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TIBI News Time (TNT), the newsletter of The International Behaviorology Institute, a non-profit educational corporation, is published in the spring and fall each year.

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Editorial: Welcome to TIBI

Through an exchange of papers, proposals, and perspectives over the last couple of years, David Feeney, Lawrence Fraley, Glenn Latham, and I recognized certain needs, and acted to meet those needs. The needs were for an organizational structure (a) that could provide training in behaviorology, especially for those who lacked ready access to that training, and (b) that could provide support for professionals who have been trained in behaviorological science. Our actions were to found *The International Behaviorology Institute* (TIBI), a non-profit educational corporation. The materials in this inaugural (and hence extra long) issue of TIBI's newsletter cover our

concerns and indicate our directions. Due to the wide-ranging nature of these materials, an overview of historical items, including some in this issue, is in order.

Fraley and Ledoux (1997) recounted the origins and cultural mission of the natural science discipline concerned with the study of behavior, behaviorology. In the process they stressed both (a) the need to maintain disciplinary organizations fully supportive of all the various disciplinary components of behaviorology (including philosophical, experimental, conceptual, analytical, and technological components) and (b) the need to establish a variety of disciplinary homes for behaviorology, including academic programs and departments.

In 1990 Ledoux described possible curricula for training behaviorologists (see Ledoux, 1997a). Later, Ledoux (1997b) and Latham (1997, and in this issue) addressed the specific need to provide behaviorological training for Chinese behavior scientists who, like some professionals in other countries, aspire to bring behaviorology to bear on their country's concerns, especially in education and childcare, even though behaviorology training opportunities are few in those countries. One of TIBI's current visiting scholars introduces himself in this issue. (I wish all such students could attend, and afford to attend, programs like the one Sigrid Glenn has organized at the University of North Texas. There the differentiation between natural and social science *is* made at the departmental level. But her behavior analysis department is already having difficulty graduating enough students fast enough to meet the demands of employers. So, on several counts, other solutions are still needed.)

Ledoux (1997c, and in this issue) sketched the evolving nature of disciplinary organizations. And Ledoux (1997d, and in this issue) examined the specific need to assure continuous and actively organized support for a balance of activity in all of behaviorology's disciplinary components, recognizing that behaviorological scientists work all over the planet and that different behaviorologists are skilled in different disciplinary components. (This paper has been reprinted with permission from *Selections* because the readership of TNT and *Selections* is not a perfect match.)

In the effort to meet the concerns expressed in those papers, the founders incorporated TIBI. To *better* meet these concerns, TIBI also includes a discipline-supporting association, TIBIA, *The International Behaviorology Institute Association*. The purposes of TIBI are listed in TIBI's by-laws and are the same as the original purposes of *The International Behaviorology Association* (TIBA—now called the *International Society for Behaviorology*, ISB). These purposes are to be fostered through several activities, including these: TIBIA members would be encouraged to host visiting scholars who are studying behaviorology. TIBI faculty (who are TIBIA members) would arrange or

provide training for behaviorology students. And TIBI would provide certificates to students who successfully complete specified behaviorology curriculum requirements.

As should be clear, TIBI (and TIBIA) are complementary with, rather than competing with, other organizations serving natural scientists of behavior locally and around the world including, for example, ISB and ABA. While TIBIA is “yet another” organization for natural scientists of behavior, it does not fragment the movement. Instead, it complements the other organizations by addressing important concerns not currently covered by any other organization. And over the last couple of years, many readers will have sensed an increasing general interest in the existence of the kind of organization TIBIA represents. I suspect that most members of TIBIA will also be active members of the other organizations.

So all readers are welcome to become members of TIBIA. You are needed to help provide the known benefits of our science to humanity. Please do so soon (using the form in this issue) as in 30 days elections will be held for TIBIA's officers. All TIBIA advocate-level members at that time will be automatically on the ballot. (The four TIBI founders share a hesitation to be elected to TIBIA offices; others should have a greater chance to participate.)

Meanwhile, TIBI hopes before too long to be able to reach you electronically. As soon as circumstances allow, we will be at “www.behaviorology.org” for mail, some course delivery, an electronic TNT, perhaps even an electronic disciplinary journal. See David Feeney's related article in this issue, and watch this space for details.☺

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Possible Geographically Based Behaviorology Associations

Stephen F. Ledoux

The natural science of behavior needs to be organized formally and independently if it is to emerge fully to take its place at the natural science roundtable and meet the urgent demands of its cultural mission (see Fraley & Ledoux, 1997). So the development of more geographically based behaviorology organizations can be anticipated. This could parallel the rise of, for example, state and regional organizations affiliated with the Association for Behavior Analysis (ABA) that share in ABA's important political (coalition—and—advocacy) mission. For example, several cooperative regional behaviorology disciplinary organizations would be possible, perhaps based in different countries or sorted on the basis of members' native languages. These organizations may be composed of new as well as established behaviorological scientists from basic laboratories and applied fields around the world. Purposes would include furthering the cultural mission, science development and support, and general disciplinary organizing for all facets of the independent natural science of behavior.

Those groups could also serve to anchor the discipline in each group's geographic area, with mutual support worldwide. Their existence, by extending formal organizing of this independent natural science discipline, could be vital to the success of behaviorological science and its cultural contributions. Natural scientists of behavior everywhere are well-served by continuing to work toward more complete and formal disciplinary integrity. While disciplinary groups around the globe could address the task of formal organizing, The International Behaviorology Association (TIBA) is itself addressing a more precise and exclusive emphasis on the important mission of maintaining and developing the quality and productivity of the experimental science component of the behaviorology discipline through the medium of a small scientific society (see Vargas, 1996). (Also, TIBA may be changing its name to reflect this emphasis; see TIBA, 1996).

Still, behaviorological professionals around the world need organizational structures that support the other facets of their formal independent discipline. These structures could carry out programs of support for the world's increasingly numerous behaviorological scientists and practitioners. Organizational support is needed to con-

solidate the independent, natural science status of their discipline and thus to promote vigorously their professional activities. The consolidation of behaviorology could redirect—to those professional activities—the energy that is currently directed either to dealing with “survival in disciplinary limbo” (as some experience in “behavior analysis” where disciplinary status is compromised by the competing claims to ownership of that label) or to dealing with “survival in contradiction” (as some experience in psychology, a disciplinary entity that accepts non-natural events in its explanatory accounts and so is called a social science). (Why other existing organizations do not fill these needs was comprehensively addressed in Fraley & Ledoux, 1997, Ch. 4.)

The kind of geographically based organizations of behaviorological science professionals mentioned here could well serve those needs. Another chapter in the history of the organizations of and for behaviorologists—as they more formally organize and support the independence of their natural science discipline and so more capably contribute to world behavioral health—is beginning. Behaviorological scientists must have one or more organizations that promote the reality of behaviorological science and scientists worldwide, and that work to establish officially the accouterments of independent disciplinary status including behaviorology's own academic homes and programs. Developments such as these may not make that much difference in the future of behaviorology; the fact of its natural science status may carry enough momentum. Then again, such developments may make all the difference in the world.☪

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China Through the Eyes of a Behaviorologist

Glenn I. Latham*

China is a country with a huge population. It is altogether safe to say that at any given moment there is more behavior going on in China than anywhere else on earth. And, as is the case with people throughout the world, antecedents get behavior going and consequences determine what happens to it after that.

Since I was in China discussing matters of education and parenting, I was not surprised to find that among the people of China, there are two compelling concerns. The “one child policy” has created a sociological dilemma for China that has come to be known in many quarters as the “Little Emperor Syndrome.” It is a problem created by members of two and three generations of a family living together in very cramped quarters in high rise apartment buildings with little to no facilities for children to play and romp about outside. In most instances both parents are working and a child is left at home to be tended by two or three sets of grandparents. Before long the child is ruling the roost and chaos reigns.

As these children enter school, they bring with them a repertoire of behaviors that is unlike anything that modern-day school teachers in China have ever experienced; hence, the concern of parents for the schooling of their children—a concern, I hasten to add, that is expressed quietly.

None of the problems created by these perplexing circumstances are the least bit adequately addressed by the reigning political ideology of China. The top down centralized system of government that has ruled and reigned in China for the last 50 years doesn't seem to impress little children at home or students in school. Political and educational leaders, as well as parents, know they have a mammoth problem and they know they have no solutions.

Subsequent to the two talks I gave at West China University for Medical Sciences in Chengdu, Sichuan, people swarmed about me wanting to know how the sci-

ence of human behavior could be adapted to the solution of China's parenting and educational problems. The talks I gave were entitled “Major Reform Issues in American Education” and “Strengthening Families.” In both talks I stressed the importance of what has been learned scientifically, through the study of human behavior, about the solution of difficult educational and family/parenting problems. (For some detailed information on this science and its application to these areas, see, Binder, 1988; Christophersen, 1988; Clark, 1996; Heward, 1994; Johnson & Layng, 1994; Latham, 1994, 1997; Lindsley, 1990, 1992, 1993; Skinner, 1953, 1968; Vargas, 1996; West & Hamerlynck, 1992; and Youth Policy Institute, 1988.)

In my talk “Major Reform Issues in American Education,” I emphasized the importance of addressing educational reform with science rather than intuition, and the importance of focusing on teacher and student behavior in school rather than overarching policies and grand organizational schemes (which, over the centuries, have assured the status quo!). During the question and answer period following my talk, one member of the university faculty made the following observation:

I think there are two reasons why education never changes. First, in medicine there is more money to be earned if one is up to date in his treatment of patients. Second, there is more immediacy in treating sickness and injury. There is less room for error. A patient could die if the doctor didn't know exactly what to do.

I thought it amusing that this would come from a faculty member in Communist China who didn't know Capitalism but did understand logic. She had grasped with ease something America's educators just can't seem to get!

There is a prevailing feeling across the earth that the margin of error in the education of children is so broad, and the sense of immediacy is so weak, that there is no reason to be concerned; that, as one teacher I interviewed put it, “They (meaning students) will finally get it somewhere along the way.” The problem, of course, is that too many don't “finally get it”; hence, the mess we are in, in education.

I was also asked by a faculty member about “systematic methods of instruction for preschool children.” He noted, “Surely there must be systematic methods of instruction that are based in science, and are known to work!” In all of my hundreds of school, classroom, and teacher/principal visits, I have never, ever, been asked by an American educator about “systematic methods of instruction” for children at any level. During further discussions with this same faculty member, he was equally interested in “systematic methods of instruction” for older students, “even into college.” I told him I would send him information about precision teaching, direct

*With his wife Louise, Prof. Glenn Latham spent three weeks—29 August through 20 September, 1996—in China (PRC). They were guests of the West China University for Medical Sciences, in Chengdu, Sichuan. Written in November 1996, this is the report of that visit, the author's second professional visit to China. It is also, through its call to action, one of the major factors prompting the founding of TIBI.

instruction, mastery learning, and Keller's Personalized System of Instruction. As I spoke of these methods to the faculty member and others gathered about me, they were in awe that such systems of instruction actually existed and assumed that they must be in widespread use in America, in fact in universal use. When I told them that the educational establishment of America, generally, had rejected these scientifically sound, data-based approaches to instruction, in favor of intuitive, individualistic, "artsy" methods, they were dumbfounded. One faculty member said to me, "Where can I learn about this wonderful science of human behavior?" (Arrangements are presently being made to bring this faculty member to America to learn about the science of human behavior and how to apply that science to a broad range of educational problems. It appears as though she, and a faculty member from the West China University for Medical Sciences, will be living with Louise and me while they go to school in America to learn about this "wonderful science.")

Everywhere we went in China, whenever it became known that my field of scholarship was the study and treatment of human behavior, great interest became immediately generated. The guides that had been arranged to escort Louise and me would ask questions, specific questions, about their children's behavior. I see China as a nation ready for the science of human behavior. It has such huge needs, and those needs are immediately demanding attention. I would hope that something could be done to arouse the American community of behaviorists and behaviorologists to an interest in getting the science of behavior into that mammoth population of people. I believe it would be well received and I believe that evidences of impact would be felt early on.

Although China is a totalitarian nation that is governed by powerful centralized leadership—a system I don't agree with—there are advantages that could come from it. For example, television is state controlled, as are other forms of media. If video-taped training and awareness programs could be developed that were acceptable by the government for presentation to the masses, it would be possible to get the message of behaviorology into millions and millions of homes rapidly and thoroughly. Such "media campaigns" (Biglan, 1995, p. 486) are already in place relative to health care and other topics of broad concern. Extending such campaigns to include aspects of "behavioral hygiene" (Ledoux, 1997a) such as parenting skills would not be unreasonable. When we were in China, there was interest generated by officials at the West China University for Medical Sciences to do that very thing. I believe it is worth looking into. We behaviorologists might do for the society of China what W. Edwards Deming did for Japanese business. I don't believe that is a farfetched notion.

