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

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

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Editorial

When this issue of the *Journal of Behaviorology* comes out, time will still be available to submit a manuscript on the coming Special Section on 21st century science views on community developments and sustainability inspired by *Walden Two* and its sequel, *A World of Our Own Making...* (If you need it, email Mike Shuler—at shuler@comcast.net—the Co–Managing Editor for the

Journal, for a copy of the call for papers, which includes the commentary article provided to help evoke relevant writing responses.)

Other than that information, given that this issue is this Journal's first monograph–style issue, this issue will forego the usual "Editorial" in favor of letting the single substantive article speak for itself. 3

Visit BOOKS at www.behaviorology.org

At www.behaviorology.org TIBI provides a range of information on as many behaviorology resources as possible, including books and audio/ visual materials, as well as electronic versions of back issues of *Journal* of Behaviorology and its predecessor Behaviorology Today. Some recently described books are (a) Work Takes a Holiday—Confessions of a Natural Scientist of Behavior by Stephen Ledoux, (b) Some Intersections of Science, Coercion, Equality, Justice, and Politics—A Teapot Tempest Stirs Sciences by multiple authors and organized by Stephen Ledoux and James O'Heare, (c) A World of Our Own Making—A sequel to Walden Two by Michael Shuler, (d) About Science, Life, and Reality by Lawrence Fraley, (e) Functional Behavioral Assessment by James O'Heare, and (f) Science Is Lovable—Volume 2 of Explaining Mysteries of Living by Stephen Ledoux. Check out the descriptions—which include where to obtain the described books, as TIBI does not sell books—of these and all of the many other behaviorology books described on the TIBI website.

Cultural Seduction Considered via the Natural Science of Behavior

Lawrence Fraley*

Abstract: This essay addresses (a) some cultural effects of the question of the philosophical compatibility of science and mysticism, (b) the behavior/body and life/death distinctions, (c) the motives and mechanisms of some common cultural seductions, and (d) some common examples of culturaal seductions (e.g., including academic operations, religion, and symbolic patriotism).

The initial sections of this paper are included to insure that the reader and author are considering the issues from a common perspective, or are, as they say, sharing a common approach. Note too that these early discussions call attention to some of the fundamentals that tend to set the behaviorological perspective apart from other socalled behavior sciences. Behaviorology exists as a strictly natural science in the same sense that biology, chemistry, and physics are natural sciences. The principles of behaviorology are objectively derived, and their validity stands independent of belief regardless of whether such belief endorses or contradicts those principles..

Early in the evolutionary path of the natural science of behavior, the fundamental question was simply whether or not something as seemingly complex and variable as behavior could be brought under the analytical umbrella of science. B. F. Skinner devoted his entire career to the experimental and theoretical development of science that did so (see, for example, B. F. Skinner, 1953; Also visit on-line the B. F. Skinner Foundation for a detailed listing of Skinner"s extensive works). Subsequently, other scholars of behavior have focused on the various aspects and implications of behavioral phenomena. Of particular practical interest has been the scientific analytical scrutiny of coercion (see, for example, Sidman, 2001, 2003). This article further explores that general concern and suggests, yet again, how, in general, to address behavioral phenomena scientifically.

Science and Mysticism: The Philosophical Compatibility Question

Over the years, the objectivity of modern science has become increasingly difficult for followers of contrary philosophies to dismiss. One result has been an increase in arguments that natural science and religious mysticism are philosophically compatible. Increasingly that position has become more fashionable, including the insistence that a single individual can logically respect both of those philosophical approaches concurrently. However, given a particular issue under consideration, while either kind of philosophical approach may occur exclusively, their concurrence remains logically impossible. However, with respect to a single issue, mystical approaches and logical approaches can alternate.

Nevertheless, as will later be explored, a more penetrating analysis reveals that religious mysticism and the objectivity of science are at opposite extremes of the same scale. Thus, behavior representing one of those extremes precludes its representation of the other. Notably, as objective and thorough scientific inquiries proceed, supplementary appeals to supernatural intrusions tend to seem increasingly unnecessary, if not futile. Nevertheless, with respect to the alternative approaches of science and mysticism, pretenses of compatibility can often be maintained simply by one's working, with scientific objectivity, on particular problems having solutions that seem not to require supernatural interventions. The practitioner, exhibiting rather unadulterated objectivity in dealing with this narrowed subject matter, thus may seem entirely committed to science. Observers, often postured remotely, may invalidly conclude that such an exhibition of objectivity reflects a character of more exclusive scientific integrity than may actually be the case.

All behavioral events, whether muscular or neural, like all other kinds of real events, are *totally* controlled via energy fluctuation. As the philosophy of science holds in reaction to a total absence of adduced exceptions, spontaneous behavioral events do not occur in the first place. Spontaneity does not exist because, given the occurrence of an event, its functionality,

 $[\]overline{}^{*}$ Address correspondence regarding this paper to the author at fraley@citlink.net.

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if not yet explored, always exists to be discovered and explained (an assumption with no known exceptions). That natural functionality leaves nothing productive about an occurring event, behavioral or otherwise, for an intervening mystical entity to do, no matter what capacity for doing may be attributed wishfully to it.

In general, the expending of resources to evoke the superfluous is considered ineffective and wasteful. Nevertheless, when trying to solve difficult behavioral problems, most people tend readily to evoke the intervention of both religious and secular deities, thus relying on mysticism in place of an as yet undescribed but reliably relevant functionality. Although blatantly illogical, humans, ever resourceful, have developed cultural ways to celebrate that ignorance, typically by paying homage to mystical forces conjured to fill generally temporary gaps in their more objective accounts. Much of this logical and analytical inconsistency would be dispelled were people simply provided more adequate educations in the natural sciences, and especially in the natural science of human behavior, beginning in elementary school and continuing through university graduate schools.

Some Cultural Effects of the Disparity Between a Philosophy of Science and a Philosophy of Mysticism

Among the commonly prevailing forms of mysticism in human culture, religious varieties tend to predominate, thus leading frequently to considerations of an apparent science/religion contrast. However, one common line of argument endorses a posited compatibility of scientific and religious thinking. Most "scientists" featured in proffered examples of science-religion compatibility tend to pursue specializations that keep them away from the specific natural science of behavior, especially human behavior. Thus, they tend to avoid acknowledging the reach of natural science to behavior in general, even in some cases to the scientific behavior that they reputedly exhibit as "scientists." If pressed to explain their apparent philosophical inconsistency, such "scientists" may argue that some phenomena pertaining to life and behavior constitute a subject matter too complex and mysterious for rigorous scientific investigation.

That conclusion, often rendered casually or just implicitly, comes not only from "scientists" who resort to the supernatural when faced with difficult behavioral problems but also from many others associated with the scientific community in general. It usually stems from a quite mistaken assumption that human bodies are inhabited by mysterious agential selves that are often referenced as pronouns (i.e., as *I, me, you,* etc.), and which, in many cases, may be deemed fundamentally unprepared to meet the challenges posed by complex behavioral problems. Nevertheless, such a culturally endorsed but invalid assumption is, of course, neither necessary nor appropriate. Note, however, that the futile search for such an internal behavior–initiating and behavior–managing self–spirit would in most instances seemingly require recourse to mysticism. After all, recourse to the supernatural usually seems to be the only course of action for overcoming the impossible.

The tolerance of such errors within scientific communities, including those in academic settings, is due largely to the failure of the academic natural-science community to expand the purview of its natural-science programs to include the study of human behavior. The scientific study of the basic natural science of behavior, apart form the complexity of that subject matter, has been rendered especially difficult by a massive cultural mislead about the nature of behavioral phenomena. The assumptions about human behavior that human culture tends to promote tend to be quite erroneous.

The natural science of behavior can easily be deemed as important and as necessary as any other basic natural science (i.e., physics, chemistry, or biology). Yet, in almost all cases, current academic institutions fail to provide for the study of behavior via the natural–science paradigm. Typically their natural–science curricula include no programs nor even isolated courses pertaining to behavioral phenomena. Thus, with respect to behavioral phenomena, natural scientists typically remain formally uneducated in the natural science of human behavior. As a result of that curricular neglect many natural scientists remain susceptible to the prevailing cultural seduction relative to behavior–related issues.

That absence of the natural science of behavior among the current natural-science curricula is partly due to the late emergence of a natural science of behavior, most of which has developed during the past century. Another factor that helps explain the absence within academia of a natural science of human behavior has a longer history. That absence is the legacy of the tacit historical and continuing compromise, through which the emerging non-behavioral natural sciences, while antithetical to supernatural accounts, were permitted to exist and grow in the midst of a general human culture traditionally committed to a heavy reliance on superstition, much of it religious.

The integrity of that compromise was largely dependent on the tacit deal between organized science and organized religion. As can be noted, persons committed to organized religion collectively have long enjoyed a vast numerical advantage as well as the organizational integrity required to marshal significant challenges to the cultural influence of the scientific community. However, that balance of power now tends to be shifting in favor of science.

