

# Journal of Behaviorology

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Conductologia

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OTE: Prior to Volume 16, Number 1 (Spring 2013) the *Journal of Behaviorology* went by the name of *Behaviorology Today*, which occasionally published fully peer–reviewed articles, explicitly so labeled. Beginning with Volume 15, Number 1, in January 2012, *all* material receives full, appropriate peer review. See the *Submission Guidelines* for details.

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<sup>\*</sup> This issue does not contain any new or updated TIBI course syllabi. New syllabi, or updates of previous syllabi, may appear in future issues. (See the *Syllabus Directory* for details.)

#### Editorial Bruce Hamm

This issue of the Journal of Behaviorology features articles by two venerated pioneers of our science. The first one summarizes the findings of an experimental aircrib study conducted by Stephen Ledoux (venerated pioneer #1, of course), Paul Filion, and Richard Schmeling. While the paper itself may be small, it contains ample evidence suggesting parents and caregivers can rest easy when it comes to the sound levels their children may experience when sleeping or playing in their aircribs. Though conducted in 1986, Ledoux et al.'s (2023) study remains relevant to anyone interested in the conditions that promote the kind of rest, relaxation and recreation that human bodies, of both current and future adults, so badly require.

The issue's second article, by venerated pioneer #2, Lawrence Fraley, is also brief, but nonetheless large in scope and implication. It also touches on the impact of one generation's cultural practices on its younger members. Fraley, however, is concerned with the cost of not protecting children, specifically the "cultural damage" incurred when one group imposes their necessarily delusional doctrine of life and reality on others in order to maintain the social status of that doctrine and its leading adherents. Anyone who appreciates Fraley's exhaustive accounts of fundamental behavior principles in works such as *General Behaviorology* (2008) will likely find in this new article a welcome continuation of the philosophical elaborations of those principles that he advances there and elsewhere (e.g., Fraley, 2017). (For those less familiar with such accounts, Fraley [2023] provides numerous helpful references.)

The two articles that comprise this issue are representative of the broad range of scientific or science—based work that characterizes behaviorology. On the one hand we have a highly focused data—based experimental piece earmarked for practical application; on the other hand, a theory—based commentary that, among other things, could spark heated debate (and hopefully rebellious action) in certain quarters. The difference between the two articles raised the question among the JoB editorial team whether they should be published back—to—back or separated into specific journal sections. If JoB were to adopt the latter formatting, the present issue would contain one section entitled, for instance, "experimental articles," with a second section entitled something in the vein of "commentary" or "theoretical"

interpretation," etc. While the decision was made to forego the creation of such section categories at this point, the question arose as to whether JoB should adopt such formatting in the future. On that basis, we are seeking your input on the following questions.

№ Do you believe it would be in the best interests of everyone concerned for the journal to be divided into, when appropriate, various content—based sections?

\* If so, what types of content sections would you recommend JoB adopt?

What specific section titles would you suggest, and why?

More generally, do you believe the introduction of new and varied section categories may serve to expand the number and type of manuscripts submissions that JoB receives?

What types of manuscripts will you contribute, because you—and so many others—have much to say?

Indeed, you may have found yourself shying away from submitting one of your own manuscripts on the assumption that it would simply not "fit" the journal as it presently stands. If this is the case, please do not hesitate to suggest one or more section categories that you believe would better accommodate your existing or future work. I would of course be delighted to receive any suggestions or opinions—or manuscripts—stemming from these questions, as I am sure would any member of the TIBI board (please see the last page of this issue for our contact information). I look forward to hearing from you on these and any other topics of concern or interest. I also hope you find the present issue stimulating and inspiring.

