:

- (19) c. He may leave, mayn't he?

Similar differences of opinion may arise over sentences like the following:

- (20) a. What did you go out and do?  
 b. What did you go out without doing?  
 c. What did you go out before doing?  
 d. What did you go out before you did?

Most people will find at least one of these sentences ungrammatical, but there may be disagreement about just how many should be rejected. These differences in rule systems do not appear to be geographically based, but they are nonetheless real. They indicate that languages are not entirely social constructs, possessed in the same form by all members of a social group, but that it is perfectly possible for an individual to possess a set of rules that he shares in its entirety with no one else.

A more extreme instance of adult idiosyncrasy is seen in the speech of people who have had a stroke, or have otherwise suffered damage to the brain, with resultant speech loss or aphasia. In fact the best defining criterion of aphasia is that the rules normally characteristic of speech have broken down, leading the patient to produce utterances which, depending on the severity of his case and the number and type of rules involved, may be complete nonsense (jargon), or merely inappropriate, e.g.:

- (21) a. I was working with the shop is in the other room, dear.  
 b. Have you got a match, I can't light my guitar. [= cigar]

In the case of (21b), we can recognize what should have been said, but in the case of (21a) it is clear that something has gone very seriously awry in the set of rules characterizing the linguistic system of the speaker.

What we have tried to show in this section is that a language is best described in terms of a grammar, or system of rules. For each speaker, there is a right and a wrong way of constructing and understanding sentences. This cannot be explained solely in terms of habit or custom, because of the case of novel utterances, which are produced and understood without having been heard before. It cannot be explained solely in terms of convention or social agreement, because each speaker has certain methods of construction and understanding which

he shares with no one else. For the same reason, it cannot be seen as a prescriptive system, handed down by authority and imposed on each speaker from the outside. The only unitary way of describing the linguistic system of a speaker is to see it as governed by a set of rules which he may share, in part, with other speakers, but which he must ultimately have constructed for himself. We turn now to a closer examination of the nature and status of such rules.

## The Psychological Reality of Rules

We have so far been assuming that speakers of a language actually know the grammars which they use in producing and understanding sentences, correcting mistakes, and so on. This assumption that speakers know grammars—usually expressed as a claim that grammars are *psychologically real*—pervades the whole of modern linguistic theory. Learning a language, as we have already seen, is equated with learning a grammar; knowing a language is equated with knowing a grammar. Linguistic differences between speakers are analysed as differences in their grammars. Linguistic change is analysed as the alteration of grammars through time. And a language itself is defined as the set of sentences described by a given grammar. Most of these definitions rest on the assumption that speakers actually know the grammar which describes their language: without this assumption, the postulation of grammars would contribute nothing to explaining linguistic behavior.

Clearly, the knowledge that speakers have of their own grammars is not conscious knowledge. This is obvious enough in the case of adults, but even more so in the case of children, who are normally completely unaware of the way in which they form relative clauses, for example, or the conditions under which they would use the word *come* rather than *go*. The linguistic knowledge that speakers have is unfortunately unconscious knowledge: the job of the linguist is to attempt an explicit, conscious formulation of the grammatical rules that speakers know. Linguistics conceived of this way is concerned with one aspect of the human mind and is therefore correctly classed as a branch of psychology.

Many people—most notably the philosopher Locke—feel unhappy about the idea of unconscious knowledge. These people have difficulty in explaining how speakers are able to produce, understand and form judgments about utterances that they have never heard before. The idea of a grammar which embodies the principles of sentence-formation and interpretation plays a crucial role in explaining how novel utterances are produced, understood and judged grammatical or ungrammatical. Someone who understands the principles of sentence-formation will be able to apply them to any sentence at all—even

one he has never heard before. Someone who has no knowledge of such principles should not be able—as humans clearly are—to deal with utterances in this way. Moreover, those who believe that there is no such thing as unconscious knowledge have difficulty in explaining what goes on when an act of memory is performed. Memory is the classic case of unconscious knowledge: to remember something is to bring to consciousness an item of unconscious, stored knowledge. Thus it seems that, however repugnant the notion of unconscious knowledge may be, it is necessarily involved, both in linguistic and nonlinguistic behavior.

Sometimes those who object to the idea of unconscious knowledge and the notion of linguistic rules argue that novel utterances are produced and understood “by analogy” to sentences one has already heard and understood. This does not, of course, solve the problem of how these latter sentences themselves were produced and understood; but it also raises the much more serious question of how speakers know which is the correct analogy to draw. The following sentences, for example, are both grammatical and similar in meaning:

- (22) a. It is likely that John will leave.  
b. It is probable that John will leave.

