



# Journal of Behaviorology

ISSN 2331-0774

A journal of TIBI: The International Behaviorology Institute

*Behaviorology*

*Conductologia*

*Xingwei Xue*

*Gedragsologie*

*Behaviourology*

## CONTENTS

<b>Editorial</b>	<b>2</b>
<b>General Parameters &amp; Procedures for Courses from The International Behaviorology Institute <i>James O'Heare</i></b>	<b>3</b>
<b>Part II. Further Applications of Behaviorological Principles to Probe the Implications of Traditional Reality &amp; Explore its Alternative <i>Lawrence E. Fraley</i></b>	<b>7</b>
<b>Submission Guidelines</b>	<b>24</b>
<b>Syllabus Directory*</b>	<b>25</b>
<b>Editorial Review Board / Web Site / Copyrights</b>	<b>26</b>
<b>TIBIA Memberships Costs &amp; Criteria &amp; Benefits</b>	<b>27</b>
<b>TIBIA Membership Cost Details (and Application Form)</b>	<b>28</b>
<b>TIBI / TIBIA Purposes</b>	<b>29</b>
<b>About Behaviorology, TIBI, and Journal of Behaviorology</b>	<b>30</b>
<b>Some TIBI Board Member Contacts</b>	<b>32</b>

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

## Editorial

James O’Heare

Companion Animal Sciences Institute—Ottawa, Canada

This issue contains two important articles. The first, *General Parameters and Procedures for Courses from The International Behaviorology Institute*, represents an important updating of the parameters and procedures to be followed when taking courses through TIBI. The presentation and updating of these guidelines has also changed. Rather than being repeated in each course syllabus, the guidelines will be presented in this singular location, separate from the course syllabi, which may then be referred to and updated more easily. The syllabi may now be published without such redundancy. The TIBI course syllabi are currently being updated as well, and will appear in future issues of the *Journal of Behaviorology*.

The other article is the second article in the three-article series of articles by Dr. Fraley, this one titled *Part II. Further Applications of Behaviorological Principles to Probe the Implications of Traditional Reality and Explore its Alternatives*. In this article, Fraley continues his exploration of behaved reality. This topic is somewhat controversial, not because it presents weak arguments that others may reasonably disagree with, but because some readers are either uncomfortable with the

robotic perspective on reality as a behaved phenomenon, or, perhaps more commonly, some readers are concerned that the presentation of this perspective makes much of the natural science of behavior, or at least how it is presented, obsolete. Some may argue that time and effort would be better spent, at this point in the evolution of behaviorology, on elucidating basic principles of behavior and their application to resolving problem behaviors. I tend to exhibit the belief that indeed some phrasing of the more traditional presentation of the natural science of behavior may need to be adjusted, but that an assumption of an external reality is useful as long as it is stipulated as an assumption based on the pragmatic perspective of organisms that may not exhibit a different perspective from outside of their own perspective. In the end, I believe it to be a major contribution to the natural science of behavior and not contrary to, or contradictory with respect to, the more traditional topics within behaviorology. However, alternative argumentation and criticism is welcomed, particularly in the form of submissions to the *Journal of Behaviorology*. Enjoy!

# General Parameters and Procedures for Courses from The International Behaviorology Institute

James O’Heare\*

Companion Animal Sciences Institute

**Abstract:** To ensure the effective dissemination of the natural science of behavior, The International Behaviorology Institute (TIBI) provides a wide range of courses in behaviorology. Since many new behaviorology textbooks have become available in recent years (see the books page of [www.behaviorology.org](http://www.behaviorology.org)), an effort is underway to update all of the TIBI syllabi. Past iterations of the syllabi for the courses that TIBI offers (e.g., see Ledoux, 2005) incorporated essentially the same parameters and procedures into each course syllabus repetitively. (See the Syllabus Directory, in the latest issue of *Journal of Behaviorology*, to find the latest syllabus for each course.) For this update effort, all of the parameters and procedures—applicable to each course—appear together in this one article, so that the syllabus for each course will only contain course-specific information. Some syllabi in this update have course numbers that differ from those used in past versions of their syllabi. These changes make the course numbers consistent with the numbers that appeared in the summary of 25 years of experience in behaviorology curricular courses and resources that Stephen Ledoux published (Ledoux, 2015).

Courses for TIBI maintain high standards in behaviorological content and grade requirements. These courses have been developed to be equivalent to or exceed corresponding university courses of study in depth, breadth, and grading standards.

Anyone under contingencies to participate in an uncompromised, high-standard, and discipline-comprehensive education in behaviorology is invited to partake in the educational opportunities provided directly through TIBI.

## Three Repertoire–Expanding Methods

Students can work their way through TIBI courses under three different sets of contingencies.

### **Option 1. Self-Directed Study**

On their own schedule, students may follow the most recently published course syllabus, along with the required course materials, working through the coursework without an assigned professor, or evaluation, or any formal

academic credit. This option, which leaves the student to complete the coursework outlined in the syllabus, and is free, would be suitable for anyone who lacks a need for formal academic credit (TIBI or university) but who is under contingencies to expand their repertoire on a course topic. Access to a professor and formal evaluation allows for a much fuller assurance of proficiency with course contents and, where this is sufficiently reinforcing, option 2 or 3 is available to the student.

### **Option 2. TIBI Academic Credit**

In this option, students earn TIBI academic credit for their study of course topics. After receiving the appropriate tuition fee, TIBI assigns the student a professor to provide guidance, feedback, and an assessment of their coursework efforts and products.

This objectively ensures proficiency with respect to the course content. Visit [www.behaviorology.org](http://www.behaviorology.org) or contact TIBI for available courses, tuition costs, and syllabi. For

---

\* Correspondence can be directed to [jamesoheare@gmail.com](mailto:jamesoheare@gmail.com)

*Keywords:* behaviorology, education, instruction, courses, distance, TIBI

students that require university academic credit, option 3 is appropriate.

### **Option 3. University Academic Credit**

Students may also study TIBI courses for university academic credit. Students following this option would work through an accredited institution of higher education that offers courses equivalent to TIBI courses. The International Behaviorology Institute accepts university academic credit, for an equivalent course, toward TIBI academic credit for TIBI certificates; TIBI accepts A and B level grades from equivalent university courses. C and D grades obtained in university courses can be remediated through TIBI for TIBI academic credit (a possibility about which TIBI can provide more information, on an individual basis, as the need arises).

### **The Shaping Model of Education**

Effective education requires appropriately arranged interaction between the student and an appropriate set of contingencies associated with the course content. Courses and programs make these contingencies available to students; TIBI courses are grounded in the “shaping model of education,” which is informed by behaviorological science (rather than the “presentation model of education” which is informed by psychology).

In the presentation model of education, teaching involves mostly talking and “learning” is seen mostly as listening. In the shaping model of education, teaching is the scientifically grounded design, arrangement, and application of educational content, methods, and contingencies presented in ways that generate and maintain incrementally small, but continuously accumulating behaviors, the short and long range consequences of which are successful in producing an ever wider range of effective responding by the student.

### **Distance Format**

The International Behaviorology Institute endeavors to eliminate as many barriers to effective, high-quality education as possible by

designing and providing its courses in a flexible distance format, thereby making behaviorology courses available to a wide range of people in a wide range of circumstances. The expansion of one’s repertoire of behavior with respect to course content does not require face-to-face contact between students and their professor in a classroom environment. Effective conditioning requires specific kinds of interaction between the student and the course content. The course material and the instruction parameters prompt and reinforce appropriate responding in an accumulating expansion of the student’s repertoire as per the shaping model of education. The distance format provides the student with the appropriate course content, as well as the appropriate instructions for interacting with that content in a manner that ensures effective conditioning and demonstration of the appropriate proficiencies. Interaction between the student and professor is also established in a manner that allows a wide range of students to partake of the courses.

### **Student–Professor Interaction**

Interaction between students and their professor is flexible, ensuring the most effective and widely available education in behaviorology. Student–professor interaction may take place via phone or email, or in some cases, by regular postal mail. Each student’s coursework is submitted to their professor, and returned to them with their professor’s feedback via any written method that provides a hardcopy or electronic record.

### **Evaluation and Grading Policy**

Each student’s work is reviewed and grades are assigned according to the quality of the work. Each student is required to produce academic products that (a) demonstrate fluency with respect to the course content and ensures (b) that all of the course objectives have been met. Within a given coursework project, an “A” grade indicates that at least 90% of the component coursework was achieved with fluency; a “B” grade indicates that

between 80% and 89% of the component coursework was achieved with fluency. The student's final grade for a course is the average of all of the student's completed coursework project grades.

Each student is required to earn an A or B level grade ( $\geq 80\%$ ) on *every* assigned "coursework project." For example, completing a set of study questions for a course text is considered a "coursework project" as would be each of any essay projects assigned to the student. The student is not required to earn an A or B on every chapter or every study question, but must earn this minimum grade level in the component of the course referred to as a "coursework project" as a whole. Should any inadequacies become apparent, as reflected by a grade lower than B, the professor may require resubmission of certain coursework as part of the fluency shaping and remediation process, but they may also provide tests or quizzes, either orally or in writing, or further assignment tasks until the products of the remediation demonstrate the student's comprehension of and fluency with respect to that content. The ultimate requirement of evaluation is to ensure that the student has objectively demonstrated fluency with respect to each course objective. Professors typically provide up to three remediation approximations before the grade is finalized for the student's work product. Students receiving an inadequate final grade at this time will be deemed to have failed the course as a whole. Students must complete all assigned course projects within the course and all components of each project.

### Technical Requirements

Student can complete most TIBI courses without access to a computer by completing the assignments in writing and mailing them to their professor through the postal service. However, students with access to a computer and the internet may communicate with their professor via email or videocalling, and with a scanner, submit handwritten assignments in PDF format.

### Obtaining Required Materials

Many of the required materials for TIBI courses are available through the TIBI website at [www.behaviorology.org](http://www.behaviorology.org). Many are also available from the following sources:

- Direct Book Services at: [www.dogwise.com](http://www.dogwise.com)
- Cambridge Center for Behavioral Studies at: [www.behavior.org/store.php](http://www.behavior.org/store.php)
- B. F. Skinner Foundation at: [www.bfskinner.org](http://www.bfskinner.org)
- P & T Ink at: [www.parentrx.com](http://www.parentrx.com)

Alternatively, many of the materials are available from major book retailers such as Amazon and Barnes & Noble.

