

tings, no matter where it originates—and the reviewer bets that it might as well start in real-life settings, at this point in the development of the field. It can.

4. The reviewer agreed (3, above) that pursuing ecologically oriented behavior analysis might yield immense profit. Now is the time to underline *might*. As Willems suggests, a little research looking for response classes and response chains has turned up some puzzling ones that would have been hard to predict. We know something about response classes and chains—not enough to predict them, perhaps, but enough to state the procedures for making new response classes and new response chains. Unfortunately, our understanding of chains shows that we can make as arbitrary, diverse, and bizarre chains as anyone cares to specify. Thus, to the extent that environment can be capricious, the resultant response chains can be equally capricious. Then it will be difficult to predict the response chains of the client from such an environment. Similarly with response classes, perhaps. On the other hand, the environment may operate very similarly on most of our clients, such that they tend to share quite similar chains (or classes). In that case, an actuarial study of *typical* chains (classes) may be fruitful, and the predictions that Willems calls for may in fact be possible and practical. It all depends, obviously, on some unknown facts about the environment. The author and the reviewer can agree that it is very worthwhile to try collecting those facts—but perhaps we had better prepare ourselves for the possibility that there will not be a useful ecological outlook for applied behavior analysts. They may have to cope from now until who-knows-when with unpredictable brushfires, simply because the nature of the environment does not offer a choice. However, even if this should be true, no one could confidently assert today that it is. Consequently, Willems's argument is the proper one for today.

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TECHNOLOGY AND ECOLOGY: REVIEWERS' COMMENTS

COMMENTS BY REVIEWER B

The manuscript by Willems is an interesting one in many respects. He is trying to warn us about the possibility of undesirable side effects of behavioral technology. Unfortunately, he has not offered us a good way of avoiding these undesirable side effects except perhaps through utilizing ecological measurement procedures. Unfortunately, I am not convinced that the ecological procedures based on the Barker-Wright model would be that powerful in avoiding the undesirable side effects that he suggests. I personally am of the impression that it will be the behavior analyst who will develop the techniques that will be most useful in evaluating the effects of a behavioral technique on the "behavioral ecology".

Thus, I do not really think that the author's suggestion of a close link-up between behavior analysts and behavior ecologists is going to be productive or even come about. Nevertheless, perhaps the most important aspect of this article is really not a suggestion for cooperation between these disciplines, but rather its role as a critique of behavior analysis. As a critique, it has many interesting features. It is highly complimentary; thus, it is palatable. The writer understands positive reinforcement and shaping.

JABA's policy of publishing occasional critiques of behavior analysis is a good one and livens up the technical journal. If JABA plans to continue that series of self-criticism, then this article would be a reasonable one to include in the series. It is well written and has lots of interesting analogies (although some of them are a little strange—but one must be willing to take tit [bearded] with tat).

COMMENTS BY REVIEWER C

There are some valuable points in the paper. However, the author is too detailed in his analogies, does not define well Behavioral Ecology (the system he favors!) or really indicate how

Behavioral Ecology actually provides bases for predicting desirable interventions, has much overlap among his sections, raises many criticisms without answering them with principles drawn from Behavioral Ecology, and does not provide bases for deciding which behaviors to study systematically. To substantiate his complaints, a complete literature review would have helped greatly, which could, for convenience, be limited to JABA articles that might provide examples of the many deficiencies he indicates exist, but does little to identify.

COMMENTS BY REVIEWER D

One of the foremost characteristics of applied behavior analysis—perhaps its most vital characteristic—is its emphasis upon demonstration

rather than discussion. The absence of any applied behavioral problems from the examples in the first of the paper suggests that the author needs to get busy with his research activities, demonstrate the utility of his suggestions, and in so doing, perhaps provide a model for us poor misguided behavior “technologists”.

Failing to provide an example with his own research, the author might use the research of others to instruct us. Apparently the author has not troubled to look in the existing literature of applied behavior analysis for approximations to the research behavior he values. A review of JABA *et al.* articles that identified the many approximations to the procedures he recommends—and there *are* many—would have been more persuasive and instructive and less irritating than this paper.