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FROM TECHNICAL JARGON TO PLAIN ENGLISH FOR APPLICATION

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Background

The term ***behavior therapy*** was coined to avoid objections to human research when we established the first human operant conditioning laboratory in 1953. We felt that names like "Experimental Psychology Laboratory," "Human Operant Laboratory," or "Experimental Analysis of Behavior Laboratory" might threaten our tenuous existence in the basement of Metropolitan State Hospital, Waltham, Massachusetts. We arrived at the name "Studies in Behavior Therapy" by generating a list of plain English words that accurately and positively described our mission. I made up eight prospective names by combining high-ranking words from the list. We had patients, parents, and physicians rank the prospective names by which best and least fit what we planned to do and a second ranking from least to most offensive. From these rankings I chose "Studies in Behavior Therapy." I then submitted our new name to Harry C. Solomon and B. F. Skinner, the original program directors, who approved it for the name of our grant proposals and laboratory (Lindsley, Skinner, & Solomon, 1953). This has been chronicled as the first use of the term ***behavior therapy*** (Martin & Pear, 1983, p.447).

Three status reports were submitted to the Office of Naval Research under "Studies in Behavior Therapy." By January 1955, our laboratory was well established, and we changed its name to "Behavior Research Laboratory" (Lindsley, Skinner, & Solomon, 1955). This was the first use of the term ***behavior research.*** I remember when that name appeared in the Boston telephone book callers would often exclaim, "Do you mean that you do research on behavior?" We would answer joyfully, "Exactly!" Their reactions confirmed that we had the right name for our laboratory. This experience convinced me of the importance and the power of naming for scientific laboratories, methods, and tools.

"Human operant" and "experimental analysis of behavior" are examples of technical jargon. They may mean the same thing to experts, but mean different things to most people. "Behavior therapy" and "behavior research" are plain English and mean the same thing to most people. As Skinner stressed in his book on verbal behavior, you should select words for their effects on the listener, not for their effects on the speaker (Skinner, 1957).

But as we all know, Skinner sometimes chose words that meant different things to other people than they did to him. He never checked out what his technical words meant to most people. It was left for those of us who applied his free operant principles and methods to struggle with abrasive jargon like "manipulate," "control," "subject," and "intervene," which turned users away. Even worse, some jargon, like "negative reinforcement" and "radical behaviorism," imply to most people the exact opposite of their technical meaning.

Since founding the Behavior Research Laboratory, I have spent 38 years selecting words to interpret our technical jargon correctly to other scientific disciplines. Since founding Precision Teaching at Kansas University Medical Center in 1965, I have spent 25 years translating our technical jargon into plain English for use by public school children, parents, and teachers.

Purpose

This article summarizes some of the procedures we used in translating our technical jargon to plain English over those years. It lists many of the translations we developed in applying behavior analysis to public education. Several acronyms and two tests

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found useful in training applied practitioners are also shared. These should provide examples to those attempting to apply behavior analysis in other areas, but who are still trying to do it using our technical jargon.

Technical Jargon

Webster's unabridged dictionary has three meanings listed for jargon: (a) chatter or twitter especially of a bird or animal, (b) confused unintelligible language, and (c) technical terminology or characteristic idiom of specialists working in a particular activity or area of knowledge. Webster's meanings are listed from the most popular to the least popular meaning. Therefore, it might follow that when we go to the public with the third meaning, we sound to most listeners like twittering birds.

However, technical jargon seems to be a necessary step in developing a technology or a profession. In fact, some use the presence of a technical jargon to determine whether an approach or method is a true technology (Swenson, personal communication, November 16, 1990). It could be that a technology has only a technical jargon, but that a profession has both a technical jargon and a set of plain English equivalents to use when translating methods or results to patients and clients. The development of accurate, comfortable application names may be one of the most important steps in moving from a technology to a profession.

The pharmaceutical profession has long had both technical names and trade names. For example, hexylresorcinol is the technical name of the active ingredient of Sucrets®, and attapulgite is the active ingredient in Kaopectate®. The medical profession has also had technical names and names they used with their patients. For example, the medical term *iatrogenic* means "a physician caused it." The medical term *idiopathic palsy* means "your foot won't move, and I don't know why."