If students have any questions or concerns about obtaining a particular resource, they should contact TIBI through [www.behaviorology.org](http://www.behaviorology.org) for guidance.

### Using Study-Question Books

Many courses require the student to work through study-question books. Most study-question books start with a section entitled "To the Student and Teacher." *Students must read this section first!* It explains how to complete the study questions successfully.

Unless specifically instructed otherwise, students are required to write out their answers in longhand. This requirement is due to the fact that this type of verbal response usually brings about more effective conditioning than merely saying or typing the answer. As taught in another, advanced behaviorology class on verbal behavior, writing the answer in longhand involves both point-to-point correspondence and formal similarity between the stimuli and the response products of the answer.

Since students must write out their answers directly in their study question books, each student must have their own study question books. To ensure that all students meet this requirement, students are required to fill out the original ownership form provided at the back of each study questions book and send it to their professor by regular postal mail. Students may send in their ownership form upon beginning their course or send it along

with the first set of coursework documents they submit for evaluation. Students may send photocopies of their work to their professor by regular postal mail or as scanned attachments to emails. If the scanning option is chosen, the student must scan all of the pages of their coursework into a single document formatted as a PDF file. Each scanned submission must be less than 10 MB. If a document exceeds 10 MB, then it can be separated into parts that meet the 10 MB restriction. Only the PDF format is acceptable. It is vitally important that the student writes legibly and includes their full name on each submission. In order to ensure against loss, students should retain all originals of their work. By retaining the originals and providing their professors with exact copies of their work, students and professors are easily able to communicate about the student's coursework. The specific course assignments are described in each specific course syllabus. Once enrolled, the student's assigned professor will provide the required mailing addresses, phone numbers, and email addresses.

### **Pace and Time Management**

The usual higher education workload expectation for a course is about 150 hours. (The typical face-to-face course features about 50 in-class contact hours with the university expecting about 100 more hours of additional study at an average rate of about two hours out of class for each hour in class.) This can be accomplished at rates ranging from about 50 hours per week over three weeks to about 10 hours per week over the typical 15 weeks of a semester. Of course, some students may take a little less than 150 hours, while others may take more than 150 hours to complete the work to the same acceptable and required standard. Students are encouraged to work through the assignments as rapidly as their schedules allow. In order to be successful, students must exercise self-management skills by starting immediately and keeping up an appropriate, reasonable and steady pace.

Students should work their way through the course by reading and studying the texts

and/or audiovisual materials and sending in their completed coursework for each chapter or assignment *as they complete it* (i.e., not all at once after many weeks of silence). Because all of the coursework is set forth in the course syllabus calendar, due dates are automatically assigned. Professors will *not* remind students of their coursework due dates. Students are respected as adult professionals and so are required to manage their time and follow through independently. Students need to set an appropriate pace for themselves and adhere to it so that they can complete and submit their assignments to their professor in a timely manner. This guideline will help facilitate success. Students generally have 15 weeks, from the time they receive their professor assignment, to complete and submit their coursework to their professor. Coursework mailed through the postal service must be postmarked before the due date. If unforeseen and sufficiently important circumstances take the student away from their studies, students may request an extension from their professor *before* the due date. At the professor's discretion, students may be offered extra time (e.g., one extra week) to complete and submit their assigned coursework.

These general parameters and procedures apply to all of the courses that TIBI offers. As such they constitute a part of the syllabus for each TIBI course.

### **References**

- Ledoux, S. F. (2005). TIBI online syllabus for BEHG 425: Non-Coercive Classroom Management and Preventing School Violence. *Behaviorology Today*, 8 (1), 41–46.
- Ledoux, S. F. (2015). Appendix 3 Addendum: Curricular courses and resources after 25 years (1990–2015). In S. F. Ledoux. *Origins and Components of Behaviorology—Third Edition* (pp. 314–326). Ottawa, Canada: BehaveTech Publishing.

## Part II.

# Further Applications of Behaviorological Principles to Probe the Implications of Traditional Reality and Explore its Alternative

Lawrence E. Fraley\*

West Virginia University—Morgantown (retired)

**Abstract:** Part I of this work (*Journal of Behaviorology*, Vol. 18, No. 1, pp. 13-25) developed the perspective on reality from within an isolated unit of “organic matter” having the structural complexity and intricacy to exhibit the biological processes that collectively we know as the mediation of behavior. It was argued that that largely unfamiliar internal perspective affords a more valid picture of the actual nature of our being. In furtherance of that work Part II continues the pursuit of differences between those two perspectives, revealing both explicitly and incidentally how the traditional perspective has misguided human culture. This is Part II of the three-part manuscript.

In general, people have long recognized the results of seduction via enculturation. From time to time various subcultures come to our attention in which every individual seems to accept a common but limited range of absurdities as true. We often regard such societies as “primitive.” In Part I of this work we stretched that kind of understanding to apply to *all* of human culture with the critical issue pertaining to the seemingly universal acceptance of a common environment plus the concept of reality that a single shared environment would support. Although according to increasingly understood, objectively derived, principles the notion of a single common or shared environment does not represent a sustainable concept, we nevertheless find it almost universally accepted. That acceptance, having obscure origins in distant antiquity, comes to each of us as a mainstay of our traditional cultural heritage. A single environment in common seems to provide a matrix of analytical accommodation for our entire behavioral repertoire. And although a fallacious notion, the totality of its influence is so great that few individuals can now find any logical bases to step from under

its umbrella. Most individuals are left to wallow in the occasional discomforts of its various misleads. Their dilemma, commonly attributed to their failure to deal with “reality,” would dissipate were they to abandon their invalid concept of “**the** environment.” However, people tend to lack the behavioral capacity for such a rejection—their dilemma often exacerbated by the clutter of equally invalid notions of behavior per se as well as their more encompassing but invalid concepts of life in which their concepts of behavior must be accommodated.

### Neural Behavior, Energy Streams, and Reality

As traditionally construed, the existence or environmental reality of what we sense inheres as but an implication of our having behaved awareness responses ... “to it” (as we presume). This statement posits traditional reality as an inferential construct—some neural behavioral manifestations of a kind sometimes called *comprehension*, which typically occur in response to a kind of preceding neural behavior that is commonly called *basic awareness*. And as a result of earlier conditioning (which

---

\* Address correspondence regarding this article to [lfraley@citlink.net](mailto:lfraley@citlink.net)

*Keywords:* behaviorology, reality, neural behavior

according to logic is construed to have produced some kind of neural micro-restructuring), among the typical chains of subsequent neural behavior perhaps the most ready occurs in the form of a presumption that the awareness behavior from which it stemmed was a reaction to some arriving energy from an “environmental” source. That presumption is bolstered by the previously conditioned logical proposition that everything happens “for a reason,” so when basic awareness occurs presumably it cannot be occurring with functional discontinuity (a.k.a. occurring spontaneously). Furthermore, that that presumed incoming energy stream was of “environmental” origin (endo... or ecto...) is a further neural behavioral manifestation, an aspect of the inferential neural behavioral construct of reality that is under consideration here.

Such an inferential kind of neural behavioral process, which chains from awareness behaviors, imposes a limit on one’s intimacy with one’s environment. Or in other words, those behavioral sensations and their associated logic (more neural behavioral activity), all occurring as internal process, are as close as a human-type unit of matter (or so one behaves oneself to be) can come to establishing existence (i.e., to the establishment of reality) for its putative environment. Furthermore, as cast from the traditional perspective,<sup>i</sup> that kind of establishment for an environment arises, not as something that agentially the human organism does as a mysteriously deliberate act of origination, but as something that merely occurs inevitably via naturally occurring neural behavioral processes.<sup>ii</sup>

The “reality of an environment” inheres in putative neural behavioral sensations that are then regarded circularly as sensations “of” that environment, with the critical projective preposition “*of*” emerging interpretively as subsequently chained neural behavior of a kind called “inference.” That is (again cast traditionally), given the occurrence of basic awareness “responses” plus the necessary

neural micro-restructuring from a presumed history of socio-cultural conditioning<sup>iii</sup> the particulars of the environment subsequently emerge in neural behavioral mode as inferences along the course of the resulting neural behavioral chaining. With the foundations for behaving an environment putatively having been established in the medium of neural microstructure (per se a “physical” kind of neural behavioral construct) via certain behavior-conditioning processes and subsequently manifesting in the neural behavioral processes that are selectively mediated by those putative structures, we then react as if such an environment is “really out there” in what is called “material” form. Yet all that has occurred is some private neural behavior that is followed by some further neural behavior in response to that preceding neural behavior. (This discussion, cast in broad generalities, leaves the intricacies of neural behavioral activity to explication by the neural physiologists.)<sup>iv</sup>

Thus, a person (presumably but an organized piece of intricately structured matter), in spite of its complex behavioral activity (only presumed to be “re”-activity) remains as isolated as does an individual piece of driveway gravel—or would, were there anything within “it” (a unit of organic matter) to be “isolated” in the traditional sense—that is, were the “it” per se more than merely another aspect of that *its own* behaved, internal, environmental construct. From the internal perspective “one” (i.e., a person-type material unit) vanishes, along with the remainder of its material environment, into the virtuality of pure process (neurobehavioral in this case). Nor can the “vanished” individual, via any resort to logic, enjoy a restoration of its substantive status within a traditional environment, because logic, which consists of but another chain of neural behavioral process, merely restores order to aspects of an environmental construct that like the “logic” in question are also occurring in behavioral process mode. Insofar as everything—environmental construct, the physical person as just another environmental



feature, and all other forms of neural behavioral activity—exist only in process mode, nothing about any such process endows it with the capacity to pierce the essential limitations of process per se. Given an analytical starting point featuring an acceptance of an environmental matrix manifesting in process mode, a state of reality for physical matter cannot be established, which leaves the physical realm as but a logical construct by which origins and “mediations” of processes can be rationalized in general.<sup>v</sup>