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Ledoux, S. F., Filion, P., & Schmeling, R. (2023). Adequacy of Methods to Control Sound Levels in Aircribs. *Journal of Behaviorology*, 26 (1), 3–6.53

#### Adequacy of Methods to Control Sound Levels in Aircribs

# Stephen Ledoux (SUNY-Canton)\* Paul Filion (SUNY-Potsdam) Richard Schmeling (SUNY-Potsdam)

Abstract: Being hard, the Plexiglas used in aircribs can reflect sound in ways that raise worries for aircrib designers and users. This study assessed aircrib sound levels under combinations of fan speeds, crib bumpers, foam padding, and quiet or crying infants. While some conditions produced higher decibel levels, no condition produced a level considered dangerous according to Occupational Safety and Health Administration (OSHA) standards. So parents using this kind of aircrib need not worry, because the sound reflectance of Plexiglas will not cause dangerous sound levels inside their aircrib.

The survival of a culture depends in part on the adequacy of the culture's child rearing practices (Latham, 1999; Ledoux, 1986, 1987; Skinner, 1971). Natural scientists of behavior (e.g., behaviorologists and behavior analysts) have long pointed out that the success of childrearing practices can be enhanced when the natural science of behavior, which some call behaviorology, is applied to evaluating and improving those practices. These natural scientists of behavior include behavior analysts (Whaley & Malott, 1971) and behaviorologists (Fraley & Ledoux, 1992/2015; Ledoux, 2014).

Some early progress in the application of the natural science of behavior occurred with the development of focused controls in environments for children, especially the controlled environment called the baby tender, or aircrib that B. F. Skinner invented (Skinner, 1945). For several decades, however, people interested in using an aircrib have been limited either to procuring someone else's home—built aircrib or to building their own (although some manufactured aircribs from early years may still be in circulation). Various designs have become

available as do-it-yourself builders have reported their designs in the literature (e.g., Bilbrey & Bilbrey, 1974; Ledoux & Cheney, 1987).

Most aircrib designs call for Plexiglas (or similar material) in the construction of the baby's chamber, because it is strong and somewhat flexible. Unlike ordinary glass, Plexiglas does not easily break and become dangerous. The tensile strength of ¼-inch-thick Plexiglas is 1,000 pounds per square inch (Bilbrey & Bilbrey, 1974). However, because of its hardness, and therefore its potential for sound reflection, the use of Plexiglas has caused concern among designers and parents. An aircrib in which the sound levels are unsafe, due to any factors including Plexiglas, would be unacceptable.

In the present study, the experimenters measured the decibel (dB) levels inside an aircrib that Ledoux built in 1985, and Ledoux and Cheney (1987) described. (Ledoux built it using general instructions that Skinner had prepared for a small model, instructions that he had not yet tested in full size.) The measurements occurred under various conditions that could affect or control

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Key words: Aircrib, baby tender, child care, child safety, product safety, sound levels.

The authors originally produced and presented this study as part of a suite of simultaneous events concerning aircribs, including an award–winning poster, at the 12th Annual Convention of the Association for Behavior Analysis in 1986, in Milwaukee, wi, when the first author was a professor at Suny–Canton and the other authors were students majoring in hearing science at Suny–Potsdam. The award–winning poster was titled "Methods for controlling sound levels in aircribs for children's benefit," and the appearance of the study here helps keep current the contributions to child care that well–constructed, and safe, aircribs (invented by the late B. F. Skinner) can provide.

sound levels. The point of the measurements was (a) to determine if the sound level was unsafe under any of the tested conditions, and (b) to determine the effectiveness, in reducing sound levels, of some of the tested conditions that involved simple, additional construction steps.

Assuming that the dB levels proved safe, if the construction steps found to reduce dB levels get added to the aricrib design, then that aircrib would be even safer. Hence, using these added steps could ease designer and parental concerns, which could contribute to expanding the use of aircribs.

#### Method

#### Apparatus

A "Quest Model 155 Impulse Precision Sound Level Meter" was used in this study to measure sound levels. In an aircrib that was built to the specifications presented in what became the 1987 book by Ledoux and Cheney, the Quest Meter's microphone was suspended inside the aircrib, at about the position of a baby's ear, by an eightfoot extension cord, so that the Meter itself could be read outside the aircrib.