Manufacturing corporations use working terms in developing products, not only for security, but more importantly, because they haven't had time to do the market research required to choose the final product name. I have heard that Ford's code name for a new car design was "Banshee." Ford's marketing research found that in Gaelic folklore a banshee is a female spirit that shrieks outside a home warning a family of the pending death of a member. Marketing changed the name to "Mustang." Apple® computers used the working term "E. T.," after the extraterrestial alien of the movie, for a new portable product they never brought to market. Apple often used first names like Sara, Annie, and Twiggy for projects. Lisa was never intended to be more than an interim internal code name, but it stuck and they went to market with it (Young, 1988).

Plain English

In the late 1960s, it became clear to those of us developing Precision Teaching that the clearest terms were the most basic plain English words. This became very apparent when we tried to describe learning channels accurately. The clearest description we could find was an input subject-verb-object combined with an output subject-verb-object. For example, "Jane, see the capital letter 'A' and say the letter's name." This is a see/say learning channel, which is different from another see/say channel such as, "Jane, see the capital letter 'A' and say the letter's sound." A third different see/say learning channel might be, "Jane, see the lower case letter 'A' and say the letter's sound." Staying with letters, we could change the channel even more to "Jane, see the capital letter 'A' and touch the same letter on this sheet." This would be a see/touch learning channel. These plain English descriptions were more exact and less confusing to us than any of the technical modality jargon from speech and language descriptive and teaching systems.

For us, plain English was one- or two-syllable words in active voice and present tense. It was best if the word could easily serve as a noun, adjective, or verb. Such words tend to be the words of early childhood. I think these basic plain English words carry more accurate meaning because they are the words that we have used most. We all are fluent listeners and speakers with these basic words. We instantly know their meanings without having to think about them. And, being old friends, we are comfortable with them.

We were very much into basic plain English in the early 1970s. So much so that Pat McGreevy actually printed and passed out white T-shirts with "Plain English" lettered in brown. He titled his book *"Teaching and Learning in Plain English"* (McGreevy, 1981). His company, "Plain English Publications," first published the *Journal of Precision Teaching.* The first of seven criteria for accepting manuscripts in the journal was "1) be written in plain English" (McGreevy, 1980).

Translation Procedures

This section describes the steps in the procedures that we finally used in developing plain English application terms for Precision Teaching.

1. Choose discovery label. The moment you discover a new process, procedure, or relationship, give it a discovery label so you know where it is and can find it again. Don't hesitate to find a better word, just arbitrarily label it, put it in its file, and go on with your other tasks. But remember, this is only a discovery label. Don't fall in love with the label, just use it for filing. Also remember that a separate task is to find a better label, but put this task on the back burner, always listening for a better word from your workers and technicians.

2. Accept technical jargon word. If you did not discover the process, procedure, or relationship, but inherited it from your parent technology, then you start with the technical jargon word instead of your discovery label. In this case, remember that the word may have been fine for technology, but could be terrible for application. So, treat your jargon as labels that you might have to refine into plain English in order to communicate accurately important facts to your practitioners.

3. Select working term. When you locate a better word than your discovery label or your jargon word, change the name on your files and use the new working term as you advance further into application. Begin to survey practitioners and check with users to see how rapidly and accurately they use the new word. Don't hold out for the perfect plain English word. You may never find it. Just be happy with getting closer to your application word goal. You know your working term isn't the best word, but you know it's better than the discovery label or technical jargon.

Prepare yourself to change the working term when the almost perfect term is found. Don't stop the word search, because if something is lacking, it proves to you that a better word can be found.

4. Listen to practitioners talking to each other. An excellent source of closer working terms, and, in some cases, your final application word, is the word used by a practitioner who has learned the procedure and who is teaching the procedure to another practitioner who hasn't learned it yet. We first heard "pinpoint" by eavesdropping on Ed Sebastian telling other fathers of retarded children what their first step should be in improving the behavior of their children. It is also how we learned to describe the Standard Celeration Chart by putting the dot where the day line (which goes up and down) crosses the frequency line (which goes across the chart). We listened to 5-year-old Stephanie Bates teach charting to her 5-year-old friends (Bates & Bates, 1971).

5. Resist investing time and money in working terms. Resist printing large numbers of high-cost workshop materials. Even though they are cheaper by the gross, they lock you into imperfect working terms. Hasty publication in journals has the same effect, and application books containing only technical jargon or working terms are disastrous. You have so much invested in them you can't possibly render them obsolete by changing the terms only a year or so after they are published.