Traditionally scientists have needed sufficient cultural independence to pursue and teach their objective kind of inquiries. Furthermore, at the same time, across the culture at large, the individual members of the vast religious community were coming to rely, with ever increasing necessity, upon the products derived from scientific activity. Within the religious community quiet ways were found to let the increasingly necessary science prosper as long as the natural-science community posed little or no apparent threat to organized superstition. In secular educational institutions the natural-science community fulfilled its obligation to that compromise in part by ignoring behavior as a subject matter for naturalscience inquiry. Under such a largely intuitive science/ religion compromise the natural-science academic community simply continued its tacit forfeiture of behavioral subject matter to the academic "soft" sciences. In secular academic institutions, the faculty members within those soft-science programs, despite their declarations of academic secularity, have tended to operate under the umbrella of approval by the large religious faction of the general population—a mostly tacit approval that has been partly dependent upon the explicit personal religiosity of a significant fraction of soft-science faculty members, a characteristic that may be exhibited to an extreme in religiously sponsored schools.

This great cultural compromise, here under review, has long required that the organized natural-science faculties avoid focusing their objective scientific inquiries on precisely why any particular behavioral event occurs as well as on how to exert an engineering kind of control over such events. This neglect by the organized natural-science community within academia has continued regardless of how important the study of behavioral motivation may seem to be. Thus academic natural-science units have evolved and matured while forgoing, among their own curricular offerings, the inclusion of courses and research studies, both in the natural science of behavior and in behavior engineering. Concurrently, their faculties have tended to project an often reluctant and typically vague acknowledgment that the social "sciences" have behavior "covered." Thus, natural scientists now working within academia can remain confused and misguided about behavioral phenomena. In general, natural scientists seem to accept and tolerate behavior as vaguely mysterious, ... an approach that reflects their participation in the ongoing science/religion compromise. Importantly, under the compromise between superstitiously anchored academicians and natural-science academicians, the academic natural-science departments have been permitted to maintain their physical separation from the soft science departments thus avoiding the intellectual corruption that their physical integration would visit upon the natural-science academic community.

But today, increasingly, critical observers tend to agree that excluding the established and expanding natural science of *why* behavior occurs (i.e., behaviorology) from natural-science attention within academia is inappropriate and unnecessary. Arguably it is time for a new cultural era in which the organized natural-science community fully expresses itself on the basis of its own proven merits. But such a complete manifestation of natural science within academia requires that natural scientific attention be focused upon all real phenomena, including behavioral varieties.

As a practical matter in behalf of academic tranquility, the differing philosophies that respectively inform softscience and natural-science traditions of inquiry into behavior, may continue for a time to be represented concurrently within academic institutions, although in different respective academic units (schools, colleges, departments, etc.). But the old preclusive compromise under which the natural sciences deliberately ignored behavioral phenomena must now be ended. The organized natural-science units within academia must be free to address any and all real subject matters, and that certainly includes all behavioral phenomena, particularly the behavior mediated by humans. Within institutions of higher education the academic institutional structuring (of schools, colleges, departments, majors, minors, and courses) should no longer be determined strictly by the phenomena being addressed, but also, as appropriate, by how given subject matters are being regarded and studied.

Appealing to the distinction between (a) how bodies mediate behavior and (b) why they do so, it can be noted that physiologists will continue, from a biological perspective, to concern themselves with how a body exhibits its mediated behaviors. But it is the behaviorologists who are prepared to focus on the functional relations between environment and body to account for *why* particular behaviors occur in particular situations and, also, how such functional relations can be controlled, mostly by altering environmental variables thus giving rise to behavior engineering. All behavior occurs according to totally controlled functionality, and behaviorology is about getting that functionality analyzed correctly. A status of "freedom" is fictional. It cannot and does not exist and has never existed. Most references to "freedom" remain but admissions of ignorance about the prevailing functionality. This truth is well known, albeit intuitively, by the long succession of successful manipulators of behavior who continue a relatively easy exploitation of the human population with references to the protection of "freedom." It is time for science to rescue humanity from their grip.

Students who want to pursue a natural science of behavior causation, including its engineered control, should no longer have to turn away from educational institutions that purport to excel in the breadth of their academic opportunities, simply because those institutions fail to include the natural science of behavior among their curricular offerings. Modern academia's political abstention from a natural scientific approach to what is arguably humanity's most important subject matter should no longer stand as modern academia's most salient contribution to what eventually may come to be regarded as a "dark age" in academic history.

One ill-conceived approach to fixing this academic debacle has been for behavior-focused, soft-science departments to import a modest compliment of otherwise academically "homeless" natural scientists. Those small clusters of ill-placed natural scientists remain a politically impotent minority within those relatively larger soft-science units. However, they can, if or when encouraged to step forth, inject a much needed air of scientific authenticity into those philosophically motley units. Such pathetic gestures pay the rent for their departmental shelter.

Traditionally, within academic institutions, with the "soft-science" faculty members organized into departments within larger Social Science units, each such academic department has purported to teach some relevant aspect of the relation of human behavior to human culture. Today such departmental programs typically do not encourage or enforce the intellectual integrity of the natural sciences, and a majority of their faculty members may strive to keep it that way. In such an academic department a student, in pursuing the study of the subject matter, can be guided either by a personal philosophy of unfettered mysticism or by a personal philosophy of strict objectivity (or some inconsistent mix of the two). Furthermore, in those "soft-science" academic departments such individual displays of philosophical intermingling, although profoundly affecting a student's analytical constructs, typically will go without formal analytical challenge. Nor in soft-science units do similar challenges tend to arise informally among faculty colleagues, insofar as such probes into what is being treated as a strictly personal matter could be regarded as impolite, inappropriate, or even unconstitutional.

However, contrary to some familiar arguments, the neglect of personal philosophy has important qualitative implications, because philosophical assumptions steer the interpretive activities of whatever studies are in progress. In the natural–science departments of academic institutions, because every citizen's personal philosophy is constitutionally protected from the unwelcome imposition of alternative philosophies, natural–science units simply tend to avoid hiring or promoting faculty members whose personal philosophies permit or endorse serious recourse to mysticism or to any kind of superstition in pursuit of the departmental subject matter. Furthermore, the professional work done in natural-science departments proceeds according to methodologies that maintain a strict objectivity, which tends to preclude individual recourse to any form of the supernatural. In general, within natural-science departments, faculty colleagues tend to disrespect the thinking of those whose work products seem reliant on superstitious or mystical recourse. In natural-science units, as that name implies, an individual faculty member's professional accomplishments thus tend to be kept reliant on the objectivity of natural science.

Apart from the philosophical carelessness and philosophical disparity that tends to characterize traditional social-science faculties, in such a unit an individual faculty member's scientific operations may be conducted without the stringency that characterizes operations in natural-science units. A prime example is the frequent reliance on indirect measurements. That rather common approach often features surveys of people's reactions to events of interest instead of more direct measurements of the phenomena in question, although those phenomena, rather than people's reactions to them, are of interest. Such an indirect approach may be deemed appropriate for certain studies being performed in a "social-science" department, whereas natural scientists, considering similar situations, would tend to regard such an indirect approach as unacceptably weak or imprecise.

When such easy indirectness is challenged, a typical answer is that more direct measurements, especially of behavioral events, are unnecessary and perhaps too difficult or inconvenient. It is a response cast from within a kind of argumentative box in which behaviorologists would tend not to be trapped in the first place. Behaviorologists, as practical behavior engineers who must conduct their inquiries in perpetual contact with such issues, have become accustomed to developing effective strategies that avoid entrapment by the ease of careless soft-science methodologies. When one knows the nature of behavior and how behavior works, one realizes that all relevant and perhaps critical behaviorcontrolling variables do actually exist to be identified and to be contacted directly. However, doing so may be difficult and in some cases beyond one's capabilities. Nevertheless, the relevant functions of those variables are real existing relationships and thus theoretically describable-a familiar challenge within any field of basic natural science.

Historically, a few hundred years ago as natural science was just beginning to emerge, the compromise between the natural scientists and followers of organized superstition, in avoiding direct public contradictions of each other's approaches, prevented most but not all early natural scientists from being burned at the stake by religious zealots who for an extended time enjoyed the political power to do so. And in some cases they did not hesitate to exercise it (google Giordano Bruno). In more contemporary times this compromise between organized science and organized superstition has allowed natural science to develop within the safe isolation and relative neglect afforded by its own separate colleges on academic campuses—provided, of course, that the faculties of those natural–science departments continue to allow academic studies of human behavioral phenomena to remain under the control of social–science units where the cultural influences of organized superstition can more easily intrude.

With such a compromise in place, natural scientists in training, usually as a matter of necessity, must typically pursue any formal study of human behavioral stimulation by taking courses offered in academic soft–science units. But they seldom get the most effective and beneficial training. Furthermore, the substitution of (a) soft–science, behavior–related, training for (b) training in the natural science of behavior, including what makes the latter "natural," tends to leave such compromised scientists–in– training with conspicuous and increasingly unaffordable gaps in their professional repertoires—gaps that most were mistakenly led to assume could be filled by taking soft–science courses in behavioral phenomena.