I'm not prepared at this moment to make many specific recommendations. But I am looking into the matter carefully and intend to have several specific recommendations in the not too distant future.

Regardless of what those next steps might be, this much I know: they will have to be taken at some expense to the Americans involved in working with the Chinese. The Chinese are in a position to help cover local expenses like food and lodging, and some forms of ground transportation, but extensive travel arrangements, consulting fees, and expensive technology will have to be borne by the Americans who take the initiative in getting this ball rolling. China is a terribly, terribly poor nation. Although some things are cheap for the Chinese, like food and lodging, their wages, nevertheless, barely allow them to make ends meet. For example, the average worker's salary in China is \$25 a month. The president of West China University for Medical Sciences earns \$100 a month as president of the university, and an additional \$100 a month for his work as a surgeon. He is a fairly well known surgeon in China, and is active in his profession, even though as president of a university he has heavy administrative responsibilities.

The university is also poor. When visiting with the president and members of his administration, we were told of how they struggle to keep their buildings heated in the winter, and how they can barely afford to make major repairs to keep their facilities functional. But in the long run, I still believe that we in America who have this great science should make every effort we can to get it into China. A relatively inexpensive way of doing that would be to host Chinese scholars in America. They would be able to get to America at their own expense, and their universities would continue to pay their wages which would be anywhere from \$50 to \$100 a month. But if they were hosted by American faculty members, that is, invited to live in our homes and eat at our tables as our extended guests, they could do quite well, acquire the skills and knowledge they need, and take those skills back to China where they would get the word out amongst their colleagues and the people generally.

One of the nice things about China is that there isn't a philosophical disposition which has biased or prejudiced the academic community against the behavioral approach. Though many Chinese scholars, educators, and university leaders were educated in Russia, and are aware of the psychodynamic approach to treating behavior problems, psychodynamicism is not a compelling force in China. Also, there is nothing about communist ideology that would stand in the way. Communism is virtually meaningless to the masses in China. They could care less. Communism is a stepping stone to moving up in the system. For example, one could never be a university president or a college dean without being a member of the

communist party. But beyond that, communism has little or no meaning to the people, and would certainly not be a deterrent to the work I am proposing.

In a word, the Chinese aren't already committed to the "isms" that are plaguing America. That is certainly a big plus. Their cup is relatively empty and waiting to be filled. I think we should start filling it.

To some American scholars and academes, the thought of sharing their knowledge and expertise with a government that would order the massacre of untold numbers of students is offensive—even repulsive. I have a friend who is on the faculty of a large Midwestern university. For years he was active in providing services and training to university personnel in China. He was in China on the night of the Tiananmen Square massacre—in fact, he watched it happen and vowed never again to lift a finger on behalf of such a government. That is understandable. One must deal with his/her own conscience on such matters. As for me, I have concluded that things will never get better for the Chinese if there are no healthy influences from the outside.

I believe strongly that we need to get bright, young as well as seasoned, assertive Chinese scholars to America, where they can be educated and trained, and who can then go back to China and be our contacts for additional work there related to promoting the science. I believe that if we could get a network of behaviorists/behaviorologists located throughout China, that network could become a dynamic force in building the science in that country, and in making it available to the people as a tool in the solution of compelling educational and parenting problems. That is certainly what my wife and I are committed to doing. Within the next few months, we expect to have two of those scholars living with us in our home, taking classes at Utah State University, being mentored by selected faculty members, and given a broad base of hands-on experience so that they will know how to apply this science to the problems facing their country. It is an enriching experience. For what it is worth, my wife and I have already hosted a visiting scholar from China in our home. He was with us for about six months and was a wonderful house guest, a delight to be with, and the fruits of that are already being realized by the influence he is having in China.

For additional insights into this matter, I suggest you read "Behaviorology in China: A Status Report" by Dr. Stephen F. Ledoux. His article (Ledoux, 1997b) was written after Professor Ledoux had spent a year teaching in China. (Also see Case & Ledoux, 1997, for a chronicle of the experiences of Ledoux and his family during that year; it will help you be prepared to appreciate your own visit to China—or provide you with an adventurous, informative, and culturally expanding visit to China from the comfort of your own home.) ☺

Endnotes

Hoping that it might enlist the informed assistance of its readers in the worthy endeavor of developing behaviorology in China, the author initially prepared this work as a report of his experience in that country. The paper received minor revisions for inclusion in *Origins and Components of Behaviorology* (Ledoux, 1997c).

The author thanks his Chinese hosts both for their efforts to make his visit to China possible and for their efforts to increase the availability of the independent natural science of behavior in their country. Address correspondence regarding this paper to the author at Mountain Plains Regional Resource Center, 1780 N. Research Parkway Suite 112, Logan UT 84341 USA. ☺

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Supporting Both Our Science and the Other Components of Our Discipline

Stephen F. Ledoux

Along with many others, Ernie Vargas and I share a fondness for the poetry of Robert Frost. I had occasion to write this offshoot while answering some local folks who want to insist that our discipline is a myth (and punish my involvement):

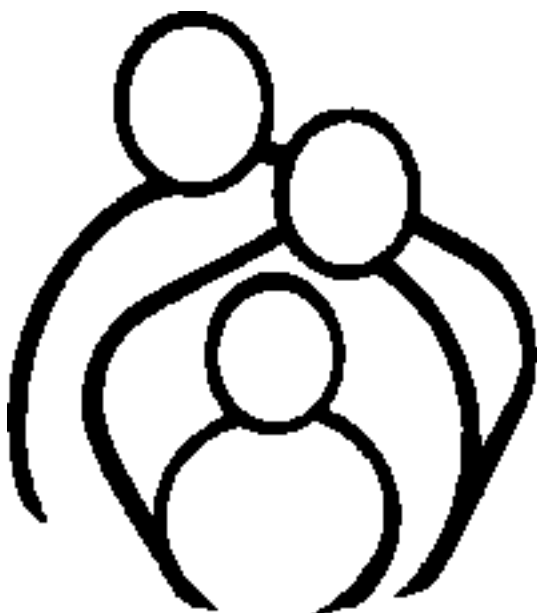
*I took the road less travelled by,
Allowing me—
Though perhaps at prices steep—
To make a difference.*

Curiously, it seems appropriate at the moment as well.

Discovering appropriate directions for our efforts to build the science, discipline, community, and organizations of behaviorologists is no easy task. We could focus just on experimental science, but I think that would ultimately be a disservice not only to ourselves but also to those our science would benefit.

Yet I must confess to wanting to be involved in a scientific society—involved as a contributor doing science. I want all behaviorologists to be involved this way. But I do not see that all behaviorologists can be involved this way, nor am I convinced that this is the way all should be involved. Behaviorologists have more to do than just conduct and report experiments, as vital as that is, if behaviorology is to make a contribution beyond our own enjoyment of experimental discovery.

Behaviorology, after all, is a comprehensive discipline that not only includes an experimental component but also philosophical, conceptual, analytical, and technological components (see Ledoux, 1997). In one or more ways, the community of behaviorologists must assure development of all of the discipline's components. As a community we need to provide support for all behaviorologists, including those whose histories prepare them to make their best contributions in these other areas, areas other than that of performing scientific experiments. In addition, a certain interdependence obtains among these areas. Those working in each of these areas need the contributions of those working in the other areas if together they are to move the discipline forward in a balanced manner. After all, where would physics be if the theoreticians were not around to tell experimenters what to look for, and if experimenters were not around to tell theoreticians when they were losing contact with reality. And



both groups not only have fun but make contributions to their discipline and the culture.

Perhaps our current organization should focus rather exclusively on experimental science. But if that is the full extent of our efforts, we may not be able to maintain them for very long due to other variables, current and historical, affecting our existence (for details, see Fraley & Ledoux, 1997). We must arrange now, even as we organize a basic science–focused society, to maintain some sort of organized involvement in our other disciplinary components.

In addition, I remain unconvinced that a handful—even a handful as large as 150, plus students—of behaviorologists, all doing basic experimental science and not much else, are going to succeed in having the kind of impact on the wider culture needed even for their own survival as behaviorologists, let alone the kind of impact that the comprehensive discipline of behaviorology can have, and should have, on that culture in so many currently needed ways. And are we also to ignore other radical behaviorists, that is, other behaviorological scientists and practitioners, who share this natural science though not the behaviorology label? I believe that it behooves us and our survival—in the sense of an obligation—to maintain some sort of organizational acknowledgment of their existence, and the reality of their work and contributions, and some sort of organizational effort to coordinate these for mutual benefit and the benefit of the wider culture. This kind of effort may even engender a growing acknowledgment, and perhaps adoption, of the behaviorology label, a development I think we should welcome and encourage for the part it could play both in the survival of behaviorology and in the timely delivery of behaviorological solutions to cultural problems.

We do not need to try to become big, certainly not for reasons of political clout (we probably derive adequate political clout from our concurrent memberships in ABA); besides, political influence is not necessarily proportional to size. But we do need to be open to becoming big, if that is the result of our other disciplinary efforts. If we do get bigger than our organizational preferences, we will deal with that situation. While circumstances differ today, with a lot more actual and potential scientists and several ways to meet (e.g., electronically), we can still take a lesson from early scientific societies. They tried to include all scientists in a particular geographic area who could attend the meetings, which in some cases were monthly. If we get “too big” we can organize on multiple levels that meet at different frequencies. The large national–level organization can meet once every couple of years, while state or regional organizations might meet annually, and small (perhaps up to 150 members) local organizations may meet every couple of months, if not monthly.

So, in some organized way, we as a community of behaviorologists must protect and extend all of our disci-

plinary components, not just our experimental science component. We must respect and support our disciplinary status. We need not do this through our current organization, although that was in essence the original purpose of our current organization (see the history of TIBA, and its statement of purpose, in Fraley & Ledoux, 1997). If we do change the focus of our current organization, we must concurrently address these other concerns organizationally. (One suggestion, made by several people at our recent convention in Plymouth, MA, concerned forming a special interest group in ABA to serve the more general concerns of our other disciplinary components. Other solutions are also possible. Several might be tried at the same time—variation and selection. Some might even beneficially coexist.)

Meanwhile, although I am inclined against changing the focus of our current organization, I could live with doing so, especially if organizational solutions are found for the concerns of our other disciplinary components as well. And if the focus is changed, I believe the adoption of a different name should be part of the change, so as to reflect honestly the new focus. (Such changes have been in progress—see Vargas, 1997—and may already be completed.) [They *have* been completed.—Ed.]

In summary, the natural science of behavior needs to be completely organized, formally and independently, if it is to emerge fully to take its place at the natural science roundtable and meet the urgent demands of its cultural mission (see Fraley & Ledoux, 1997). Behaviorological professionals around the world need organizational structures that support *all* the components of their formal independent discipline. These structures could carry out programs of support for the world’s increasingly numerous behaviorological scientists and practitioners. Organizational support is needed to consolidate the independent, natural science status of their discipline and thus to promote vigorously their professional activities (also, see Appendix 5 of Ledoux, 1997).

As behaviorologists more formally organize and support the independence of their natural science discipline, and so more capably contribute to world behavioral health, another chapter is beginning in the history of the organizations of and for behaviorologists. Behaviorological scientists must have one or more organizations that promote the reality and efficacy of behaviorological science and the disciplinary interests of behaviorological scientists worldwide, and that work to establish officially the accouterments of independent disciplinary status including behaviorology’s own academic homes and programs. Developments such as these may not make that much difference in the future of behaviorology; the fact of its natural science status may carry enough momentum. Then again, such developments may make all the difference in the world.☺

References

- Fraley, L.E. & Ledoux, S.F. (1997). Origins, status, and mission of behaviorology. In S.F. Ledoux. *Origins and Components of Behaviorology* (pp. 33–169). Canton, NY: ABCs.
- Ledoux, S.F. (1997). *Origins and Components of Behaviorology*. Canton, NY: ABCs.
- Vargas, E.A. (1997). Building the scientific community. *Selections*, 8 (3), 1–3.

Three Related Quotes

Quote 1*

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...Skinner and his followers never had a chance of making over psychology by demonstrating that practices informed by their natural science were more effective. ...Should accumulating evidence force a traditional psychologist to the brink of either abandoning mysticism or discounting valid and reliable evidence, the typical traditional psychologist treats the dilemma as a Hobson's choice—there is no real option. Any science that contradicts the fundamental mystical assumptions is abandoned. People who got into science in the first place in order to shed some scholarly light on the details of their deepest philosophical assumptions... are not going to abandon those foundations if that science starts causing trouble. Instead, they abandon the science, which at that point is merely an intellectual tool that initially looked helpful, but has proven to cause more difficulties than it is worth. (p. 128)

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*L.E. Fraley. From Ch. 5 of Fraley, L.E. & Ledoux, S.F. (1997). Origins, status, and mission of behaviorology. In S.F. Ledoux. *Origins and Components of Behaviorology* (pp. 33–169). Canton, NY: ABCs.