Pavlov was burned by hasty report at the annual meeting of an international physiological society. He announced that he had found the inheritance of acquired characteristics in his conditioned animals. Later, he found out that one of his students had faked the data. Pavlov was furious, but did not publicly recant at the next international meeting of the society. From that day forward, however, he resolved to let discoveries "mature" for 5 years before publishing them.

Remember, working terms are working terms. Use them, but don't abuse them.

6. List six to eight current alternatives. Keep a folder with a running list of alternative terms for

your application word search. Put all your information about the search in this file. Upgrade the list as frequently as you wish. Keep the back versions and make notes of why you upgraded. Was it a hunch, a suggestion, a survey, or the ultimate test of usage by practitioners?

7. Search a good thesaurus for synonyms. Search several thesauri for synonyms of your working terms. Sometimes, by luck, you find a word closer to your goal than the one you now use. Change working terms. You are getting closer to pay dirt. No, you're not there yet, but closer! Lock in your current position with your new working term and go on with your search.

8. Check the meanings in an unabridged dictionary. Check the meanings in an unabridged dictionary for each word on your list of alternatives. Often, the first listed meanings are the ones that most people believe; so a good dictionary serves as a crude frequency of usage estimation. Also, check the breadth of the meanings listed under each word in the dictionary. The breadth of meanings crudely indicates how widely different your audiences reactions will be to your words. A word with a narrow breadth of meanings is more accurate than a word with a wide breadth of meanings. For example, there are 13 different meanings for "rate" and eight different meanings for "frequency" in Webster's unabridged dictionary (Gove, 1961). Number per unit time is the sixth meaning listed under "rate" and the fifth listed under "frequency." However, all 13 meanings for "rate" are different, only one having to do with how frequent something is—a very broad set of meanings. All eight of the meanings under "frequency" have something to do with how frequent something is—a very narrow, highly accurate set of meanings. Clearly "frequency" is the word with the narrowest, most accurate set of plain English meanings.

9. Instinctively agree on application word. When you find the right word, you and others know almost instinctively that it is the right word. In a related situation, when searching for plain English equivalents of jargon pairs, you often get a word for one of the pair that is perfect. You and others can feel it! But the word for the other member of the pair doesn't quite fit as well.

A current working example is the jargon pair of radical behaviorism and methodological behaviorism. Skinner reasoned that the kind of behaviorism coming directly from John Broadus Watson and denying the presence of thinking, feelings, and consciousness was methodological. Watsonian behaviorism methodically ignored feelings and thoughts. It denied their existence. It said, "there is only behavior, there is nothing else." A better term may have been "orthodox behaviorism" (Catania, 1991). My recent plain English translation is "nothing-else behaviorism." Nothing-else behaviorism is an almost perfect translation for methodological behaviorism. This is because practitioners accurately pair "nothing-else behaviorism" with "those who say there is only observable behavior, nothing else."

Skinner reasoned that his kind of behaviorism, which departed from orthodox Watsonian (nothing-else) behaviorism and did not deny the presence of mental events, should be termed radical behaviorism (Skinner, 1974). Here Skinner used Webster's "departure from the usual" definition 3a of radical (Gove, 1961). Most practitioners, however, use Webster's 3b meaning, "disposed to make extreme changes in existing views," when trying to understand Skinner's term. Using this meaning, practitioners match "radical" with "those who say there is only observable behavior, nothing else," which is the opposite of Skinner's intention.

In 1990, I told practitioners that there is a kind of behaviorist who does not deny the presence of inner events, but who, for now, focuses on analyzing outer behavior. Later, when there is less pressure to solve the urgent problems of outer behavior, there may be time to develop methods to analyze inner behavior experimentally. I said we can call this kind of behaviorist a "for-now" behaviorist. We found our practitioners matched "for-now behaviorist" with "does not deny inner behavior" with high accuracy. But, the term didn't fit "radical behaviorism" quite as well as "nothing-else behaviorism" fit methodological behaviorism. For this

reason we kept it as a working term until we found a closer plain English translation.