Cast again from the traditional perspective, most people are comfortably accustomed to thinking backwards about body-environment relations by accepting uncritically the remote reality of our inferred environments and then relying on those presumed “environments” to stimulate awareness behavior. People tend to have difficulty with a reversal of direction in that relation—namely, with a behaved environment that derives inferentially via the kind of chaining neural behaviors that begin with what we call “sensation” or “awareness.” But given our behavioral capacity, which limits the emergence of our environments to the form of further neural behavioral reactions to our own awareness behaviors, the awareness events logically *are always our starting points*. Such a shift in the attribution of primacy, critical to distinguishing between the generally unfamiliar internally constrained perspective and the traditional one, bears an analogous relation to an important characteristic of behaviorological theory developed by B. F. Skinner—namely, its postcedent analytical approach.<sup>vi</sup>

Skinner’s analytical formulation begins with behavioral events and then analytically pursues the subsequent selection mechanisms that affect future instances of those behaviors. However, his analytical approach is framed in the traditional terms of a real external behavior-controlling environment. Likewise, representatives of the currently discernible, four, basic, natural sciences (behaviorology, physics, chemistry, and biology)<sup>vii</sup> tend to broadcast their scientific operations and findings from the traditional perspective of a

real *external* environment that is shared in common and which putatively controls peoples’ actions and anchors accounts for them. Those behaviorologists who may be sensitive to the less familiar internal perspective arguably, as a matter of communicative necessity, have operated from the traditional perspective along with the other kinds of natural scientists. That cooperatively common approach by behaviorologists has perhaps also, in some cases, been bolstered by personal career investments that may seem to those individuals necessarily reliant on the traditional perspective thus protectively intensifying their incredulity with respect to any alternative to it. Nevertheless, a conundrum inheres in the assumptions of that traditional and typically unchallenged perspective—namely, by what logic a mere unit of matter, isolated in the mode of its own internal neural-behavioral activity, could become established in the traditional sense as a physical feature of such a putatively remote, real, self-including, and shared environmental context.

The chaining neural behavioral processes to which the discussion in this section pertains represent a special capacity of what, traditionally, are presumed to be certain kinds of environment-defining material units that represent a biologically organized class commonly designated as organic. Yet, upon further consideration, as natural entities “we” inhere entirely within the containment of our own neurally behaved “structure” and manifest exclusively in the mode of the neural behavioral processes putatively *of* those neurally behaved structures—a kind of containment that imposes limits on an individual’s accruing conceptual construct of inferred reality. “We” are behavioral mediations of behaved matter units, and thus we remain quite trapped within ourselves in the sense that an inferred process cannot depart from the putative entity that is mediating it (recall the motor and its running). Manifesting as process rather than as traditionally construed material entities, “we” are confined to the virtuality of process.<sup>viii</sup>

The validity of this proposition can be established only from within the new internal perspective—a perspective that is afforded by the process mode to which accordingly we are confined. However, casting from this new perspective can be challenging, insofar as incompatible considerations from the traditional perspective often seem necessary to such explications, as illustrated by the logical incompatibilities in the following sentence: *The reality of our material world remains a neural behavioral construct that can and does happen only within us in the mode of certain of the processes in which our internal neural structure can engage—a kind of conceptually behaved neural structure that remains flexible in its behavioral capacity insofar as it is susceptible to the residual micro-changes that remain after what are called “conditioning processes.”*

Note that such a statement can seem self-contradictory to the extent that an implicit reader-agent may gloss over its reliance on bodily structure that actually inheres merely as a conceptual projection of behavioral process.

Such a reader would tend to accept implicit references to (a) bodies as material entities that occupy a traditional and implicitly real “environment” and (b) body parts that implicitly are structures existing within the endo-environmental facet of that putative environment. Thus, the italicized statement can seem to rely, as is traditional, on certain parts of a real remote environment that includes material entities such as “us” (a reference to our material bodies) and on the internal neural structures within those bodies. Yet those bodies and their internal nervous systems, which according to that sentence support critical aspects of the process mode to which we are confined, are themselves aspects of environmental constructs that must manifest only in process mode. Thus, our “bodies” do not exist independently in support of our behavioral processes; one’s body manifests as a part **of** one’s putative neural behavioral processes. And furthermore, such neural behavioral processes, which putatively occur to

conceptually projected body parts (in this case, nerves) are but completions of logical models (i.e., are more events in process mode).

The confinement to behavioral process of both (a) one’s body and (b) the world in which that body “exists” limits one’s world (and the individual as part of it) to that individual’s own putatively-behavioral process, a limitation that precludes the establishment of a traditional reality that exists beyond that “individual’s” own neural behaving. That is, we have available only the logical construct of our neural behavioral process with which to establish the material entities of a putative environment, and one’s traditional expectations for the remote reality of independent material entities cannot be met if material entities per se are cast only in the mode of “one’s internal neural behavioral processes.”

And furthermore, note that an “internal neural behavioral process” per se inheres as but an aspect of a conceptual endo-environmental construct.<sup>ix</sup> One may continue to find difficult the acceptance of fictional status for one’s pronominal self-agent and its neural behavioral processes, but as earlier noted a putative “person” is no more “alive” (in the traditional mystical sense) than a piece of driveway gravel. Presumably people are just more intricately structured and hence much more diversely active (presumably reactive) than are their rocky relatives, as an appreciative reader may be tending now to understand about “one’s” “self.” However, the reality of both that “one” as an entity, along with the putative self-agent said to perform its “understanding,” suffer a logical erosion that leaves no such entities established in reality either to be explained or to do the explaining.

Nevertheless, as a putative result of what we behave as our “prior conditioning,” the presumption (a naturally occurring conceptual construct) of energy coming from without (and to which traditionally the origin of our putatively common kind of basic awareness behaviors have been attributed), presumably plays a role in accounts for the occurrence of whatever has been regarded traditionally as the

processes of sociality (processes in which the putative incoming energy presumably comes from other people). As we shall review, that traditional and overtaxed concept of sociality (which relies on an assumed, commonly shared, external reality) has provided a putative operational matrix for what traditionally has passed as “social interactions.” However, such “social activity” among various individuals must occur *without* “shared basic perceptions of the same public things,” insofar as a common reality cannot be established for such a putatively shared externality. Such a traditional notion of sociality thus relies on a fallacy. There is only ever one individual. That individual, behaviorally self-established, manifests exclusively in the isolated mode of its own internal behavioral processes, neurally behaving its own environment including self and others.

Thus, an individual can and must “exist” only in the absolute isolation of its own neural behavioral processes. Within the inescapable isolation of its own neural behavior is behaviorally created its own universe, which locally includes its own culture. In that kind of confinement (to its own neural behavioral processes) an “individual” remains unable to meet the conditions and requirements for social interactions within a single, commonly shared, and remotely independent environment as traditionally construed. Its “social interactions,” all aspects of which must manifest in its own neural behavioral process mode, remain process-mode aspects of its behaved and conceptually projected environmental construct, a prevailing circumstance that requires explications of “social” to be recast for conformity to that kind of individual isolation. Reliance on such a concept of extreme personal “privacy” affords a new increment of cogency, insofar as it becomes clear that the behaviorally isolated “individual” cannot “get out of itself” to validate via independent observation an independent reality for such newly redefined “social” phenomena (which putatively are occurring in virtual mode only as conceptual projections of certain aspects of that

individual’s own internally occurring neural behavior).

To pursue that revelation, note that the rough brown bark on the trunk of a large oak tree in the front yard manifests within the isolated individuality of some private neural behavior, as does its environmental context as well as the particulars of its detection. The properties of that tree bark, or of any other aspect of the environment that one presumes to be detecting, occur in the form of one’s neural behavioral manifestations, the fundamental order of which, presumably as a result of conditioning processes earlier in one’s life, is assumed (more chained neural behavior) to have been imparted by an energy stream “from” that putative environmental feature. But instead of agentially “looking at” some remote tree bark, some neural behaving is merely occurring to an individual in the form of an awareness-type sensation, the particulars of which one presumably has been *conditioned* to call “tree bark” and to *suppose* that that neurally behaved “tree bark” is environmentally “out there.” It is assumed (more neural behavior stimulated by previous neural behavior) that the awareness behavior that presumably is happening internally “**is**” part of an external environment that is being detected. The environmental reality of that tree bark is thus conceptually projected in neural behavioral mode—a virtual endowment of reality posited in the previous sentence by a bold-faced “is,” (the third person present singular of “be”). Importantly, the tree bark’s endowment of “being” is but a neural behavioral event—an often neglected circumstance that negates the tenaciously established historical concept of absolute independent “existence.”

Logic, traditionally a linguistic event (in the mode of more neural behavior), has evolved to comport with the presumed reality of this projected externality—an externality in which the mythical agent called “one” purportedly exists. Thus, although one behaves internally a world in which one purports to live, with the traditional conceptual reversal of the actual

prevailing perspective the elements of that neural-behavioral conceptually projected world are presumed to be exerting control over the very behavior by which they manifest in the first place. Thus, an individual's world-construct is behaviorally projected as the externality that the agential "one" then purports to be discovering... "out there," as that mystical individual seems wont to presume. Note, again, that from the traditional perspective, the individual must rely on the reality of an absolutely established environment, but such an environment cannot be established in the first place and thus remains unavailable to anchor the traditional concept of reality.<sup>x</sup>

Given that the "environment" is rendered in the medium of one's own internal neural behavior, most of the superficial properties that one attributes to a raw sensation, presumably "of" an environmental event, must derive from the characteristics of that individual's own neural behavioral medium as the neural behaving of those environmental features occurs—that is, as "that individual's" neurally behaved construct of environmental reality is being rendered in the medium of that individual's personal neural behavior.

To pursue a different example (and continuing to cast the argument from the traditional perspective): If one of the pieces of gravel on a driveway were to have the structural intricacy to behave and conceptually project an "environment," it might "sense" itself among a population of gravels and would be sharing with them a precarious "gravel-life" in a "gravel's world" characterized by threatening compressions (exerted by what we behave as tires and shoe soles). Importantly, such a gravel-world would be cast with a rendering of behaved property styles that would derive from certain intrinsic structural characteristics of those driveway gravels. If a human independent observer could "see" that environment "from a gravel's eye view" (as might be said), that observer might, indeed, describe that particular kind of gravel-influenced environmental rendition as "a *gravel's world*." Behaved into its

virtual existence by a gravel-type of micro-structure, it would seem to differ extensively in medium-related ways from a corresponding humanly behaved world (were such a comparative observation possible). Thus, insofar as we putative organic units of matter, unlike gravels, respectively do have structural capacities for behavior (as traditionally one such unit presumes of the others), the respective worlds that presumably we humans behave would be detectable independently, on the basis of their medium-imparted properties, as human renderings (were an independent observer ever able to gain such an impossible comparative perspective).

