

## THE SOUND OF THE BELL

Dwight Bolinger  
Harvard University

In his instructive "Transformational grammar and the native speaker: some elementary issues," Kivung 2. 2-36 (1969), Andrew Pawley makes a number of interesting comparisons between English and Karam, which raise again the question of how relevant the structure of one language is to understanding the structure of another. On one hand it is always useful to compare, because things overtly marked in Language A may be covert, and hence overlooked, in Language B— this is the merit of a heuristic. On the other hand, if there is such a thing as a universal deep structure, then anything present in A is potentially present in B; it may have been blocked, but if it is present the two manifestations will not be incommensurate at that level. Discovering something about A is in a sense the same as discovering it about B.

The argument can be taken along traditional generative lines, by comparing syntactic structures. Or it can be taken through generative semantics, in which meanings are viewed as an extension of structure below that of the lowest arrangement of lexemes. Pawley's comparisons are syntactic. I shall keep to that point of view, but this does not mean that a different picture might not be drawn if the other were adopted.

Pawley has not claimed any relationship between Karam and English in a universal deep structure sense. My criticisms are directed at the temptation to assume that there may be some such connection. After reviewing Pawley's argument I shall offer some evidence that the key example, the English verb to hear, fails to relate English deep structure to Karam surface structure, as claimed. Here (30-31) is what we are told about to hear:

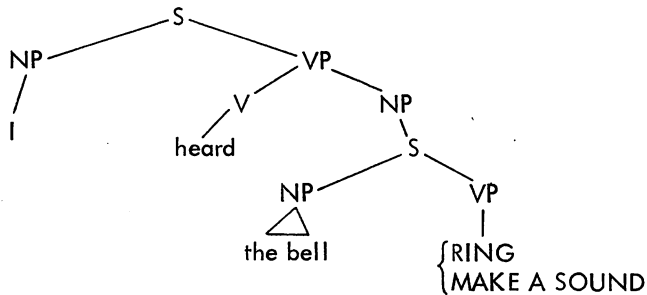
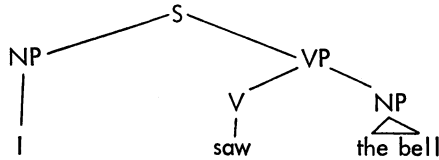
"In English, the two utterances:

1. I saw the bell.<sup>1</sup>
2. I heard the bell.

are superficially alike. They both have the structure NP-V-NP, with the second NP (the bell) functioning as the direct object of the verb. But in fact (1) and (2) are understood quite differently, and therefore must be assigned different deep structures. (1) involves the understanding that I saw an object which was a bell. (2) involves the understanding, not that I heard an object, the bell, but that I heard the sound made by the bell - I heard the

bell ring. The verb hear always implies a sound, and in the absence of any other indication, the hearer assumes the sound to be the characteristic noise made by the object named; for example, I heard the singer (sing), I heard the thunder (thundering), I heard the announcer (talking, announcing), I heard the dogs (barking), I heard (the chopping sound of) the axes.

"The distinct meanings of (1) and (2) can be represented by the structures:



(where RING and MAKE A SOUND are not actual lexical items, but represent the idea of the sound made by the bell). In the surface structure the idea that the sound of the bell is what is heard is obvious from the context; consequently the kind of sound made need not be named unless the speaker wants to say something special about it. In transformational terms this is described as an optional "deletion". That is, the object of hear in (2) is represented in the deep structure as whatever is common to the bell rings, the ringing of the bell, the sound made by the bell and other paraphrases. In converting this to a surface structure, a transformational rule "drops out" items which can be understood from the context. In this case the omission of the item is not obligatory, that is, it is possible to realize the deep structure as I heard the bell ring, I heard the ringing of the bell, etc. as well as in the form I heard the bell."

The effect of this is to deprive hear of the semantic feature 'sound' and to turn that feature into a selectional restriction. To hear "means" only 'to perceive', but is not used unless some lexical equivalent of 'sound' is present in deep structure. In the lexicon, to hear would have to be marked for this requirement much as to inhabit is marked

as requiring a locative, the main difference being that inhabit demands its extension in surface structure whereas hear is additionally marked for its optional deletion.

We must ask first whether the two sentences cited by Pawley really are understood differently. Of course see is at a disadvantage when the object is bell, since bells are made to be heard. Suppose we use this pair instead:

I heard the bell.

I saw the flasher.

Flashers serve as traffic warnings and are meant to be seen; see can now compete on equal terms. And I think that if it is claimed that one cannot hear a bell but can only hear the bell sound, it can also be claimed that one cannot see a flasher, but can only see the flasher flash. In the absence of any other indication, it would be the flashing that one would see, though of course one might see other aspects of it on inspection; similarly a listener back in 1752 might have heard the Liberty Bell crack. So it would appear that if "the verb hear always implies a sound", it is also true that "the verb see always implies a sight".