Still searching for a better plain English word than "for-now" behaviorism, I focused on a specific problem with the term. "For-now" doesn't acknowledge that Skinner's new radical behaviorism not only accepted thoughts and feelings, but also put their causes in the environment along with outer behavior's causes. This train of thought suggests the name "environmental behaviorism," which is closer to our perfect plain English goal than "for-now behaviorism."

It is interesting to speculate on what would have happened if Skinner had called his approach "environmentalism." You measure behavior by recording its effects on the environment. You change behavior by changing its immediate environment. Behavior is controlled by its environment. Move to another environment and the behavior is weakened or is absent. Behavior is determined and selected by its environment. Perhaps the misunderstandings and aggression that we have experienced towards behavior analysis would not have occurred against "environmental analysis."

10. Test application word accuracy with practitioners. The accuracy of your plain English translation can be determined by asking audiences of workshops, lectures, and classes to pair the plain English word you've chosen with its best meaning. This can be done easily just by projecting the word and the alternative meanings on an overhead projector and asking the audience to decide by a show of hands for the correct meaning. Spontaneous definitions, which are often better tests, can be collected by passing out cards on which audiences anonymously write their chosen meaning. The cards can be collected, sorted, and tallied during the workshop coffee break, at the the end of the lecture, or after class.

The only real test is how well practitioners use the word in their work, which may be different from how they may have decided on its meanings. Only about 20% of the groups I tested had radical and methodological behaviorism correctly matched with their Skinnerian meanings. When tested with the plain English equivalents of "for-now" and "nothing-else" behaviorism, about 90% of the groups had the correct meaning. The mismatchings occurred with "for-now" behaviorism.

Translations Made in Developing Precision Teaching

About five pages of an article I wrote in 1971 described the translations we had made from free operant laboratory jargon to plain English in developing Precision Teaching up to that time (Lindsley, 1971). We do not have the space here for that degree of detail, so I will merely list the major translations along with the year in which we selected them (see Table 1). Remember that these translations did not come easily. In many cases several years went by before we noticed that a particular jargon term caused communication problems. Then we had to screw up our courage, locate a new plain English word, and test to see that the new word produced the desired listener response. This was a courageous act because of the cost involved in changing all our printed materials and admitting to the people we trained that we taught them an imperfect thing. The more materials you have and the more people you have trained, the more this upgrade costs. Finally, when the new word is in place, you are punished by your old friends in the technology for abandoning their jargon, rather than "selling it" to the public. All this takes about three times the amount of time and money that you would expect.

Application Acronyms

When teaching practitioners to do things, acronyms are often useful. They help the person remember and sequence the steps in a chain of performances. They can help in remembering lists of features. They also can help name a procedure. Here I share several successful, tried and true, well-known acronyms as examples of making steps, lists, and procedures clearer in application.

1. PRICE—Pinpoint, Record, Intervene, Chart, and Evaluate (Lindsley, 1971). This acronym se-

Table 1
Translations from Technical Jargon to Plain English. Numbers Indicate the Year in which They Were Selected

Technical jargon	Working term	Plain English application
human operant laboratory	53 studies in behavior therapy	55 behavior research laboratory
behavior modification	65 operant classroom applications	67 precision teaching
stimulus		64 antecedent
reinforcer		64 consequence
rate (number per minute)	65 rate	70 frequency
behaviorally define	64 target behavior	65 pinpoint
operant level	65 base-line	68 before
independent variable	65 intervention	68 during
extinction	65 reversal	68 after
experimentally analyze	65 pragmatically select	66 try, try again
ABA research design		68 before, during, after
ABABA research design		68 before, during, between, during, after
ABC research design		68 try, try again
A + B + C design		70 try three at once (T3AO)
multiple baseline design		74 try at different times on same behavior with different people (TdTsBdP)
multiple baseline design		74 try at different times on different behavior in same person (TdTdBsP)
private events	65 mental events	68 inner behavior
public events	65 physical behavior	68 outer behavior
	65 self-control	67 personal management
plot data	65 graph data	67 chart progress
take data	65 submit charts	67 share charts
subject	65 protege	67 behaver
experimenter	65 teacher	67 manager
manipulate	65 intervene	67 change or try
six-cycle semilog graph	65 standard behavior chart	67 standard celeration chart
abscissa	65 across the bottom	69 day lines go up and down
ordinate	65 up the left	69 frequency lines go across
logarithmic scale	65 ratio scale	79 multiply-divide scale
linear scale	65 interval scale	79 add-subtract scale
step function	68 frequency multiplier	80 jump up or jump down
vector or angle shift	68 celeration multiplier	80 turn up or turn down
stimulus-response reflex	65 input mode-output response	74 learning channel
correct and error rates	65 accuracy pair	76 two-line learning picture
positive reinforcement	68 presented accelerating conseq.	80 reward
negative reinforcement	68 withdrawn accelerating conseq.	80 relief
positive punishment	68 presented decelerating conseq.	80 punishment
negative punishment	68 withdrawn decelerating conseq.	80 penalty
methodological behaviorism		90 nothing-else behaviorism
radical behaviorism	90 for-now behaviorism	91 environmental behaviorism

