

## Figure 25—Applications Part 1

While many more complexities and implications await our exploration, now is not the time—especially without more background—so, instead we turn to the broadest implications category. Here, the implications are in terms of *applications*: *What are some things that this analysis of verbal behavior implies about HOW to teach foreign languages?*

When I taught in China in 1979, and again in 1990–91, Chinese faculty teaching English repeatedly assured me that:

Everyone involved in teaching languages in China knows Chomsky's theories but side-steps them as they are not readily applicable in language teaching.

In contrast, I guarantee that science-based applications to language teaching flow readily from VB analysis, as we shall see.

And note that most of the applications I will describe are simple ones—again, as our time has been insufficient to cover the background necessary for the more complex ones...

## Figure 25—Applications Part 2

In fact, most of the applications I will describe arose from the discussions that occurred, during the latter part of my Verbal Behavior class in China in 1991, among graduate students who were mastering the basics of VB analysis (most of whom were English language teachers)...

Traditionally, one viewed language structurally (e.g., grammar, syntax, vocabulary). So foreign language teachers focused on teaching those things, often in the context of reading. Obviously, that *can* work, but we must *empirically* ask: *What can work better?*

Perhaps the most basic implication of VB analysis applied to foreign language teaching is this: If you want real fluency (a result of effective teaching), and you want it faster (more efficiently) than traditional methods can provide, then try teaching second (and third, etc.) languages *using the same methods as are used to teach native language!* **However,** —>

## Figure 25—Applications Part 3

[... Try teaching second (and third, etc.) languages *using the same methods as are used to teach native language!*] **However,** *coordinate the methods* rather than using them in the same uncoordinated manner used in native language teaching...

After all, verbal communities teach native language to quite fluent levels to new speakers, although it takes years of round-the-clock efforts to do so, using methods that are appropriate but accidentally applied (i.e., uncoordinated, not applied by design), with more years *later*, in school, covering grammar, syntax, reading, etc.

So, if foreign language teachers also use similarly appropriate methods but in scientifically informed, coordinated ways, then the results should be similar, and probably with even less time being needed for instruction than was needed for native language teaching...

## Figure 25—Applications Part 4

And, as we shall see, *making use of the verbal communities* that automatically exist in places where languages are taught (especially where they are *systematically* taught as in college language departments)—making use, by organizing these communities—*is a major component in coordinating methods that build fluency*, and that we will explore...

However, if foreign language teachers are to use the methods associated with native language acquisition, then we should review at least some minimal material on a few of the most relevant aspects of fluent native language acquisition:

✱ *All of the behaviorological principles and practices that I listed at the start (see “Background Part 5”), and more, play roles in native language acquisition (roles that we lack the time to delineate here).*

## Figure 25—Applications Part 5

✦ Native speakers learn the verbal operants in a fairly typical order, partly due to the reality that each type of verbal operant is a separate repertoire, as we have seen, and so needs to be taught / learned separately before it can be available for combination with, and recombination in, more complex (and more common) verbal response forms. So *the order in which native speakers learn verbal operants is an order worth following in teaching foreign languages.*

✦ That order is: (a) *Echoics*, (b) *Mands*, (c) *Tacts*, (d) *Intraverbals*, and (e) all those that are more complex and so are beyond the scope of this presentation, including *Extensions*, *Autoclitics*, *Audience Relations*, etc. For example, a child learns to say “cookie” as an Echoic in imitation of others saying “cookie,” before learning to say “cookie” as a Mand due to an Establishing Operation, before learning to say “cookie” as a tact when the child sees a cookie, before learning to say “cookie” as an intraverbal when someone asks “What goes with milk?”

## Figure 25—Applications Part 6

✦ *And*, instances of learning all those repertoires, especially learning them in that order, overlap with themselves and with learning Codic and Duplic operants like reading (which can be Textual—for alphabetic languages..., or Intraverbal—for ideographic languages...) and writing (as Copy Text, or Taking Dictation—someone else's *or your own*).

✦ *Interim summary*: Native speakers learn to talk fluently before learning to read or to write, and before learning grammar and syntax, etc. Verbal Behavior Analysis supports the likelihood of substantial fluency benefits accruing to foreign language learners when they follow the same sequence.

*And now*, ALL those aspects of fluent native language acquisition lead us to some concrete suggestions / examples of coordinated methods for foreign language teaching...

## Figure 25—Applications Part 7

*Here are some concrete suggestions to research more fully:*

✿ With each category of verbal operant relations, start by teaching *single* words and gradually *shape* more *complex* verbal responses. For example, start teaching tacts by having students tact objects or events (from seeing the real thing or from seeing pictures, etc.) using single words like “book” or “flying.” And gradually teach the same whole range of tacts using more complex responses like “It is a book” or “That is a book.” (And even gradually add tacts of all possible characteristics, such as “That *green* book was / *not* / *long*, but it was *hard*”—which takes us well into the more complex verbal operants!...).

✿ Teach Echoic response repertoires through imitation and repetition. Your research experience will teach you how much of an echoic repertoire needs to be taught before moving on to mands.

## Figure 25—Applications Part 8

✦ To teach Mand response repertoires, generally begin by making use of already organized settings and situations in which manding normally occurs, such as games, shopping, and meals (both informal and formal), etc. If your access to these settings and situations is insufficient, then organize your own real ones, or have your students pretend them in physical space, or (last resort) in imagination. Also, have the students deliver the actual characteristic reinforcers for each other's mands, or have them explicitly pretend to deliver these. *But note:* (a) The closer the settings and situations are to being real—including under real establishing operations (like food deprivations for meal settings)—the more likely the students are to learn more mands more quickly and more fluently. And (b) the more accurately you can arrange for the characteristic reinforcers to be delivered for the students' mands, the more likely, again, the students are to learn more mands more quickly and more fluently.

## Figure 25—Applications Part 9

✦ To teach Tact response repertoires, use methods similar to those used for teaching mands. That is, hold up real objects, or point to characteristics of objects, for students to tact. Or point to actions or events so that students can tact them. *For example*, point to a blue bird flying from a small tree with a few pine needles to a big tree with many green leaves (and perhaps ask [i.e., mand information about] “What happened?”); then have students tact as many things as possible from that. (Answer: at least three things, one bird and two trees, and at least ten characteristics including blue and flying [bird], small [tree] with few pine needles, and big [tree] with many green leaves.) Reality is just *full* of things and situations and events and characteristics that your students can tact... *Also*, if you want to teach some particular tact that is unavailable in reality when you need it, you can certainly use a picture, drawing, photograph, or video clip instead... (And *gradually* build great complexity!)

## Figure 25—Applications Part 10

✿ Similar suggestions can be made about teaching Intraverbal response repertoires, and the response repertoires of the other simple and complex verbal operants (but we have not the time to discuss them today...). But spend several years, perhaps in primary school, teaching these verbal operant repertoires *and gradually helping students put them together vocally into fluent spoken interactions between them...*

✿ Move on, perhaps in middle school, to “reading,” and “writing,” and grammar (etc.), but *only* after the students have mastered adequate fluency in the echoic, mand, tact, and intraverbal repertoires. (How much fluency is adequate? Again, your research experience will tell you this, from classroom measurements to standardized test scores and the relative successes of your graduates...)

✿ Then in college you can polish all these repertoires together toward the levels of fluency you have always dreamed about!