An appropriate personal philosophy is critical to natural scientists for the maintenance of their objectivity, and the training of such scientists must include a philosophy of reliance on objectivity. Nevertheless, as demonstrated in the "social sciences," one's personal philosophy, typically after an early–life indoctrination, may remain a private matter not to be formally reconstructed in any subsequent retraining program. Thus, when students should be receiving instruction in the objectivity of science, the human culture at large endorses the formal neglect of instruction pertinent to a personal philosophy per se, ...a neglect characteristic of most social–science curricula.

A purely natural science of human behavior exists along with it's philosophy of objectivity. At issue is how long the study of that critical field of natural science will continue to be unavailable within academic natural– science programs, ...an omission that remains unaddressed by simple transfers of philosophically deficient social– science departments to natural–science colleges that tend to be located elsewhere on academic campuses.

The Behavior/Body Distinction and the Life/Death Distinction

A human body is not a person. Rather, a person is the repertoire of behaviors that are mediated by a body. The stream of behavioral events being exhibited by a body accumulate over a lifetime to a totality that is the "whole person." Each occasional contact with a particular continuously-behaving body offers but a fleeting fragment of the vast behavioral repertoire that cumulatively defines "a person."

The complexity of a complete person-defining behavioral repertoire reflects both (a) the structural intricacy and complexity of its behavior-mediating body and (b) the complexity of the energy flows that are stimulating such person-defining behavior. (A) pertains to the structural qualities of the behaving body, while (b) pertains to the qualities of the behaviorstimulating environment along with that individual's history of interactions with various environments. An "environment" is traditionally regarded as a realm from which behavior-stimulating energy impinges upon a behavior-exhibiting body-part. Recall that behavioral interactions with an environment modify the neural microstructures of a body so that it behaves differently on future occasions of similar contact with that environment ...(a process a.k.a. "learning"). Because behavior occurs in pure process mode, the behaviorally defined person occurs exclusively as process. Thus, persons, consisting of pure behavioral process, occur as events, but they lack material status.

The body that mediates a person is characterized by an intricate structural complexity sufficient to insure the establishment of a functional relation between the body's environment and the behavioral events that a part or parts of that body may exhibit. Of course, in addition to behavior, energy impingements from an environment also may stimulate a behavior-mediating body to exhibit what are regarded, in general, as various non-behavioral reactions-for example, suntans, poison ivy blistering, or tooth discolorations. Plants, another class of live bodies, react in various ways to incoming energy impingements, although very few if any of such reactions may qualify as behaviors. In the general case of live entities, the ongoing "life" of a body under consideration is denoted by the continuity of function (a) during the production of behavior or (b) during the natural maintenance of the body whether or not that body also happens to be mediating behavioral reactions.

A body, traditionally regarded as a material entity, if propelled, moves about, so that the respective behaviors that it may mediate, in addition to its locomotion, can occur at different locations. (A) The relation between features of that body's environment and (b) any behavioral activity that that body is mediating thus changes continuously with the motion of that body. The relation between body and environment also changes (a) due to intrinsic changes to the environment (endovironment or ectovironment) and (b) due to intrinsic changes to the responsive bodily structure. Thus, as the relation of body to environment changes (for whatever reason), so does the behavior that that body is mediating. While bodies can move and thus can exhibit behavior in different locations, the behaviors that they exhibit, defined in terms of process, can merely start, stop, accelerate, decelerate, intensify, and fade. Thus, bodies may move about. But behaviors remain limited to mere occurrence, a somewhat subtle difference blurred by common language that developed mostly in the absence of such a distinction. While an entity is required for the manifestation of a process, entity and process are differing concepts, ...hence the life/body distinction.

Such a process-defined individual, manifesting only in process mode, can exhibit, but only exhibit, properties that processes can exhibit. Note in review that a process can start occurring and stop occurring. Also, a process can accelerate or decelerate, and it can both intensify and de-intensify. However, a process cannot move in the sense of traveling about. Only the material entity that mediates that process can do that. Hence, a person's body may travel to and fro, but the "person" manifests exclusively and only in behavioral process mode as mediated by that body. If the body moves about without mediating any aspect of a person, that body is described as dead, and while any motions exhibited by that body are attributable to applied forces, such exhibited motions are not attributable to any behavior-produced forces being exerted by that body.

Common parlance can cause confusion with respect to these variables when a body's behavioral mediations are described in general as a "person's" behavior. Note how this common way of referring to behavior contrasts behavior and person so that a body's behavior is something that a person *does* when, in fact, that behavior *is* the person. Ordinary language thus imposes this common misconception.

If the person-defining behavior ceases entirely and does not reoccur, the person is described as dead, although it would be more enlightening to say that the person no longer "occurs." If the occurring behavior remains sustained only at some minimized bodymaintenance level, the person may be described either as comatose, unconscious, or perhaps merely asleep. An acceleration of the behavioral processes may indicate an emotionally excited person; deceleration, an increasingly depressed person.

However, note again that such an exhibited behavioral display is not something that a *person is doing;* that behavior *is* the person. Thus a person may occur excitedly, but to say that the person is *acting* excitedly is redundant, because it impossibly bifurcates the person and the behavior that the body exhibits. Traditionally, persons have been cast as fictitious supernatural entities that act in the role of mini-deities who inhere as self-agents inside of peoples' bodies. From that imbedded location each such mini-deity somehow presumably chooses, and directs, the behavior that its host body exhibits. Thus persons are said to *do* things. However, persons don't initiatively *do* anything; rather, they simply occur, and they do so in the functional mode of environmentally stimulated behavioral process. Hence, a self that would serve as a body-inhabiting and behavior-managing agent is a redundant fictitious creation. The completely tight functional relation between environment and behavior leaves nothing for such a self-agent to do.

Note again that the environmental control of behavior is total; it represents an absolute functionality. Recall, as previously noted, and from a traditional perspective, that all behavioral process occurs functionally—that is, under the functional control of environmental events. Just as a radio does not internally originate its broadcasted thematic programming, a behaving body–part does not originate its exhibited behavioral manifestations. Thus, the asserted spontaneity of any kind of process, including a behavioral process, constitutes a fictional account that actually is not, and cannot be, valid. Thus, a sincere assertion of spontaneity is instead but a confession of ignorance.

In review, behavior occurs inevitably naturally (i.e., functionally) just as do all other kinds of "real" events. Insofar as the environmental control of behavior is total, assertions that a self-agent has initiatively decided that its host body should "do" that behaving simply indicate that the environment/behavior functionality is being ignored and that the exhibited behavior is being explained wrongly via an appeal to supernatural interruptions of that ongoing functionality. However, the control of behavior, instead of its being exercised by an internal self (whatever one of those could be), is an entirely natural phenomenon. Thus, behavior, like any other process, never occurs spontaneously. Behavior is produced (i.e., stimulated) entirely by the composite of surroundings that are exerting functional control over whatever behavior is being mediated and exhibited by a body. We note, too, that a behaving body is also part of its own behavior-stimulating environment (a part called the endovironment).

Private verbal behavior, often regarded as a selfagent at work, is just another kind of totally controlled behavior. It occurs in functional relation to the environmental factors that determine it and hence control it. Once that kind of behavior occurs it can functionally control other subsequent behavioral reactions. All such sequences of events consist of natural chaining according to the laws of functionality. We seemingly agential "weagents" do not exist as functional links in the behavioral chains being mediated by our own bodies. Agential "we...s" are naturally superfluous and thus fictitious. Behaviorologists, after redefining "us," can then get on with the task of accounting for specific behaviors and for their functional controls—behaviors that must be occurring, not initiatively, but consequentially.

Given a particular behavior-capable body including all of its structural detail, all of its behavior is theoretically predictable from an exclusively environmental database. However, in reality, the term "environment" represents a multiplicity of drifting factors, varying in functional reach from great to infinitesimally small, both known and as yet unknown. Such a multiplicity of concurrently active and fluctuating behavior-controlling factors inevitably exceeds one's capacity for complete accounting. Behaviorology is the field of science that approaches such accounting via what tends to be useful and hence valuable culling of those causal factors according to the magnitude and importance of their behavioral effects. This allows for accounting based on an identification and consideration of the more important causal environmental factors. That is, important behavior-controlling environmental factors are identified, and their behavioral effects are measured, while behavioral controls of lesser importance are ignored according to their excessive demands on available resources and according to the unimportance of the further degree of accountability that they presumably could provide. Thus, behaviorological operations, like those of other natural sciences, are characterized by an operational practicality.

In traditional terms, a hypothetical environmental element is not subject to analytical establishment as such until or unless it exerts, directly or indirectly, some kind of functional control, resulting in the occurrence of a significant, bodily–mediated, behavior. That behavior may be as inconspicuous as a simple awareness response such as seeing or hearing that environmental factor (as traditional phrasing tends to express it), although to be "meaningful," as they say, it must usually chain to an interpretative kind of response. However, without *some* behavioral mediation by a body, an environmental element remains unrealized and perhaps entirely unsuspected.