Quote 2*

§

...Cultural survival appeared to be at stake during the emergence of modern biological science and on other occasions in human history. And so again today. However, the technologies capable of destruction that characterize the present era (whether actively, as with nuclear weapons, or passively, as with unchecked population or pollution) are qualitatively greater than those of previous times. This puts not just cultural survival but the survival of life in general on this planet at risk (e.g., from a nuclear winter). The early behaviorologists believed... that that was what was at stake, and so they incurred the costs of organizing the behaviorology movement and discipline. (p. 313)

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*From Appendix 2 (Ch. 7 section) of Ledoux, S.F. (1997). Appendices. In S.F. Ledoux. *Origins and Components of Behaviorology* (pp. 303–317). Canton, NY: ABCs.

Quote 3*

§

...Future readers, should their lives have unfolded within the context of a culture pervaded by behaviorology, might have difficulty appreciating a past era of antithesis to behaviorological science. That people would not have readily invested in a repertoire that effective—one that obvious and well demonstrated in its validity and implications, one that elegant in its parsimonious reduction of false complexities—could tax the comprehension of those who live in such a future.... (p. 158)

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*From Ch. 7 of Fraley, L.E. & Ledoux, S.F. (1997). Origins, status, and mission of behaviorology. In S.F. Ledoux. *Origins and Components of Behaviorology* (pp. 33–169). Canton, NY: ABCs.❁

The International Behaviorology Institute By-laws

Article I: Names

(Section 1-A). The name of this corporation shall be The International Behaviorology Institute; that name shall be represented by the initials TIBI without periods.

(Section 1-B). If “TIBI” is used as an adjective preceded by the article “the,” that combination, appearing as “...the TIBI...,” shall not be redundant.

(Section 1-C). The name of the *association* component of TIBI shall be The International Behaviorology Institute Association; that name shall be represented by the initials TIBIA without periods.

(Section 1-D). If “TIBIA” is used as an adjective preceded by the article “the,” that combination, appearing as “...the TIBIA...,” shall not be redundant.

Article II. Purposes

The purposes of The International Behaviorology Institute (TIBI) as a *professional* body shall be described under Section II-A, and the purposes of TIBI as a *corporation* shall be described under Section II-B:

(Section 2-A). TIBI is a *professional* organization that is dedicated to many concerns. TIBI is dedicated to teaching behaviorology, especially to those who do not have university behaviorology departments or programs available to them; TIBI is a professional organization also dedicated to expanding the behaviorological literature at least through the *TIBI News Time* newsletter and the *Behaviorology and Radical Behaviorism* journal* (with editors being appointed by the TIBI Board of Directors from among the TIBIA Advocate members); TIBI is a professional organization also dedicated to organizing behaviorological scientists and practitioners into an association (The International Behaviorology Institute Association—TIBIA) so they can engage in coordinated activities that carry out TIBI’s purposes** (activities such as [1] encouraging and assisting members to host visiting scholars who are studying behaviorology; [2] enabling TIBI faculty—who must also be TIBIA Advocate (or occasionally Associate) members—to arrange or provide training for behaviorology students; and [3] providing TIBI certificates to students who successfully complete specified behaviorology curriculum requirements); and TIBI is a professional organization dedicated to representing and

developing the philosophical, conceptual, analytical, experimental, and technological components of the discipline of behaviorology, the comprehensive natural science discipline of the functional relations between behavior and independent variables including determinants from the environment, both socio-cultural and physical, as well as determinants from the biological history of the species. Therefore, recognizing that behaviorology’s principles and contributions are generally relevant to all cultures and species, the purposes of TIBI** (to be printed in each issue of the *TIBI News Time* newsletter) are:

- A. to foster the philosophy of science known as radical behaviorism;
- B. to nurture experimental and applied research analyzing the effects of physical, biological, behavioral, and cultural variables on the behavior of organisms, with selection by consequences being an important causal mode relating these variables at the different levels of organization in the life sciences;
- C. to extend technological application of behaviorological research results to areas of human concern;
- D. to interpret, consistent with scientific foundations, complex behavioral relations;
- E. to support methodologies relevant to the scientific analysis, interpretation, and change of both behavior and its relations with other events;
- F. to sustain scientific study in diverse specialized areas of behaviorological phenomena;
- G. to integrate the concepts, data, and technologies of the discipline’s various sub-fields;
- H. to develop a verbal community of behaviorologists;
- I. to assist programs and departments of behaviorology to teach the philosophical foundations, scientific analyses and methodologies, and technological extensions of the discipline;
- J. to promote a scientific “Behavior Literacy” graduation requirement of appropriate content and depth at all levels of educational institutions from kindergarten through university;
- K. to encourage the full use of behaviorology as the essential scientific foundation for behavior related work within all fields of human affairs;
- L. to cooperate on mutually important concerns with other humanistic and scientific disciplines and technological fields where their members pursue interests overlapping those of behaviorologists; and
- M. to communicate to the general public the importance of the behaviorological perspective for the development, well-being, and survival of humankind.

*This journal (BARB) is under development at this time and will appear only when its implementation can be fully and properly supported.—Ed.

**By virtue of being purposes of TIBI, these purposes are also the purposes of TIBIA!—Ed.

(Section 2-B). As a corporation the purposes of TIBI are to receive tax-deductible charitable contributions and apply such funds as are received to support TIBI's purposes as specified in Section II-A above.

Article III: Membership

(Section 3-A). TIBIA shall have four categories of membership, of which two are non-voting and two are voting. The two non-voting categories shall be Student and Affiliate. The two voting categories shall be Associate and Advocate. All new members shall be admitted provisionally to TIBIA at the appropriate membership level. Advocates will consider each provisional member and then vote on whether to elect each provisional member to the full status of her or his membership level or to accept the provisional member at a different membership level. Lists of the members at each membership level shall be printed in the *TIBI News Time* newsletter at least annually.

Admission to TIBIA in the Student membership category shall remain open to all persons who are undergraduate or graduate students who have not yet attained a doctoral level degree in behaviorology or in an acceptably appropriate area, and who complete the membership application form and pay the appropriate dues.

Admission to TIBIA in the Affiliate membership category shall remain open to all persons who wish to maintain contact with the organization, receive its publications, and go to its meetings, but who are not students and who have not attained any graduate degree in behaviorology or in an acceptably appropriate area, and who complete the membership application form and pay the appropriate dues. On the basis of having earned TIBI Certificates, Affiliate members may nominate themselves, or may be invited by the TIBI Board of Directors or Faculty, to apply for an Associate membership.

Admission to TIBIA in the Associate membership category shall remain open to all persons who are not students, who document a behaviorological repertoire at or above the masters level or who have attained at least a masters level degree in behaviorology or in an acceptably appropriate area, who maintain the good record—typical of “early-career” professionals—of professional accomplishments of a behaviorological nature, and who complete the membership application form and pay the appropriate dues. On the basis either of documenting a behaviorological repertoire at the doctoral level or of completing a doctoral level degree in behaviorology or in an acceptably appropriate area, an Associate member may apply for membership as an Advocate.

Admission to TIBIA in the Advocate membership category shall remain open to all persons who are not students, who document a behaviorological repertoire at the doctoral level or who have attained a doctoral level degree in behaviorology or in an acceptably appropriate area,

who maintain a good record of professional accomplishments of a behaviorological nature, who demonstrate a significant history—typical of experienced professionals—of work supporting the integrity of the organized discipline of behaviorology including its organizational manifestations such as TIBI and TIBIA, and who complete the membership application form and pay the appropriate dues.

The criteria for each membership level shall be printed in each issue of the *TIBI News Time* newsletter.

(Section 3-B). The TIBI Board of Directors bears final responsibility regarding decisions on acceptably appropriate degree areas and specific criteria for each membership category. The criteria and degree areas for each membership category may be reviewed and, with the concurrence of the Board of Directors, edited as deemed appropriate by the officers—the “Executive Board”—of the voting members of TIBIA.

(Section 3-C). With the concurrence of the Executive Board of the voting members of TIBIA, a group may hold a group-membership in TIBIA. At least one member of the group must hold an individual membership in TIBIA by fully meeting the criteria for the level of membership held, and one such member-person will be chosen by the group to act as the group's formal representative to TIBIA. The person serving as the group's representative to TIBIA may be changed at the discretion of the member group. At any given time, such a member group shall have only those rights and privileges normally attached to the category of membership in TIBIA held by its current representative. Any such member group shall have only one vote on matters upon which its representative is eligible to cast a vote, get only one free subscription to publications provided with membership, and receive only one copy of any other materials or benefits distributed to members. The person in the group, who is to act as the group's representative and who shall be a qualified individual member of TIBIA, shall, upon recognition by the highest ranking TIBIA officer present at, or in control of, any official TIBIA function, be authorized to speak, vote, or otherwise represent the group. Any such designated person shall function on behalf of the represented group *only* with the rights and privileges of the level of TIBIA individual membership held by that person. If during the tenure of a group membership, no member of a member-group qualifies as an individual member of TIBIA and accepts the appointment and responsibility for representing the group, then the group membership automatically ends.

(Section 3-D). Establishing the annual dues structure for the different membership categories takes partially into account, by means of percentages of annual income, the differences in income levels and currency values among the world's various countries. Thus, the annual dues for each membership category (which shall be printed in each issue of the *TIBI News Time* newsletter) are:

Membership Category	Dues (in US dollars —\$10 minimum)
Advocate	The lesser of 0.4% of annual income, or \$80.00
Associate	The lesser of 0.3% of annual income, or \$60.00
Affiliate	The lesser of 0.2% of annual income, or \$40.00
Student	The lesser of 0.1% of annual income, or \$20.00

Article IV: Board of Directors, Faculty, Officers, Terms, and Vacancies

(Section 4-A). TIBI will have a Board of Directors and a Faculty. These shall be constituted as follows:

The TIBI Board of Directors shall consist initially of the founders of TIBI and the TIBIA President. The members of the TIBI Board of Directors may create additional membership seats on the TIBI Board of Directors by unanimous vote for each membership seat created, however the total number of members shall not exceed ten. For any additional seat created, the TIBI Board of Directors shall by unanimous vote elect a new Board member to fill the new seat from among the TIBI Faculty or from among past or present TIBIA elected officers. When a member of the TIBI Board of Directors resigns, the remaining members of the TIBI Board of Directors may by unanimous vote eliminate that membership seat, however the total number of Board members shall not be less than five. Members of the TIBI Board of Directors shall serve in that capacity until they resign.

Members of the TIBI Board of Directors will maintain TIBIA Advocate membership. Except for the TIBIA President, Board members will pay an annual Board of Directors dues of the lesser of 0.6% of annual income or US\$120.00 (minimum: US\$20.00). Failure to maintain TIBIA Advocate membership, or failure to pay annual Board of Directors dues, will constitute resignation from being a member of the TIBI Board of Directors. When the seat of a member of the TIBI Board of Directors who resigns is retained, the remaining members of the TIBI Board of Directors will replace him or her by electing a new Board member from among the TIBI Faculty or from among past or present TIBIA elected officers. Board of Directors dues shall be printed in each issue of the *TIBI News Time* newsletter.

In addition to the TIBI founders who shall be TIBI Faculty members so long as they hold TIBIA Advocate membership and meet all other faculty requirements, the

TIBI Faculty will be those accepting TIBI Faculty appointments made by the TIBI Board of Directors from among all TIBIA Advocates or by special exception as the TIBI Board of Directors deems appropriate. TIBI Faculty appointments may be for a specified or an unspecified period; in either case, the appointments may be rescinded. All TIBI Faculty will maintain TIBIA Advocate membership (unless an exception applies), as well as pay an annual Faculty dues of the lesser of 0.5% of annual income or US\$100.00 (minimum: US\$20.00). Failure to maintain TIBIA Advocate membership (unless an exception applies), or failure to pay annual Faculty dues, will constitute resignation from being a TIBI Faculty member. Faculty dues shall be printed in each issue of the *TIBI News Time* newsletter. Faculty may receive stipends from TIBI.

All doctoral level behaviorologists (a) who are TIBI Faculty members, or (b) who are offered and accept appointments as TIBI Faculty members, shall receive from TIBI the *DLBC* (Doctoral Level Behaviorology Certificate), recognizing the level of their behaviorological repertoire, as part of TIBI's expression of appreciation for their service contributing to the teaching of other behaviorologists.