Some aircrib construction components could affect sound levels, particularly the aircrib's fan, crib bumpers, and foam padding. The fan was a well–used, impedance–protected Muffin fan which had previously cooled the interior of electronic components for many years. The crib bumpers were five–inch diameter, cloth–covered, tubular sacks of foam pieces. The foam padding, which covered the ceiling and the upper half of the non–Plexiglas parts of the baby's chamber, was of closed–cell construction. It was originally sold for use by hikers as a pad to go under their sleeping bags. The trade names for this foam padding include "Unilite" and "Ensolite."

#### Procedure

All measurements were made by inter-observer agreement among the three authors. If a measurement reading was not seen as the same by all three, the measurement was repeated—once was always enough—until all three recorded the same reading. This repetition was necessary with less than ten percent of the readings. Thus agreement was not derived through any manner of calculations but occurred instead directly under control of stimuli produced by the meter.

Also, all measurements used the dBA weighting scale. The "A" weighting in decibels was a scale that organizations concerned with occupational and industrial hearing conservation often used. It is the accepted scale that the Occupational Safety and Health Administration (OSHA) used, and was the most common measure that diagnostic and hearing conservation professionals used.

Under each of a variety of conditions, dB readings were taken when there was quiet in the aircrib (quiet time) and when there was crying in the aircrib (crying time). The crying was provided by a tape recording of a baby crying for 15 seconds. This recording was then played back repeatedly outside the aircrib until the tape player's sound—level control was set so that the recording—produced sound level generated the same dB level as the original crying generated when it was first recorded. For study measurements under the crying—time condition, the tape player—set for this sound level—was played back inside the aircrib.

Other conditions concerned (a) the levels to which the fan speed was adjusted, (b) whether or not the crib bumpers were in place in the aircrib, and (c) whether or not the foam padding was installed in the aircrib. The lowest fan speed that was used was not the lowest possible setting, because the fan could be set to operate at a speed so low—as between "low" and "off"—that the fan would not actually move any air. Due to concern to guarantee air circulation, in actual use physical constraints would prevent the aircrib fan from being set so low. For that same reason, no readings were taken with the fan off during crying time, and readings with the fan off during quiet time were taken only for comparisons.

Importantly, the fan used in this study was old and considerably louder than new fans. When measured, a new fan was so quiet that its sound was not detectable by the meter, which had a threshold of 27 dB. So a new fan in an aircrib would by itself reduce sound levels from those reported here. Of course, new fans get louder as they get older. Still, the data here suggest that a new fan getting older should not cause any dangerous sound level by itself.

#### **Results and Discussion**

The results are depicted in Table 1. This Table shows dB levels under various mixes of conditions involving up to four fan speeds, quiet time versus crying time, foam padding in place or not, and with and without crib bumpers present.

With the foam padding in place, using the crib bumpers reduced the ambient sound level 2–4 dB during both quiet and crying times at the high and medium fan–speed settings, the settings most likely to be used, but left the sound level at the low fan speed unaffected. Without the foam padding in place, using the crib bumpers reduced the levels 1–3 dB at all tested fan speeds during both quiet and crying times.

The aircrib itself was found to attenuate external noises, such as a TV set, by 5–10 dB. Thus loud sounds outside the aircrib were still audible but at reduced levels.

#### TABLE 1

Without foam padding in place	Quiet–time dB	Crying–time dB
Fan on high:		
No bumpers	61	80
With bumpers	58	78
Fan on medium:		
No bumpers	59	81
With bumpers	58	79
Fan on low:		
No bumpers	59	80
With bumpers	58	78
Fan off:		
No bumpers	<30	NA
With bumpers	<30	NA

With foam padding in place	Quiet-time dB	Crying–time dB
Fan on high:		
No bumpers	61	78
With bumpers	58	76
Fan on Medium:		
No bumpers	62	78
With bumpers	58	76
Fan on low:		
No bumpers	57	78
With bumpers	57	78
Fan off:		
No bumpers	<30	NA
With bumpers	<30	NA

**Table 1:** dB levels under various conditions involving up to four fan speeds, quiet time versus crying time, foam padding in place or not, and with and without crib bumpers present.