Thus, the stuff of which environments are constructed is behavior per se, although we are not accustomed to speaking of environments as if that were their nature. A person's own existence inheres, only and inescapably, within the bubble of that person's own behavioral processes ...along with the entire *behaved* universe in which that person purports to dwell. Traditionally, we regard this relation backwards by speaking of a real environment stimulating our behavior, when that environment consists merely of our behavior in the first place. The only establishment of an environmental feature is one's behaving that feature. One cannot independently get out of one's own behavioral bubble to somehow confirm that feature apart from one's having to behave it. Note that the totality of a person's environment is a behaved logical construct in which the person, consisting exclusively of behavior, is trapped, and that a behavioralmode person cannot get out of itself to explore its own environment from a perspective external to its own private behavioral bubble. "We" remain confined as pure behavior, while we further behave the logic by which we invalidly rationalize our status as entities operating within an independent environment. Thus, analytically, we are left with behaved logic, behaved bodily entities, and a behaved environment. It is all just behavior. And with behavior being one's only basis for establishing anything, beyond that behaving an isolated independence for something remote cannot be established (in the traditional sense of "established").

To return to the traditional analytical framework in which we normally presume to operate: The behavioral processes exhibited on a particular occasion by a given body thus vary in quantity, intensity, and variety, and are commonly said, in traditional terms, to do so in functional relation to the energy streams impinging on that body's behavior-mediating parts. Thus, (still in traditional terms), given a sufficient energy input, the nature of the behavioral repertoire that a behavior mediating body can exhibit is partly a function of the complexity and intricacy of that body's energysusceptible structure. If such a body is, or becomes, structurally incapable of mediating any detectable behavioral responses, operant or respondent, the body is then usually regarded as dead. Thus, the existing extent of such structural capacity to mediate behavior typically accounts, at its minimal extreme, for the distinction between being alive and not being alive. Such a life/ death distinction is far simpler than the traditional life/ death distinction that presumably relies on the presence or absence of an internal body-managing and behaviorproducing self-agent (whatever one of those could be). Were we to go into an appropriately equipped laboratory and develop a new entity comprised of unique structures, the complexity and intricacy of which would rival that of biological entities, it too may exhibit the kinds of reactive processes that collectively are regarded as "life".

Such a contrived manifestation of life may also include the subset of processes that collectively we call "behavior." Some of those behaviors, in the class called operant behaviors, could perhaps change rather quickly in frequency and form (via conditioning and shaping processes) and thereby could exhibit a relatively rapid evolution through either natural interactions with their environments or with the aid of interventional contrivance (i.e., teaching or instruction). Others of those behavioral processes would be under the control of more rigid, biologically fixed, microstructuring (reflexive behaviors) and would remain unsusceptible to the general rapidity of operant changes. They may, however, be susceptible to respondent conditioning.

As such artificial life forms become more complex and sophisticated, including acquisition of a capacity for temporary, chemical modifications (a.k.a. emotions), perhaps we should remain prepared to condition any such technologically contrived life forms to exhibit a sophisticated compassion toward humans lest those contrivances simplify their environments by eradicating humans, thus terminating any aversiveness that their competitive association with humans may be producing an aversiveness perhaps provocatively exacerbated by humans too often flaunting their presumed superiority.

To continue from the traditional perspective: In nearly all instances, the worth of a human being is the worth of its behavior, which in turn is based upon the worth of the environmental outcomes produced by that behavior. Thus, the potential worth of a behavior-capable body generally inheres in the worth of the operant behavioral repertoires that it can mediate. Live bodies, however, are subject both to normal degradation and accidental damage. When the structure of a human body has irreparably become incapable of mediating its operant process-defined person, in most cases that lingering body's worth will have sunk below the threshold of most culturally based, protective, respect. Such a still-living body, sans operantly defined "person," may be left to medical personnel who are skilled at finding ways to allow its residual life functions to come to a seemingly natural end.

A human body, upon being declared "dead," may be subject to immediate disposal, or it may have limited research value, perhaps being subjected to autopsy or dissection for training purposes. Still viable parts, if needed, may be harvested from that personless body for transplant. Typically, following any such procedure, the residual "dead" body, perhaps stripped of useful parts, will be subjected to some form of disposal perhaps by burial, incineration, or, more rarely, some kind of exposed abandonment. However, that the residuals of a dead human body are no longer deemed worth the bother of any conceivable alternative to such wasteful disposal options is a result of some cultural seduction that obviates, for example, the conversion of dead bodies into fertilizer for useful crops.

Motives and Mechanisms for Some Common Cultural Seductions

This section discusses some currently prevailing kinds of cultural seduction and, absent specific examples, allows the reader imaginatively to behave them. The section that immediately follows this one will present detailed discussions of some actual examples.

Some or all of the points made in previous sections may seem simple and obvious, but since antiquity cultural influences have led people to confuse bodily entities with the person-defining behavioral processes that those bodies can mediate. As a result of such confusion, invalid but seemingly important problems arise. Such fake problems often tend tenaciously to resist solution, in some cases for millennia. Furthermore, the failure to distinguish body from person often leaves those who are making that mistake vulnerable to costly exploitation by people who are eager to take advantage of the kind of vulnerability that can develop around an enduring mistaken assumption.

Such exploiters typically offer self-serving prescriptions for how best those misled people can deal with their apparent dilemmas. Exploitation of that kind is typically contrived and maintained precisely to keep such victims vulnerable to that kind of exploitation, in some cases by encouraging those misguided people to ignore their critical mistake while accepting the often elaborate assistance of their exploiters in coping with any troublesome implications of their basic analytical error. In other cases the exploiters may strive to insure reinforcing consequences for pursuing the implications of such a fundamental mistake. In such cases, the exploitation is made easier if the reinforcement is augmented by intrinsic biological propensities. That is, the exploitation is easier if the exploited individuals have a natural intrinsic proclivity for the relevant kind of exploitive activity. Such exploiters typically rely on a sufficient degree of ignorance and intellectual insufficiency in their prey as those exploiters vigorously promote, and subsequently exploit, the analytical confusion of their victims.

A typical strategy of such exploiters is to pretend that, unlike the people whom they exploit, only they have the insightful wisdom and experience to guide their followers through what they present as the vast implications of the "truths" that they purvey. In all or most such instances the exploiters act in various ways to extend the scope of their prey's mistaken fundamental assumption and then to pursue any of its many implications for which they can appear to provide helpful guidance to their preyguidance for which, typically, they are paid in various ways sufficient to maintain their predation. Whether such an exploiter shares the professed beliefs of the victims, or is knowingly acting duplicitously, is largely irrelevant, because the respective roles are determined more by the prevailing contingencies than by valid descriptions of what is occurring. Such contrived, exploitive, operations can become so vast and complex that corporate-like organizational structures may become necessary to conduct and manage them.

In another class of cases the vulnerability that renders people more susceptible to such exploitive control is genetically based. In such cases, people tend emotively to enjoy certain kinds of behavioral activity because of a genetically determined proclivity for pursuing it. That is, because of some intrinsic, genetically determined bodily microstructuring, certain kinds of behaving that are mediated by those body-parts are automatically pleasurable (we refer to such feelings, which are chemically induced, as emotional effects). The exploiters strive to keep such people focused on the innate pleasures of such activity while those exploiters profit in various ways from fulfilling their prey's pleasurable and emotionally bolstered urges. Those being exploited, preoccupied by the innately reinforcing consequences of the relevant activity, remain distracted from analyses of the true nature of the prevailing contingencies. Focused on teasing out the often rather intense immediate pleasures of such activity, the affected people tend to ignore the possibility that such behaving, bolstered by innate susceptibilities passed to them genetically from the ancient origins of their species, may no longer be relevant or appropriate in modern culture.

Another variety of exploitation via cultural seduction comes at the expense of those individuals who have been subjected to an elaborate pretense that their worth as human beings is based on their protective preservation of some vaguely defined socio-cultural characteristics that have been made to sound good but of which their understanding tends to remain shallow. Typically, some kind of "enemy" is defined for them in a simplistic way, in some cases merely with a one-word label. Whatever is so labelled will have been vilified deliberately in a general way until its mere mention elicits aversive emotional reactions among those targeted for such exploitation. Such victims may have been prepared to sacrifice themselves for the protection and preservation of whatever their exploiters have portrayed as the respectable alternative to toleration of the nominally vilified "evil." The "enemy" will have become anyone, or any group, that can be labeled with the socially poisoned name.

While the analytical recognition of this kind of exploitation may be relatively easy for appropriately educated and moderately intelligent people, this exploitive approach remains effective with a large segment of the general population, especially in the absence of even an elementary introduction to a natural science of behavior in what passes as their schooling.

Another kind of cultural seduction involves contrivances designed to obfuscate the original functionality of some behavioral activity that in earlier times allowed an important cultural need to be met, but which in the modern era has become unnecessary and perhaps even hazardous. The original cultural need, no longer in effect, will by now have been culturally dispelled. However, the class of behavior that developed originally in response to that need now continues to occur, but only under alternative controls contrived to serve disproportionally those who are currently exploiting that activity. With adequate propagandistic preparation of the exploited faction of the population, the management of that system of cultural seduction can be rather easy for its exploitive beneficiaries.