To put it in terms of a traditionally cast analogy, just as the medium of any artistic rendering (including the behavior of the artist) imparts to that work of art a special set of properties presumed to derive from the prevailing medium per se, so our respective constructs of environmental reality must be influenced, or "colored," by such special sets of properties. Such an environmental construct, behaved into existence by a human, thus exhibits intrinsic properties presumably imparted by the kind of uniquely human neural microstructures that are said to mediate any human's reality-construct in neural behavioral mode. Were such respective "environments" of super-gravels and humans actually "out there" for comparison by some impossible kind of independent observer, distinguishing among them on the basis of their medium-imparted properties probably would be easy.

Whatever presumably might be "out there," our neural sensational activity, which is merely interpreted to be "of it," chains quickly to a further neural behavioral construct that is only regarded as our "detection" or "awareness" of it.<sup>xi</sup> The "it" remains cast of some neural behavior and thus can only be rendered in the medium *of* neural behavior. Thus, from the traditional perspective, our respective pictures of environmental reality are created privately in that neural behavioral medium, and those individual renderings are cast necessarily with properties much affected by the human neural

behavioral medium that produces them. Furthermore, each individual's traditionally presumed neural behavioral medium, as well as the neural behaviors that it would mediate, would exhibit an individual uniqueness that derives from the individually unique microstructural level of neural behavioral activity. Just as the paintings of one artist can be distinguished from those of another artist even though both artists paint "the same" subject matter in the same general style, the neural behavioral renditions of "a given environment" by one human could be distinguished from those of another human were such independent comparisons possible.

From the traditional perspective consider, for example, those of our respective environmental renderings that traditionally we say are "of the same environmental thing that others also are contacting"—for instance, that tree bark that was featured in an earlier discussion. The "contacts of that tree bark by others," even from the traditional perspective, would have to be generated respectively by the differing neural microstructures within each of those individuals and therefore would differ accordingly were traditional comparisons possible. But with an individual confined to the behavioral isolation of its own self-defining neural behavior, "other" individuals, as well as their behaviors, exist merely as parts of the neurally behaved environmental construct of *a single and isolated individual*. Individual isolation cannot be pierced directly through reliance on a commonly shared environment (which is the traditional approach), because one behaves the "other individuals" as part of one's private construct of an environment. Furthermore, even if the independent reality of "other individuals" could somehow be established, each of whom logically would be projecting conceptually its *own* version of an environment, a single commonly shared "environment" could not exist—the notion of it, a fallacy.

Thus, with the putatively common (or shared) environment actually existing only in the conceptual mode of an individual and hence

not in common amongst individuals, a putatively common aspect of the environmental construct of a single individual would have to comprise only what that individual fragmentarily construes to be the respective environmental constructs of each other individual that that individual is also behaving into existence. But insofar as every presumed individual (if indeed others even exist) would have to behave neurally its own environment, while similarities among those putative environmental constructs might be imagined, an assumption of environmental commonness shared among individuals cannot get validated insofar as a basis for it can neither be found nor established. Thus, an individual remains absolutely isolated in the solitary confinement of its own neural behavioral process, which defines that individual exclusively. And if confined to pure process, the "individual" (traditionally regarded as bodily material structure that actually is only conceptually projected) would be devoid of status as a material entity established in environmental reality. This exclusion also pertains to any kind of material entity that might be imagined to be mediating the process that defines that individual. Hence, a behaviorally occurring "individual" would be unable to transcend or escape the isolation imposed by the process mode of its nature. It is a kind of absolute entrapment ensured by the process-type nature of *everything* of which the individual is aware, including that individual per se.

Let us now turn away from private, covert, neural behavior, and again, from the traditional perspective, consider a comparative example of some overt behaving. Compare respective cellist renderings of the simple American ballad entitled "Home on the Range" as played first by a grade school beginner and next by Yo Yo Ma, cellist virtuoso and internationally acclaimed musician. As traditionally observed, they both play the same series of notes, a sequence called a tune, but because their musical behaviors are public all members of the audience are privy to the vast differences in their respective renditions.

We would also anticipate similar differences were their respective behaviors of a private nature, as are neurally behaved environmental constructs. For instance, revisiting that tree in the front yard, consider what, from the traditional perspective, are two different people each looking at it. Supposedly, each neurally behaves the same putative tree bark. People say, agentially and with the mistaken assumption of a single unified reality that presumably is being contacted by each “observer,” that “they are both looking at the same tree.” Even if we accept the fallacious traditional perspective, we have no more reason to suppose that their respective private neural behaviors of “the same tree” would be identical than we had reason to expect that the two cellists would behave identical overt musical renditions of *Home on the Range*.

Indeed, even from the traditional perspective, the latitude for individual differences between any two individuals may seem substantially greater in comparisons of their *private* neural “reactions to the same public thing” than with respect to comparisons of their *overt* public “reactions to the same thing.” Suppose, for instance, that one observer of the bark on a tree is a university professor of botany while the other is a four-year-old urban child who remains largely inexperienced with respect to trees. If on almost any occasion involving “contact” with some specific tree bark we do not expect those two observers to exhibit similar overt behaviors, why should we expect them to behave identical private ones? Yet only from such disparate data do we attempt to establish the reality of “the common environment” that, traditionally, all parties presumably share. Note that under such a false assumption (of a commonly shared “real” environment) the inevitable inconsistencies in what are presumed to be people’s “reactions to that single common environment” tend to be misinterpreted as having stemmed from “observational errors” or “inspectional insufficiencies.” Note too that conjured mythical self-agents, typically in this example

called “people,” implicitly would have to be “making those errors.”<sup>xiii</sup>

Nevertheless, from the traditional perspective (which at this point makes little or no sense), people-agents (as but one aspect of an individual’s behaved environmental construct) have been intent on insisting that any “real environmental aspect” is “out there” in some state of absolute fixation. Actually, however, “various observers” respectively would have to be establishing such an environmental aspect independently, each through its respective neural behaviors. Traditionally, it has seemed as if each individual were reacting “to” a remote and fixed “it” instead of each individual internally behaving his or her own version of it into a private “existence.” The neural microstructure of each individual (if other individuals can be imagined to exist) would have to be creating behaviorally a private version of that “given environmental feature,” and those respective versions would have to be dissimilar probably in many ways. Yet in the traditional formulation each individual tends to react as if it were his or her respective challenge to get “it” (the putatively common environmental feature) “right.” However, instead of the behavior of individuals occurring in reaction to a common external material environment, even upon careful analysis from the traditional perspective “the environment” would have to be a group production emerging in process mode as a virtual abstract collectivity composed of each individual’s abstractly superimposed conceptual behavior. The problem is that a single isolated individual has to behave the entirety of such a comparative operation, and that individual, existing only in neural behavioral process mode, cannot transcend its own absolute isolation as implied by the term “comparison.”

To recite again the increasingly obvious: There would be as many environments, or specific aspects thereof, as there are individuals to behave them. And, again even from the traditional perspective, each individual’s behaved environmental version would have to

be unique. However, from the more realistic internal perspective, it is not possible for an isolated individual to enjoy an outsider's view either of its own or a hypothetical other person's environmental construct. Thus, the individual cannot come to appreciate in a comparative way from an outside perspective what that individual and other presumably remote individuals might be behaving as their respective independent environmental constructs. Note again that for the individual, other people and their activities are but aspects of that isolated individual's own environmental construct.<sup>xiii</sup>

From the familiar traditional perspective, at the more familiar *social* level of analysis that is predicated on the prevailing notion of a single, shared, and putatively real environment, the traditional reversal in logic actually leaves the putatively common environmental reality to be a product of the social persuasion and coerced interpretations that is endorsed and promulgated by the more influential individuals—or by the “culture” at large, which in this context alludes to the collective influence of the dominant or influential faction. Thus, in the traditional view, culture emerges as the putative instrument by which each individual's construction of reality gets defined and interpreted via conditioning processes, which typically remain under the management of the dominant culture-controlling factions of one's community. In contrast, from the intrinsic perspective, “social” activity among individuals can inhere only within each individual's private behavioral construct, which deprives “sociality” of a shared, external, reality-matrix in which various individuals occur in common. Each individual, if indeed others even exist, would have to behave and conceptually project its own environment, each of which presumably would include “other people” and the respectively unique environmental matrices in which they purportedly operate.

In a broader view, a “material entity” can occur to an organic unit of matter only as part of its internal behavioral construct in the mode of neural behavior, which, consisting

exclusively of neural behavioral process, precludes the traditionally conceived absolute physical existence for material entities. Thus, the reality of “matter” per se cannot be established as posited in traditional physical reality; instead it inheres only in process mode—neural behavioral process, to be precise, where it serves as a virtual building “material” for the formation of an isolated individual's behaved environmental construct—a construct that includes among its behaved “entities” the behaving individual per se.

The neural-behavioral presumption of a real, sensorially tacted environment is a “socio-cultural” conceptual product that is rendered from absolute isolation in the medium of an individual's own and thus unique neural behavior. And the “idea” that “other individuals” do likewise remains a presumption (in the mode of more of that isolated individual's neural behavior). Limitation to that behavioral process-type of medium represents the ultimate constraint on an organic “matter-chunk's” capacity “to ‘contact’ its environment,” because the “contactor” (as the entirety of its own behaved environment), like the remainder of the environment that it presumes to contact, exists only in behavioral process mode. That is, all behavioral sensations, putatively “of” an external environment or parts thereof, occur in the mode of internal neural-behavioral process as do any material entities presumably being contacted. “Probes of an environment” are merely neural behavior chains that stem from those primary environment-defining, sensation-type, neural behaviors and thus enhance the environmental constructs to which they contribute. An organic unit, in “mediating the occurrence of behavioral process,” cannot actually “go” outside of its behavioral self to probe a putatively external realm when that realm manifests only in the process mode of its own internal neural behaving. Insofar as an “individual” manifests merely in the mode of intrinsically isolated sequences of behavioral process, so the remainder of its “environment” is thus constructed, also behaviorally, as context for its

behavioral self. Consider again that the “environment” of an individual exists only as behavioral process that occurs entirely within and to the presumed individual, and that that individual, as an entity within that environment, is but a part of it.

