The World Beyond Our Borders

What Might Our Students Need to Know About It?

Michael Cole University of California, San Diego

I have been asked by APA to discuss the relevance of the rest of the world to American psychology students. This assignment grows out of a new wave of concern about America's place in the world. Economic and political events of the 1970s have increased the conviction in many circles that American college students are not obtaining a realistic picture of their place in the world from their college education.

There is no doubt that there is widespread ignorance among our citizenry of world events that are vital to their interests (Barrows, Klein, & Clark, 1981). The question is, what do we do about it? More particularly, what should we be doing in our classrooms to ensure that our students enter the adult world with an increased appreciation for the world beyond our borders?

This is not an easy question for American psychologists to answer. Nor are we all likely to answer in the same way. The real question, it seems to me, is, "Why bother?" What, in particular, should we be teaching as psychologists?

I will address this problem in three parts. First, I will survey three areas of interest to psychologists in which some knowledge about international matters is already represented in our curricula. Next, I will recount the effect on my work of my coming into serious contact with psychology and life in other countries. Finally, I will describe a few of the techniques that I use to pass on some of my own experience to my students.

The History of Psychology

An obvious place to start is to examine how we teach the origins of our ideas about psychology. Virtually all psychology curricula contain some material on the historical development of the discipline. Even if no special course on history is taught, many textbooks begin with a brief history of the ideas and people considered most germane to understanding the current state of the field.

During my undergraduate career, I was introduced to the ideas of prominent scholars from many different countries. I read about Galton, an originator of the correlation coefficient and of the study of individual differences; Binet and Simon, who gave us intelligence testing in its nearly modern form;

Kohler, Koffka, and other German psychologists who said provocative things about problem solving and perception; and Pavlov, who gave us a scientific model of learning. I was also introduced to philosophers like Locke, Rousseau, Mill, James, and Dewey as important contributors to contemporary (1950s) psychology. Freud made his appearance in the personality course. What relationship his ideas had to any of the other courses in the curriculum was not made clear, but it was clear that most of my teachers considered Freud unscientific and, therefore, of dubious character.

Overall, this historical background did not seem especially relevant to my training as a psychologist, although I found the discussions interesting. It was far more important that I master the right methods for obtaining appropriate data and make myself familiar with an area of research within which to ply my skills. I was too preoccupied with mastering the techniques of constructing Markov models to spend much time on the history and metatheory they represented. Until after I obtained my PhD, my main impression was that the history of psychology was best understood by examining the contemporary achievements of its most developed branch, American experimental psychology. From this perspective, history was the story of the past, an antiquarian hobby in which dusty artifacts gave testimony to the errors of our forbears.

Contemporary Theories

Another obvious area in which international influences make themselves felt in the undergraduate curriculum is that of psychological theory. It is my impression that the shifting role of the United States in world affairs is roughly paralleled by a shifting relationship between basic approaches to theorizing in different countries. In the mid-1950s the supremacy of American technology set the target all industrialized countries attempted to achieve. Our modes of psychological theorizing and the methods they generated were studied and emulated in many different countries. To a large extent this is still the case. Countries as different from us as the Soviet Union and Japan, each with long intellectual traditions in psychology, have undergraduate psychology

curricula that bear a startling resemblance to our own. American textbooks have been widely translated and used as the basis for undergraduate education, and American research topics are carefully followed.

For a number of years, American dominance in prestige and numbers of psychologists (APA is by far the largest national association) meant that theoretical discourse was likely to be very much on American terms. It did not appear that we had very much to learn from the rest of the world.

Things have changed. APA membership is still large in numbers and English still dominates international conferences, the enormous asymmetry in numbers and prestige that American psychology enjoyed in the 1950s has been substantially reduced, although the changes have not been uniform. Speaking only to the issue of the number of psychologists, the enormous efforts of other industrialized countries to train substantial numbers of research psychologists have clearly born fruit. Within foreign universities, psychology faculties have been created with substantial support for basic research. Large research establishments have been established within the military and in industrial firms. When American specialists go to international meetings, their counterparts are designing human-machine systems for the exploration of space and for efficient production of human resources. The mutual relevance is obvious, but American technological preeminence has given us less to learn, or so it has seemed until recently.