OSHA provides guidelines for maximum exposure to variable—intensity noise in the workplace and in other living situations. Generally, noise at or above 80 dBA is thought to pose a possible hearing danger over long periods of time. That is, an average noise intensity of 80 dBA over a period of eight hours constitutes 100 percent of the allowable exposure to that noise.

The highest readings recorded in this study were those in which the crying condition was present, and the highest readings under the crying condition were recorded at peak level, the loudest point of the cry. Since a baby in an aircrib is unlikely to cry continuously for a period of eight hours with an average intensity of 80 dBA, a baby in an aircrib would not approach the time—weighted threshold for hearing loss.

#### Conclusion

The combination of crib bumpers and foam padding that this study described and tested appears to be more than adequate to control the sound level in an aircrib of the design tested here (i.e., from Ledoux & Cheney, 1987). Hence parents using this kind of aircrib need not worry that the sound reflectance of Plexiglas will cause dangerous sound levels inside their aircrib. The data here suggest clearly that Plexiglas is not a problem.

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#### Cultural Damage to Individuals

#### Lawrence E. Fraley\*

West Virginia University (retired)

Abstract: To consider issues that involve the state of life and the state of death, and how they occur, differ, and relate, one must recognize certain of the fundamental, scientifically grounded validities of those concepts. With those basic realities in place, one can then rely on those more validly cast basics when formulating personal ideas that increase the probability of one's efficient and effective living and also one's survival. Such improved fundamentals readily tend to facilitate one's avoidance of various ill-boding cultural entrapments, and hence reduce traditional cultural damage to individuals.

#### Introduction

Material that addresses topics in interpretive behaviorological science tends to rely on reader familiarity with at least some earlier writings for context. This holds especially for the context of the extensive, previous, general behaviorological-science commentary on questions about life, and about death and about their interconnections with a range of cultural contingency effects, especially from the superstitious effects of traditional cultural conditioning versus the relief from those effects provided by natural science. Such commentary comes in a range of available works (see, for example, Fraley, 2008, 2012/2020; and see Ledoux, 2014, 2017, 2021; also, for the context of the origins of this science, see Fraley & Ledoux, 1992/2015). The material here stems partly from such resources but even more directly from the explicit address of culture, natural science, and life covered in Fraley, 2017, 2021, and 2022. However, unlike these more extensive articles, the point here is that sometimes, or for some people, a small dose of natural science can slice right through vast and well established aspects of entire cultures when those aspects happen to rest on faulty foundations (hence these article's points are *not* explicitly re–enumerated here).

#### Questions and Answers

While nearly everybody talks about "life," a reliable definition of life tends to remain elusive. So what, one may ask, is "life"?

First, life is a collection of interactive processes, and that fundamental observation has a critical implication: While a process can start and stop, and can accelerate and decelerate, a process cannot move about independently. At the common level of consideration only an entity can do that.

The term "entity" commonly designates a piece of matter. The movement of an entity is, and thus exhibits, process. The coordinated movement of many entities can amount to the exhibition of what is recognized as one process, and such a multi–caused process is typically described as complex. Thus, process is something that an entity exhibits. Life, consisting purely of coordinated processes, thus occurs as the particular activities of particular entities that therefore are designated as "biological." In the case of animals such entities are usually called "bodies," or "body parts," and the bodies that exhibit the processes of life are of an organic kind.

Just as it makes no sense to talk about a hammer swing departing from a hammer and moving independently away from that hammer, a person, as pure process, cannot depart from the bodily entity that is behaving its personhood. Such a "person" consists entirely of pure behavioral process. When all of that on—going behavioral process stops, the person that it represents is regarded as dead. Death, as an event, consists entirely of the cessation of process. If only the behavioral kinds of processes stop, the residual live entity may be described as comatose. "Death," the permanent cessation of all life functions, relates only by the association of a descriptor to the bodily entity that had exhibited the ceased processes.

Apart from behavioral activity, the processes of life also sustain and maintain the body. So, given a dying body, if by practical intervention the body–supporting

*Key words:* Natural science, natural science of behavior, behaviorology, life, death, superstition, culture, cultural contingencies, cultural conditioning.