From such privately occurring neural behavior, all further typical “revelations of a behaviorally established environment” that follow from subsequent “analytical probing” occur in the mode of such things as “observations,” “data,” “facts,” “ideas,” et cetera. However, all such things (traditionally regarded either as aspects of, or as feedback from, the environment) manifest merely in the mode of more neural behavior that has chained from previous neural behavior. Such chains of neural behavior may be supplemented continually by new “awareness” behaviors that traditionally are interpreted as “responses.” Presumably, such sensorial supplementation, traditionally regarded as further instances of “one’s becoming more aware” of environmental details, occurs via further of what traditionally one describes as “stimulating<sup>[adj.]</sup> energy inputs from without” and perhaps agentially in general as “the acquisition of additional data.” Such a supplementation process is implicit of an assumed externality that actually is occurring internally in behavioral process mode as part of an environmental construction. Such sensorial supplements, occurring in the form of further awareness behaviors, among other things share in the chaining to what typically one construes to be further instances of one’s “environmentally effective” behavior. Thus accumulates naturally the rationalized concept of a real material externality with which “one” presumably is interacting.<sup>xiv</sup>

It must be recognized yet again that, because one is traditionally cast as but a unit of organic matter, the reality of one’s “environment” cannot transcend one’s own internal neural activity, because that environment per se manifests exclusively in the medium of one’s own internal neural behavior. It then follows that an independent ontological status for a common environment that would be shared

among individuals cannot be established. Instead, for an individual, a unique environmental version manifests internally and does so exclusively in the mode of process (of a neural behavioral kind). The conceptual projection to externality of that neurally behaved environment, although traditionally regarded in reverse as “awareness activity of an environment” by a proactive “me-agent,” actually follows quickly and automatically from neural sensational behavior, a chaining process that rationalizes the initial sensations from which those behavioral chains began. Note, however, that such rationalization, featuring concepts of environmental externality, consist merely of chaining loops of more internal neural behaving. One simply cannot get out of one’s behavioral “self” to conduct verifications via direct contacts with an externality the existence of which can inhere only in internal behavioral mode in the first place.

Thus, following an episode of sensory behavior and depending mostly on its intensity plus the “conditioning” history of the organism, chaining leads quickly to a behaved environmental construct, and usually then to further behaviors of various kinds that chain from that behaved environmental construct. Among such subsequent behavioral chain links may be neural behaviors of the kind called supposition, some of which categorize those links as reactions to an external environment, although the behavior in question is actually a reaction to an internal environment that manifests in neural behavioral process mode.<sup>xv</sup> Subsequently, when new, and in some ways, different sensational behavior occurs, it initiates another such internal chain of neural behavioral events. The initiation of such new sensational behavior has been regarded, traditionally, as “further feedback from the external environment,” and the subsequent steps in the new chains that follow from it have been regarded, traditionally, as “the individual’s further reactions to a changing external environment.”

One (if, indeed, anyone else is out there) can now note that the “projection” of an external



environment is but a particular kind of interpretation subsequent to internally behaved sensations. And we can also note that an “interpretation of” such an internally behaved sensation actually manifests in the mode of more neural behavior that chains *from* that sensation. Yet often, some order in a pattern of behaving, ...behaving that from the traditional perspective may be interpreted as “acting behaviorally on, or toward, an environment,” seems to be reflected in subsequent sensory behaviors (traditionally regarded as “feedback” *from* what is now understood to be the conceptually projected environment). The order, which from the internal perspective appears first in some internal chaining behaviors and again in subsequent sensory behaviors, then seemingly lends strength to logical assumptions (more neural behavioral chains) that the internally behaved environment represents *something* that is actually “out there” in a presumed externality. Thus, such a coincidence of order logically (still more neural behavior) may seem to provide an indirect hint of an external realm that would correspond to the internally behaved one, but the external version remains immune to establishment in a more direct way.

According to the traditional matrix of logic that lends coherence and context to a neurally behaved environmental construct, neural behavior, like all behavior, remains purely reactive. A behaving body, including parts of its nervous system, mediates behavior, but logically cannot agentially create it from nothing. That is, although one behavior can chain to another, an organism, as a mere unit of matter, cannot spontaneously or autonomously originate behavioral activity in the sense of agentially starting it in the absence of links to precursive energy inputs. Accordingly, within the traditional logical construct of reality, behavior is a *functional* kind of event, because it must always be preceded by an evocative or eliciting, environmentally sourced, stimulus from which a flow of energy can be traced to the behavior-mediating body part—a logical requirement that pertains to every behavioral

occurrence, including any behavior attributed to a stimulus manifesting within the endenvironment. In spite of the common linguistic habit of describing behavior in terms of self-motivation, as implicit in the infinitive form “to do [something],” the initiative implied by such an infinitive verb form connotes a fallacy. Whether matter is possessed of established physicality, as in a traditional formulation, or is possessed exclusively of the virtuality of process, as when considered from the internal perspective, logic dictates that units of matter can only react; they spontaneously<sup>xvi</sup> initiate nothing, a limitation that extends to all material entities that exhibit behavioral process. It is a passivity that we share with the rocks beneath our feet. But, as noted from the traditional perspective, due to our intricate structural complexity, our reactions to energy inputs exceed in variety and complexity those of our inorganic relatives—a gap that many roboticists are working to close.<sup>xvii</sup>

In summary (cast in the traditional terms of environments possessed of ontological reality): A certain kind of matter, endowed with the necessary structural intricacy, is classed as “biological,” which implies, among other things, that the capabilities of its individual specimens, rather than confined merely to the decomposition of erosion like most rocks, are respectively capable of certain more complex kinds of processes. Those biological processes are or tend, presumably, to be (a) responsively behavioral, (b) developmental (structurally accumulative) (c) numerically conservative or expansive (reproductive), (d) individually restorative (healable), and (e) energy-supplementing (nutrition-capable)<sup>xviii</sup>. That is, organic material entities, among their capabilities, behave, grow, reproduce, auto-repair, and amplify—integrated capabilities that are made possible merely by an intricate structural complexity that renders biological entities more diversely reactive to energy inputs than are familiar inorganic entities. Each such energy-dependent process is structurally enabled, the critical seminal structures for

which having respectively arisen among proliferate variations to which the cull of evolutionary selection was then applicable. That is, biological entities, due to their complex and intricate structures, are subject to a general change process known as biological evolution, through which, progressively, their successive generations enjoy more supportive and effective relations with their environments. That kind of endurance follows from the extensive assortment of processes that are mediated via the complex and evolutionarily sensitive intricacy of an organic entity, the results of which are subsequently subjected to evolutionary culling. Biological evolution works by selectively subtracting individuals whose respective structural variations, in certain environmental situations, fail to support behavior that insures their pre-reproductive survival. Our own current form in that ongoing progression is labeled *human*.

And in further review, expressed again from the traditional perspective (which from the internal perspective resolves to a neurally behaved logical construct), behavioral events tend to be followed by energy inputs (from the behaviorally modified environment) that have a micro-restructuring aftereffect on the behavior-mediating neural structures that shared in mediating the original behavior (a sequence a.k.a. *conditioning*, or less formally as *learning*).<sup>xix</sup> To interpret this traditional logical environmental construct in further resolution of this issue, while the evolutionary processes make us human units of matter, the conditioning processes result in the effectiveness of our current responsiveness to what we presume are variations in a remote “environment.” However, our current responses are projected only conceptually to endo-environmental remoteness, and accordingly may seem to be produced neuro-muscularly or in some cases purely neurally. And in either case they may be modified emotively. That is, from the traditional perspective, this reference to “responses” alludes to a total behavioral responsiveness that, while manifesting by way either of motility and intellectuality, or both,

may drift in form and intensity if/when critical parts of the mediating body are chemically modified temporarily—a kind of change in behavior that typically is described as an “emotional” effect or is said to express special “feelings.”<sup>xx</sup>

Hence, from the internal perspective, *presumed* energy streams putatively impinge on an organized unit of matter that has been particularly structured (presumably both [a] genetically as an indirect result of the selective processes of biological evolution and [b] through the subsequent neural microstructural changes from conditioning processes). Such putatively impinging energy presumably induces, among various effects, a kind of behaving (neural), part of which *is* the virtual reality of the environment of that unit of matter. Again, it must be concluded that the world manifests only within the concluder, accruing through the functioning of neural behavioral constructs and thus occurring in the form of the neural behavioral processes of which those behaved neural structures putatively are capable. From the intrinsic perspective, the putative neural microstructural changes that occur during conditioning events, instead of stemming from a “real” proactive external environment, discriminatively reflect the changing features of a neurally behaved *internal* “environmental” construct.

### Conclusion

This writing merely brings together and subjects to a new kind of examination some relevant elements of what behaviorological members of the natural science community have long been saying. Insofar as we natural scientists have been relying on certain principles and components of our subject matter in various other ways, if those factual resources are valid, then reconsidered from the less familiar intrinsic perspective they carry validly to some implications that afford an escape from certain troublesome remnants of mysticism with which most of us have remained encumbered. The so-called *Great Mystery of Life* (imprecisely described but

pertaining in general to mystical accounts for human beings and their putative agential self-agents) pursued since the antiquity our species, is revealed rather incidentally as a fallacy-based conundrum the resolve of which, no longer appropriate, becomes irrelevant. Specifically, one is not a mini-deity, as the traditionally construed and over-taxed concept of “life” is so often relied upon to imply. A human being exists in neural behavioral process mode as a “unit of matter” that manifests as just one aspect of a conceptually projected environment. Because of (a) putative energy impingements upon what presumably is that human being’s mediating body along with (b) what is further presumed to be the intricate structural complexity of its organic construction, that behaved “unit of matter” can seemingly support elaborate energy-induced behavioral processes that remain unsupportable by what one also behaves into “existence” as one’s less intricately structured “material” cousins (e.g., rocks, minerals, super-cooled liquids, etc. as well as some less elaborately structured organics, such as most plants).