Americans have also discovered lines of research originating in other countries that were poorly attended to in the decades immediately following World War II. The work of Jean Piaget, which was by no means unknown to American students of the 1930s, became a dominating influence in developmental psychology of the 1970s. The work of the German ethologists, which at first appeared no more significant than a parlor trick (the image that comes to mind is a bearded Lorenz followed by ducklings), began working its way into the superstructure of associationistic learning theories. In the area of clinical psychology, the methodology of which has always been suspect in university circles, ideas from Eastern philosophy and a variety of interactional theories from Europe began to be debated. At the very time when foreign ideas in psychology seemed least relevant on technical grounds, some of the basic ideas of psychologists in other countries were beginning to change the assumptions of many American psychologists.

Preparation of this article was supported by Grant DC 15 Dept. 06184 from the Carnegie Corporation and Grant 780-0639A from the Ford Foundation.

Requests for reprints should be sent to Michael Cole, Laboratory of Comparative Human Cognition, D003A University of California, San Diego, La Jolla, California 92093.

Two interwoven threads are discernible in the tangled tapestry of these events. First, the rest of the world has joined the United States in making psychological sciences an integrated part of the apparatus for running an industrialized state. This integration has meant acceptance of the basic analytic devices for making sense of, and evaluating, human behavior. These methods can be, more or less, standardized. They contribute to production and the creation of new social institutions to embody the proper conditions for efficient running of the system, A number of societies are now faced with common difficulties. These difficulties arise from the fact that all engage in similar sorts of industrial production and compete within a single economic arena. And there is now a large international community of psychologists whose work is mutually relevant because their societies share these concerns.

Second, we have seen the United States join the rest of the world in acknowledging the limitations of assuming that people can be understood entirely according to the kind of scientific laws that permit us to exploit the physical world. This acknowledgment, although uneven, has taken several forms.

Some claim that the limitations of physical models are a technical problem and that, with sufficiently powerful computers, we will someday be able to represent basic psychological processes in physical systems in all their essential features. Others deny even the possibility of reducing living matter to mechanical control. Whether one accepts the mechanistic goal for psychology or not, work in artificial intelligence and human-machine systems requires, at the very least, that we acknowledge the systemic nature of human psychological processes. The current work in cognitive systems renders relevant the work of Europeans whose ideas Americans found impenetrable two decades ago: Piaget, Lacan, Vygotsky, Luria, Lewis, Cassirer, and many others.

Americans are also becoming aware of the human costs associated with too much success at organizing society to exploit modern technology efficiently: school failure on a large scale, creation of social classes separated by huge information gaps, worker alienation, changes in family socialization patterns, and isolation of the handicapped and aged. In dealing with these common affronts to the sufficiency of existing psychological theorizing, psychologists from different countries have often found common cause. This is true, for example, of Japanese, Russian, Chinese, and American psychologists whose task it is to figure out the human consequences engendered by industrial success.

Contemporary Variability

Thus far, my discussion of the relevance of international information to undergraduates has been very much discipline bound: Who were the important thinkers; what theories can help us solve specific, common problems? There is a second way, however, in which we can think of an internationally based understanding being important to psychologists, and that is by asking how people in other countries experience life as individual people living in communities. How do they react to their life circumstances? How do their experiences shape their understandings of human nature?

These are by no means new questions, but they took on a special character following World War II because of the wide acceptance of the idea that psychologists could be useful in solving important social problems, of which education and national economic development were two primary examples. A worldwide commitment to industrialization meant worldwide commitment to modern education. Education is expensive. Psychologists, it was hoped, would find ways to reduce the cost and to help speed social and economic change, not only by increasing educational productivity, but also by finding a great variety of ways to bring broad masses of people into the modern world.

As a consequence of these beliefs, and the policy directives that followed, an unprecedented number of trained psychologists found themselves working in very distant parts of the world, where they encountered religions and political systems that strained their ideas of how people could organize their lives together. They encountered individuals and whole societies that operated with virtually no literacy, schooling, or industrialized work patterns. These psychologists worked not only in schools, but also for mining firms, ministries of communications, and international agencies.