quences the steps in a successful behavior modification or precise behavioral management project. There have been various versions of this acronym from 1965 through 1975. The term "pinpoint" was suggested by Ed Sebastian, a foreman at Hercules Powder and a member of our first fathers' class in 1965. Our first version was "pinpoint, record, manipulate, and consequate" and was made into a folk song by Nancy Johnson and sung on a local Kansas City television program. Current versions are "pinpoint, chart, change, and try, try again" along with "pinpoint, try three at once, chart three, pick the best, and try two more." Different versions of PRICE have become so pop-

ular that Precision Teaching is seldom given the credit for developing it. The acronym is widely used in industrial performance management.

2. ACORD—Accomplishment, Control, Overall, Reconciled, Number (Gilbert, 1978). This acronym sequences the steps to go through in determining a job mission for a department or division of a company. A: Is it an Accomplishment, and not just a description of behavior? C: Do those assigned the mission have primary Control over it? O: Is it an Overall objective of the division and not just a subgoal? R: Can this mission be Reconciled with other goals of the institution, or is it incompatible with them? N: Can a Number be put on it, that is, can it be measured? ACORN has become very popular in industrial performance management because it takes care of the major problem we experience in public education. In public education, the major portion of the budget is teacher salaries, and the power of a district superintendent or department head is measured by the size of the budget or number of teachers under his or her direction. Therefore, when you come in with a method that will increase the efficiency of education and will teach more in less time with fewer teachers, your mission does not reconcile with the superintendent's mission. Similarly, in the training department of a corporation, the director of training may be positioned for promotion to vice president when the training department reaches 75 trainers. His department is now at 72 trainers, and you come along and threaten to quadruple their training efficiency, thus cutting his need for trainers down to about 18. Your objective and the training director's objectives don't reconcile, thus failing Gilbert's ACORN test.

3. MUSIC—Multiply, Unique, Specific, Independent, Consequence (Lindsley, 1977). This acronym lists the major discoveries about behavior in general that were made by precision teachers and others using the Standard Celeration Chart. In 1965 we set out merely to introduce rate of response with standard, direct, and continuous self-recording in public school classrooms. We neither expected nor sought to discover basic laws of behavior. We expected that frequency would prove more sensitive and would produce more rapid learning than percentage correct in classroom monitoring. However, as we collected thousands of frequencies on standard charts, basic relationships emerged. We discovered surprising laws of behavior that had eluded us in the laboratories. MUSIC lists the five most important counterintuitive laws of behavior that we discovered. M: Behavior Multiplies, it doesn't add. U: behavior is Unique, not common. S: behavior is Specific, not general. I: behavior is Independent, not dependent. C: behavior is produced by Consequences and is not caused. The detailed explanations of these abbreviations and their implications are covered in a recent article (Lindsley, 1990).

4. REAPS—Retention, Endurance, Application, Performance, Stability (Haughton, 1981). This acronym helps performance managers list the products of high-performance fluency. When fluency aims to increase from 60 per minute to 300 per minute depending on the performance reached, then the result is R: increased Retention after periods without practice; E: increased Endurance when working for extended periods of time; A: increased Application to more complex situations; P: Performance standards for training aims; and S: increased Stability in resisting disturbances. (In the original, PS stood for Performance Standards.) This acronym listing fluency products was developed by Eric Haughton in the late 1970s to help Precision Teachers explain the need for high classroom fluencies to parents and administrators.