Lists of the TIBI Board of Directors and all TIBI Faculty (and TIBI students willing to be listed) shall be printed in each issue of the *TIBI News Time* newsletter.

(Section 4-B). TIBIA Officers will be (a) a President, (b) a Vice President, and (c) a Secretary. All three officers will be elected by the voting members of TIBIA from among the Advocates. Should the President be unable to carry out the duties of office, the Vice President shall assume those duties until the President—within her or his term of office—is again able to carry them out, and the Secretary will be third in that same line of succession. Should all three officers be unable to carry out the duties of office, the TIBI Board of Directors will review and act on available options.

The three elected officers shall appoint, from among the Advocates and Associates, other officers as they deem necessary for the successful operation of TIBIA.

TIBIA will have an Executive Board, with up to ten members, consisting of the three elected officers, the chair of the TIBI Board of Directors, the immediate TIBIA past president, and up to five senior appointed TIBIA officers.

Lists of the TIBIA Executive Board members and all elected and appointed officers and their terms shall be printed in each issue of the *TIBI News Time* newsletter.

(Section 4-C). TIBIA officers shall have terms of three years duration. A person may serve as president for more than one term but may not be elected to consecutive full terms. A person may serve as vice president for no more than three consecutive full terms, though a person may serve as vice president for more than three terms if the terms are not consecutive. A person may serve as secretary for no more than five consecutive full terms, though

a person may serve as secretary for more than five terms if the terms are not consecutive. Appointed officers are not limited to any fixed number of terms.

(Section 4-D). If an *elected* officer vacates office and one year or less remains in the unexpired term, the TIBIA Executive Board shall, within three months of the vacancy, appoint a replacement to finish the three-year term. If more than one year remains in the unexpired term, a special election shall be conducted by the TIBIA Executive Board within three months of the vacancy to fill that office for the remainder of the unexpired term. If an *appointed* officer vacates office before the expiration of his or her term, the TIBIA Executive Board shall act within three months of the vacancy either (1) to appoint a person to complete the unexpired term, (2) to allow the office to go unfilled until such time as the TIBIA Executive Board appoints a person to fill it, or (3) to eliminate the office.

(Section 4-E). The three-year terms of each of the elected officers shall run concurrently, beginning on January 1. The terms of office for the first set of elected officers shall have begun on 1 January 1998 and shall end on 31 December 2000.

(Section 4-F). An elected officer of TIBIA may be removed from office by a two-thirds majority vote of the voting members of TIBIA. Such a vote shall occur upon the presentation to the TIBIA Executive Board of a petition, signed by at least one-fifth of the current TIBIA voting members. The petition shall name the officer whose removal is sought, specify the reasons for the action to remove from office, and request that such a vote be taken. The officer whose removal is sought shall prepare a rebuttal at his or her option within ninety (90) days from notice of the petition action. The reasons for the removal and the rebuttal, if any, shall be presented to the voting members before they are asked to vote on a motion to remove an elected officer.

(Section 4-G). An appointed officer, or a person appointed to any other official duty or task within TIBIA, may be removed by action of the TIBIA Executive Board from that position prior to the expiration of the appointed term of office regardless of how that term and the office are defined. The reasons for such a removal action shall be given to the person at least 30 days prior to an opportunity for that person to be heard by the TIBI Executive Board regarding the removal action, which hearing must occur prior to the removal action taking effect.

(Section 4-H). The TIBIA President and Vice President may divide and specify how the usual duties of such executive positions will be shared between them. The duties of the TIBIA Secretary will include (a) taking the minutes of all official meetings, (b) verifying those minutes—within 30 days of the meeting—with those present or with a sub-group of them authorized by them to authenticate the minutes, (c) providing the verified minutes

to the *TIBI News Time* newsletter editor, (d) carrying out the election procedures as needed, (e) sending “Thank You” correspondence to persons making material donations or monetary contributions to TIBI/A, (f) verifying that responses have been made to correspondence addressed to TIBIA or any of its officers, (g) coordinating the annual production of a *TIBIA Directory*, and (h) distributing TIBIA announcements (e.g., of position statements or meetings).

Article V: Nominations And Elections

(Section 5-A). Elections shall be conducted by the TIBIA Executive Board. Six months before an elected officer’s term begins, the nomination and election procedure is begun and proceeds as follows: Ballots calling for nominations shall be prepared and distributed to all voting members of TIBIA by the end of July, and returned, along with statements of willingness “to serve if elected” from those being nominated, by the end of September if they are to be counted. The names of the two persons receiving the highest number of nominations for each office, from among those who are both eligible and willing to serve if elected, shall be placed on the official TIBIA election ballots. Those ballots shall be prepared and distributed to all voting members of TIBIA before the end of October and returned before the end of November if they are to be counted. The results of such elections shall be available before the end of December and shall be reported in the *TIBI News Time* newsletter and announced at the next TIBIA meeting. On 1 January each newly elected officer begins her or his term of office.

Article VI: Meetings

(Section 6-A). The TIBIA President may call meetings of the TIBIA Executive Board, and must call a meeting when requested by a majority of the TIBIA Executive Board. The TIBIA Executive Board shall call general meetings of TIBIA members. An annual meeting of TIBIA members will be held. The proceedings of all these meetings will be reported in the next issue of the *TIBI News Time* newsletter (and whenever possible, these meetings will be announced beforehand in the newsletter as well).

Article VII: Quorum

(Section 7-A). For the TIBI Board of Directors to take any action, a quorum of *all* the Board members must be involved although the involvement need not require being bodily present at a traditional meeting because involvement may be by electronic or other communications methods at different points in time. Should full consensus on a motion not be reached, members may vote through the communication means of their involvement either for or against the motion—or specifically abstain—and the motion will pass only if a minimal consensus of

80% is reached among board members in favor of the motion. Actions of the TIBI Board of Directors will be reported in the next issue of the *TIBI News Time* newsletter.

(Section 7-B). A quorum at business meetings of the TIBIA Executive Board shall consist of either the three elected officers plus two other TIBIA Executive Board members, or two of the three elected officers plus four other TIBIA Executive Board members. No valid business meeting of the TIBIA Executive Board can be conducted if a bona fide attempt was not made to provide timely notice of the meeting to each person eligible to participate.

(Section 7-C). The TIBIA Executive Board may create an Executive Committee consisting of a subset of the TIBIA Executive Board members. The Executive Committee subset must have at least three members of which one must be a member of the TIBI Board of Directors. The proceedings of all Executive Committee meetings will be reported in the next issue of the *TIBI News Time* newsletter. The quorum at business meetings of the Executive Committee shall be as indicated in the following chart:

Executive Committee	
<u>Number of Members</u>	<u>Quorum</u>
3-5	3
6 or 7	4
8 or more	70%

(Section 7-D). The quorum at business meetings of other groups within TIBIA shall be determined by those groups, except that at *initial* organizational meetings of any such groups having predetermined numbers of members, the quorum at the first meeting shall be 50% of the previously defined membership.

Article VIII: Fiscal Matters and Treasurer Responsibilities

(Section 8-A). Each member's dues shall be due and payable in or before the month of December before the next membership year.

(Section 8-B). Members who qualify and apply for a change in membership status shall see an approved status change at the start of the next membership year.

(Section 8-C). TIBI and, as part of TIBI, TIBIA shall share a Treasurer appointed by, and from among, the members of the TIBI Board of Directors. The Treasurer shall be responsible for keeping records of billing of members for all types of dues and dues payments described in these By-laws. He or she shall be responsible for keeping records of any contributions received and disbursements made. She or he will prepare a report on the fiscal and membership status of TIBIA to be presented at each annual TIBIA Executive Board meeting and at each additional TIBIA Executive Board meeting at which a report describing the fiscal or membership status of TIBIA

might be relevant. The report will also be distributed to the TIBI Board of Directors. Once each year or when requested, he or she will also prepare a report on the fiscal status of TIBIA, including dues billed and paid, contributions received, and disbursements made. This report will be provided to the TIBIA Board of Directors. All such reports shall be printed in the *TIBI News Time* newsletter.

(Section 8-D). In addition to the automatic allocation of adequate funds to support the *TIBI News Time* newsletter, the *Behaviorology and Radical Behaviorism* journal, and the postage and supply costs incurred through the duties of the Secretary, the policies for (a) the investment of TIBIA funds, (b) expenditures, and (c) disbursements, policies which may result from actions of the TIBIA Executive Board or which may be proposed by TIBIA members, shall be approved by the voting members of TIBIA at the annual TIBIA meeting. Those policies shall be carried out by the TIBIA Executive Board. All such policies shall be reported in the *TIBI News Time* newsletter.

(Section 8-E). In addition to the automatic allocation of adequate funds to support the training of TIBI's students, the postage and supply costs and accounting agency fees incurred through the duties of the Treasurer, and support for the *TIBI News Time* newsletter and the *Behaviorology and Radical Behaviorism* journal, the policies for (a) the investment of TIBI funds, (b) expenditures, and (c) disbursements shall be determined and carried out by the TIBI Board of Directors. All such policies shall be reported in the *TIBI News Time* newsletter.

(Section 8-F). In addition to treasurer responsibilities, the treasurer will bear some secretarial responsibilities. These will include (a) corresponding with those applying for training, and (b) maintaining the TIBI corporate seals, certificate stocks, and records of certificates earned/presented.

Article IX: Position Statements

(Section 9-A). Position statements of TIBIA shall become official after both receiving the approval of the TIBIA voting members, according to voting arrangements specified and carried out by the TIBIA Executive Board, and receiving the concurrence of the TIBI Board of Directors. Thereafter, dissemination of such position statements shall be considered official only if made by a member of the TIBI Board of Directors or by an elected officer of TIBIA, and in the event of publication, only if accompanied by a statement of endorsement as an official position statement of TIBIA. All official position statements shall be printed in the *TIBI News Time* newsletter and the *Behaviorology and Radical Behaviorism* journal.

(Section 9-B). Affiliated organizations, groups holding group memberships in TIBIA, TIBIA members, or other TIBIA related units are required to disclaim explicitly any implications of TIBIA endorsement of any position statements that they might adopt unless such

statements have been formally approved by TIBIA as specified in Section 9-A.

(Section 9-C). The TIBI and TIBIA names may not be used by any TIBIA member in any way that implies an official endorsement by the organization unless such an official endorsement has been extended by the organization and the member is acting in accordance with the provisions of that endorsement.

(Section 9-D). Activities or works of any TIBIA member which mention TIBIA or TIBI, or names that could be confused with these names, are to carry a statement clarifying that no official TIBI or TIBIA endorsement of those activities and works has been sought or provided.

Article X: General

(Section 10-A). The TIBI Board of Directors and the TIBIA Executive Board shall maintain a policies and procedures manual, the contents of which shall not contradict these TIBI By-laws. This manual shall reflect the preferences of these boards in running the day to day affairs of TIBI and TIBIA. The boards shall be guided by the policies and procedures set forth in this manual. This manual shall be printed in the *TIBI News Time* newsletter at least once each year.

(Section 10-B). TIBI and TIBIA shall not have any policy, procedure, or by-law which makes race, color, creed, ethnicity, age, gender, physical condition, sexual preference, or national origin a criterion for granting admission to TIBIA membership or to any TIBI or TIBIA program or activity.

(Section 10-C). Any member of TIBIA who resigns from membership in TIBIA or who allows her or his TIBIA membership to lapse by failing to pay dues and renew membership, shall thereby terminate all benefits, privileges, and opportunities of membership. Upon subsequently rejoining TIBIA, if that occurs, he or she shall be considered a new member in the appropriate membership category and shall receive no additional credit, status, or other benefits based on prior TIBIA membership except that should she or he pay the dues that would have been assessed in the intervening years then he or she will be considered to have been a member for those years.

Article XI: Amendments to By-laws

(Section 11-A). Amendments to these By-laws may be proposed by any member of the TIBI Board of Directors or by a petition signed by at least 70% of those listed as TIBIA voting members. These By-laws may be amended by any of three mechanisms: (a) These By-laws stand amended if 80% or more of the TIBI Board of Directors votes for the proposed amendment. Or (b) at any time that TIBIA has more than 50 voting members these By-laws stand amended if 90% or more of TIBIA voting members signs a petition requesting the change. Or (c) if

an amendment is not adopted by action of the TIBI Board of Directors after that amendment was proposed by a petition signed by between 70% and 89% of TIBIA voting members (at any time that TIBIA has more than 50 voting members), then the TIBI Board of Directors must, within 30 days of their vote, distribute a report to all TIBIA voting members describing why the amendment was not adopted; however, if that report is not distributed in a timely manner, then the proposed amendment takes effect and the By-laws stand changed. All By-laws changes shall be reported in the *TIBI News Time* newsletter.