It might be thought that this commitment to the utility of psychology abroad would result among Americans in a great flowering of interest in the study of psychology among diverse peoples. In fact, a large number of research studies have been carried out in a variety of countries by American psychologists interested in figuring out how cultural variations produce psychological variations. Many monographs have been written summarizing this work, and specialized journals have been formed to handle the volume of new data.

However, it is not clear that psychological research making systematic use of cultural variation has penetrated very far into the undergraduate curriculum. A sampling of introductory texts yields some well-known studies: infant motor development in Africa, day care in Israel, infant temperament in Japan, theoretical thinking in Uzbekistan. But no overall understanding informs the examples. They are selected to illustrate particular points derived from a quite restrictive scientific tradition. The

countries, activities, and processes they sample change from one example to the next because there is no overall framework, with an appropriate methodology, to guide this form of inquiry.

The fact is that cross-cultural psychology is very often treated as a slightly miscreant stepchild, or perhaps as just a specialized method, by the mainstream of psychology. Like clinical psychology, its methods are suspect. The basic idea is simple enough: The fact of variation can be used to find out which parts of human experience are universal and which are subject to environmental control. The difficulty for psychologists arises from the inability to create the clean, analytical situation that the basic idea seems to promise and require. Because the proper conditions of psychological observation could not be demonstrated at the turn of the century. the conclusions of the psychologists who went to the Torres Straits near New Guinea to get comparative data on visual acuity were vulnerable, and Titchener (1916) was unable to accept them. So, too, contemporary psychological methodologists look with mistrust upon research carried out in varied cultural circumstances. Too often such research violates the most fundamental rules of the experimental method without offering compensating safeguards to constrain theoretical claims (see Cole & Means, 1981, for a discussion).

As a consequence, cross-cultural work is ghettoized; its results only rarely inform the dominant activities through which psychologists strive for a general theory. I do not intend here to debate the actual merits of cross-cultural research. It is enough to say that, for whatever reasons, knowledge of the basic psychological characteristics of people living in other parts of the world makes up a very small part of our undergraduate curricula. We can draw on anthropological accounts that are often accepted as reasonable descriptions. But we have to keep in mind that these descriptions are themselves theorybound and often the source of controversy (for example, note the current controversy over Margaret Mead's early work in Samoa). We can draw on cross-cultural research, but it is easily disregarded on methodological grounds. Faced with these unsatisfactory alternatives, teachers of psychology most often are left to depend upon their own backgrounds.

A Midpoint Summary

Up to this point, I have presented what I believe to be an oversimplified, but generally accurate, picture of the way in which information about people living in other parts of the world enters the undergraduate psychology curriculum. I have suggested three ways in which such information might be relevant—in history, comparative theoretical approaches, and

cross-cultural research. Using my own education and an informal survey of contemporary textbooks at the freshman and sophomore levels as my data base, I have concluded that, by and large, American psychology does not make a great deal of use of historical or comparative information to go about its chores. Moreover, I have argued that these characteristics of our science are not perceived as a problem because psychology has fit relatively well into the social orders of which it is a part; the absence of such information is only seen as a problem on rare occasions by a few people.

Efforts to extend current practices can be criticized for various weaknesses. But, realistically, it is difficult to see the situation changing much until events force even more attention to be paid to the international sphere as a source of important social knowledge.

Until that time comes, the best evidence we have of the potential usefulness of information from abroad to the education of American psychologists comes from the results of the work done in those relatively few cases where Americans have been deeply involved in other countries. Here I will draw on my own experiences, both as a source of evidence of the improvement of my own research and as a means of making such improvements available to my students.

Sputnik

Halfway through my undergraduate education, the USSR launched the first Sputnik satellite, an event that galvanized public attention. Except for reading the headlines, I did not pay much attention to Sputnik. I was not planning to be an engineer or an astronaut, and no one seemed to be throwing money in my direction, so it was not clear how I was to be affected. Eventually, Sputnik profoundly changed the course of my career.