In situations of that kind, a wide-spread public revelation of such deliberate social manipulation would tend to invite public rejection of that corrupting operation. However, this could threaten any essential contributions to the culture that more appropriately occurring operations of that kind might provide. That is, under certain circumstances such operations, if uncorrupted, may be of benefit to the general population, or perhaps even essential. But those now-corrupted operations seemingly must be kept from analytical scrutiny lest an aroused populace act indiscriminatively to eradicate an operational system that, if conducted with consistent appropriateness, may be essential to the cultural well-being. Those who currently are mismanaging such operations rely on the tease of huge personal payoffs to guide their managerial activities and tend to ignore the appropriate contingencies that originally controlled, and should still control, the behavioral systems over which they exploitively preside.

In some cases the behavioral activity in question may have become so outdated and now inappropriate that no contemporary public-interest may be served by it. However, those patterns of behaving may serve the interests of exploiters who maintain a perhaps intense cultural seduction campaign to preserve certain aspects of such activity, typically by promoting the idea that such activity protects and preserves something about which people are being made to care whether or not whatever that may be is actually being threatened.

The emotional reaction to a particular kind of stimulus control of behavior may feel aversive, neutral, or pleasurable. When the prevailing controls yield pleasurable reactions, the involved individuals tend to regard those emotional feelings as "happiness" and, typically, their own environmental status as "free." If behavioral control is aversive, they tend, instead, to regard themselves as "oppressed" and perhaps "depressed." If such people are without behaviorological analytical skills, they tend to remain susceptible to the false notion that the good feelings of control via reinforcement merely represent a celebration of their being under control presumably of their own self-agents. They, as imagined self-agents, presume to be in control of themselves (whatever that implies) and to be "choosing" their behavior rather than having it determined perhaps via the involvement of self-serving oppressors. Although the actual control of their behavior by environmental factors is total, if it feels good they regard themselves as "free." As usual, such analytical mistakes leave them vulnerable

to exploitation by those reinforced by taking advantage of such opportunities. Thus, the fiction of self-agency is endorsed, "freedom" is celebrated without an examination of its actual nature, and the good feelings aroused via that celebration are attributed, as a distraction, to the "good character" of those being exploited.

Typically the exploited individuals, most of whom otherwise probably would never rise to social prominence, are treated as if they already enjoy that elevated status—a status that is then allowed to manifest in various ways such as their expressing a "willingness" to expend themselves for example, in defense of some favorable status, even in cases where such status is not actually threatened. Such a fake elevation of status renders the exploited individuals vulnerable to their manipulators who may then use and expend them to enhance their own well–being. Typically, the personal benefits realized by such exploiters may include enlargements of their financial resources, and/or increases in their social or political status.

Common Examples of Cultural Seduction

This section presents five familiar domains of human behavior, each of which exemplifies cultural seduction on a rather large scale. Each of these discussions exposes the kind of exploitation that typically occurs via its featured version of cultural seduction. Beyond these examples, others could be sited, and collectively they may account for much if not most of any person's behavioral repertoire.

Hunting

A significant fraction of humans enthusiastically hunt and end the lives of less intelligent organisms, in some cases gruesomely. This typically occurs merely to allow a hunter to realize the innate thrill of killing them. Humans evolved as a predator species whose individuals killed members of various other species for a variety of reasons such as for food, for clothing, and as sources of raw material for various kinds of tools. The thrilling aspect of such activity emerged as an evolved emotional feature of that lethal activity. However, in contemporary human society the activity of hunting and its evolved emotional support, now mostly unnecessary for its original purposes, may, like the appendix, be relegated to a class of genetically produced junk with which contemporary humans are burdened.

Insofar as humans are evolved to avoid and resist both their own dying and the incurring of pain, humans are postured to react sympathetically to organisms of lesser intellect but similar sensitivity to pain and fear of damage whenever such lower organisms are similarly threatened. Thus, despite the innate pleasurable urge to do so, intellectually it may seem unreasonable that humans should eagerly kill less intellectual species merely for the fun of doing so.

Burdened with such a currently inappropriate, unnecessary, but innate urge, contemporary humans must rely largely on intellectual strategies to overcome their intrinsic propensity to kill for fun. However, such intellectually supported counter–strategies are, in general, poorly developed among the many individuals whose behavior remains largely governed by simplistic innate urges and contemporary social trends. That extensive and less intellectual subset of the population, tending to be more rule–following than situational contingency–driven, thus remains vulnerable to the influences of those who would offer, with effective authority, self–serving resolutions of such conflicts between private personal urges and a contemporary way of life that may not afford naturally occurring circumstances facilitative of those urges.

Such relatively easy exploitation typically involves creating contrived opportunities to kill for fun. To that end the exploited masses are provided with relevant rules and redefinitions, the respect of which incidentally transfers wealth from the targeted followers to their exploiters. Such behavioral prescriptions are carefully crafted to enhance the seeming status of those being exploited. Thus, killing for fun is cast as honorable "sport," and enhanced societal status is made contingent on extremes in pursuit of that activity.

Certain aspects of government, effectively under the influence of the exploiters, encourage and authorize such killing, and establish the special intervals during which such behavior may legally transpire—if only expensive licensing fees are paid for the privilege. Those fees help to fund the government and thereby reduce tax burdens, especially on the typically wealthy exploiters. The business community provides chains of retail outlets featuring a wide variety of special clothing and equipment that appeals to killers on the prowl. Manufacturers and marketers of the diverse merchandise in those stores exhibit a pretended respect for the status of those who are being made to believe that their personal virtue inheres in such "conformance with human nature."

Although governments may try to maintain public safety by keeping weapons from dangerously unstable individuals, typically, the exploited killers are aroused to distraction by fake over-generalized warnings, often by pretentious alarmists, that the "government" is trying to seize their weapons. In response they purchase ever more of them. The manufacturers of firearms applaud the character of those whose quest for ever more powerful and effective killing devices leads them to purchase disproportionally effective and increasingly expensive weaponry. Members of the exploited mass are encouraged to regard their extensive relevant arms-acquiring repertoire as an un-amendable constitutional right even though the original intent of that constitutional provision was to insure that a military force could quickly be mobilized should the need arise—an approach that originally was conceived when an army could be marshaled only if citizens grabbed guns from weapon racks in their homes and fell into the ranks of passing citizen–soldiers.

Today members of this exploited community of carefully legitimized hunter-killers are thus encouraged to take pride in acting as if they are of special character. They perpetuate a life style that may include such things as trophy-hunting trips and, in their homes, wall decorations consisting of the severed and preserved heads of animals that they have killed. They also tend to encourage their children to experience the thrill of such killing while becoming desensitized to regret about ending innocent lives. Newspapers often print pictures of children proudly displaying the dead bodies of animals that they have killed with the encouragement of parents and other adult role models.

Those who are intellectually capable of avoiding such broad and effective cultural seduction, and to appreciate what actually is occurring, tend to encounter resistance to any counter–activity they may be mounting. Such counteraction comes (a) defensively from those who are being exploited successfully and (b) protectively from those who profit by perpetrating the sham. The exploiters typically expend whatever effort and resources may be required to prevent those being exploited from recognizing what is being done to them and why.

Perhaps, as presented in a popular television show, this planet eventually will be visited by an advanced alien species that has come here in search of game to hunt and discovers that the slightly intelligent human species makes an ideal prey. The nature of those aliens' reception by our community of "hunters" would be fascinating if it were consistent with the human history of killing members of less intellectually endowed species for fun. But an inconsistent human reaction would probably ensue.

Religion

Throughout the entire history of the human species, its individuals, being of limited general intellectuality, have had to confront many seemingly insoluble problems, often with important implications. Prime among such intractable problems is how to avoid the apparently inevitable death of every individual. And in addition to that issue there remains a multitude of lesser problems having serious and often potentially harmful implications. The more difficult of such problems may tend indefinitely to resist practical solutions, often because misconceptions of critical factors have resulted in the problems being miscast. While the human species as a whole may be characterized by intellectual superiority on this planet, the intellectuality that facilitates problem solving in general, remains differential across the population. Thus, unevenly across the population, many problems tenaciously tend to resist solution, and many dilemmas seem indefinitely to go unresolved. If one steps back, as they say, and compares the evolving human intellect with hypothetical models that include potentially superior species– intellects, one can rather easily conclude that the human species, in general, may not be particularly intelligent and that the primacy of its intellectuality on this planet does not improve its potentially unspectacular ranking.

Thus, among the contemporary human population, individuals of relatively less genetically endowed intellectual capacity, and in most cases insufficient education, find themselves relatively incapable of validly framing such problems for solution in the first place. And because of their illogical casting, such ill-conceived problems, often of seeming importance, tend indefinitely to resist solution. For individuals caught in such a web, the intellectual resolution of the conundrums that they confront tends to remain beyond their intellectual capacity and become especially trying. Insofar as people, in general, tend to resist accepting their inability to resolve complex issues, such failures often elicit aversive emotional distress. Under such an often emotion-bolstered press for a fix that one finds oneself unable to provide, such individuals, including mature adults, simply appeal for assistance to be delivered by way of supernaturally-contrived interventions.