5. MOR—Measurable, Observable, Reliable (Daniels, 1989). This acronym lists three important characteristics of a pinpoint. It has been successfully used in teaching performance management principles to business executives and supervisors. In addition to passing the dead-man test, the pinpoint must be Measurable, Observable, and Reliable. My wife, Nancy Hughes, suggested that Aubrey Daniels might add E for Effective to this acronym, making it MORE. This shows that acronyms and application terms can be continually refined and improved, and the source is often unexpected.

6. SSIP—Sincere, Specific, Immediate, Personal (Daniels, 1989). This acronym lists the features used to select and deliver social rewards. It is im-

portant that praise be sincere and said sincerely. Praise must also be specific—you tell the person exactly what they did that you are rewarding. Your praise should also be immediate—catch them in the act. And your praise should be personal, saying "Ruth, I really like what you're doing. You're twisting it at exactly a 45 degree angle. Great!" Next time say something different.

6. WHIP—What you Have In your Possession (Daniels, 1989). This acronym reminds performance managers that the most ready and least expensive rewards are What you Have In your Possession. Social rewards are the most available and the least costly. You don't have to ask permission or have a budget to pat someone on the back. Tangible rewards require budgets, advance planning, approval, increased paper work, and are seldom readily available. WHIP has helped industrial supervisors increase their frequency of socially rewarding their workers.

7. PIP—Potential for Improving Performance (Gilbert, 1978). This acronym names the performance where the biggest gain can be made. It is exemplary performance divided by typical performance. Exemplary performance is a personal best, or division or company best performance. Gilbert calls these bests exemplars." The greater the PIP, the greater the opportunity to improve performance. The smaller the PIP, the lower the possibility to improve performance. Going after the biggest PIP is where companies can make the most money in performance management. This is a revolutionary notion for two reasons. First, it goes after the highest performance or performer, which traditional statistics throws out. Second, it expresses this as a multiple, or factor, so PIPs can be directly compared across very different performances. In this way, cost-accounting of potential pay-offs for investment in performance management can be forecast.

Application Letter Codes

Letter codes are useful mnemonics even though, because they don't spell words, they are not acronyms. Such letter codes help practitioners use and recall complex relationships. A fine example follows.

1. PIC—Positive, Immediate, Certain consequence (Daniels, 1989). By using positional notation, this letter code lists the characteristics of consequences used in performance management. In the first position are either P for positive or N for negative (P/N). In the second position are either I for immediate or F for future (I/F). In the third position are either C for certain or U for uncertain (C/U). These three positions with two possibilities in each position give eight categories of consequences. The eight categories are PIC for positive immediate certain, NIC for negative immediate certain (these are the two most powerful); PIU for positive immediate uncertain, NIU for negative immediate uncertain; PFC for positive future certain, NFC for negative future certain; and PFU for positive future uncertain, NFU for negative future uncertain (these are the two least powerful). The categories are easily remembered by performance managers.

It is interesting to note that PIC, along with the acronyms ACORN, REAPS, SSIP, and PIP, goes beyond the knowledge of the parent technology. Applied performance technologists often have to face dimensions that the basic technology has not yet addressed. In doing this, they must create new technology and coin new terms that make sense to practitioners and are easily taught with minimal confusion.

Application Analogies

A useful way of calling attention to procedures that practitioners should or should not do is to name the procedure with a clear, plain English analogy. These names have been used more often in industrial than psychological or educational performance management.

1. SANDWICH—punishment sandwiched between two rewards (Daniels, 1989). Some management development programs actually advise mixing reward and punishment this way. Aubrey Daniels has found that this should be avoided. It makes people suspicious. It sets up reward as an antecedent for punishment, making reward less credible at other times. This is a very important distinction that is very cleverly communicated with the name "sandwich."

2. SNAP-SHOT—A single, 1-min timing of a performance (Kunzelmann et al., 1970). A snap-shot is a single 1-min timing of a learner's performance in a Precision Teaching diagnosis. It is not as reliable a performance indicator as the median of three successive days with a single 1-min timing on each day. This is because the daily variance (bounce on the Standard Celeration Chart) is usually times two. The snap-shot can be off what a 3-day median would have been by a factor of two; either two times higher or one-half as high. Snap-shots also are often reacted to as tests that can cloud the picture further. Some learners respond higher than usual and others perform lower than usual due to "test anxiety."

Just as a snap-shot photo cannot picture the direction of a subject's motion, a snap-shot timing cannot picture the learning that is going on. It cannot even accurately picture the frequency due to the daily variability. However, snap-shots do give a rough estimate of the performance frequency.

