

Fig 7 Elementary Verbal Relations: Abbreviated Figure

\*Form is what the person says, writes, signs, finger spells, etc.

### Figure 7—Supplement Part 1

Among these verbal relations, some that come under "point to point correspondence" actually expand Skinner's original work. Why? Because, to keep things simple, he mostly used auditory (stimulus) / vocal (response) examples. But the whole analysis applies equally well to stimuli and responses in the other sense modes.

For instance, when a stimulus is an *auditory* **evocative** [see Fig. 7] stimulus, and the response is *vocal* (with a reinforcing consequence mediated by other people's behavior, as when they provide approval), AND when the form of the response has point to point correspondence **and** formal similarity with the stimulus, then Skinner used the term "echoic." Change auditory to *visual* and vocal to *written*, and you have "copy text." Or change to "making a sign [the response] that you see someone else make [the stimulus]" and you have "mimetic" (i.e., an "echoic" *in sign language*).

# Figure 7—Supplement Part 2

[*Evocative* replaces the somewhat agential *discriminative*.] **Or**, what about point to point correspondence *without* formal similarity?

For instance, when a stimulus is a *visual* evocative stimulus like something written, and the response is *vocal* like English reading (with a reinforcing consequence mediated by other people's behavior, as when they provide appreciation\*), THEN *the form of the response has point to point correspondence, but lacks formal similarity, with the stimulus*... For this we use the term "textual."

Change visual to *auditory* (stimulus) and vocal to *written* (response) as in English (...), and you have "taking dictation."

We will soon see many examples of all of these relations.

\*People can provide their own appreciation, when they hear their own correct response, by virtue of also being a listener...

#### Fig 8 Elementary Verbal Relations (common terms)



1Form is what the person says, writes, signs, etc.
2Speaker is the producer of the vb: speaker, writer, signer, etc.
3Response product is the stimulus produced by the response.



1 Form is what the person says, writes, signs, etc.
2Response product is the stimulus produced by the response
3Complex issue: some R-products of another's vb are not verbal
4Pt to pt correspondence: parts of R controlled by parts of S
5Formal similarity: R-product and S<sup>D</sup> are in same sense mode and resemble each other (look alike, sound alike)

"Verbal stimuli" is a tricky concept to define. The problem is this: We start by saying that "a verbal stimulus is a stimulus that results from someone else's verbal behavior." But people's verbal behavior has *more* than just verbal characteristics; if we forget this, then those characteristics may mislead our analysis.

For example, when someone says "tiger," the sound that is produced *is a verbal stimulus* for others because the person said "tiger" as a result of a verbal relation (such as seeing a tiger [a tact relation], or seeing the word "tiger" [a textual], where the typical reinforcing consequence is some attention provided by another person). Correct so far. BUT what if a person in a group said "tiger," as a tact, **loudly?** Or *softly?* Loudly, because a tiger lunged at the group. Or softly, because the person spotted a tiger in the distance. Such controlling variables, here controlling intensity, are non–verbal, yet they are *inseparable* from the saying of "tiger." (More...)

*Tricky!* Yet for verbal behavior analysis, we can generally ignore the non–verbal characteristics of verbal stimuli. (In a sense, the same holds for verbal responses, such as the tiger tact in that example, but the non–verbal characteristics of verbal responses generally cause less confusion...)

Another example: A "No Smoking" sign is a verbal stimulus. But it can be BIG or small, plain or *fancy*, and in some (Any!) color. These are all non–verbal characteristics...

*Moving along:* we will now take another quick look at two verbal characteristics sometimes shared by verbal stimuli and verbal response products: "*point to point correspondence*" and "*formal similarity*." Regarding these, remember that, while a verbal stimulus is the product of a previous verbal response, verbal responses can occur *due to that verbal stimulus*, and these verbal responses produce products that can be verbal stimuli...

*Point to Point Correspondence:* You can break the stimulus into parts, and you can break the response product into parts. In some verbal relations, the stimulus parts correspond to the response product parts on a part by part basis. This is called *point to point correspondence*.

*Example*: A student hears you *say* to write "cat" and so *writes cat*. The parts of the auditory stimulus "cat" (the product of your saying "cat") are "c," "a," and "t" (as phonemes). And these correspond to the parts of the product of the student's *writing* response: the written "c," "a," and "t" as "cat." (This verbal relation is called "Taking Dictation" and has no "formal similarity." What's that? That comes soon.)

*Non–Example*: You hear someone say "dog" and you say "cat." Each has parts (even the same number of parts) but the parts do not correspond. The whole response ("cat") is to the whole stimulus ("dog"), not to the parts or phonemes.

*Formal Similarity:* If the stimulus parts correspond to the response product parts on a part by part basis (i.e., there is *point to point correspondence*), AND if the stimulus parts are physically structurally similar to the response product parts, then the stimulus and response product are said to have *formal similarity* also.

*Example*: You ask a student to "say cat" and the student says "cat." The auditory parts of the verbal stimulus that you provided the student ("c–a–t" as phonemes) are structurally similar to the parts of the product of the student's vocal response ("c–a–t" as phonemes) so not only is point to point correspondence present but also formal similarity. (This verbal relation is called "echoic.") If the student saw "cat" and then wrote "cat," formal similarity would still be present (the verbal relation called "copy text")...

*Non–Examples*: Hear "cat," write "cat"; see "cat," say "cat"...