One pressure generated by Sputnik was for language training, especially Russian language training. When I entered graduate school at Indiana University in 1962, that institution required that doctoral candidates pass two language examinations. I was flabbergasted. I could read French passably well, although I knew nothing about French work in psychology. The idea of learning a second foreign language when my whole education had taught me that foreign thinkers were of purely historical interest struck me as a clear indication of Indiana's isolation from reality. I wanted to learn FORTRAN.

A mimeographed wall poster offered an intriguing solution—"How would you like to study in Russia?" Now there was an interesting idea; Pavlov, politics, and adventure. Moreover, all I had to do to follow up the idea was to visit the Indiana University history department, the location of the academic

headquarters of the Soviet-American academic exchange program. Many things fell into place. The exchange was short on scholars in several disciplines, and psychology was one of them, and the people in charge were interested in me. But I would have to learn Russian and something about the USSR. Just to make the possibility really attractive, a fellowship was offered that would compensate me for the extra work.

At first I thought of this educational strategy purely in opportunistic terms. I had been going to school for about 18 years without respite. I had never been out of the country. In order to be supported to live in another country for a year, I "had" to take the language courses but I got paid well in the bargain. I also had an opportunity to learn a lot about the modern world.

Of course the Russian language and Russian area studies were extraneous to my real education. They could be viewed as an academic expedient with a year's exotic adventure as a bonus. The rest of my education pursued the historical interests of my own society. Indiana University and my mentor, William K. Estes, provided me with fine training in quantitative and analytic methods for the study of learning. I was privileged to watch a master theoretician at work; a firm foundation was set for my future in American psychology.

My experience was not unique among members of my generation. Sputnik made a difference. Although relatively few psychologists learned the Russian language or Russian psychology, hundreds of young doctorate holders from many fields studied in the Soviet Union, absorbing to varying degrees the life of the people with whom they worked. Their writing has been crucial to enriching America's knowledge of its most prominent international competitor. (I do not seek to answer the question of who, in general, profits more from these exchanges. Personally, my professional work has gained enormously.)

Dealing with Soviet Psychology

My entering understanding of Soviet psychology was strongly shaped by the historical links between Pavlovian neurophysiology and American behaviorism. During the 1950s a good deal of Russian research had come to the attention of American psychologists. Figures such as Eugene Sokolov and Alexander Luria were seen as formulators of more sophisticated stimulus–response theories that would accommodate factors such as attention and language into the basic stimulus–response, associationistic theory of learning. Even the Russians' diagrams looked the same as ours, and I arrived in Moscow hopeful that I could get something more from the experience than a

vacation abroad by finding out about research on semantic conditioning and mediated stimulus-response learning.

The situation that greeted me was recognizable as a kind of shabby version of the image that I had built up from my reading. Consistent with a long-standing complaint about European psychology in general and Russian psychology in particular, I found that experiments were conducted in a fashion that paid less attention than I thought proper to the issue of design and procedure. Equipment was often held together by baling wire or glue, and a good deal of the work seemed to depend upon a young man with expertise in jury rigging electromechanical devices. To make matters worse, Luria no longer showed much interest in semantic conditioning. I was 10 years late.

People were very polite to me. They did their best to create the conditions I thought appropriate for the work, and all of us worked at not getting upset when things did not pan out too well. We collected semantic conditioning data. At the same time, my hosts made it clear that I was going through a lot of wasted motion. Their basic orientation to theories and data collection seemed different from mine. They were interested in the news that I brought them about mathematical models as descriptive techniques, but what they really wanted to know was what theory of human psychological functioning was the model a part of; how did it help to explain aphasia or prescribe an educational program for the classroom? In other words, what was my work about? My distrust of their observations was neatly matched by their amusement at my naive, model-based empiricism. Just as I found a lot of their work mushy and unscientific, they found mine peculiarly abstract and inaccessible.

I came away from the USSR without any real feeling that I had learned something useful for application later to my career. I had encountered interesting research ideas and some very impressive applications of research in school, clinical, and work settings, but had no conviction that Soviet psychology offered a paradigm worth the effort of changing directions. Of course, I subsequently spent three years conditioning dogs . . . to test a mathematical model based on techniques invented by a Russian named Markov and used imaginatively by an American psychologist named Estes.