The effectiveness of such self-fakery relies on the seeming credibility of both the supernaturalistic realm and its typically ethereal beings that are being summoned forth to assist with one's problems—a seeming credibility that is usually bolstered through intense cultural seduction. Typically such elaborate self-deceptions provide contrived comfort that in many cases can carry to blissful extremes, albeit entirely divorced from otherwise established reality.

Such interventions, consisting of appeals to a supernatural realm, usually involve the conjuring of deities. Such appeals may often resemble a small child's appeals to Santa Claus—a mythical person who presumably travels through the sky by reindeer–drawn sleigh bringing holiday gifts from a toy–making workshop at the North Pole. The Santa Claus myth is so childish and absurd that children of four to seven years of age typically come to realize that there is no Santa Claus and begin to consider the obvious alternatives. That each individual in early childhood should abandon such a myth remains a culture– wide expectation. Notably, parents and other influential members of each child's cultural community, after earlier having conditioned a young child's acceptance of that myth, effectively support its subsequent abandonment. Such culture–wide endorsement of each child's growing incredulity about the reality of Santa Clause is critical for a child's complete abandonment of the Santa Clause myth. In cases such as this, the early myth–promoting cultural seduction is subject to a deliberate reversal, thus countering and reversing that earlier cultivated myth—a reversal that is bolstered by the maturing child's increasing intellectual capacity.

However, in contrast, equally childish myths about deities, unlike the Santa Claus myth, can be subject to enduring cultural endorsement, typically in various ways and to an extreme extent. The cultural endorsement of a role to be played by deities in human affairs is typically of sufficient strength to over-compensate for a child's natural intellectual growth. Consequently, notions about roles played by deities in human affairs tend to persist, often tenaciously. In such cases, as children mature toward adulthood, they get little cultural help dispensing with that myth. Those developing persons tend to be left to deal independently with such culturally endorsed reliances on supernatural interventions into human affairs. Left increasingly to rely on their often inadequate personal intellects and much more frequently inadequate educations, as they sort through the conflict between (a) the prevailing influences of their cultural seduction and (b) their personal experiences with objectivity, few such individuals avoid the drift toward increasing reliance on the supernatural. Victims of an ongoing, dehumanizing cultural seduction, the progressive damage to their maturing human intellects may approach practical irrevocability, and many become life-long defenders of such degradation of their respective intellectual capacities. Unfortunately, intellectuality is the trait that most renders them "human," so it is their "humanness" that suffers the brunt of such damage.

However, the alternative, objective approach to problem solving, generally recognized as scientific activity, is so logically compelling that rational arguments against it tend not to gain traction. One counter-strategy of the large religion-dependent community has been to argue, not against science, but rather that science and religion are compatible approaches to problem solving. That contention relies on the mistake of assuming that a scientific approach and a religious approach respectively represent two alternative yet potentially effective ways to approach problem solving. However, for a more valid comparative perspective, objectivity and superstition (as terms that respectively characterize science and religion) can be regarded as occurring at opposite extremes on a single scale—a scale of logic. The control of behavior at one of those extremes is marked by strict, objectively conducted, scientific practice, and the rejection of any appeal to supernatural causation, while

control of behavior at the opposite and rather blatantly nonobjective extreme is often characterized by unfettered appeals to the supernatural. According to this argument, rather than two approaches with science and religion each respectively occupying an advanced placement on its own respective scale, the two approaches to problem solving are on opposite extremes of a single scale—a scale of reliance on logic.

To better understand this distinction, consider that, commonly, extreme emotional distress may be treated via either of two approaches: the ingestion of emotion-calming chemicals, or behaviorally by engagement in calming rituals. Medicinal interventions are fundamentally rather direct chemical interventions to change certain of the body's microstructures so that the arousal of the offending emotions no longer occurs. On the other hand, behaviorological interventions involve changes to the behavior-controlling environment so that that environment emits different energy outputs that evoke or elicit different behaviors-in this case, responses that will not arouse such aversive emotional reactions. Thus, tinkering medicinally with the internal microstructuring of one's body can be distinguished from interventions to alter the variables that define one's behavior-controlling environment.

Religious activity affords relief by substituting emotionally soothing behavioral activity, usually of a ritualistic nature, for the ingestion of emotion–calming chemicals. This leaves the practice of religion partly as a negatively reinforced and drug–free way of soothing the aversive bodily reactions to ineffective efforts to escape or avoid aversive situations such as the persistent inability to solve seemingly intractable problems. The subsequent abstraction of the general success of such negatively reinforcing practices may then abstractively convert such religious practices to positive reinforcers (i.e., apart from any relief that they actually provide, one comes to feel better merely by engaging in them).

Commonly, adherents to religious superstition point to particular, devoutly religious, and in many cases culturally influential individuals whom they regard as good examples of "scientists." Typically, such "scientists" are graduates of widely respected universities. Collectively their respective academic credentials span the traditional fields of science. Most such individuals will have enjoyed long careers successfully pursuing respectable scientific goals within their particular specializations. Thus, influential religious individuals, secure in the seeming logic of their argument that science and religion represent compatible approaches to solving problems, advance and endorse the argument that a single individual can exhibit both approaches, although whether those alternatives are pursued concurrently or sequentially may remain vague. In the view of such religious adherents, their insistence

that science and religion are compatible occurs without a concurrent sacrifice of logical integrity.

Nevertheless, that defensive argument presents an easily revealed illogic. First, any real phenomenon is subject to scientific treatment and analyses. Logically, nothing real may be excluded from the purview of science, including behavioral phenomena. The natural sciences can readily accommodate probes of such things as the processes definitive of life as well as behavior of any and all kinds (muscular or neural, each perhaps modified by the intra-body chemical effects known as emotions). A person who would divide the world of real phenomena into domains, some of which, according to that person, may be studied scientifically and others of which must be approached superstitiously, forfeits credibility as a reliable advocate or practitioner of science. The cultural seduction that promotes acceptance of a science/religion compatibility must logically yield to a recognition that science and religion represent different values on the same scale. They are located at opposite extremes on a single scale of direct behavioral effectiveness. It is true in some cases that an individual's religious activity may yield change to that individual such that the religiously modified individual behaves more effectively in a given situation. But that kind of outcome represents an indirect approach to outcomes that scientific objectivity tends to produce more directly and more reliably.

Speaking traditionally: Intelligent and adequately educated individuals typically find the personal abandonment of religious superstition rather easy. However, those same individuals may tend to experience much more personal reluctance to let go of assumptions that feature themselves as secular mini-deities. Their independent self-agency often seems nearly impossible for them to relinquish. For such people, the status of *life* per se, would have to change from that of an appreciative and interventional mini-deity to some mere structurallyenabled reactions to energy impinging on structure, ... automatic reactions that are inevitable and leave nothing for a mystically regarded self-agent to do. Many well educated and generally scientific people remain unready to bring their natural-science analytical skills to bear on the issue of self-agency, less because they deem themselves prepared to argue objectively for an impossible human status of self-agency, and more because influential members of their community remain educationally unprepared to teach them behavioral subject matter. Thus, they remain untrained in behaviorology, the fourth basic natural science, which continues to be absent at the roundtable of the natural sciences. And consequently they may often tend to take seriously their own pronominal designation as reference to an internal mini-deity whose job is to exercise control of its host body (in this case, their own body).

What often may be accepted as an instance of divine intervention can be revealed as an obfuscating effect of mysticism on the behaving individual. True, a prayer for improved behavioral effectiveness may be followed by the occurrence of some behavior of increased effectiveness, but not because a summoned deity is looking over the prayer's shoulder and exerting supplementary control over that individual's behavior to render it more effective. One typical reason for such more effective behavior is simply that the ritualistic behavioral routine has interfered with the ineffective behavior occurring under control of irrelevant stimuli and thus allowed for a more effective pattern of responding to occur under the functional control of more relevant, if weaker, environmental variables. Given such a science-based versus supernaturally-based account, the science-based account tends to make more sense, as they say.

The cultural seduction that fosters religious mystical superstition has thrived in proportion of the susceptibility of the human species to that kind of influence. In human society religious cultural seduction continues to be focused heavily upon young children, because of the ease with which their immature intellects are vulnerable to such intrusion. The intellects of many immature human individuals are thus corrupted, often beyond practical recovery, by such early indoctrination with mysticism. Religion promotes a heavy personal reliance on rule governed behavior that tends to feature fixed rules, while science fosters reliance on contingency managed behavior that includes endless tinkering with the environmental controls in an ongoing effort to enhance behavioral performance. Nevertheless, parents or guardians who regard the widely touted introduction of young children to religious superstition as a dehumanizing form of child abuse remain in the minority, although seemingly their percentage of the population continues to trend upward.

The general process by which religiously indoctrinated individuals incur that kind of intellectual damage is augmented by the intense and ongoing cultural seduction that typically obscures what is actually being done to them. To proceed in traditional terms: As they increasingly gain the capacity for a more logical approach to relief from what are often culturally emphasized threats, they progressively tend to perceive themselves as having more to lose by validly recognizing the actual circumstances of their plight. That is, a valid revelation of their personal functionality would seemingly cost them both the negatively reinforcing relief and the positively reinforcing and mostly social benefits from their religious mysticism. Thus, seemingly unable to afford a logical approach, they languish in the grip of self-delusion.