While it may seem to each individual that its world is shared with other individuals, an individual’s behavioral immurement limits that “world” to a private internality. “Other individuals” within that world are but aspects of an individual’s conceptually projected environmental construct, which occurs in behavioral process mode and from which the “host individual’s” confirmatory “escape” is therefore rendered meaningless. That is, the individual’s world, which includes that individual per se along with “others,” manifests only in process mode, and processes, unlike entities, do not “escape,” nor do they initiatively shift position to enjoy a better perspective. As processes they are subject only to changes in their rates of occurrence between their starts and stops. Thus an “individual,” or a “one,” must occur to a behaved “neural entity” in the mode of some sequences of process that putatively are being mediated by that so-called “entity.” But, logically, such a behaved “person,” existing in process mode, cannot step

away from itself to “go out” into a virtual world that is only conceptually projected to externality—an internally mediated world that, like the “person” said to be creating and “occupying” it, is also occurring only in neural-behavioral process mode.

The material entities of that “world” thus do not exist as such but instead occur as process exclusively in an internal conceptual mode. Nevertheless, the traditional interpretation of those environmental features as parts of the grand fallacy of externality seem to rationalize the traditionally interpreted environment in which one purports to operate. One’s “external domain” thus comprises a vast array of private conceptual interrelations, further interpretations of which respectively constitute the various features of one’s putative externality. Thus, to reiterate, features of that presumed environment actually exist only in process mode as parts of one’s internal environmental construct. However, the invalid historical positing of what is actually this internalized mega-process has led to a grand interpretive error to which the isolated individual mistakenly refers as the “commonly shared environment.” According to traditional wisdom that common environment is shared by all individuals under the rubric of “reality,” but such a remote commonality as well as the other individuals whose behaviors would help define it cannot be established by an isolated individual in whose internal neural behavior they inhere exclusively in the first place. And to take this one step further, the material body of the isolated individual to whom all of this refers is but another part of the disqualified environment of that hypothetical unit of matter.<sup>xxi</sup>

Thus, while the traditionally interpreted lives that we lead serve as features of a grand myth, we have continued to “play out” those lives as constituent events in a disestablished reality. But now, concurrently, we are finally embarked on an understanding of the relevant relations, although we do not yet know on which implications to dwell nor what conclusions to draw.<sup>xxii</sup>

The traditional interpretive mistakes outlined in the previous pages have left a trail of invalid implications that have been spawning analytical difficulties since antiquity—a circumstance that, for instance among other things, has provided the traditionally construed field called philosophy with a profusion of rather passive subject matter. Much of that “content,” although perhaps still of historical interest, arguably drifts toward diminished relevance due to the lack of a coherent disciplinary science and philosophy for the field of philosophy per se. Increasingly, an intellectual reinvigoration of the philosophy field, perhaps eventually as an independent behaviorological specialty, will be possible. Anchored in neural (or, more traditionally, “verbal”) behavioral foundations, such a behaviorological specialization (or perhaps a more independently organized field), thus manifesting with an historically absent proactivity, will provide human culture with far more important products than can be supported by mere catalogues of interpretive mistakes from throughout human intellectual history.

## Endnotes

<sup>i</sup> Throughout this work many of the ideas being presented will be denoted explicitly as having been cast from the familiar “traditional perspective,” seemingly a communicative necessity insofar as the “internal perspective” being explicated in this work is presumably too unfamiliar to serve as a matrix or bases from which to cast those ideas.

<sup>ii</sup> The verb “to do,” in its agential sense, denotes a capacity definitive of a deity.

From the traditional perspective, that kind of careless attribution is common to the linguistic habits of humans. Accordingly, a given individual, by descriptive implication, may seem empowered as an agent to do things initiatively. However, if such an empowerment is seriously applied to a human as one of its capacities, the involved forms of the term “do” in its agential sense betray a basic reliance on mysticism in accounts of behavioral phenomena by the speaker or author.

<sup>iii</sup> The term *history* in this context may connote “memory” of the events in question, although a chain of neural behavior denoted as “remembering” need not

occur for past conditioning (a neural micro-restructuring event) to result in changed behavior. Behaviorologically, to remember is merely to behave neurally again what previously was behaved neurally, although logically the current version (the “memory”) may be occurring under stimulation different from whatever stimulated the original version. However, if the neural behavior in question did not originally occur, to “remember it” would be impossible, because no stimulation has sufficient capacity to produce a reoccurrence of a neural behavioral event that did not occur previously. Therefore, an assertion of such an occurrence is illogical.

<sup>iv</sup> Discussions such as this necessarily move from behaviorology into physiology, but such brief excursions into physiological matters are cast here in general science terms characteristic of high school science classes. An entire sub-field of biology, generally known as neural physiology, exists to explicate these familiar generalities in much more elaborate scientific detail. Superficial discussions of physiological matters, such as those included in this work, being cast from an observational perch on the physiological border fence can do little more than help orient applications of physiological expertise toward some worthwhile outcomes.

<sup>v</sup> In the traditional formulation, any process is functionally mediated by matter that is undergoing energy gain or loss. That, as they say in general, is how and why events occur. However, when an environment, or any aspect of it, can be regarded as a neural behavioral manifestation in process mode (an important conclusion highlighted in this work), the process-status of the physical material of an environment comes endowed with certain implications: Entities vanish, having been transformed into neural behavioral process, and processes, being neither massive nor independently occupying space, cannot display many of the capacities formerly attributed to false entities. For instance, as understood even from the traditional perspective, it would be pointless to “search within a motor” for its “running process” as though its “running” were located “in there” like a material entity that occupies space and exhibits mass. Furthermore, from the new internal perspective note that while the motor per se manifests as one kind of neural behavioral process, its running is merely another kind of such process. That is, one process (running) is conceptually imposed on another process (the latter kind of process called the motor per se and traditionally not recognized as process). Even from the traditional perspective from which motors are deemed to be independently-established physical entities, although the “running” of a motor can start and stop and that

running can be associated with certain parts of its motor, that motor's "running" cannot be established in the manner of a posited engine part having the independent status of a material entity. And, as can be said in the case of people-type motors, that's life.

<sup>vi</sup> For elaborations of Skinner's analytical approach see the following sources: Skinner, B. F. (1938/ renewed 1966). *The Behavior of Organisms, An Experimental Analysis*. New York: Appleton-Century-Croft, Inc. Skinner, B. F. (1953). *Science and Human Behavior*. New York: The Free Press.

Skinner, B. F. (1961). *Cumulative Record*. New York: Appleton-Century-Croft, Inc. Potentially helpful consultations: search on-line for B. F. Skinner Foundation or go directly to [www.bfskinner.org](http://www.bfskinner.org) for updated information on the availability of each of Skinner's many books. E-mail the B.F. Skinner Foundation at [info@bfskinner.org](mailto:info@bfskinner.org)

<sup>vii</sup> These four designations for the "basic natural sciences" sufficiently serve most discussions. It can be argued that the foundations of both chemistry and biology can be reduced to the physics of special classes of events. A similar reduction of behaviorology may be less arguable. In general, the phenomena studied in physics, chemistry, and biology involve energy-induced events, and although behavior can be considered as an energy-stimulated event, arguably the phenomena more directly studied in behaviorology consist of relations and hence may seem to require a "different level of analysis," as they say. Nevertheless, this issue remains unsettled.

<sup>viii</sup> Any kind of material entity, including one of "us," resolves to the neural behavioral processes of its inception. That is, matter is behaved into "existence" in process mode as an aspect of a neural-behavioral environmental construct. Thus, rather than anchoring a remote environmental reality, material substance, as traditionally conceived, is revealed to be a fallacy.

<sup>ix</sup> Just as a "person" does not have the established independent existence to appreciate an external entity or event so as to validate its existence, neither is that "person" there, in a state of independent existence apart from itself, to appreciate the internal entities or events that putatively define its self. What traditionally has been described as a person's appreciation of its own internal environment manifests, as do external events, in the mode of conceptual constructs that, by interrelating in certain ways the more basic awareness events of internality, lend rationality to them. That is, the putative "neural behavioral processes" that complete such accounts of neural environments merely relate certain kinds of internal environmental processes, one to others,

so as to rationalize them into what traditionally are called "conceptual constructs." Note that all such kinds of complex processes per se, presumably manifesting in the form of conceptual environmental constructs, like entities, are also environmental "events." Just as external environmental entities and the processes that they mediate cannot be established in a state of environmental reality, neither can *internal* "entities" nor the processes that they putatively mediate. Being unreal in the traditional sense, such putative internal environmental entities and their mediated processes cannot complete accounts that could restore traditional reality to them. Thus, "persons," their "perspectives," and their "accomplishments" all become casualties insofar as they vanish, along with all else environmental, into a kind of virtuality.

<sup>x</sup> To cast the matter from the traditional perspective, recall from Part I (*Journal of Behaviorology*, Spring 2015, pp. 13-25) that the mere existence of an organic unit of matter does not endow it with some mystical power to spontaneously initiate. To expect an organic entity to "take the initiative" in that way implicitly invests that unit of matter with a supernatural power reserved for a deity. Like a piece of driveway gravel, an organic entity can only *react* in some orderly way to events that we then describe as the "controls" on those reactions. Organic entities, being possessed of much more intricate structure than inorganic matter units, hence exhibit a much more elaborate reactivity than do their more simply structured inorganic relatives. That being the kind of difference between rocks and people, an opportunity thus exists for exploitation by the robotics community, which strives to close that gap by enhancing the structural intricacy of inorganic entities thus endowing them with an enhanced reactivity that is similar to, and ultimately in excess of, that which characterizes organic entities.

<sup>xi</sup> The singular "it" alludes to the fiction of commonality that humans traditionally entertain about their respective behaviorally created environments. Presumably, from the traditional perspective, a common environment is being shared. However, each individual "lives" entirely within its own environmental construct, so there would be as many unique respective environments as there were individuals to behave them. Note, too, that such a speculation about multiple environments must be cast as an aspect of the behavior of an isolated individual that cannot establish the reality of an independent environmental matrix in which speculated others could exist.