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processes can be restarted, an intervention typically called resuscitation, the life of the body may be restored. However, an irrecoverably dead body of a previous person, henceforth permanently incapable of exhibiting the person–kind of processes, is typically abandoned and perhaps discarded as relatively worthless, a discard most often ritualistically embellished.

Because the departure of a person (pure process) from the body (an entity) that exhibits that person is logical nonsense, schools of thought that rely on such impossible separations of entities and the processes that they exhibit are invalid. Such schools of thought include most organized religions.

The validity of these brief observations is, in general, so obvious that it may seem strange that so many humans devote much of their lives to denying them, which is not an easy task. To deny the validity of something so obviously true is difficult for an organism that is endowed genetically with far too much capacity for intelligence to readily accept such simplistic invalidities. Careful programs of traditionally conditioned parenting, along with more broadly cast cultural influences, typically would be required to accomplish such a vast scale—down of human intellectuality.

So rather than combating the effectiveness of already well established intelligence, such dehumanizing parenting, and certain other cultural practices, generally interfere with, or preclude, the initial development of full intellectual independence in a young individual. That is, rather than trying to counter—influence a child who already tends to know better, the child is simply prevented from developing such critical thinking in the first place. That child, thus intellectually incapacitated in that way, may then be subjected to the vast array of developmental intrusions that collectively form a substantial part of its traditional culture. Primary among those many kinds of cultural intrusions are those imposed by organized religions.

#### **Conclusion**

The logical capacity being distorted to accommodate the simplistic fantasies that typically characterize religious constructs nevertheless remains necessary for survival in a harsh environment. Any given school of religiosity tends to have its own way to cope with such a paradox. Within Christianity the religiously indoctrinated individual is typically taught to separate the "real world" practicality of their everyday experience from that which pertains to a "spiritual world" and one's "afterlife," the latter consisting of a conceptual domain in which logic may be violated with impunity, which continues the far too common cultural damage to individuals.

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#### Syllabus Directory\*

The most recent issue of *Journal of Behaviorology* that features a Syllabus Directory contains two lists of TIBI's current course syllabi. These lists show where to find the most up—to—date versions of these syllabi in number, title, and content. The first list organizes the syllabi by numerical course number. The second list organizes the syllabi by the chronological volume, number, and pages where you can find each course syllabus.

Each of these syllabi contain only information explicit to a particular course. You will find all the relevant generic information in the article, *General Parameters & Procedures for Courses from The International Behaviorology Institute*, in *Journal of Behaviorology*, Volume 18, Number 2 (Spring, 2015) pp. 3–6.

#### Current Syllabi by Course Number

BEHG 100: Child Rearing Principles and Practices; Volume 19, Number 2 (Fall 2016) 3–5. BEHG IIO: Introduction to Behaviorology Terminology; Volume 20, Number 1 (Spring, 2017) 19–21. BEHG 210: Introduction to Behaviorology I; Volume 19, Number 2 (Fall 2016) 6–8. BEHG 211: Introduction to Behaviorology II; Volume 19, Number 2 (Fall 2016) 9–12. BEHG 330: Companion Animal Training; Volume 19, Number 2 (Fall 2016) 13–15. BEHG 340: Introduction to Verbal Behavior; Volume 19, Number 2 (Fall 2016) 16–18. BEHG 350: Behaviorology Philosophy and History; Volume 20, Number 1 (Spring, 2017) 22–24. BEHG 405: Basic Autism Intervention Methods; Volume 19, Number 2 (Fall 2016) 19–21. BEHG 425: Classroom Management and Preventing School Violence; Volume 19, Number 2 (Fall 2016) 22–24. BEHG 430: Resolving Problem Animal Behavior; Volume 20, Number 1 (Spring, 2017) 25–28. BEHG 435: Performance Management and Preventing Workplace Violence; Volume 19, Number 2 (Fall 2016) 25–27. BEHG 455: Behaviorological Thanatology and Dignified Dying; Volume 19, Number 2 (Fall 2016) 28–31. BEHG 465: Behaviorological Rehabilitation; Volume 19, Number 2 (Fall 2016) 32–34.