By any normal notion of analogy, then, one might expect that (23a) and (23b) should also both be grammatical:

- (23) a. John is likely to leave.  
b. \*John is probable to leave.<sup>2</sup>

But of course (23b) is ungrammatical. This raises the whole question of how the *correct* analogy is determined; now the notion of “correct analogy” seems itself to presuppose the existence of a set of rules distinguishing the correct from the incorrect analogies, returning us, by a slightly different route, to the idea of a grammar as a set of rules or principles for correct sentence-formation.

In looking at a set of linguistic facts, it is often fairly easy to find a pattern in them. For example, consider the following set of words from French:

une balle—tennis ball  
un ballon—football  
une bille—billiard ball  
une boule—croquet ball

<sup>2</sup> From now on we shall follow the convention of indicating with an asterisk those sentences which we are judging ungrammatical.

un boulet—cannonball  
une boulette—meatball

It is tempting to see the striking regularity of the appearance of *b* and *l* in these words as indication of some fixed relation between the sound and meaning of French words for *ball*. This might in turn have a natural historical explanation: for example if all the words evolved from a common root. However, if the job of the linguist is to reconstruct the grammar which speakers of a language actually know, it will be important for him to discover whether the patterns he finds are psychologically valid for speakers of the language, or whether they are there merely by accident or coincidence. The distinction between rule-governed regularities and fortuitous patterns in the language is usually treated in terms of a distinction between *accidental generalizations* and *significant generalizations*. The significant generalizations are those produced by the operation of rules; the accidental generalizations are the result of chance, or the effects of rules which applied at an earlier stage of the language, or of causes external to the language—anything except the operation of currently valid linguistic rules. Thus the search for linguistic rules has two aspects: first the search for patterns, and second, the rejection of those patterns which are judged accidental.

For example, there is a clear pattern in the occurrence of reflexive pronouns (*myself, herself, etc.*) in (24a–e):

- |                                  |                                |
|----------------------------------|--------------------------------|
| (24) a. We washed ourselves.     | *Ourselves washed us.          |
| b. John hurt himself.            | *Himself hurt John.            |
| c. They surprised themselves.    | *Themselves surprised them.    |
| d. Your argument refutes itself. | *Itself refutes your argument. |
| e. You behaved yourself.         | *Yourself behaved you.         |

The pattern might be expressed as follows: a reflexive pronoun is the direct object of a verb, and agrees in number, person and gender with the subject noun-phrase of the same verb.<sup>3</sup> The resulting generalization relates subjects, verbs and reflexive direct objects. Is this a significant generalization about English? A little consideration shows that it is an accident of the limited data considered in (24), and that a more adequate formulation would contain no reference to subjects and direct objects. For example, in (25) the reflexive pronoun is not a direct object:

<sup>3</sup> In English, *number* involves a distinction between singular and plural: e.g., *I* versus *we*; *person* involves a distinction between speaker, hearer and a third party: e.g., *I* versus *you* versus *he*; *gender* involves a distinction between masculine, feminine and neuter: e.g., *he, she, it*. A *noun-phrase* is a group of words which contains a noun: e.g., *the little man*; the *subject noun-phrase* is normally the one which precedes the verb and the *direct object noun-phrase* is normally the one which immediately follows it.

- (25) I talked to Mary about myself.

In (26), the reflexive pronoun does not agree with the subject:

- (26) I talked to Mary about herself.

By considering (24)–(26), one might propose the following alternative generalization: a reflexive pronoun must agree in person, number and gender with *some* preceding noun-phrase. While this generalization is more adequate, consideration of still further data might show that it too was incorrect. For example, in (27a) the reflexive pronoun agrees with a preceding noun-phrase, but the result is ungrammatical; and in (27b) the reflexive pronoun agrees not with a preceding but with a following noun-phrase, and the result is nonetheless grammatical:

- (27) a. \*John said that himself was leaving.  
b. The story about himself that John told Mary was a pack of lies.

Gradual expansion of the data considered leads to successive rejection of accidental, incorrect generalizations and formulation of successively more adequate ones.