Article XII: Newsletter Communications

(Section 12-A). The purposes of TIBI shall be printed in each issue of the *TIBI News Time* newsletter.

(Section 12-B). The criteria for each TIBIA membership level shall be printed in each issue of the *TIBI News Time* newsletter.

(Section 12-C). The annual dues for each TIBIA membership category shall be printed in each issue of the *TIBI News Time* newsletter.

(Section 12-D). Lists of the members of TIBIA at each membership level shall be printed in the *TIBI News Time* newsletter at least annually.

(Section 12-E). Board of Directors dues shall be printed in each issue of the *TIBI News Time* newsletter.

(Section 12-F). Faculty dues shall be printed in each issue of the *TIBI News Time* newsletter.

(Section 12-G). Lists of the members of the TIBI Board of Directors and TIBI Faculty, (and TIBI students willing to be listed) shall be printed in each issue of the *TIBI News Time* newsletter.

(Section 12-H). All Actions of the TIBI Board of Directors will be reported in the next issue of the *TIBI News Time* newsletter.

(Section 12-I). The results of TIBIA elections shall be reported in the first *TIBI News Time* newsletter issued after the elections.

(Section 12-J). Lists of the TIBIA Executive Board members and all elected and appointed officers and their terms of shall be printed in each issue of the *TIBI News Time* newsletter.

(Section 12-K). The proceedings of all TIBIA Executive Board, general, and annual meetings will be reported in the first *TIBI News Time* newsletter issued after they occur (and whenever possible, these meetings will be announced beforehand in the newsletter as well).

(Section 12-L). The proceedings of all meetings of the Executive Committee of the TIBIA Executive Board will be reported in the first *TIBI News Time* newsletter issued after they occur.

(Section 12-M). All reports from the TIBI/A Treasurer shall be printed in the *TIBI News Time* newsletter.

(Section 12-N). All TIBI and TIBIA fiscal policies regarding income, expenditures, disbursements, and temporary investment of income prior to disbursement, shall be reported in the *TIBI News Time* newsletter.

(Section 12-O). All official TIBIA position statements shall be printed in the *TIBI News Time* newsletter and in the *Behaviorology and Radical Behaviorism* journal.

(Section 12-P). The updated/current version of these By-laws, and the policies and procedures manual of the TIBI Board of Directors and the TIBIA Executive Board, shall be printed in the *TIBI News Time* newsletter at least once each year.

(Section 12-Q). By-laws changes shall be reported in the first *TIBI News Time* newsletter to be issued after the change is made.

Article XIII: Rules of Procedure

(Section 13-A). The rules contained in the most recent edition of *Robert's Rules of Order (Newly Revised)* shall govern TIBI, including TIBIA, in all cases to which they are applicable and in which they are consistent with these By-laws and with any special rules, policies, or traditions that TIBI or TIBIA might recognize; otherwise, these By-laws and the special rules, policies, and traditions of TIBI or TIBIA shall govern.

Article XIV: Dissolution

(Section 14-A). In the event of the dissolution or termination of TIBIA, the association component of TIBI, all of the assets and title to and possession of the property of TIBIA shall pass to TIBI.

(Section 14-B). In the event of the dissolution or termination of TIBI, all of the assets and title to and possession of the property of TIBI shall pass to a scientific educational organization selected by the TIBI Board of Directors.☺

Introducing a Visiting Scholar

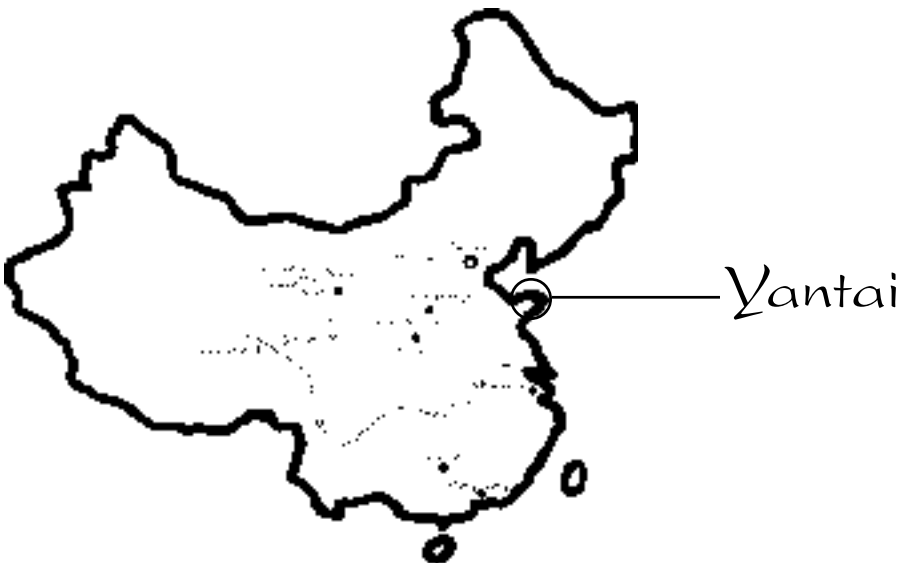
Ma Wen

It seems I am the first “eastern states” visiting scholar from China to study behaviorology through the programs of TIBI. I was able to afford my travel to and from the USA, but I would have been unable to afford room and board, or the usual tuition. With the Institute helping with these expenses, I am able to be here to study.

As an associate professor of English at Yantai University in Shandong Province, I am interested in factors that relate to language, especially language teaching and translation. Along with many of my colleagues, I find—even after more than ten years of English teaching—that the knowledge and skills we acquired in the past from psycholinguistic theories are not easily applicable in the classroom. As an alternative I have come to study behaviorology because I believe that Skinner’s verbal behavior analysis may be able to help in these areas.

As a parent, I am also interested in factors that relate to successful child rearing. Due to the extent of the “little emperor” syndrome in China, much can be done with the help of behaviorological science. Again, this provides good reason to come and study behaviorology.

If behaviorological science does contribute solutions to problems in education and child rearing, then there indeed exists a big potential for research and application in the Chinese context. I want to learn more about this discipline to help make contributions, and to help discover the extent of its contributions, in China. And I deeply appreciate the opportunity to do so.☺



Behaviorology.org: An Action Plan

David R. Feeney

An estimated 20–30 million people in the United States use electronic mail (email).¹ Online written communication tools like email, commercial online services² and the World Wide Web (www) have become part of the daily routine of a vast and growing number of people, worldwide. Online communications serve as a convenient, low cost way to share documents, supplemental graphics, mail and real-time conversation.

Such a far-reaching technological revolution affects the way scientists behave, including behaviorological and behavior-related (social) sciences. HTML, the programming language of the www, originated as a simple way for researchers to share documents, with pictures, over worldwide computer networks. Science is heavily verbal, and online writing tools in particular (such as email, listserves, newsgroups and chat) bring rapid, worldwide document-sharing and conversation into offices and homes.³ Online communications are being used to deliver education and therapy,⁴ including professional education credits.⁵ Online behavior is increasingly the object of research and theory,⁶ as well as judicial scrutiny.⁷

Regardless of the size of our behaviorological community, our professional and personal development can be facilitated by the routine use of simple online communications. The small size of the local behaviorological

community, combined with isolated behaviorologists worldwide, may especially benefit from using simple online communications for professional development and training. For a small organization with typically limited resources, low-cost behavioral strategies for effective, international professional outreach are needed.

The BALANCE Website

As Webmaster for BALANCE (Behavior Analysis League for Accuracy in News, Commentary and Education) I designed a simple website for small group communications. Two main goals were to distribute the BALANCE Newsletter in www format, while increasing www-based subscriptions to the paper Newsletter. With BALANCE editor Roger Bass (RFB53074@aol.com), I designed the BALANCE Website and installed it at <http://www.onlearn.com/balance.html>.

The website was designed to display all prior issues of the BALANCE Newsletter and other original writing by BALANCE members. The website gave visitors the opportunity to subscribe to the paper Newsletter for free. Website visitors could also use email to converse with me concerning printing from the www, or to submit manuscripts to Roger Bass via email.

The BALANCE website went online on Wednesday 21 May 1997. Here is an informal analysis of its impact up to 8 October 1997.

The week following 21 May was the 1997 ABA Convention, which featured the BALANCE SIG meeting and the demo of the initial site to the BALANCE members. On 27 May I began taking data of the BALANCE Web Site “hit count” (hits = number of times the site is accessed by a web browser). Figure 1 below illustrates a cumulative record of those hit counts.

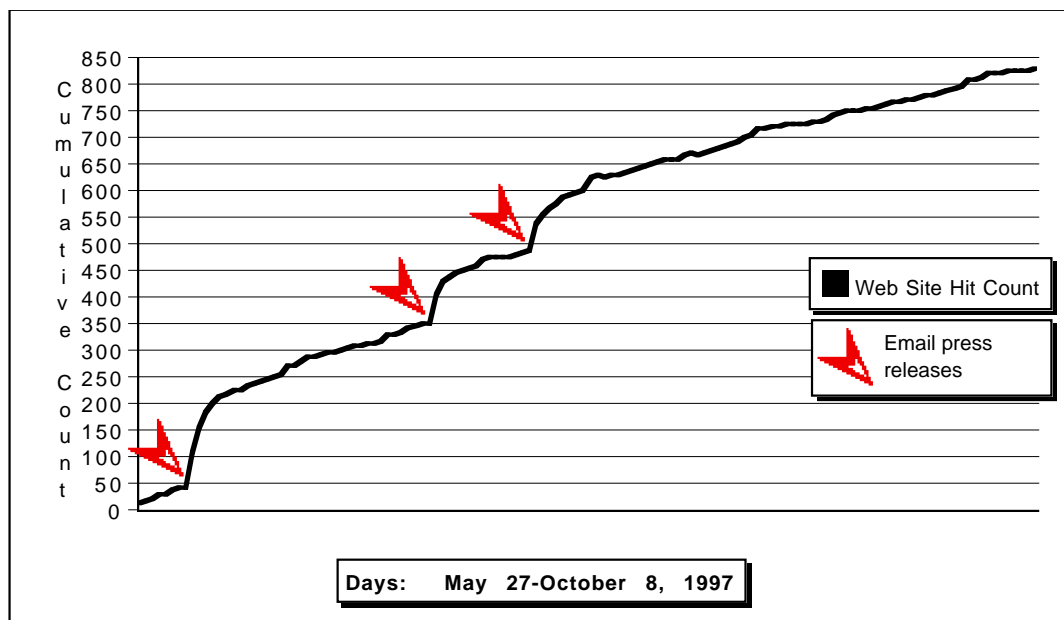


Figure 1: Cumulative Hit Counts of BALANCE Website

To increase the rate of daily visitors, “press releases” were written for email distribution via listservers devoted to behavior-analytic and related issues. The first BALANCE press release was sent on 3 June 1997. Two more press releases were done, on 9 and 24 July 1997. Press releases to listservers served as informational advertising to a target group of interested professionals, since each listserver typically distributes email to hundreds of listserver subscribers. Press releases are notated in Figure 1 with an arrow marker.

It is interesting, if not surprising, to note the “uptick” in hit counts after each press release. However, larger listserver audiences did not result in larger increments of hit counts to the site. The first press release was to the Behav–An listserver.⁸ This was associated with the steepest climb on the graph. The second press release was sent to two listservers: the Behav–An list and the new Standard Celeration listserver⁹—*more recipients, but fewer subsequent hits to the site*. Finally, the modest increase after the final press release (announcing the publication of the BALANCE Online Library monograph) is especially intriguing, since that press release targeted five listservers: Behav–An, Education Consumers Clearinghouse,¹⁰ LEARNING listserve, Standard Celeration (SCList), and Society for Computers in Psychology (SCiP-L).

Increasing Newsletter Subscribers

On the same day as the debut of the BALANCE site (21 May 1997), I emailed a small personal press release to 20 select individuals. They included Murray Sidman, Og Lindsley, Joe Cautela, John Church, Dennis Wahlgren and 15 others.

The first BALANCE subscription request to be emailed from the website was on Thursday 22 May; the day after the BALANCE site went online. That was Dennis Wahlgren (wahlgren@mail.sdsu.edu) at the Center for Behavioral Epidemiology and Community Health (C-BEACH) in San Diego.

Since 21 May 1997, I processed 78 new subscription requests. The BALANCE Newsletter (paper version) grew to 202 subscribers, 38% of whom were drawn from visitors to the BALANCE site during its first five months of operation.