BEHG 480: Green Contingency Engineering;
Volume 20, Number 1 (Spring, 2017) 29–31.
BEHG 512: Advanced Behaviorology I;
Volume 19, Number 2 (Fall 2016) 35–37.
BEHG 513: Advanced Behaviorology II;
Volume 19, Number 2 (Fall 2016) 38–40.
BEHG 541: Advanced Verbal Behavior;
Volume 19, Number 2 (Fall 2016) 41–43.\*

#### Current Syllabi by Volume & Number

BEHG 100: Child Rearing Principles and Practices; Volume 19, Number 2 (Fall 2016) 3–5. BEHG 210: Introduction to Behaviorology I; Volume 19, Number 2 (Fall 2016) 6-8. BEHG 211: Introduction to Behaviorology II; Volume 19, Number 2 (Fall 2016) 9–12. BEHG 330: Companion Animal Training; Volume 19, Number 2 (Fall 2016) 13–15. BEHG 340: Introduction to Verbal Behavior; Volume 19, Number 2 (Fall 2016) 16–18. BEHG 405: Basic Autism Intervention Methods; Volume 19, Number 2 (Fall 2016) 19–21. BEHG 425: Classroom Management and Preventing School Violence; Volume 19, Number 2 (Fall 2016) 22–24. BEHG 435: Performance Management and Preventing Workplace Violence; Volume 19, Number 2 (Fall 2016) 25–27. BEHG 455: Behaviorological Thanatology and Dignified Dying; Volume 19, Number 2 (Fall 2016) 28-31. BEHG 465: Behaviorological Rehabilitation; Volume 19, Number 2 (Fall 2016) 32–34. BEHG 512: Advanced Behaviorology I; Volume 19, Number 2 (Fall 2016) 35–37. венс 513: Advanced Behaviorology II; Volume 19, Number 2 (Fall 2016) 38–40. BEHG 541: Advanced Verbal Behavior; Volume 19, Number 2 (Fall 2016) 41–43. BEHG IIO: Introduction to Behaviorology Terminology; Volume 20, Number 1 (Spring, 2017) 19–21. BEHG 350: Behaviorology Philosophy and History; Volume 20, Number 1 (Spring, 2017) 22-24. BEHG 430: Resolving Problem Animal Behavior; Volume 20, Number 1 (Spring, 2017) 25–28. BEHG 480: Green Contingency Engineering; Volume 20, Number 1 (Spring, 2017) 29-31.63

<sup>\*</sup>All of these TIBI course syllabi were either updated in 2016 or new in 2017. Many have older version appearing in earlier issues under different course numbers; see the *Syllabus Directory* in Volume 18, Number 1 (Spring 2015) for details.

#### TIBIA Membership Costs & Criteria & Benefits

The intrinsic value of TIBIA membership rests on giving the member status as a contributing part of an organization helping to extend and disseminate the findings and applications of the natural science of behavior, behaviorology, for the benefit of humanity. The levels of TIBIA membership include one "free" level and four paid levels, which have increasing amounts of basic benefits. The four annual paid membership levels are Student, Affiliate, Associate, and Advocate. The Student and Affiliate are non-voting categories, and the Associate and Advocate are voting categories. 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. Here are all the membership levels and their criteria and basic benefits (with dues details under TIBIA Membership Cost Details on the application–form page):

Free-online membership. Online visitors receive access (a) to past Behaviorology Today and Journal of Behaviorology articles and issues, (b) to accumulating news items, (c) to Institute information regarding TIBI Certificates and course syllabi, (d) to selected links of other organizations, and (e) to other science and organization features.