Cases like the above tend to show that it is easier to refute a proposed generalization than to show conclusively that it is correct. By the same token, it is easier to show that a proposed rule of grammar *cannot* be psychologically real than to show that it *must* be. Even when a proposed rule is consistent with all the data so far considered, there may be some further data not yet incorporated into the grammar which would either support it or conclusively refute it. One of the problems in writing grammars is thus to have some clear idea about the possible range of data which would have a bearing on the formulation of linguistic rules. The claim that rules of grammar are psychologically real extends the range of relevant data in important ways. For example, if rules are psychologically real, a consideration of how children learn them becomes relevant to decisions about their final form. If language change can be traced back to change in rules of grammar, then historical change in language may provide vital evidence about the form of rules before and after change. If dialect study is the study of similarity among grammars, then dialect comparison may provide valuable insights into the form of the grammars being compared; and finally if, as we shall argue, all languages are similar in certain respects, then even facts from totally unrelated languages may become relevant to the formulation of rules in a given language. Hence, although the claim that the rules of grammar are psychologically real is a strong, and seemingly unprov-

able one, it does allow for a considerable expansion in the range and type of data that become relevant to their formulation. . . .

In this section we have tried to show how the assumption that speakers of a language possess psychologically real grammars can be used to explain their command of language. The grammar that a speaker actually possesses will depend, at least in part, on the utterances he has heard in the past—mainly as a child learning his language for the first time. Since each speaker will have heard a different set of utterances, it is not surprising that he comes to possess a slightly different grammar from those of people around him. Strictly speaking, then, we cannot talk of *the* grammar of English, but only of the grammars of individual speakers of English.

However, what is surprising is how much agreement there is among the adult speakers of a language. We were able to assume, for example, that most of our readers would agree with our judgments about the grammaticality of the sentences in (24)–(27). In spite of the diversity of the utterances to which speakers are exposed in learning their language, there seems to be a remarkable similarity in the grammars which result from the learning process. Having emphasized the individual and idiosyncratic aspects of grammar, we now turn to its universal, common features.

### Innateness and Universals

The work of Noam Chomsky, which provides one of the most coherent overall frameworks for the study of language ever seen, first came to the attention of the general public because, as part of that framework, he claimed that human beings were innately disposed to learn certain types of language. In other words, the languages that actually exist are the ones that children are predisposed to learn. This claim is supported by two further facts: first, that human languages do exhibit remarkable similarities; second, that children follow remarkably similar routes to learning the languages they learn. Both these facts would be explained on the assumption that children are innately equipped to learn only certain types of language, and that the form their linguistic development takes is genetically determined.

As an example of the similarities among languages, one might cite the two main strategies used in forming relative clauses. Certain languages, like English and French, use relative clause constructions like those italicized below:

- (28) a. The man *that I saw* was your brother.  
b. I read the book *that you read*.

- (29) a. L'homme *que j'ai vu* était ton frère.  
b. J'ai lu le livre *que tu as lu*.†

Other languages, for example Hebrew, use relative clauses which contain an extra pronoun: translated into English, these sentences would look as follows:

- (30) a. \*The man *that I saw him* was your brother.  
b. \*I read the book *that you read it*.

The fact that most languages tend to adopt one of these two strategies for forming relative clauses is itself quite striking: logically speaking, there are thousands of alternative possibilities. What is even more striking is that languages which have opted for the same strategy as English and French usually turn out, on closer investigation, to possess traces of the Hebrew strategy too. So, for example, though standard French forms its relative clauses as in (29), many regional dialects of French adopt the Hebrew strategy. In these dialects, sentences like the following are perfectly grammatical:

- (30) a. L'homme *que je l'ai vu* était ton frère.  
b. J'ai lu le livre *que tu l'as lu*.†

Moreover, although so far as we know there are no regional dialects of English which adopt this same strategy, there are certain complicated (and strictly ungrammatical) sentences of English in which it sounds fairly natural: for example, the following:

- (31) a. \*That's the kind of answer *that, when you come to think about it, you find you've forgotten it*.  
b. \*This is the sort of book *that, having once read it, you feel you want to give it to all your friends*.

To see that these sentences are indeed ungrammatical, one simply has to omit the parenthetical clauses:

- (32) a. \*That's the kind of answer *that you find you've forgotten it*.  
b. \*This is the sort of book *that you feel you want to give it to all your friends*.

Clearly (32a) and (32b) are ungrammatical, and we would not want to

† Editors' note: 29a is a translation of 28a, and 29b is a translation of 28b.