With an eye to international outreach, of those 78 new BALANCE subscribers, 18 (23%) were from outside the continental United States. The following shows the number of subscribers from 12 countries and Alaska:

Alaska:	1	Brazil:	1
Canada:	3	France:	1
Israel:	1	Japan:	2
Mexico:	3	N. Ireland:	1
Norway:	1	Phillipines:	1
Poland:	1	Scotland:	1
Spain:	1		

The BALANCE website procedures have had a sustained, remarkable impact on the number of subscribers to the BALANCE Newsletter, a sizable percentage of which were international. BALANCE can serve as a pilot experiment guiding uses of New Media by TIBI. Both TIBI and BALANCE are small organizations, with comparable resources and comparable missions: to supplement and shape accurate verbal behavior regarding a natural science of behavior. Both BALANCE and TIBI desire increased international participation, with TIBI being explicitly organized to foster it.

An Action Plan for *www.behaviorology.org*

TIBI has reserved *www.behaviorology.org* (.org being the Internet suffix for nonprofit companies), and is committed to using available online tools to teach and advocate behaviorology. Here are steps TIBI might take to generate disciplinary interaction and outreach, at modest costs:

Offer a free paper newsletter via a TIBI Website. With proper software coordination, the desktop publishing document used to print the current TNT Newsletter can be published to the *www* quickly and easily.

Advertise for free to target audiences. Academic and private listservers (such as Behav–An and Education Consumers Clearinghouse, respectively) accept a single email document, then resend it to hundreds of listserver subscribers. A short, factual press release introducing TIBI and its features, guiding readers to a web site, can generate web visitors and set the stage for verbal interaction. Also, hundreds of search engines accept and list sites for free (but for the response-cost of submitting forms). That “behaviorology” be a searchable term in various internet search tool would be a powerful payoff for modest effort.

Make high probability requests of site visitors, then rapidly consequate. “Subscribe to our free Newsletter via email” can be viewed as a high-probability request.¹¹ While using a Netscape browser, clicking an email link and writing your name and mailing address in a pre-addressed email has a low response cost. Either an automatic or human email response is generated, and the site visitor gets his or her reply from TIBI almost immediately. From this high-probability request strategy, a subscriber database of names, mailing addresses and e-dresses can be gleaned. Since the response cost of writing and sending email is similar regardless of geographic distance, international visitors have as much opportunity to participate as national visitors. Finally, it leaves TIBI with a wider market for its most valuable export: behaviorology.

Offer avenues for site visitors to contribute and shape productivity. A percentage of the subscribers to a newsletter will have more to say, which may be relayed via email to TIBI. Such writing may be shaped into publication-quality text, articles or other verbal contributions, then

fed back into the web site or other TIBI publications. Reader-derived material can keep a site “fresh,” while developing new verbal material via audience involvement.

Routinely advertise site changes and new features. Since the cost of “targetcasting” via email press releases is nil, new releases can be sent at regular intervals, announcing valuable changes and additions to a site.

Distribute references of behaviorological work in basic, applied, and conceptual areas. A list of references and resources documenting the emergence of behaviorology in professional and popular literature already exists... on paper. Even a non-interactive web page listing the same information would be available worldwide for reading or printing, 24 hours a day. Adding email or hypertext links for the various authors serves to enhance the interactivity of such a list.

Build, with active email feedback, a “Frequently Asked Questions” list (FAQ). Both professionals and lay people react to the novelty of behaviorology with similar reactions: *What’s that? Where did it start? How long has it lasted?* FAOs feature basic answers to questions encountered in real-life (but also via online contact). A FAO is generally cumulative, with new materials added over time. Instead of asking people with basic questions to read technical literature, let’s “catch ‘em being good,” and reward basic questions with plenty of basic answers (with clickable opportunities for more involved answers available).

High interactivity and verbal productivity need not require expensive online resources. Mundane email and web tools can be combined with simple behavioral technology to get audiences immersed in the verbal repertoire of a natural science of behavior. Online communications offer behaviorologists worldwide opportunities to shape and be shaped.☺☺

¹ See <http://etrg.findsvp.com/internet/overview.html>

² Such as America Online, Compuserve, Prodigy, Microsoft Network and others.

³ For a working example of using commercial online services for sharing and reviewing Standard Celeration Chart data, see <http://www.onlearn.com/scchat.html>.

⁴ See <http://www.onlearn.com/lmodlibrary.html> as well as: Feeny, D.R. (1997). Creative life-style management through on-line and real-time application of the behaviorological education practices of precision teaching. In S.F. Ledoux. *Origins and Components of Behaviorology* (pp. 259-295). Canton, NY: ABCs.

⁵ See WebEd (<http://ceus.com>) or The Psy Broadcasting Corporation (<http://www.psybc.com>).

⁶ See <http://www.pitt.edu/~ksy> for Dr. Kimberly Young’s work on Internet Addiction Disorder or <http://www.computeraddiction.com> regarding compulsive internet use. Also, the Journal of Online Behavior at <http://www.behavior.net>.

⁷ See the Electronic Privacy Information Center (<http://www.epic.org>) for reviews of legal cases related to online speech, including this year’s landmark US Supreme Court ruling on the Federal Communications Decency Act.

⁸ To join the Behavior Analysis (Behav-An) forum, send the command SUBSCRIBE BEHAV-AN YOURFIRSTNAME YOURLASTNAME to LISTSERV@LISTSERV.NODAK.EDU

⁹ To join the Standard Celeration (SCList) forum, send the command SUBSCRIBE SCLIST YOURFIRSTNAME YOURLASTNAME to listproc@lists.acs.ohio-state.edu.

¹⁰ To join the Education Consumers Clearinghouse (ECCList) forum, contact Dr. John Stone (professor@tricon.net).

¹¹ See Mace et. al. in JABA, 30, 1 (Spring, 1997) p. 1-20 for behavioral applications of high-probability requests.☼



Advancing an Independent Discipline on All Fronts

Lawrence E. Fraley

The promotion of a natural science of behavior requires a multifaceted organizational response. We already have in place a massive, and perhaps well failed, organizational effort to persuade fundamentally mystical people to adopt the natural philosophy and science of the behavioral phenomena on which they dwell ...people who themselves are already organized in their own way to validate scientifically the implications of their mystical assumptions. On another front, we also have a newer organized effort that pursues, in an uncompromised way, the expansion of the natural science frontier. We now turn to the *training* mission, and we begin to address the problem of how best to train new members of the natural science community that concerns itself with behavior/environment functional relations.

We undertake this venture during unstable times. Most current training opportunities in the natural science of human behavior are fragmented and severely denatured by an uncritical and thorough integration with fundamentally incompatible elements of antithetical paradigms ...the legacy of more than half a century of trying to co-opt the discipline of another community instead of bearing the substantial short term costs of establishing our own independent discipline.

Students from around the world, whose local training missions do not offer even a fragmented approximation of the natural science of behavior, seek training opportunities in the United States. However, along with American students, they discover that, to access fragments of relevant training, a substantial fraction of their precious resources must be consumed by the required purchase of training in irrelevant pseudo-sciences. At the same time, we find ourselves in the midst of an unprecedented world-wide communal revolution sustained by the new electronic media, one hopeful implication of which is that training options will no longer be dictated by geography.

A balanced disciplinary advance is important. The International Society for Behaviorology has focused on an essential and sometimes neglected facet of the total disciplinary mission, namely, the experimental generation of new science. It is appropriate that that aspect of the emerging discipline has received early and somewhat intense organizational attention, but like many, I do not believe that the necessary mission-balance can develop

exclusively through operations conducted by that kind of organization.

A mature scientific discipline is organized around three main missions: (a) the generation of new science and philosophy, (b) education (the training of new members of that scientific community), and (c) the redesign of cultural practices in ways that involve the products of that discipline. In the long run, I would hope for a consolidation into a single large disciplinary organization featuring those three major mission-related divisions. Each division would have at least one journal, and be maintained by a membership representing the requisite expertise.

The Association for Behavior Analysis will not contribute effectively until it shifts its real focus to disciplinary development and stops using an alias of that mission to mooch the resources of the host discipline from whose house it has refused to move like a well lodged but unwelcome relative. The International Society for Behaviorology, pursuing its deliberately insular policy, is making its valuable and focused contribution, which manifests in the nature, quality, and integrity of our science. For the time being, I think that a new group can begin profitably to work (independently for now) on the development of the other two pieces of the organizational tapestry.

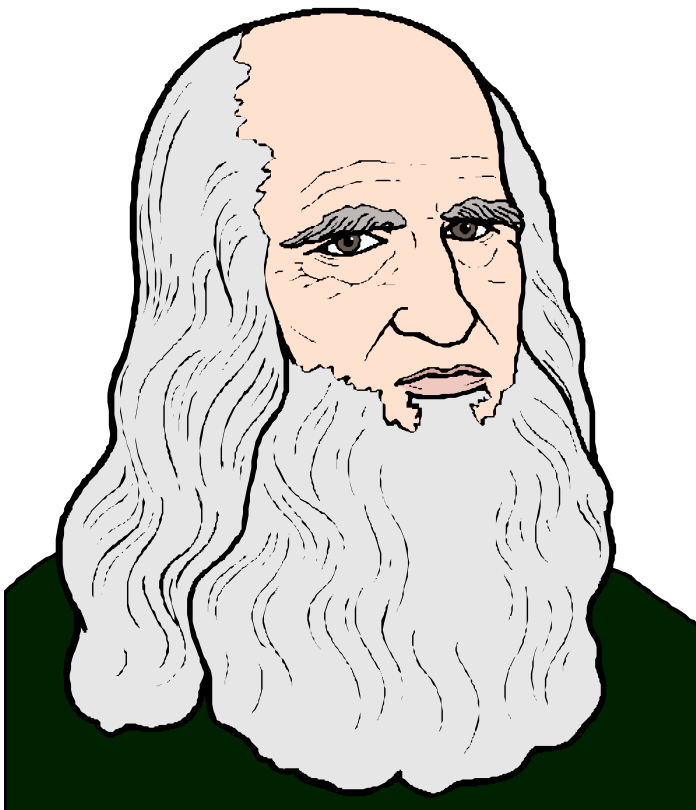
I believe that the matter of how best to impact the culture at large deserves careful re-examination. We seem best postured at the moment to emphasize the education mission, and few would argue against the importance of education. I have thought about the practical problem of how a worthwhile and substantive curriculum of studies could be endorsed, or even offered, by our new kind of organization. The failure, over the years, of the behavior analytic movement to organize, or even endorse, a separate discipline has left behavioral training fragmented, with the pieces scattered among the training programs of other disciplines (most of which are fundamentally antithetical to behaviorology). The single exception seems to be at the University of North Texas, where a behavior analytic department operates apart from that institution's psychology department.

But more typically, while any single behavioral professor may be prepared to offer from one to three or four courses, or while, in the far more rare instance, a small and isolated cluster of behavioral faculty members may be able to offer a limited track of behavior studies, to get a respectable full fledged degree program, a trainee would usually have to pick up a course here and a couple of courses there, until a program of studies had been completed. That could be made to work if a central program-coordinating unit exercised the oversight to insure that the training (obtained in pieces from a variety of sources) had the necessary thematic and programmatic integrity. One advantage for such a traveling student, aside from getting to see a lot of the country, would be personal con-

tact with trainers selected because they were prepared to offer excellent examples of their respective pieces of the training puzzle. And the electronic revolution will mean, probably sooner than most suspect, that students may not actually have to travel to accomplish the same thing.

Perhaps it will be possible to secure funded projects to bring foreign scholars to the United States to study the natural science of human behavior. Perhaps the student's program could be put together by our organization, and the student would simply go to where the best courses were being offered. The project would cover travel, lodging, and tuition. The program of study could be given an interdisciplinary twist by including a variety of related electives, perhaps in fields such as evolutionary biology, ecology, human factors engineering (ergonomics), behavioral education, and economics. The subject matter of many behavior-related fields can be reinterpreted behaviorologically to great advantage. Much of economics, for example, amounts to the study of how economic realities control human behavior, a subject matter that we approach through our consideration of various contingencies of reinforcement.

Eventually, perhaps, our organization could supervise final products (e.g., theses, dissertations, etc.), provide unified program transcripts, and award the degrees. In any case, some organizational groundwork would now seem to be in order. ☺



Carl Sagan is Right Again: A Review of The Millennium Man

Stephen F. Ledoux

The novel, *The Millennium Man*, by W. Joseph Wyatt lives up to its honest billing as “a positive look at behavior analysis” (a name connoting the *natural* science of behavior). Appearing near the close of the 1900s, the title could grab a fair amount of attention as the second millennium ends and the third millennium begins (in “common era” parlance; see Gould, 1997). The story is not only set at the turn of the millennium, but it also suggests various actions that could make the next millennium more humane than all the previous ones. Still, the title derives more from the basic story line than from such calendrical connections, that story line being the surprising and insightful reactions, to this time period, of someone who has visited several earlier time periods.