Such individuals, culturally seduced into valued approval of that kind of intense intrusion, continue to live with their intellects progressively damaged by mystical superstitious indulgence. Furthermore, such ongoing cultural seduction tends to prevent their effective contacts with corrective challenges as those individuals mature. Unfortunately, in a majority of cases a practical capacity to effect repairs remains beyond their respective reaches as such damage to one's intellectual capacity tends to become ever more irreversible at a practical level. And because intellectuality is the most distinguishing feature of the human species, such damage accrues to the nature of people *as human beings*.

Academic Operations

Most "scientists" that are proffered in examples touting presumptive science/religion compatibility tend to pursue specializations that do not address the natural science of behavior per se, especially human behavior. Thus, such "scientists" remain vulnerable to the common assumption that the reach of natural science cannot, or should not, in all cases, extend to behavioral phenomena. If a science/religion inconsistency in their philosophy is bought to their attention, such individuals may carelessly posit that some problems pertaining to life and behavior are either too mysterious or too complex and intractable for scientific address, or at least for contemporary scientific address. Others may believe that the soothe of religion is too good to disrupt with logic. Such a conclusion, not only by religious "scientists" who resort to the supernatural when faced with presumably intractable behavioral issues, but also by many others throughout the scientific community in general, usually stems from the quite mistaken assumption that a human body is inhabited by a mysterious, behavior-controlling, agential self (typically referenced pronominally as I, me, you, etc.), ...a culturally promoted mistake that ostensibly converts an organic unit into a mini-deity. And such an incidental conversion typically leads to a multiplicity of additional errors.

Hard evidence for the existence of such an internal manager of behavior is entirely lacking. Objectively, such an internal agent, (a body-managing I, me, you, etc.) cannot be found, because such a mystical contrivance is nonexistent. So, any revelation of an internal behaviorinitiating and behavior-managing self, as well as accounting for how it works, must require recourse to superstition, because a scientific approach is futile when, as in this case, there is nothing upon which to focus a scientific inquiry.

The blatantly conspicuous tolerance of such an analytical error within contemporary scientific communities, including those in academic settings, is due to the colossal failure of the natural–science community to expand its formal scientific purview to include the study of human behavior. Thus even large numbers of natural scientists rely on what amounts to mysticism when casually accounting for human behavioral events, typically without noticing that they are doing so.

For instance, when a chemist asserts that "I decided to empty the beaker containing the solution, so I poured its contents into the sink," such a person will be assuming, uncritically, that their bodily behavior is reliably selected and executed by an indwelling I–agent that exhibits the powers required to compel the necessary body parts to accomplish such a pour. Usually, if such a recourse to mysticism is properly challenged, such an individual will hastily strive to invent enough basic behaviorology to extract themselves from such logical entrapment. But why should a presumably well educated person be caught in such a predicament?

The study of the natural science of behavior can easily be deemed as important, and certainly as necessary, as the study of any other basic natural science (i.e., physics, chemistry, and biology). Yet, in almost all instances, the natural–science departments in current academic institutions offer no natural–science programs, nor even isolated courses, pertaining exclusively to behavior as a natural–science subject matter. Typically within academia, to find available courses of study pertaining to behavioral phenomena, one must turn away from the natural sciences where physics, chemistry, and biology departments are grouped and go elsewhere on campus to academic programs that operate with a more careless regard for the philosophy of science and the role of that philosophy in scholarly practice.

Very rarely, in an apparent attempt to overcome the neglect of behavior science by the academic natural– science community, or perhaps simply to hide such neglect through obscuration, a university psychology department will simply have been transferred from the social sciences and installed among that institution's natural sciences. However, a mere physical displacement of a contemporary psychology department cannot be expected to erase or overcome the differences between the scientific practices of its faculty and those of corresponding operations within a natural–science cluster that enjoys a long evolutionary history as such.

The absence of the natural science of behavior among the contemporary natural–science curricula is partly due to the relatively late emergence of a natural science of behavior, most of which has occurred during the past century. Another factor that helps explain the absence within academia of a natural science of human behavior has a longer history. The current absence of organized natural–science attention to behavioral phenomena is the legacy of a historical compromise through which emerging natural science, while antithetical to supernatural intrusions, was permitted to exist and grow in the midst of a general human culture traditionally committed to a very heavy reliance on superstition, much of it religious. Thus the integrity of that compromise depended on the tacit deal between organized science and organized religion. Scientists needed the independence to pursue their special kind of inquiries, and additionally, like the remainder of society, the vast religious community relied, with ever increasing necessity, upon products derived through scientific activity. Absent behavioral phenomena from natural–science scrutiny, necessary products of many kinds could continue to flow from the applied natural sciences to the remainder of society including its religious majority without the prevailing cultural mysticism being threatened by scientific scrutiny.

Organized academia nurtured this somewhat curious and tacit mutual accommodation by allowing and encouraging the growth of "soft-science" to undergird studies of socio-cultural phenomena. Under the traditional science/religion compromise, the naturalscience academic community continued its tacit forfeiture of human behavioral subject matter, to the academic "soft" sciences. The faculty members of softscience units, despite their declared academic secularity to whatever extent seemed appropriate, have operated mostly under the umbrella of approval by the relatively vast religious faction of the general population. That tacit approval by organized religion has been encouraged by the explicit, if personal, religiosity of a substantial fraction of the soft-science faculty members and their administrators. This compromise, because it promotes social tranquility, has long been accepted by academic administrators despite any adverse implications for the culture at-large.

Thus, the academic natural–science units (departments of physics, chemistry, and biology) have evolved and matured while forgoing, among their curricular offerings, the inclusion of studies in the natural science of behavioral events. Concurrently their applied operations have continued to provide the culture with desirable and often critically essential products that have been necessary for cultural progress. Within academic institutions, the natural–science units, as a result of having surrendered behavior as a subject matter, have been permitted to maintain their physical separation from the "soft" (i.e., social) science departments. Under that academic isolation, the natural sciences have been relatively free to develop their own kind of intellectual integrity.

Within academia, in any given academic department, the political control of the faculty by its philosophical majority is typically of sufficient strength that a potentially rebellious minority faction within that faculty can be kept politically contained and suppressed. This has provided the opportunity for a simple defensive strategy to come into play. A soft–science department may recruit or somehow incorporate a single faculty member, or as is often the case, a small cadre of faculty members, who pursue a "hard science" approach to the general subject matter or to some specialization within it. If or when that department stands accused of soft– science inadequacy in its academic practice, that captured cluster of "hard scientists" can be summoned to counter any such accusations. The logical error is, of course, a response featuring some narrowly applicable specifics to counter a larger generality, but such a revelation is usually hidden by a screen of easy obfuscation.

Nevertheless, today, increasingly, critical observers tend to agree that, for the natural-science community, the era of fortifying its own place within an academic institution by neglecting to include behavior among its subject matters has passed. Arguably it is time for a new cultural era in which organized intellectuality asserts itself on the basis of its own proven merits by abandoning its forfeiture of a particularly critical subject matter to the thinly disguised forces of organized superstition. While, as a practical matter, both approaches may continue for a time to be represented within academic institutions, the old compromise of preclusion must be ended. Organized science within academia must be free to address, in the rigorous manner of the natural sciences, any and all real subject matters, and that certainly includes all behavioral phenomena, especially those that are mediated by humans.

Traditionally, within large academic institutions, the typical "soft science" curricula were organized by departments within Social Science units. Typically these units would have a basic behavior science department, usually under the name *psychology*, plus additional academic departments each purporting to focus instruction on some aspect of the relation of human behavior to human culture. These various social-science programs typically do not encourage or enforce the intellectual integrity that is maintained within naturalscience departments. In typical social science departments a student or a faculty member can entertain either a personal philosophy of unfettered mysticism or a personal philosophy of strict objectivity (or some inconsistent mix of the two), and either kind of philosophy may affect with work of a faculty member. In those "soft science" academic departments such individual displays of philosophical intermingling tend to go without formal challenge. Nor in soft science units do such challenges tend to arise informally among faculty colleagues. Among social science colleagues one's philosophical recourse is generally regarded as a strictly private matter.

However, contrary to some familiar arguments based on a presumption of sanctity for the personal freedom to think, the neglect of personal philosophy has important qualitative implications, because philosophical assumptions steer both the design and the interpretive activities of whatever studies are in progress. However, not only is each citizen's personal philosophy constitutionally protected from threatening or forceful attempts to impose alternative philosophies, such intrusions, usually abrupt, tend to be as ineffective as they are aversive. Therefore, in publicly supported academic institutions, the natural– science units arrange their curricula to introduce their subject matters in ways that allow and compel students to mature toward an objective intellectuality.