**\$20** Behaviorology Student membership (requires completed paper application, co–signed by department chair or advisor, and annual dues payment). Admission to TIBIA in the Student membership category is open to all undergraduate or graduate students in behaviorology or in an acceptably appropriate area. Benefits include all those from the previous membership level plus these: (a) a subscription to—and thus immediate postal delivery of—each new paper–printed issue of Journal of Behaviorology (ISSN 1536–6669), (b) access to special organizational activities (e.g., invitations to attend and participate in, and present at, TIBI conferences, conventions, workshops, etc.) and (c) access to available TIBIA member contact information.

**\$40** Affiliate membership (requires completed paper application and annual dues payment). Admission to TIBIA in the Affiliate membership category is open to all who wish to follow disciplinary developments, maintain contact with the organization, receive its publications, and participate in its activities, but who are neither

students nor professional behaviorologists. Benefits include *all* those from the previous levels plus these: Access both to additional activity options at the interface of their interests and behaviorology, and to advanced membership levels for those acquiring the additional qualifications that come from pursuing behaviorology academic training. On the basis of having earned an appropriate degree or TIBI Certificate, Affiliate members may apply for, or be invited to, Associate membership.

\$60 Associate membership (requires completed paper application and annual dues payment). This level is only available to qualifying individuals. Admission to TIBIA in the Associate membership category is open to all who are not students, who document a behaviorological repertoire at or above the masters level (such as by attaining a masters-level TIBI Certificate or a masters degree in behaviorology or in an accepted area) and who maintain a good record—often typical of "early-career" professionals—of professional activities or accomplishments of a behaviorological nature that support the integrity of the organized, independent discipline of behaviorology including its organizational manifestations such as TIBI and TIBIA. Benefits include all those from the previous levels plus TIBIA voting rights, and access to contributing by accepting appointment to a TIBIA or TIBI position of interest. On the basis of documenting a behaviorological repertoire at the doctoral level, an Associate member may apply for, or be invited to, Advocate membership.

**\$80 Advocate membership** (requires completed paper application and annual dues payment). This level is only available to qualifying individuals. Admission to TIBIA in the Advocate membership category is open to all who are not students, who document a behaviorological repertoire at the doctoral level (such as by attaining a doctoral-level TIBI Certificate or a doctoral degree in behaviorology or in an accepted area), who maintain a good record of professional activities or accomplishments of a behaviorological nature, and who demonstrate a significant history—usually typical for experienced professionals—of work supporting the integrity of the organized, independent discipline of behaviorology including its organizational manifestations such as TIBI and TIBIA. Benefits include all those from the previous levels plus access to contributing by accepting election to a TIBIA or TIBI position of interest.

Life membership. At its February 2020 Annual Meeting, the TIBI Board passed a motion enabling Life Memberships. The criteria and requirements appear in the Minutes to that meeting. If you are interested, contact the TIBI Treasurer for details.

The lesser of 0.2% of

The lesser of 0.3% of

The lesser of 0.4% of

annual income, or \$40.00

annual income, or \$60.00

annual income, or \$80.00

#### TIBIA Membership Cost Details

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 and economies. Thus, the annual dues for each membership (or other) category are:

for each membership (or other) category are:

CATEGORY DUES (in US dollars)\*

Student The lesser of 0.1% of annual income, or \$20.00

\*Minimums: \$20 Board Member; \$10 others

Member of Board of Directors:

The lesser of 0.6% of annual income, or \$300.00

(Retired Associate, Advocate, or Board Members: ... 50% less)

**Affiliate** 

member

member

Advocate

member

Associate

Tibia Membership Application Form				
(For contributions, a form ensures acknowledgement but is not required.)				
Copy and complete this form (please type or print)—for membership, contributions, back issues, or subscriptions—and send it with your check (made payable to TIBIA in US dollars) to the TIBIA treasurer at this address:	Mr. Chris Cryer Тівіа Treasurer 406 North Meadow Drive Ogdensburg NY 13669 USA	Check if applies:  Contribution:  Subscriptions:*  Back issues:**		
Name:	Membership (category):			
Office Address:	Amount enclosed: us\$			
	Home Address:			
Office Phone #:	Home Phone #:			
Fax #:	CHECK PREFERRED MAILING ADDRESS:			
E-mail:	Office:	Home:		
Degree/Institution:***	Sign & Date:			
*Subscriptions are us\$40 annually, the same as affil ***For Student Membership: I verify that the above person is enrolled as a studen		*Back issues: US\$20 each.		
Name & Signature of advisor or Dept. Chair:				