Wyatt weaves an intriguing tale of a Renaissance genius—called “Leo” in the story—whose systematic work led him to discover a formula to enable a person to engage in decades-long periods of hibernation-like sleep. Applying his discovery to himself in the early 1500s, this genius has experienced a series of glimpses of the state of humanity by awakening for a couple of months every hundred years or so. He had also made arrangements to ensure his presence in the “new” world.

During the current awakening, Leo visits our time. He marvels at what he must call *miracles*, the miracles all around him in the year 2001, including miracles in medicine, transportation, construction, and communication. He recognizes these miracles as wrought by applying advances discovered in the natural sciences using essentially the same scientific methods that led him to discover his own formula. But all these miracles had not been present on any of his earlier visits, even on his last visit only a couple of generations back. Yet all these are miracles that we today take all too much for granted, apparently not appreciating what life would be like without them, and this itself causes a certain amount of concern for Leo.

However, Leo also finds certain things that have not changed, things like the easy allegiance so many, many people give to the various pseudo explanations of their own behavior, comforting but essentially shallow, untestable and so essentially unhelpful explanations such as are available in the occult, mentalistic, or astrology sections of bookstores. As counterpoint, Leo also quickly recognizes the development of a natural science of behavior, a

science called behavior analysis in the story and behaviorology by some other current practitioners.

That natural science is clearly delineated in the book from the social science of behavior called psychology (see Fraley & Ledoux, 1997, about the history and differentiation of these two disciplines). In the perspectives, advances, and applications of the natural science of behavior, Leo finds not only the relevant actions but also the wisdom about ourselves that is needed to help solve so many of the continuing problems of society that he still observes.

If you combine (a) the twentieth century's scientific miracles, (b) the continued clinging to pre-scientific notions about human behavior and its causes, and (c) the value of the discoveries and applications of the natural science of behavior, then you have the mix that I think Carl Sagan was correctly addressing when he described this story as "an excellent device to view our time." (His comment is inscribed on the book's cover.)

Joe Wyatt is himself a natural scientist of behavior. Although also trained in psychology—as were so many of today's behavior analysts and behaviorologists—Wyatt had to fight a court battle with psychologists to retain his university teaching position as a natural scientist of behavior. (He won that battle, but he should not have had to fight it, and the energy spent by both sides was not available to help society in more beneficial ways; see Chapter 3 of Fraley & Ledoux, 1997.) While not used in the book, this experience could be a typical example of the contradiction between science and pseudo science that Leo puzzled over so often in the story.

A reader already familiar with the natural science of behavior might be concerned with Leo's occasionally extreme or incomplete handling of some of the puzzles that he encounters (though most readers may not take any notice). For example, while Leo castigates the mentalism of Freud, he ignores Freud's historical contribution of looking at behavior deterministically. Based on information from his patients, Freud grasped some of the forces that determine behavior, such as primary reinforcers like food and sex. However, the variables shaping Freud's behavior led him to locate these forces inside the person as psychic entities, like the id, rather than acknowledge them as independent variables of behavior in the person's environment, both internal and external.

While the professional reader may be concerned with such cases, the lack of that level of detail cannot be considered a problem for the book. Including all such details in a novel risks making the story read like an imitation of Jack London's *The Iron Heel* (London, 1971) in which the polemics were the point.

On the other hand, the occasional inclusion of a little more detail could have been beneficial. For example, while stating with authority the origins of verbal behav-

ior (language), Leo understated the complexity of those origins, leaving too much room for the continuation of many modern misunderstandings about those origins. Leo touched on partial differential reinforcement of babbling leading to words leading to sentences. However, stopping at that point too easily implies to readers that that is all that is considered necessary to account for language from a scientific perspective. Yet, in Leo's speaking style, only a few more sentences may be needed to interest the reader in a more complete range of the variables involved in language development, variables such as parental repetition—and thus modeling—of correct forms, generalization, creative-looking recombinations of already separately learned responses, perhaps even the part played by stimulus equivalences.

Leo's short discourse on "praise" and "blame" is another example of stopping short. He describes how praise and blame are not actually earned—in the sense of the behavior that precedes them being initiated by the person as an initiating agent. But by stopping there, readers are too easily left with the misimpression that behavior science says praise and blame should be ignored, or even banned. Yet a little elaboration by Leo could simply point out how praise and blame are still culturally and scientifically needed as reinforcing and punishing consequences of the behavior that produces them.

Those musings could even lead to an interesting digression about the misconstrual of reinforcers as bribes. Is praising a child when she or he does something well a bribe? What about giving cookies or stars or points (or grades, for college students) or allowances (or salaries, for adults)? None of these are bribes! Dictionaries are quite reliable on this point: bribes are anything given to someone to induce him or her to act immorally or illegally (e.g., Webster [1979, p. 226] defines a bribe as "a price, reward, gift, or favor bestowed or promised to induce one to commit a wrong or illegal act").

At one point the author skillfully leads the reader to feel that Leo is misusing science of behavior principles to manipulate others for personal gain. This provides the opening to make an important point. One of the other characters then notes that Leo was not engaging in that kind of abuse, that knowing about the laws of behavior does not automatically make the knower misuse those laws. Indeed, one of the best ways to reduce and avoid such abuse is to enable everyone to be familiar with the laws of behavior. This is surely part of the very purpose of this book. Everyone should be as familiar with the basic principles and practices of the natural science of behavior as they are with physics or biology from high school.

At another point, the author has Leo giving an unusually and uncritically oversimplified description of communism. Given the difficulty—or controversy—inherent in fixing this passage, one which seemed to be dis-

tracting anyway, perhaps it would have been better to omit this small part.

Actually, in all of the concerns I have discussed, the level of detail the author provides can certainly be construed as adequate for a novel of this type. Still, I think a novel that included the kind of details that I have suggested would be appreciated for the increase in its educational value. (And novels *can* be revised.) Meanwhile, given the general thrust of this work, I find the author's effort quite compelling. The author may not yet be a fully developed "Jack London," but efforts such as his have long been needed to help bring the natural science of behavior to a public inadequately versed in the workings and values of science (e.g., see Sagan, 1996, 1997).

I would not be surprised if *Millennium Man* turned out to be a sleeper in the way *Walden Two* was (Skinner, 1948). But I rather think it deserves to take off like a rocket. I have adopted it as a text in behavior science courses (and recommend others do so as well). For starters, I suggest to the students that they imagine themselves in the shoes of Holly and David, the younger characters in the story. I then ask the students to describe the things they would hope to be able to show Leo at his next awakening, especially in terms of the science of behavior. Finally, I ask them to describe the things they might do in their own lifetimes to help make into realities the things they would hope to show Leo.

In a similar vein, as I neared the end of the novel, the possibility, then probability, that we had not seen the last of Leo continued to rise. Wyatt handled this notion with deliberate delicacy. I enjoyed "falling for it." I found myself compelled to consider what concerns I would be pleased to find Leo observing and addressing. Of course, I would like to see Leo again meeting Holly and David and Beth and even Jim (through medical science advances) as well as Rose and her children. Who *are* all these folks? Well, read the story!

The sheer human interest of such reunions would be gratifying, whether expected or not, as would be seeing which of the many potential directions the author ends up being compelled to develop. Yet, regarding concerns, I would hope Leo gets to observe the meaningful and valuable reality of our behavior science being more accepted by those who currently see science *per se* as the principal if not sole cause of society's ills. I would hope Leo gets to observe that by his next visit, the natural science of behavior is at least as accepted then as Darwinian evolutionary biology is accepted now. And I would hope Leo gets to observe the extensive benefits our science can deliver even now—if allowed to—in areas that currently have such great needs including both child rearing and, especially, the educational arena.

Perhaps excessively critical readers will readily find tidbits about which to nit pick (e.g., the probable, unad-

ressed problems of muscle atrophy during a 100-year-long sleep). But I would have to wonder whether they were missing or avoiding the well-developed point of the story: the wisdom-bringing value—for the present and the future of humanity—that is readily available now through behavior analysis/behaviorology.

In the final analysis, this is an inspirational book, inspirational in several—and the best—senses of the word. Of course, it inspires readers to learn about, and apply, behavior analysis/behaviorology. But it also inspires readers to a greater appreciation of *all* the other wonders that the other natural sciences have brought us, wonders that we have come to take far too much for granted. More importantly, it inspires us realistically to work to know ourselves better through the natural science of behavior and thereby be better able to use the rest of our knowledge to benefit the world and the future. ☺

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DataShare: Show and Tell Your Databased Work

David R. Feeney

DataShare is to be a regular column featuring a quick show and tell of behaviorological research going on in our community. Datashares use clear, short, minimally edited descriptions of research using charted rates of behavior and plain English discussion of results and significance. Contributors want feedback from readers, so be sure to contact the authors of each *DataShare* (who will include at least their email address). Today's *DataShare* concerns the use of online writing tools to teach adults to monitor and modify daily rates of chain smoking:

Learner:

40 year old adult male.

Dependent variable(s):

Daily rate of cigarettes smoked.

Independent variable(s):

Participation in Online Self-Management course.

Tools used:

Personal computers, America Online, daily email, chat room, behavior charts.

Learner Goals:

Reduce (decelerate) smoking rates to 20 per day or lower.

Author's address:

drfeeney@onlearn.com

Work with this Learner involved a personalized changing-criterion element, but in an a-b-c sequence of (a) baseline, (b) cost analysis with behavior charts, and (c) a changing criterion rule with home charting worksheets. This learner counted his cigarettes smoked per day, then he emailed those data each evening. He participated in online chat room discussions about his project, and received customized behavior charts displaying his smoking rates, contingent on course participation.

Learner's results and discussion

The chart shows the total course data for this project, using a StatView Standard Celeration Chart (ssc) in the new 3v format. (Email Dr. Steve Graf at zerobros@aol.com for more information about new SCC formats.)

The baseline phase lasted 23 days. During baseline, this Learner smoked a mean of 57.83 cigarettes per day (CPD), with a range between 92 and 44 CPD. During baseline, this Learner smoked a total of 1,330 cigarettes, for which he paid \$135.26, making an average of \$5.88 spent per day.

Weekday smoking levels remained in the high 40s to 60 CPD range throughout baseline. During weeks one through three, the Learner showed a stable smoking rate

between 40–50 CPD, with notable accelerations of smoking occurring on weekends. Such frequency outliers occurred on all weekends except for week four (see Eshleman, 1997 for discussion of frequency outliers and the SCC). Weekends may hold independent variables (such as social activities with smoking cues) which accelerate smoking. Based on discussions of daily emailed data, both Learner and Instructor soon began to plan for control of weekend smoking in addition to weekday smoking.

During Intervention one, which began on Wednesday of week four, the Learner experienced gradual decelerations of his weekday smoking rate, with weekend rates remaining higher than weekday rates, but decelerating when compared with prior weekends. Intervention one lasted 77 days, in which the Learner smoked an average of 30.6 cigarettes per day. During Intervention one, smoking ranged from 15–68 cigarettes per day, with the Learner smoking a total of 2,361 cigarettes, at a cost of \$240.11. The Learner spent an average of \$3.12 per day on cigarettes during Intervention one. This was a decrease of \$2.76 per day from the average spent per day during baseline.

During online chat sessions, the Learner expressed his satisfaction with his smoking performance during Intervention one. The Learner noted that he had saved \$212.52 during Intervention one. He felt that the cost analysis was particularly effective at reducing his smoking rate by directly pairing each cigarette with a visibly increasing cost measurement. The Learner also felt that behavior charts were useful, since he was able to see numerical data in the form of levels, trends, and weekend jumps.

By week eleven, the Learner seemed to reach a “smoking floor,” both for weekday rates (from 17–23 cigarettes per day) as well as weekend rates (from 25–30 cigarettes per day). During week 12, the last week of Intervention one, the Learner had experienced his first serious “uptick” in smoking rates, with a visible acceleration in weekend smoking. This onset of accelerating smoking rates after periods of consistent deceleration (referred to by the Learner as a “loss of control”) led him to discuss and adopt Intervention two.

Intervention two, a changing criterion with home charting worksheet, continued for only three weeks before the Learner resigned from the course. During the 20 days of Intervention two, the Learner smoked a total of 428 cigarettes for an average of 21.4 cigarettes per day. The total cost for cigarettes was \$43.53, with a mean cost per day of \$2.18. This constitutes a further decrease in costs compared to the level of costs in Intervention one, which itself was better than the rate of daily smoking in baseline. The Learner resigned from the online course due to a job and schedule changes.