This line of reasoning implies that Pawley has dealt properly with to hear but assigned too little structure to the verb to see. Both Karam and English have an underlying verb corresponding to--say--radiate or reflect, and both languages permit its deletion. But it can also be argued that the verb to hear has been assigned too much structure, and that in positing such an underlying verb we have been misled by our powers of infinite regress: do we hear the bell, or the ringing of the bell, or the sound of the ringing of the bell, or the acoustic vibrations of the sound of the ringing of the bell, or the nerve response to the acoustic vibrations of the sound of the ringing of the bell? The ability to interpose any number of concepts along a casual chain is a useful resource in interpreting linguistic data, but it has to be verified by the evidence.<sup>2</sup>

It is easy to be misled in this way because of the vastly greater number of simple I see X constructions by comparison with I hear X constructions. One can say

I see the wastebasket.

I see the house.

I see the patio.

whereas

?I hear the wastebasket.

?I hear the house.

?I hear the patio.

are hard to interpret except in a context like

I hear the house creak at night.

But this hardly means more than that visual stimuli are more nearly ubiquitous than auditory ones. We simply assume that everything is visible -- and this sheds an interesting light on cultural history. Somehow, at an early stage, human beings managed to hit upon a causal chain where hearing was concerned. First, as the more exceptional phenomenon, it probably aroused more curiosity; second, the vibrations could be seen and felt as well as heard--a kind of confirmation that was lacking with vision until very recently. Vision remains the sense medium into which we try to translate all the others. The widespread synonymy of 'to see' and 'to comprehend' is no accident. But this is beside the point. It is not up to linguists to decide whether objects can be apprehended directly, and we must either find linguistic reasons for the analysis or abandon it.

The structural evidence in English is that subordinate sentences can be embedded after practically any verb of perception, and that it makes no difference whether the noun object to which the embedding is attached refers to a thing or to a sensation--the structure does not distinguish between emitter and emission:

I saw the candle shine.

I saw the light (of the candle) shine.

I heard the bell ring.

I heard the ring (of the bell) echo.

I smelled the skunk stinking up the yard.

I smelled the stink (of the skunk) reeking about the premises.

I felt the breeze tickle.

I felt the itch tingle.

(There are even cases where the emission can be provided with an embedding but the emitter not. Thus a collision is a coming together of two bodies, not a sound, yet while we can say

I heard the collision.

we cannot say

\*I heard the collision crash (echo sound).

and still we can say

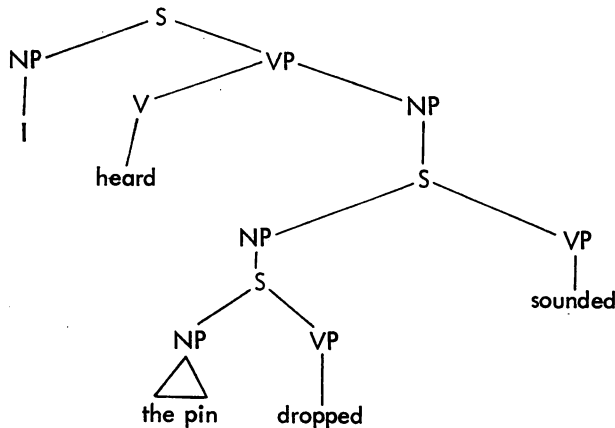
I heard the crash echo.)

It also makes no difference whether the embedded sentence itself refers to the stimulus or to something altogether unrelated; syntactically the two sentences

I heard the bell ring.

I heard the pin drop.

are identical. If the reasoning about underlying structure is applied to the second of these, a third layer is required: I heard the sound of the dropping of the pin--



The fact of embedding is therefore no support for the notion of an underlying verb to sound. Its justification is philosophical. And for the evidence from Karam to bear on it one would have to show that that language does not allow structures like I heard the man come in but requires something on the order of I heard the sound of the coming in of the man.

Assuming now that Pawley overloaded to hear structurally but underloaded it semantically, let us see whether there are indications that I heard the bell means exactly what it says, with 'sound' contained in hear and not in the structure surrounding it. The active voice, unfortunately, is misleading; in

"How did you know there was a bell in the tower?"--"I heard it."

"How do you know he asked for you?"--"I heard him."

we are unable to tell whether one, both, or neither presupposes an embedded sentence:

I heard it ring, I heard him ask for me. But the passive distinguishes:

"How was it known that there was a bell in the tower?"--"It was heard."

"How was it known that he asked for you?"--"He was heard to."

This evidence suggests that when hear actually does involve a deep structure with a complementary infinitive, the passive will make it explicit.

If we compare the last example with

"How was it known that the bell rang?"--"It was heard (to)."

we find that the to can now be omitted with much less strain. But that is in the nature of hearing people and hearing bells. Without the to, neither answer is directly responsive to the question, but in the second the information called for is more readily available by inference. Here the "typicalness" of sound to source noted by Pawley is relevant. All the same, the native speaker intuits a difference between It was heard and It was heard to, which reflects the fact that in English the source of a sound, and not necessarily the sound itself, may serve as underlying object of to hear.

It is comforting to find that sometimes things are really as they seem, and not but the cloudy manifestations of a mystery that only Linguists can illuminate.

#### FOOTNOTES

- 1 The examples are renumbered for convenience.
- 2 An article on "Semiosis and infinite regressus", by William Wykoff, is announced for Semiotica. It will be interesting to see whether it deals with this potentiality.