My only professional commitment was to use the experience to some useful purpose. So I agreed to edit the *Handbook of Contemporary Soviet Psychology* (Cole & Maltzman, 1969) and to edit *Soviet Psychology*, a journal in which translations of articles representative of Soviet psychological research and theory are published. That would fulfill my obligation.

Encountering Variability

One thing, as they say, leads to another. Spending a year in Moscow is one way to get past the postdissertation doldrums, and it certainly changes one's notion of how the world works. But it is a lousy place from which to hunt for a job in an American university: The mail is unreliable and transportation to interviews a little expensive. I was saved from exile by Bill Estes, who arranged for me to spend a year at Stanford as a lecturer in order to gather my wits and to get on with my career. Here, again, the power of Sputnik made itself felt as the move for educational reform initiated in 1957 spread into the underdeveloped countries of the world.

From the late 1950s well into the 1960s, American scientists received support from the government to revise basic science curricula in hope of improving our ability to build our own Sputniks faster and better than the Russians. According to existing evidence (Wahlberg, 1983), this effort has made a real difference in American schools. However, I did not experience the New Math in American schools, but as part of an assignment in a tiny West African village. My selection for this assignment is an outstanding example of that elusive concept, serendipity. I was at Stanford because, in part, Estes liked working with Patrick Suppes. Suppes was involved as an advisor to a project to extend the New Math into anglophone Africa. I had a passport and a willingness to travel. What was more, I had a degree as a mathematical learning theorist; I was an expert on learning. On this thin pretext, I was sent as an advisor to John Gay, a missionary mathematician with an interest in elementary education.

In Russia no one had ever asked me to account for the processes by which people thought in their everyday lives. As a psychologist, all I had to account for were the laws by which word meaning is expressed in involuntary and objectively measurable ways. The tasks I set up in Russia took little account of the way that word meanings are organized as part of everyday thinking. It took a little time to get adjusted to the situations we constructed to enable us to present stimuli to Russian subjects and to record responses. But, in essence we taught the subjects how to provide a calm and organized background against which we could make our recordings. I could have stayed home and run the same experiments a little more cleanly.

In Africa the situation was completely different. It was not clear that I would be able to address the problems that greeted me there with any of the techniques I knew. The situation, in a nutshell, was the following. As roads opened up new areas of contact with the outer world, children living in the jungle areas of Liberia were being exposed to school-

ing. Despite large expenditures of money, the schools were considered a failure because the dropout rates were very high and the final achievement levels very uneven.

Gay was looking at this problem from the perspective of a mathematician/educator whose college students amazed him with their difficulties in learning mathematics. This dismay took him to nearby Kpelle villages to observe mathematics instruction. He was appalled by the situation that greeted him. Liberia is a very poor country with many distinct tribes and tribal languages. In 1964 the country had very few miles of all-weather road. Education had been very limited in the country prior to World War II and was still very limited. The teachers were a mixture: graduates of missionary schools or very limited public schools and Peace Corps volunteers who did not speak the local dialects well enough to teach in them. The textbooks were from American school systems, discards of the prior decades.

In all of this chaos, what fascinated Gay was the great difficulty that students encountered with problems of measurement and arithmetic reasoning in school, even though people seemed to manage their daily affairs and keep track of their possessions well enough. He was taken with the most elementary principle of education, that you must begin where the student is in order to guide the student through the system. But Gay did not know where to begin. He did not have any idea of what the students already knew when they came to school, nor did he know what adults who had not been to school knew. My job was to help him find ways to figure out what the Kpelle people understood about mathematics.

It amazed me that anyone took seriously the idea that I could be of use in such an enterprise. Somehow people, John Gay in particular, had mesmerized themselves into believing that a mathematical learning theorist knew how mathematics is learned, not only in America, but in Liberia as well! So, no sooner had I recovered from the trip than I found myself in a tiny village, an eight-hour walk from the nearest road. (I, of course, being an important expert, flew into the village.)