<sup>xii</sup> As can be said from the familiar historical perspective, when expecting the miraculous outcomes demanded by the explanatory fallacies of that traditional perspective, people have simply invented deity-like entities possessed of whatever mystical powers are required to fulfill such expectations. Prime among such fictitious miracle workers are self-agents, which in this case are conjured to produce what traditionally we have recognized to be “interpretive errors” pertinent to what is being erroneously interpreted as some aspect of a fixed and common environment (even though there is no common environment). There is no common environment from the traditional perspective, because each individual would have to be projecting its own unique environment; and from the internal perspective of an isolated individual there can be no common environment, because the reality of a remote environment cannot be established in the first place.

<sup>xiii</sup> The more realistic internal perspective limits, or “reigns in,” the impossible excesses of the traditional perspective, thus serving as a more sound basis for the establishment of reality than could the traditional perspective with which, unfortunately, we all tend to be more comfortably familiar.

<sup>xiv</sup> According to the traditional conceptual formulation, given the low energy of most behavioral stimulation, the necessary amplification required for all or any subsequent occurrences of behavioral activity relies on energy supplementation via the nutritional system of the body, which stores and releases potent energy. In that sense, the body serves as an amplifier.

<sup>xv</sup> It may help at this point to relate a traditionally construed, human unit, of organic matter to one of its structurally simplistic driveway gravel cousins. Both are natural. Both can exhibit only what their respective “structures” allow, which in the human case includes the processes that are regarded as evidence of life. But, traditionally, “life” has been so over-interpreted that arguably humans should now be disqualified as representatives of what traditionally life has been presumed to be. Apart from being mere neural behavioral patterns rationalized as material entities, both gravels and people are characterized simply by their respective “properties” (i.e., by the neural behavioral events required to define them). The gravel/person difference amounts to nothing more than a vast separation on a *single* abstract dimension. Thus, a traditional kind of conversion of one into the other theoretically would represent a continuous shift along a single abstract “structural” dimension between the opposite extremes of (a) simple and (b) intricately complex.

<sup>xvi</sup> The term “spontaneous” appears here in the traditional, supernatural, agential sense rather than merely as a term of extreme on a probability scale. To appreciate this distinction, consider an example of the latter sense of that term. Suppose that we contemplate a particular kind of large atom, each unit of which features a field of many electrons. Suppose too that this kind of matter is regarded as radioactive, because its atoms are prone to occasional energetic disintegration. Each atom of that element presents as a dynamic system, in part because its many electrons are in constant rotational motion, which keeps the configuration of that atom in a constant state of flux. Additionally, something similar might be said of its complex nucleus. Some of its possible if fleeting atomic configurations, although they may rarely occur, are unstable, so that when such a configuration does occur, the atom simply flies apart in a disintegrating burst. Insofar as the dynamic state of any particular atom is far beyond our capacity to track, people often apply the term *spontaneous* to such an atomic disintegration, which may tend unnecessarily to mystify it. Such a radioactive event does not rely on supernatural activity; it merely occurs to a dynamic atomic structure that has reached an unstable configuration, although the structural configuration of an atom is changing too rapidly and with too much complexity for contemporary humans to predict such a disintegration with specificity. However, to call that destructive event “spontaneous” may unnecessarily inject mysticism into a circumstance the natural complexity of which simply overtaxes current human analytical capacity.

<sup>xvii</sup> For example, visit <http://www.brookings.edu/research/reports2/2014/07/how-humans-respond-to-robots> to see a relevant article entitled “How Humans Respond to Robots: Building Public Policy through Good Design.” As is generally true of similar articles, the endnotes attached to that piece provide references to many more relevant articles. Most contemporary efforts in the field of robotics tend to stress practical cooperation between (a) humans and (b) robots with specific capabilities. Unlike the philosophical hodgepodge that has been characteristic of psychology, the strictly natural science of behaviorology, in cooperation with physiology, provides to roboticists a more valid and reliable model of environment/behavior interactions—the objectively adduced “whys” and “hows” of the organically based behavior that many roboticists strive, via their creative inventions, to emulate including, in some cases, to surpass. Also, modern roboticists could seemingly profit from the recognition of

humans as robots per se,... robots that are derived via a different kind of history than are the contemporary plastic-and-metal models that roboticists now tend to produce.

<sup>xviii</sup> With respect to the role played by nutritional processes, recall that most, if not all, detectable behavior requires far more energy than impinges on the behaving organism as “stimulation.” Such a typically feeble energetic input can do little if anything more than trigger the release of bodily-stored potential energy in quantities necessary to sustain the resultant behavioral activity. We broadly classify the processes that convert, prepare, accumulate, and store such potential energy as being aspects of the “nutritional” system of the body.

<sup>xix</sup> Behaviorological engineers commonly say, from the traditional perspective, that their practices are “changing the behavior” of their subjects. While the behavior of their subjects does change, the targeted behavior occurs in the mode of process, while the putative changes that behaviorologists indirectly produce occur to the bodily structures that exhibit the relevant behavioral mediations. Behaviorological interventions result in changes to neural microstructures via selective energy impingements, which then result in those structures mediating behavior at different frequencies and/or of different behavioral forms than before those microstructural changes occurred. The explication of such microstructural changes falls within the province of the neural physiologists and also is of interest to roboticists striving to replicate or replace the human nervous system. Currently, the conduct of such physiological and robotic science may in some cases suffer qualitatively due to the influence of the popular but misguided notion that brains initiate behaviors that, in fact, they can only mediate.

<sup>xx</sup> From the traditional perspective, emotionally altered behavior results from temporary chemical alterations to the behavior-mediating bodily part of the “environment” (i.e., to changes within the endenvironment). For a detailed account of the production and behavioral effects of emotions at the traditional behaviorological level of analysis, see Chapter 4, especially pp. 96-100 in: Fraley, L. E. 2008. *General Behaviorology: The Natural Science of Human Behavior*. Canton NY: ABCs (copies, autographed if so requested, can be obtained directly from the author at lfraley@citlink.net).

<sup>xxi</sup> Note, from the traditional perspective, that conclusions such as these, which are reached via the new internalized perspective, beg a couple of imposing questions: To whom is this document written, and why bother? However, from the internal prospective the relevant

implications that inhere in such traditionally cast questions are invalid. An isolated individual cannot establish the material reality of a remote audience for its behavior nor even for its behavior per se insofar as such things are but aspects of its own environment, the entirety of which exists exclusively as a construct cast in the mode of neural behavioral process. And note too that such castings rely on a nervous system that likewise is part of “that individual’s” behaved environmental construct (an aspect of the endenvironmental part). Thus, among the casualties of this analysis is the bodily reality of an individual, including all of its agential capacity. We share the passivity of our driveway-gravel cousins.

<sup>xxii</sup> See, for example, Ledoux, S. F. (2015). *Journal of Behaviorology*, 18, No. 1, pp. 27-28.

## Submission Guidelines

*Journal of Behaviorology* (previously known as *Behaviorology Today*) is the fully peer-reviewed Journal of TIBI (The International Behaviorology Institute) and is published in the spring and fall of each year.

To submit items, contact the Editor (Volumes 18, 19, 20):

Dr. James O’Heare  
Companion Animal Sciences Institute  
1333 Rainbow Crescent  
Ottawa Ontario K1J 8E3  
Canada  
Phone: (613) 297–0153  
E-mail: jamesoheare@gmail.com

### Considerations

The Journal entertains experimental or applied research papers and theoretical or conceptual or literature review articles (all of which will have at least three reviewers) as well as book reviews, on terms, in response, and program descriptions (two reviewers) plus letters, memorials, etc. The members of the TIBI Board of Directors constitute the basic Editorial Review Board (ERB) on which others can serve as members or guests. Authors will not be identified to reviewers and reviewers will not be identified to authors, except when they opt to sign their reviews. (Some reviewers prefer to sign, usually in acknowledgement of the additional assistance that they are prepared to offer the author.) Each reviewer will provide constructive feedback as well as a recommendation: accept, or accept with revisions, or revise and resubmit, or reject.

Based on the set of reviewer recommendations and comments, the Editor will convey the feedback and summary decision to the author(s). With assistance from members of the ERB, the Editor will also provide authors with guidance to shape the best manuscripts possible in a reasonable time frame.

All accepted pieces must contribute to the behaviorology discipline (e.g., by relating to or clarifying or expanding some part of the discipline such as the philosophical, conceptual, theoretical, experimental, applied, or interdisciplinary aspects). Accepted pieces must also be crafted in ways that convey as much consistency as possible with the principles, concepts, practices, philosophy, and terminology of the discipline.

Research paper authors (a) must obtain any necessary permissions or approvals from the Human-

Subjects Review Committee of their affiliated campus or agency, and (b) must comply with the usual ethical standards relating to all research and experimental subjects. All authors are required to disclose for publication any possible conflicts of interest. Also, congruent with past practice, exclusions of important or relevant content for length reduction will be resisted as much as possible.

### Mechanics

Authors are encouraged to contact the editor to discuss their manuscript prior to submission to answer questions and clarify procedures and processes. Initially, a paper should be submitted to the editor by email as a PDF attachment.

The email will contain a cover letter. This letter should describe the article, and the work or history behind it, and will include the author name(s), affiliation(s), addresses, phone numbers, paper title, footnotes (e.g., acknowledgements, disclosures, and email or other contact information for publication) as well as comprehensive contact information on up to six suggestions for possible reviewers.

The PDF document (a) should have *only* the author’s name in the file name (which the Editor will record with the assigned manuscript number while replacing the name *with* the number in the file name before sending the manuscript PDF file out to reviewers TIBI (b) should *use the standard style exemplified by papers in past issues* of the journal (as PDF is unconnected with any particular, formal “style”), and (c) should be set in 12 point type on 24 point leading (i.e., double spaced) with 1.25 inch side margins and 0.75 inch top and bottom margins, excluding the title header and page-number footer (i.e., all text parts of the piece—including tables, figures, photos, etc.—fit in text blocks that are 6.0 inches wide and 9.5 inches tall, with the title header just above this block and the page-number footer just below this block). These measurements are for us letter size paper; for other paper sizes, the text block size and top margin remain the same while the other margins will change as needed. The text parts of the paper start with the title, then an abstract, and a list of “Key Words” for indexing purposes, followed by the body of the piece plus references and figures or tables. Work all footnote material into the text. Upon acceptance, papers should be provided to the editor as a Word-format document along with a new PDF of the Word file (to verify the accuracy of content transfers during page-layout operations).