Application Tests

In addition to plain English translations, acronymic steps, lists and names, and analogies, simple application tests can help practitioners make difficult decisions in applying behavior analysis. The important distinctions between the form of the behavior, the behavior, and the results of the behavior are often difficult for beginning practitioners. I developed a test to make clear to classroom researchers that they weren't measuring behavior when they recorded the number of minutes that students spent staring at their math books. Tom Gilbert developed a test to help industrial managers tell the difference between behavior and the results of behavior or accomplishments. We need more simple application tests of this sort.

1. Dead-man test for behavior (Lindsley, 1965). In 1965, we were plagued by a rash of very poor alleged "measures" of classroom behavior. The educational research journals were publishing studies with "time on task" that were actually only records of minutes spent sitting at a desk in arithmetic position. Another equally virulent measure was minutes spent without a tantrum. Thinking of the "reductio ad absurdum" method used successfully in laboratory natural science, I deduced that if a dead boy could do it, it wasn't behavior; we should not spend valuable school funds teaching children to play dead.

I cut five personal profiles out of opaque plastic to demonstrate the dead-man test on overhead projector stages at early Precision Teaching workshops. There was: "Mouthy," whose jaw moved up and down if he was "talking"; "Bangie," with a bow in her hair, whose fist moved up and down to hit her head; "Thumby" in a propeller hat, whose thumb went up into his mouth and back down; "Thumby's" twin brother, "Nosey," also in a propeller hat, whose index finger went up deep into his nostril and back down; and Mathy," sitting at his desk, whose pencil went up and down as he did his math. With no motion all five figures could have been posed by dead men. If a dead man can do it, it isn't behavior and shouldn't be taught.

This test very successfully stamped out static measures of behavior position that were being used in place of behavior in many classrooms. It has a touch of humor, and practitioners did not get too mad when told that dead men could score perfectly high on their classroom behavior measures. They usually only chuckled, looked sheepish, and switched to an active pinpoint. This dead-man test has been used successfully by a large number of applied practitioners. So many, in fact, that, as with pinpointing, credit for its origins are no longer cited. (The dead-man test can be politically corrected for current use by calling it the "dead-person test.")

2. Leave-it test for accomplishment (Gilbert, 1962). Equally powerful, but less well known or used, is Tom Gilbert's leave-it test. Tom's choice of the word "accomplishment" to describe the results of behavior is a brilliant selection (Gilbert, 1978). If Skinner had used that word instead of struggling with terms like "functional definitions," or confusing things with statements like "you can measure behavior or the results of behavior," things would have been much easier for the rest of us. For years, a good test of a well-trained behavior analyst was whether he or she defined a behavior by its results. All the animal and human free operant conditioning was described by the results or accomplishments of the subjects. We did not study

pigeon beak thrusts, rat paw drops, or human hand pulls. We studied pigeon key pecks, rat bar presses, and human lever pulls—accomplishments all!

In workshops on behavioral engineering, Tom Gilbert was plagued with practitioners not knowing the crucial difference between behavior and accomplishment. It was accomplishment that had value to the employing corporation, not behavior, so he developed what I have called the leave-it test for an accomplishment. Tom often showed a transparency of an archer with bow and arrow and said, "that's behavior." Then as he showed a target with an arrow in its bull's eye he said, "now, that's an accomplishment." I recently asked Tom when he first did this, and he said in workshops in 1962 (Gilbert, personal communication, May 25, 1991). He quoted a phrase he used then: "Behavior you take with you, accomplishment you leave behind!" I said, "It isn't in your book, *Human Competence.*" Tom said, "I know, but it should have been!"

Summary

These examples of translating technical jargon into plain English application words, acronyms, letter codes, and simple tests were necessary as we developed Precision Teaching. I hope our experience is useful to others facing the problems of applying technology in practical settings. At the least, our experience should give you an idea of the work and time involved in making your own translations. Above all, be patient. Accurate plain English translations do not come easily. They cannot be made at your desk. A search often takes years to produce one new accurate plain English translation. Rapid publication pressures, journal editorial policies, and investments in materials, books, and computer programs all combine to hamper these translations. It's possible that you will find some of our plain English equivalents useful in your own applied behavior analysis applications.

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