The most immediate consequence of this encounter was that I spent the next 15 years commuting on an irregular basis to and from Liberia where, first under the caring hand of John Gay and then on our own, my colleagues and I worked on the problem of culture and thought. The results of this work have been published in various places and need not be summarized here. In the present circumstances, the following, rather general summary of this cross-cultural research experience seems relevant. In order to find a coherent way to deal with the problems posed to us on that first field trip, we

had to rethink the disciplinary division of labor that put culture and thought into different scientific categories at the end of the past century (Laboratory of Comparative Human Cognition, 1982a, 1983). This reassessment motivated new lines of research, sometimes serving as a critique of existing conceptions, sometimes offering new concepts and methods to replace the old (Cole, Gay, Glick, & Sharp, 1971; Scribner & Cole, 1981). Eventually we were led back home, where we sought to apply what we had learned in our own cultural settings and to the problems that cultural variations pose us (Cole & Traupmann, 1980; Laboratory of Comparative Human Cognition, 1982b; Newman, Griffin, & Cole, 1984).

An especially rewarding aspect of the cross-cultural work was that it gave me a whole new basis upon which to interact with Luria and an entirely new way to deal with basic problems of learning, my starting point and my anchor in all that wandering. Until I began to fashion an interest in cross-cultural psychology, Luria did not have much to learn from me. I was friendly, and I obligingly helped with translations of his work, but I did not know anything special. By 1966 my status in this regard had changed. Luria was *very* interested in cross-cultural comparisons.

Remembering that Luria had once told me a little about his research in Central Asia (long before I thought of going to Africa or could take a special interest), I pressed him for more details on what he had done and why. He, in turn, pressed me for information about my own work in a nonliterate society. We struck a bargain. He would tutor me in his cross-cultural methods, working through his old data, if I would help with preparations for the International Congress of Psychology, to be held in Moscow that year. So I spent most of my mornings in the summer of 1966 working through musty data protocols and listening to Luria's account of his work.

What amazed me about Luria's approach to culture and mind was not so much his specific methods, although they were often very ingenious, but rather, it was the assurance with which he applied a relatively small set of concepts that I knew were important to his earlier theorizing about brain functions as well. I was really struggling to find a coherent framework to fit the pieces of empirical work together. Luria did not seem to have any problem at all. He had clearly worked out a very coherent viewpoint, but I was having trouble understanding it.

Perhaps the safest thing to say is that I am still learning. At this writing, my research is deeply influenced by the psychological framework that Luria and his colleagues constructed more than 50 years

ago in the burst of humanistic enthusiasm released by the Russian Revolution. At the same time, I am from a different culture and a different generation, so the way I interpret his ideas cannot be considered a copy of the original. Luria and I disagreed about the interpretation of his cross-cultural theories, and I have never been an expert in neuropsychology; frameworks are analytic devices, not straitjackets. Perhaps one of the most important things that I eventually learned through my attempts to reconstruct a sociocultural theory of mind was a way in which I could unite my interest in psychology as a discipline with my interest in people's use of their minds in a wide variety of social endeavors. It allowed me to gain a new sense of my own education.

So What?

For what it is worth, I have presented my brief sketch of how a crash program in international education affected one psychologist. The larger value of my experiences to American psychology and American society is well beyond my power to evaluate. It does seem like a very good strategy though, for a society to send some of its members to live for a while in the other fellows' town in order to come to know, more or less, what those fellows are up to. The news the travellers bring back might seem strange or impenetrable, but it might also bring answers to some nagging questions. If it is indeed the case that American technological supremacy is in doubt and that our security as a nation rests in part on our ability to deal intelligently (as contrasted with forcibly) with the rest of the world, the news that we can get from abroad may well be crucial to our future.

On a personal level, there is no doubt in my mind about the value of my experiences. They have fundamentally changed the way I think about the world, the way I teach, and the way I conduct my research. All aspects of my professional life have been made much more enjoyable than I can imagine them being otherwise.

Applications to Teaching

As what I learned from my involvement in West Africa began to connect with the way of theorizing that I had encountered in the Soviet Union and the canons of research that I had learned in America, I found myself perplexed about the best way to teach. It was especially difficult to formulate comparative findings because they could so easily be criticized on methodological grounds that any good experimenter knew by heart. I began to teach using experimental techniques as a basic medium. It was not clear how nonexperimental evidence was relevant, except perhaps as local color. When I used

nonexperimental material to question the experimenter's cross-cultural data, my curious criticisms seemed not a little like nitpicking.