The results from this project illustrate that high rates of “binge” smoking can be decelerated via the use of online self-management coursework. During the course, the applicability of “cost monitoring per cigarette” as an

Intervention became apparent. Cost monitoring seems to provide especially powerful behavior changing stimuli when arranged in the manner of Intervention one. Having a Learner attach a dollar cost-per-cigarette may transfer to each cigarette an additional, verbally mediated response-cost. In one online chat session, the Learner remarked: "I thought about how much I was spending when I smoked... I thought about how much I was saving when I smoked less." The Learner's costs-per-cigarette (and savings per reduction) can be effectively delivered to (and echoed by) the Learner in an online chat room, in addition to the mechanics of daily data reporting.

Cost-per-cigarette measurements are also easily projected into future savings. The resulting verbal stimuli might mediate further behavior. For example, a year of smoking at this Learner's baseline rate would cost over \$2100. In contrast, a year at the reduced rates of Intervention two would cost about \$800, a savings of \$1300. Repeating these facts (e.g., from reading a note on a bathroom mirror) might reduce the probability of "post-course" smoking.

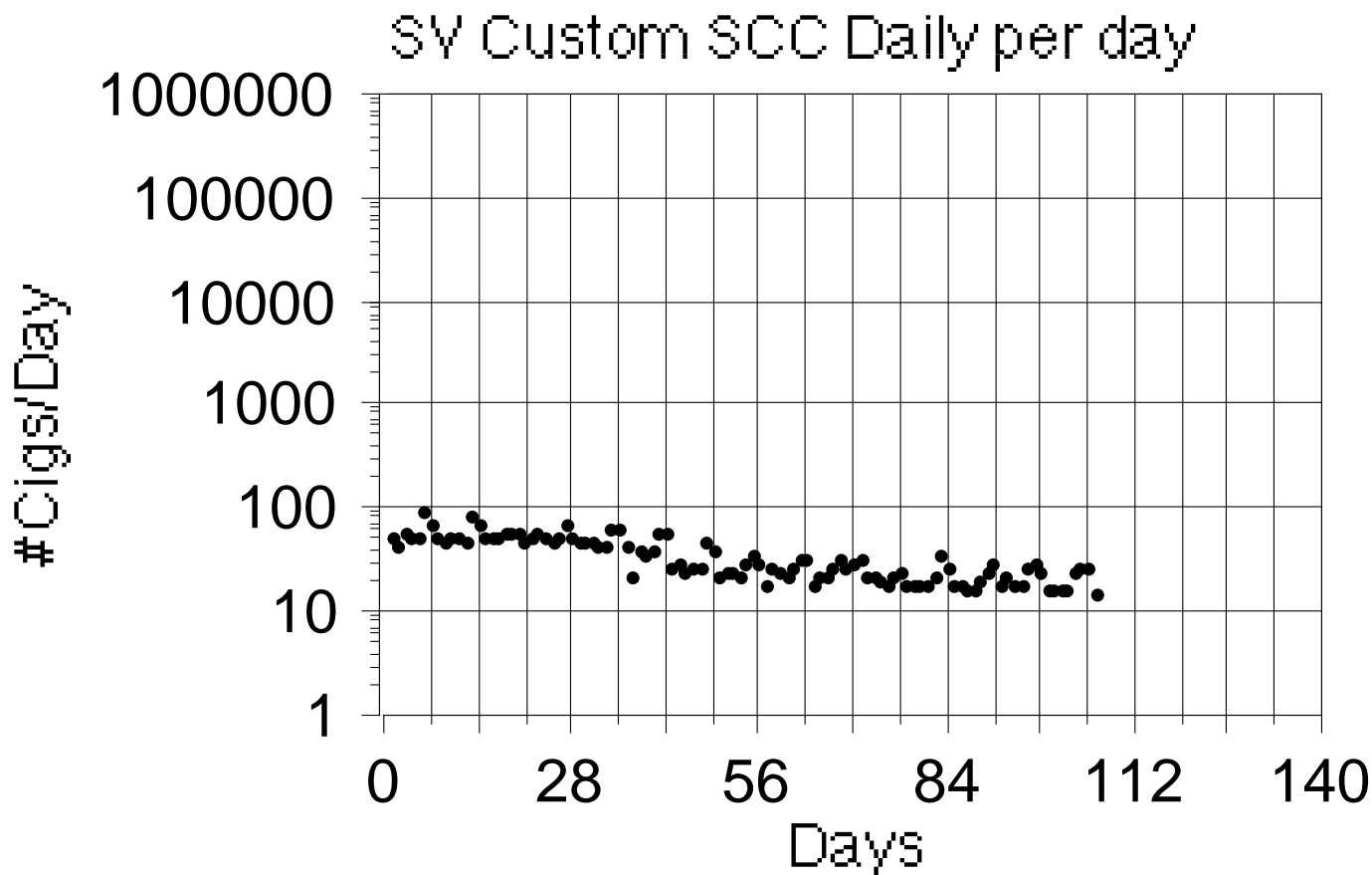
The results of this study support further investigation of online writing for self monitoring and management of smoking and other lifestyle changes.

Editor's note: Send your "DataShares" to David Feeney, our DataShare editor, at 183 Pinehurst Avenue Suite 54, New

York, NY 10033. And when your research reaches a completion point, submit it to *Behaviorology*. ☺

Resources

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SCC View of daily smoking rate for this Learner.

TIBI Treasurer's Summary Report

This is an initial report of TIBI's finances through 5 March 1998. It will include income and expense summaries.

INCOME:

US\$ 1,200.00	DUES
US\$ 2,400.00	DONATION (for room and board for a visiting scholar)
US\$ 79.00	OTHER DONATIONS
US\$ 160.00	STUDENT BOOK USE
US\$ 200.00	TUITION
US\$ 1.98	INTEREST (on fee-free interest bearing checking account)
US\$ 4,040.98	TOTAL

EXPENSES:

US\$ 1,000.00	LEGAL COSTS (for incorporation)
US\$ 100.00	DOMAIN NAME
US\$ 29.00	TRAINING BOOKS (ten copies of Holland & Skinner)
US\$ 152.18	SUPPLIES
US\$ 2,290.00	VISITING SCHOLAR SUPPORT COSTS
US\$ 3,571.18	TOTAL

BALANCE IN ACCOUNT: \$469.80

Be sure to join TIBIA, at least at the Affiliate or Student level, so that you can stay informed, as well as participate. You *are* needed! Join, and help extend the input from the natural science of behavior to all the places it can benefit. (Besides, it is difficult to spend the donations and dues of others to provide a lot of member benefits—like a regular newsletter—for folks who are not members.) ☺



TIBIA Membership Criteria and Costs

TIBIA has four categories of membership, of which two are non-voting and two are voting. The two non-voting categories are Student and Affiliate. The two voting categories are Associate and Advocate. All new members are admitted provisionally to TIBIA at the appropriate membership level. Advocate members consider each provisional member and then vote on whether to elect each provisional member to the full status of her or his membership level or to accept the provisional member at a different membership level.

Admission to TIBIA in the Student membership category is open to all persons who are undergraduate or graduate students who have not yet attained a doctoral level degree in behaviorology or in an acceptably appropriate area.

Admission to TIBIA in the Affiliate membership category shall remain open to all persons who wish to maintain contact with the organization, receive its publications, and go to its meetings, but who are not students and who have not attained any graduate degree in behaviorology or in an acceptably appropriate area. On the basis of having earned TIBI Certificates, Affiliate members may nominate themselves, or may be invited by the TIBI Board of Directors or Faculty, to apply for Associate membership.

Admission to TIBIA in the Associate membership category shall remain open to all persons who are not students, who document a behaviorological repertoire at or above the masters level or who have attained at least a masters level degree in behaviorology or in an acceptably appropriate area, and who maintain the good record—typical of “early-career” professionals—of professional accomplishments of a behaviorological nature. On the basis either of documenting a behaviorological repertoire at the doctoral level or of completing a doctoral level degree in behaviorology or in an acceptably appropriate area, an Associate member may apply for Advocate membership.

Admission to TIBIA in the Advocate membership category shall remain open to all persons who are not students, who document a behaviorological repertoire at the doctoral level or who have attained a doctoral level degree in behaviorology or in an acceptably appropriate area, who maintain a good record of professional accomplishments of a behaviorological nature, and who demonstrate a significant history—typical of experienced professionals—of work supporting the integrity of the organized discipline of behaviorology including its organizational manifestations such as TIBI and TIBIA.

For all membership levels, prospective members need to complete the membership application form and pay the appropriate dues.

Establishing the annual dues structure for the different membership categories takes partially into account, by means of percentages of annual income, the differences in income levels and currency values among the world's various countries. Thus, the annual dues for each membership category are:

Other Category	Dues (in US dollars —\$20 minimum)
Board of Directors member	The lesser of 0.6% of annual income, or \$120.00
Faculty member	The lesser of 0.5% of annual income, or \$100.00

Membership Category	Dues (in US dollars —\$10 minimum)
Advocate member	The lesser of 0.4% of annual income, or \$80.00
Associate member	The lesser of 0.3% of annual income, or \$60.00
Affiliate member	The lesser of 0.2% of annual income, or \$40.00
Student member	The lesser of 0.1% of annual income, or \$20.00

TIBIA MEMBERSHIP APPLICATION FORM

(SEE THE NEXT PAGE FOR THE TIBI / TIBIA PURPOSES.)

Copy and complete this form
(please type or print)
then send it with your check
(made payable to TIBIA) to:

Dr. Stephen Ledoux
TIBIA Treasurer
SUNY-CTC
Cornell Drive
Canton NY 13617 USA

Name: _____

Member Category: _____

Office Address: _____

Amount enclosed: us\$ _____

Home Address: _____

Office Phone #: _____

Home Phone #: _____

FAX #: _____

CHECK PREFERRED MAILING ADDRESS:

Email: _____

Office: Home:

Degree/Institution*: _____

Sign & Date: _____

*I verify that the above person is enrolled as a student at: _____

Name & Signature of Advisor or Dept. Chair: _____

TIBI / TIBIA Purposes*

As a non-profit educational corporation and professional organization, TIBI is dedicated to many concerns. TIBI is dedicated to teaching behaviorology, especially to those who do not have university behaviorology departments or programs available to them; TIBI is also dedicated to expanding the behaviorological literature at least through the *TIBI News Time* newsletter and the *Behaviorology and Radical Behaviorism* journal;** TIBI is also dedicated to organizing behaviorological scientists and practitioners into an association (The International Behaviorology Institute Association—TIBIA) so they can engage in coordinated activities that carry out their shared purposes. These activities include (a) encouraging and assisting members to host visiting scholars who are studying behaviorology, (b) enabling TIBI faculty to arrange or provide training for behaviorology students, and (c) providing TIBI certificates to those who successfully complete specified behaviorology curriculum requirements. And TIBI is dedicated to representing and developing the philosophical, conceptual, analytical, experimental, and technological components of the discipline of behaviorology, the comprehensive natural science discipline of the functional relations between behavior and independent variables including determinants from the environment, both socio-cultural and physical, as well as determinants from the biological history of the species. Therefore, recognizing that behaviorology's principles and contributions are generally relevant to all cultures and species, the purposes of TIBI and TIBIA are:

- A. to foster the philosophy of science known as radical behaviorism;
- B. to nurture experimental and applied research analyzing the effects of physical, biological, behavioral, and cultural variables on the behavior of organisms, with selection by consequences being an important causal mode relating these variables at the different levels of organization in the life sciences;
- C. to extend technological application of behaviorological research results to areas of human concern;
- D. to interpret, consistent with scientific foundations, complex behavioral relations;
- E. to support methodologies relevant to the scientific analysis, interpretation, and change of both behavior and its relations with other events;

- F. to sustain scientific study in diverse specialized areas of behaviorological phenomena;
- G. to integrate the concepts, data, and technologies of the discipline's various sub-fields;
- H. to develop a verbal community of behaviorologists;
- I. to assist programs and departments of behaviorology to teach the philosophical foundations, scientific analyses and methodologies, and technological extensions of the discipline;
- J. to promote a scientific "Behavior Literacy" graduation requirement of appropriate content and depth at all levels of educational institutions from kindergarten through university;
- K. to encourage the full use of behaviorology as the essential scientific foundation for behavior related work within all fields of human affairs;
- L. to cooperate on mutually important concerns with other humanistic and scientific disciplines and technological fields where their members pursue interests overlapping those of behaviorologists; and
- M. to communicate to the general public the importance of the behaviorological perspective for the development, well-being, and survival of humankind.☺

JOIN TIBIA

See the previous pages for the membership criteria, costs, and application form.



*This statement of the TIBI / TIBIA purposes has been adopted from the TIBI By-laws.

**This journal (BARB) is under development at this time and will appear only when its implementation can be fully and properly supported.—Ed.