† Editors' note: There is an extra pronoun in both of these sentences. Translated, they read:

- (30) a. The man *that I saw him* was your brother.  
b. I read the book *that you read it*.

incorporate into English grammar the principles of relative clause formation that they share with (31). However, it seems that this strategy of forming relative clauses by leaving in an extra pronoun is so powerful that even those languages, like English and French, which do not explicitly adopt it, nonetheless show traces of it in certain ways: in regional dialects of French, and in long and complex constructions of English. In other words, relative clauses seem to be formed on broadly similar lines in many entirely unrelated languages. The assumption that human beings are predisposed to construct relative clauses along these lines would explain this striking similarity among languages.

The evidence that all children learning a language pass through similar stages is also compelling. For example, children learning English pass through a stage of producing two-word utterances like the following:

- (33) a. Daddy gone.  
b. Susie shoe.  
c. Mummy play.

In their earliest attempts to form negative sentences, they merely put a *no* or a *not* in front of a sentence:

- (34) a. No Daddy come.  
b. Not Susie shoe.  
c. No Mummy play.

Later, they incorporate the *not* into a sentence before a verb:

- (35) a. Daddy not come.  
b. Mummy not play.

Finally, the full complexity of the English verbal system is grasped, leading to the correct adult forms:

- (36) a. Daddy didn't come; Daddy hasn't come; Daddy won't come.  
b. Mummy didn't play; Mummy isn't playing; Mummy mustn't play; etc.

As with many other cases of language learning that we have seen, the sentences in (33)–(35) could not have been directly imitated from anything the children had heard around them, since they are ungrammatical in adult English. The assumption that the child's linguistic de-

velopment is predetermined from birth to follow certain patterns would provide an attractive account of the clearly parallel linguistic development shown by all normal children.

The assumption that all languages are cut to the same pattern—that is, that there are *linguistic universals*—places an extra constraint on the search for linguistic rules. We have already argued for a distinction between accidental and significant generalizations, the latter being those that are psychologically real. We have also suggested that it is much easier to show that a proposed generalization is *not* significant than to show that it is. If there are linguistic universals, however, the domain of data that can be considered in formulating rules becomes much wider. First, a linguistic theory which incorporated explicit claims about the universal features of language would automatically disallow certain proposed rules as inconsistent with the known properties of language. Second, and more important, it would permit certain facts from other languages to have a bearing on—say—the formulation of the rule of relative clause formation in English, in the following way. Even though more than one possible generalization might be consistent with the facts of English, when relative clauses in other languages were considered, it might turn out that only one possible generalization was consistent with *all* the facts. If such a generalization could be found, and if it was a type permitted or favored by the theory of linguistic universals, then, within the framework we are considering, we would be justified in concluding that it was correct for English too. This is not, of course, to say that languages, like humans, do not have their own linguistic idiosyncrasies. However, it does say that even these idiosyncrasies will fall into universal patterns: languages do not vary without limit. . . .

. . . We have tried to give the following picture of a human language. It is a rule-governed system, definable in terms of a grammar which separates grammatical from ungrammatical sentences, assigning a pronunciation and a meaning to each grammatical sentence. This grammar is, in a minor sense, a construct of the linguist, in that linguists do attempt to construct grammars. However, in a much more important sense it is the construct of the child who has learned it, and the adult who knows it. We have expressed this as the claim that grammars are psychologically real. Each person has his own grammar—which is likely to change through time, and to differ in certain respects from the grammars of other speakers of the language. However, every grammar will have certain things in common with every other grammar, as a result of genetic constraints on the ability of human beings to learn languages. We have expressed this as the claim that all languages have an innately determined and universal structure. . . .

## FOR DISCUSSION AND REVIEW

1. According to Smith and Wilson, what are the two functions of the grammar of any language?
2. What arguments support the claim that human language is "rule-governed"? Give some specific examples of such arguments.
3. Drawing on your own experience, list three examples illustrating the fact that "no two speakers of a language possess exactly the same set of rules."
4. Explain the significance of the observation that children "construct rules for themselves" and that, in so doing, they often get the rules "wrong."
5. In claiming that grammars are "psychologically real," linguists are also claiming that "speakers know grammars." In what sense do people "know" their own grammars?
6. Explain the difference between "accidental generalizations" and "significant generalizations." In principle, how can you tell which is which?
7. What kinds of data support Noam Chomsky's argument that human beings are "innately disposed to learn certain types of language"?