Over time I have worked to find ways to convey the experience of growing up in a very different culture. Now, dissatisfied with what I can communicate through experimental results, I reach into other disciplines and other historical eras for material. I also find myself reaching into other media. Videotape, film, novels, and even music come into my classroom as I seek communicable replicas of some of the experiences I have had.

So, for example, a film like *Dersu Uzala*, directed by the great Japanese film maker, Akira Kurosawa, but shot in Siberia, illustrates to an incredible degree the nonliterate peasant of Luria's Central Asian trips. Francois Truffaut's *Wild Child* helps students to understand what civilization meant to our forebears during the Enlightenment. Many fine ethnographic films make the vast range of human adaptations more palpable.

Novels and memoirs are another medium of source material. Camara Laye's, L'Enfant Noir, Chinua Achebe's novels about Ibo life in the early days of colonialism, and many current Japanese novels all offer informative glimpses of very different ways of experiencing the world. In this category, I would also include ethnographies and fictionalized accounts of Europeans' dawning understanding of another culture (such as Elizabeth Bowen's searching reconstruction of her own initiation into anthropology, Return to Laughter).

Materials like these cannot stand on their own in a psychology class. Because they are of interest to students for reasons institutionally quite separate from their interest in psychology as a discipline, there is a special responsibility on the instructor to show how they are relevant. That is a big challenge, because as data, films and novels are pretty hard to reconcile with experimental procedures. My own response to this dilemma is to use that need for reconciliation as a wedge into discussing the methodological assumptions of our taken-for-granted procedures so that students have the best possible chance of using the materials to good advantage.

Because a lot of invention is required, I cannot imagine trying to create an "international knowledge" curriculum in psychology. But I can see those psychologists who find that they want to put more effort into exploring the international context of their work organizing workshops at the annual APA convention and preparing a compendium of materials found useful by individual members. Perhaps publication of relevant sources in specialized APA journals or the *American Psychologist* would be appropriate. The sources of information are legion. It is only the will to organize them that is lacking.

REFERENCES

- Barrows, T. S., Klein, S. F., & Clark, J. L. D. (1981). What college students know and believe about their world. Princeton, NJ: Educational Testing Service.
- Cole, M., Gay, J., Glick, J., & Sharp, D. W. (1971). The cultural context of learning and thinking. New York: Basic Books.
- Cole, M., & Maltzman, I. (1969). Handbook of contemporary Soviet psychology. New York: Basic Books.
- Cole, M., & Means, B. (1981). Comparative studies of how people think. Cambridge, MA: Harvard University Press.
- Cole, M., & Traupmann, K. (1980). Learning from a learning disabled child. In W. A. Collins (Ed.), Minnesota symposia on child psychology (Vol. 14). Hillsdale, NJ: Erlbaum.
- Laboratory of Comparative Human Cognition. (1982a). Culture and intelligence. In R. Sternberg (Ed.), Handbook of human intelligence (pp. 642-719). Cambridge, MA: Cambridge University Press.
- Laboratory of Comparative Human Cognition. (1982b). A model

- system for the study of learning difficulties. The Newsletter of the Laboratory of Comparative Human Cognition, 4, 39-66.
- Laboratory of Comparative Human Cognition. (1983). Culture and cognitive development. In W. Kessen (Ed.), *Mussen handbook of child development* (Vol. 1, pp. 295-356). New York: Wiley.
- Newman, D., Griffin, P., & Cole, M. (1984). Social constraints in laboratory and classroom tasks. In B. Rogoff & J. Lave (Eds.), Everyday cognition: Its development in social context (pp. 172-193). Cambridge, MA: Harvard University Press.
- Scribner, S., & Cole, M. (1981). The psychology of literacy. Cambridge, MA: Harvard University Press.
- Titchener, E. B. (1916). On ethnological tests of sensation and perception. *Proceedings of the American Philosophical Society*, 55, 204-236.
- Wahlberg, H. (1983, April). A comparative study of Japanese and American school achievement. Paper presented at the Conference on Child Development in Japan and the United States, Stanford University, Palo Alto, CA.