Note: Authors’ views need not coincide with official positions of TIBI, and authors retain copyrights.



## **Syllabus Directory**

The most recent issue of *Journal of Behaviorology* that features a syllabus directory contains these two lists of current syllabi. These lists show where to find the most up-to-date versions (in title and content) of TIBI's current course syllabi. The first list organizes the syllabi by the chronological volume and number where you can find each one (with volumes 5 through 15 under the name *Behaviorology Today*). The second list organizes the syllabi by numerical course number.

### **Current Syllabi by Volume & Number**

- Volume 7, Number 2 (Fall 2004): BEHG 101:  
*Introduction to Behaviorology I*.\*
- Volume 7, Number 2 (Fall 2004): BEHG 102:  
*Introduction to Behaviorology II*.\*
- Volume 7, Number 2 (Fall 2004): BEHG 201:  
*Non-Coercive Child Rearing Principles and Practices*.\*
- Volume 7, Number 2 (Fall 2004): BEHG 355:  
*Verbal Behavior I*.\*
- Volume 8, Number 1 (Spring 2005): BEHG 400:  
*Behaviorological Rehabilitation*.
- Volume 8, Number 1 (Spring 2005): BEHG 415:  
*Basic Autism Intervention Methods*.\*
- Volume 8, Number 1 (Spring 2005): BEHG 420:  
*Performance Management and Preventing Workplace Violence*.\*
- Volume 8, Number 1 (Spring 2005): BEHG 425:  
*Non-Coercive Classroom Management and Preventing School Violence*.\*
- Volume 8, Number 1 (Spring 2005): BEHG 475:  
*Verbal Behavior II*.\*
- Volume 8, Number 2 (Fall 2005): BEHG 410:  
*Behaviorological Thanatology and Dignified Dying*.
- Volume 9, Number 1 (Spring 2006): BEHG 365:  
*Advanced Behaviorology I*.
- Volume 9, Number 2 (Fall 2006): BEHG 470:  
*Advanced Behaviorology II*.
- Volume 10, Number 1 (Spring 2007): BEHG 120:  
*Non-Coercive Companion Animal Behavior Training*.

### **Current Syllabi by Course Number**

- BEHG 101: *Introduction to Behaviorology I*:  
Volume 7, Number 2 (Fall 2004).\*
- BEHG 102: *Introduction to Behaviorology II*:  
Volume 7, Number 2 (Fall 2004).\*
- BEHG 120: *Non-Coercive Companion Animal Behavior Training*:  
Volume 10, Number 1 (Spring 2007).
- BEHG 201: *Non-Coercive Child Rearing Principles and Practices*:  
Volume 7, Number 2 (Fall 2004).\*
- BEHG 355: *Verbal Behavior I*:  
Volume 7, Number 2 (Fall 2004).\*
- BEHG 365: *Advanced Behaviorology I*:  
Volume 9, Number 1 (Spring 2006).
- BEHG 400: *Behaviorological Rehabilitation*:  
Volume 8, Number 1 (Spring 2005).
- BEHG 410: *Behaviorological Thanatology and Dignified Dying*:  
Volume 8, Number 2 (Fall 2005).
- BEHG 415: *Basic Autism Intervention Methods*:  
Volume 8, Number 1 (Spring 2005).\*
- BEHG 420: *Performance Management and Preventing Workplace Violence*:  
Volume 8, Number 1 (Spring 2005).\*
- BEHG 425: *Non-Coercive Classroom Management and Preventing School Violence*:  
Volume 8, Number 1 (Spring 2005).\*
- BEHG 470: *Advanced Behaviorology II*:  
Volume 9, Number 2 (Fall 2006).
- BEHG 475: *Verbal Behavior II*:  
Volume 8, Number 1 (Spring 2005).\*

-----  
\*An older version appeared in an earlier issue.

## **Editorial Review Board & Guest Reviewers**

Editorial Review Board members:

- Dr. John B. Ferreira
- Dr. Lawrence E. Fraley
- Dr. Philip R. Johnson
- Dr. Stephen F. Ledoux
- Dr. Angela R. Lebbon
- Dr. James O’Heare (Editor)
- Dr. Jón Sigurjónsson
- Dr. Donn Sottolano
- Dr. Deborah Thomas

Guest Reviews:

- Dr. Thomas Clark
- Dr. John Hyland
- Dr. Werner Matthijs
- Dr. Zuilma Gabriela Sigurðardóttir

## **Journal & Website Copyrights**

While authors retain copyrights to their articles, The International Behaviorology Institute (TIBI) holds the copyright to [www.behaviorology.org](http://www.behaviorology.org) and to Journal of Behaviorology, the TIBI journal.  
Copyright © 2016 TIBI, Inc.

## **Visit [www.behaviorology.org](http://www.behaviorology.org)**

Stay informed by visiting the TIBI web site regularly ([www.behaviorology.org](http://www.behaviorology.org)). We are always adding and updating material.

You can find a wide selection of useful articles, many from Behaviorology Today / Journal of Behaviorology, in Adobe’s Acrobat format. (If you need it, you will find a button to click, for a free download of Adobe’s Acrobat Reader software, in the “First 10-years Archive” part of the site.) Also in the “First 10-years Archive,” the articles are organized on several topical category pages (e.g., contributions to parenting and education, book reviews, and behaviorology around the world). The rest of the site features a single PDF for each full issue of both Behaviorology Today and Journal of Behaviorology. Other selections feature descriptions of TIBI’s certificate programs and course syllabi, and links to some other helpful related web sites. Explore!

## **Back Issues & Donations**

Some back issues of the Journal are available; the cost is US\$20 each, which includes air-equivalent postage. To place an order: Photocopy, fill out, and send in the “membership” form on a later page of nearly every Journal issue; check the “back issues” box, and list the volume and number of each back issue that you are ordering. Mail the form, with a check for the correct amount, in us dollars made payable to TIBI, to the address on the form. Donations/Contributions are also welcome, and are tax-deductible as TIBI is non-profit (under 501-c-3).

## **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.

## 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:

CATEGORY	DUES (in US dollars)*
Student member	The lesser of 0.1% of annual income, or \$20.00

Affiliate member	The lesser of 0.2% of annual income, or \$40.00
Associate member	The lesser of 0.3% of annual income, or \$60.00
Advocate member	The lesser of 0.4% of annual income, or \$80.00

Member of Board of Directors:	The lesser of 0.6% of annual income, or \$300.00
-------------------------------	--

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

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

### 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  
TIBIA Treasurer  
406 North Meadow Drive  
Ogdensburg NY 13669  
USA

Check if applies:  
Contribution:   
Subscriptions\*:   
Back issues:\*\*   
    ⌘ Vol. \_\_, # \_\_  
    ⌘ Vol. \_\_, # \_\_

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 affiliate membership. \*\*Back issues: US\$20 each.

\*\*\*For Student Membership:

I verify that the above person is enrolled as a student at: \_\_\_\_\_

Name & Signature of advisor or Dept. Chair: \_\_\_\_\_

### ***TIBI / TIBIA Purposes\****

TIBI, as a non-profit educational corporation, is dedicated to many concerns. TIBI is dedicated to expanding and disseminating the behaviorological literature at least through the fully peer-reviewed *Journal of Behaviorology* (previously called *Behaviorology Today*) and the behaviorology.org web site; TIBI is also dedicated to teaching behaviorology, especially to those who do not have university behaviorology departments or programs available to them; TIBI is also a professional organization dedicated to organizing behaviorological scientists and practitioners into an association (*The International Behaviorology Institute Association—TIBIA*) so that they can engage in a range of coordinated activities that carry out their shared purposes. These activities include (a) holding conventions and conferences and so on; (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 also dedicated to representing and de-veloping the philosophical, conceptual, analytical, experimental, and technological components of the separate, independent 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 are:

- a. to foster the development of the philosophy of science known as radical behavior-ism;
- 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 an 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 statement of the TIBI/TIBIA purposes was adapted from the TIBI By-Laws.—Ed.

### **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 refereed 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.)



### ***Some Member Contacts***

John B. Ferreira, Ph.D., LPC (Chair)  
*Ess-Plus Behavioral Counseling*  
Tucson, AZ  
jbf721@aol.com

Lawrence E. Fraley, Ed.D.  
*Professor (Retired)*  
*West Virginia University at Morgantown*  
lfraley@citlink.net

Philip R. Johnson, Ph.D., CRC  
*Professor, University of Arizona*  
Tucson, AZ  
johnsonp@email.arizona.edu

Angela R. Lebbon, Ph.D. (Co-Managing Editor)  
*Professor, SUNY New Paltz*  
New Paltz, NY  
lebbona@newpaltz.edu

Chris Cryer, M.A., BCBA, NYS LBA (Treasurer)  
*St. Lawrence NYSARC*  
Canton NY  
ccryer@slnysarc.org

Stephen F. Ledoux, Ph.D.  
*Professor Emeritus*  
*State University of New York at Canton*  
Canton, NY  
ledoux@canton.edu

James O’Heare, DLBC (JoB Editor)  
*Companion Animal Sciences Institute*  
jamesoheare@gmail.com

Jón G. Sigurjónsson (Co-Managing Editor)  
*Professor*  
*City College of New York, CUNY*  
jsigurjonsson@ccny.cuny.edu

Donn Sottolano, Ph.D., BCBA-D  
*ACES Autism Center (Retired)*  
Norford, CT  
d\_sottolano@comcast.net

Deborah Thomas, Ed.D.  
*Professor,*  
*Washington State Community College,*  
Marietta, OH  
dthomas@wscc.edu

*Journal of Behaviorology*

Dr. James O’Heare, Editor  
1333 Rainbow Crescent  
Ottawa Ontario K1J 8E3  
Canada