#### TIBI/TIBIA Purposes\*

 $T_{\rm IBI}$ , as a non-profit educational corporation, 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 and disseminating the behaviorological literature at least through the fully peer-reviewed Journal of Behaviorology (originally called TIBI News Time and then Behaviorology Today) with editors being appointed by the TIBI Board of Directors, usually 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 the purposes of TIBI/TIBIA. These activities include (a) encouraging and assisting members to host visiting scholars who are studying behaviorology as well as holding conventions and conferences; (b) enabling TIBI faculty to arrange or provide training for behaviorology students; and (c) 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 and TIBIA are:

A. to foster the philosophy of science known as radical behaviorism [AKA behavioral naturalism];

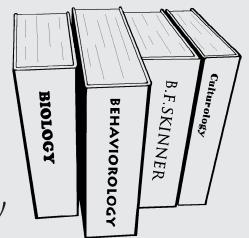
- B. to nurture experimental and applied research analyzing the effects of physical, biological, behavioral, and cultural variables on the behavior of organisms, with selection by consequences being an important causal mode relating these variables at the different levels of organization in the life 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;
- н. to develop a verbal community of behaviorologists;
- 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.

#### Another Free-Access Behaviorology Website

Delayed by the 2020 pandemic, the free-access, behavior-related website, <a href="www.BehaviorInfo.com">www.BehaviorInfo.com</a> is finally available for behaviorologists, friends, and everyone. Primarily, and initially, this website features Stephen Ledoux's sets of newspaper columns about behaviorology so that more people can gain additional familiarity with this natural science. Humanity needs this, because human behavior causes local and global problems and changes in human behavior help solve these problems. Going up gradually and simultaneously, the first set of columns, on basics, leads into the second set, on methodology and scientific answers to ancient human questions (e.g., on values, rights, ethics, morals, language, consciousness, personhood, life, death, reality, and even evolutions and robotics). Then may come columns by other authors. (Interested in writing some? Contact Ledoux at 26 Timber Ridge Road, Los Alamos, NM 87544.) Try it, and tell you students, colleagues, and friends about it!

<sup>\*</sup>Adapted from the 2017–updated TIBI Bylaws.

# ABOUT BEHAVIOROLOGY, TIBI, AND Journal of Behaviorology



Behaviorology is an independently organized discipline featuring the natural science of behavior. Behaviorologists study the functional relations between behavior and its independent variables in the behavior—determining environment. Behaviorological accounts are based on the behavioral capacity of the species, the personal history of the behaving organism, and the current physical and social environment in which behavior occurs. Behaviorologists discover the natural laws governing behavior. They then develop beneficial behaviorological—engineering technologies applicable to behavior—related concerns in all fields including child rearing, education, employment, entertainment, government, law, marketing, medicine, and self—management.

Behaviorology features strictly natural accounts for behavioral events. In this way behaviorology differs from disciplines that entertain fundamentally superstitious assumptions about humans and their behavior. Behaviorology excludes the mystical notion of a rather spontaneous origination of behavior by the willful action of ethereal, body—dwelling agents connoted by such terms as mind, psyche, self, muse, or even pronouns like *I*, me, and you.

As part of the organizational structure of the independent natural science of behavior, *The International Behaviorology Institute* (tibi), a non-profit organization, exists (a) to arrange professional activities for behaviorologists and supportive others, and (b) to focus behaviorological philosophy and science on a broad range of cultural concerns. And *Journal of Behaviorology* is the referred journal of the Institute. Journal authors write on the full range of disciplinary topics including history, philosophy, concepts, principles, and experimental and applied research. Join us and support bringing the benefits of behaviorology to humanity. (Contributions to tibi or tibia—the professional organization arm of tibi—are tax deductible.)

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