Faculty hires, on the other hand, must already have successfully undergone that process. The natural-science departments, in hiring new faculty members, simply tend to avoid hiring faculty members whose personal philosophies compel or allow serious recourse to the supernatural in the pursuit of their scientific interests. That philosophical culling is justified insofar as the professional work done in natural-science departments proceeds according to methodologies that require a strict objectivity. That approach tends to preclude appealing to the supernatural regardless of how facilitating such appeals would seem to be. Thus, within academic natural-science departments, faculty colleagues tend to disrespect the thinking of colleagues whose work products are reliant on superstitious or mystical recourse. In natural-science units, as that name implies, an individual faculty member's academic work is expected to be contingent on strict respect for the objectivity of natural science. Deviations are regarded as unscientific and tend to earn the disrespect both of colleagues and of administrators. One's recourse to the supernatural merely to prepare one to behave with the objectivity of science is deemed to be an unnecessarily circuitous route to a much more directly and reliably attainable outcome.

Several centuries ago, as natural science was just beginning to emerge, a tacit compromise between the natural sciences and organized superstition developed rather naturally without either side being publicly explicit about it. That compromise involved the avoidance of direct public contradictions of each other's approaches, a tacit understanding that prevented most but not all early natural scientists from being burned at the stake by religious zealots who for an extended time enjoyed the political power to do so. And in some cases they did not hesitate to use it (e.g., Giordano Bruno). In more contemporary times this tacit compromise between organized science and organized superstition has allowed natural science to develop within the safe isolation and relative neglect afforded by its own separate colleges on academic campuses-provided, of course, that the faculties of those natural-science departments continue to respect the claims of organized superstition to the subject matter of human behavior.

Under such prevailing circumstances natural scientists in training, who may need some instruction in human behavioral phenomena, must pursue their formal study of human behavior in academic soft–science units. But in doing so they may fail to get what they are seeking. The substitution of (a) soft-science, behavior-related, training for (b) training in the natural science of behavior, including what makes the latter "natural," tends to leave such compromised academic scientists with conspicuous and increasingly unaffordable gaps in their professional repertoires—gaps that many were led to assume could be filled by soft-science studies of behavior.

For natural scientists an appropriate personal philosophy is essential for the maintenance of their scientific objectivity. Thus the training of scientists must include an appropriate introduction to the philosophy of science. Nevertheless, as demonstrated in the "social sciences" where typically one's personal philosophy is a private matter not to be formally constructed or reconstructed in any public training program, the human culture at large endorses the formal curricular neglect of personal philosophy. Those contemporary natural scientists, whose needs for some training in *behavior* science were presumably fulfilled by recourse to instruction in contemporary social–science curricula, may have gone without adequate training in the very essence of science.

As earlier noted, there does exist a purely natural science of human behavior, and it is called behaviorology. As is true of the events studied in physics, chemistry, and biology, all behavioral events are functionally determined by energy flows from their environmental antecedents. Regardless of which basic natural science addresses a given event, any putative spontaneity of that event is impossible, and explanatory recourse either to spontaneity or to mystical causation amounts but to an expression of ignorance about the relevant functional relations that entirely determine and control that event. (For books on behaviorology and its various applied specializations, visit <u>www.behaviorology.org</u> and also see the peer reviewed *Journal of Behaviorology*.)

When intellectually sophisticated academic scholars address the issues that define their respective fields of specialization, the activity to which we refer as "addressing" can occur only in the mode of behavior. Thus academic scholars need to understand well the nature of themselves, the nature of that of which they speak, and the nature of their relation to it. And all such things-they per se, the establishment of that to which they are relating, and their relations to it-are all cast of behaviors, because *all* of reality is cast exclusively of behavior. For example, if one studies stars, one must first behave those stars insofar as doing so imparts to those stars what we call their "existence." Insofar as behavior is the mode of definitions in general, of subject matters, and of knowledge—all of which are cast exclusively of behavior-natural scientists need an understanding of behavior per se to grasp their own nature, what they

are doing, what they are trying to do, and what they have done. They also need to understand that "they" do not exist as self–agents with the mystical power to intervene in naturally occurring functional relations. For many traditional scientists an initial confrontation with such an understanding may approximate the kind of revelation that is afforded by most people's introduction to quantum physics.

At issue is how long the critical natural science of behavior will continue to be excluded, not only from the natural-science programs for students within academia but also from the preparatory training of their faculties. Those continuing omissions are glaring. But due to the intrusive cultural seduction via traditional academic operations, the absence of behavior as a subject matter among the natural sciences tends to go largely ignored, even as human culture continues to be overwhelmed by its inadequately resolved behavior-related problems. This happens while most people continue, with simplistic invalidity, to presume that science cannot penetrate the mysteries of behavior.

Symbolic Patriotism

Traditionally speaking, all behavior is, of course, totally controlled by flows of energy from the environment that is stimulating that behavior. The functional occurrence of behavior under such control also may have (a) an aversive emotional effect, (b) a pleasurable emotional effect, or (c) neither, on the entity that is behaving. Expressed partly in traditional terms: When the functionally controlled behavior is accompanied by a reinforcing emotional effect, the individual who is exhibiting that behavior seemingly tends to treat its associated emotional feelings as happiness and, in many cases, its environmental status as free. But if behavioral control elicits aversive emotional reactions, such individuals may tend, instead, to react as if unfavorably exploited or, depending on the situation, as displeased, miserable, or perhaps oppressed. If the prior conditioning of such persons has not capacitated behaviorological analytical skills, those persons tend to remain susceptible to false notions such as the idea that the good feelings of control via reinforcement merely represent a celebration of their behavior presumably occurring under control by their own respective self-agents (whatever one of those could be). "They," as putative self-agents, presume to be in control of themselves (whatever that implies) and to be "choosing" the behaviors to be exhibited by their host bodies. Wallowing in such self-aggrandizement, they may be distracted from discerning whether or not such behavior is determined as an exploitive contrivance arranged by self-serving oppressors.

Although the control of the behavior of organisms is total, in the case of humans if it feels good they tend

to regard themselves as "free." Such freedom is usually misinterpreted as a lack of environmental control over their behavior. As usual, such analytical mistakes leave the victims vulnerable to those eager to seize such opportunities in pursuit of some kind of exploitive contrivance. Such exploitative operations usually include a pretense of respect for the victims' personal "freedom." Such exploitive arrangements evoke behavior that is contrived to maintain the good feelings of the targeted individuals. Thus, such exploitative episodes typically include the bolster of a victim's relevant behavior via an orchestrated cultural seduction that keeps the victim content in the belief that things "should be that way." Thus, the fiction of self-agency is culturally endorsed; "freedom" is celebrated without an examination of its actual nature; and the good feelings aroused via that celebration are attributed, as a distraction, to the "good character" of those being exploited. All the while the behavior of those who are being manipulated continues to benefit their exploiters, although typically in carefully contrived obscurity. Note too that those exploiters may be acting intuitively with little or no capacity to account explicitly for what they are doing.

The exploited individuals then may be encouraged to expend themselves in defense of the "freedom" that they and others presumably enjoy, usually cast as a national benefit. While most such individuals otherwise probably would never rise to social prominence, they are treated by most factions of the culture as if they already enjoy that elevated status-a pseudo-status attained via their expressed "willingness" to expend themselves in defense of a shared "freedom" even in cases where a significant loss of their culturally endorsed reinforcers is not actually being threatened. Such a fake enhancement of status—a product of carefully contrived cultural seductiontends to leave the victimized individuals vulnerable to exploitation by manipulators who then use and expend them to enhance their own well-being. Typically, such personal gain by those exploiters accrues in the form of increases to their personal financial resources, as increases to their social status, or as expansions of their political influence, while the costs tend to be born by members of the exploited faction.

For example, wars, whether worldwide conflicts or mini-wars provoked every decade or so, involve massive expenditures for recruitment and training and much more for costly military equipment. Furthermore, when a particular military conflict is ending and the combatants are withdrawing, much of the winner's military equipment may be left behind in the possession of "allies." Or such equipment may be abandoned if the conflict is being lost. Regardless of exactly why that equipment was lost, its replacement involves a vast expenditure of taxpayers' dollars.

Those who, for each such cycle of conflict, profit, for example, by re-outfitting the military with new equipment and trained personnel, care little whether such remote wars are won or lost. Actually, they may make more profit from military conflicts that are lost, because the equipment replacement tends to be greater in such cases. Politicians usually choose which potential conflicts to pursue, and in some cases appear to be selecting those with the best implications for their personal empowerment. In many cases any constitutional safeguards against undemocratically engaging in wars are rather easily circumvented. Political and financial profiteers may try to manage such situations by creating the appearance that they are leading the defense of "freedom" that cultural seduction has rendered important to nearly everyone regardless of the fact that almost no one can define freedom accurately. The massive general population, effectively seduced by the contrived exploitive culture, tends to exhibit the unity of a very ritualistic and, more importantly, distractive patriotism. Such seduced individuals, if eligible for military service, generally continue pursuing their military enlistments. And with relatively quiet independence, the remainder of the general population continues to shoulder its carefully contrived personal tax burdens thus maintaining the vast flow of accumulating wealth to the voracious exploiters.

The characteristics of uncritical patriotism typically include such practices as conspicuously displaying and exhibiting symbolic respect for the national flag; exuberantly seizing opportunities to recite the national Pledge of Allegiance; affecting a general "my–country– right–or–wrong" attitude; and, in general, exhibiting an uncritical eagerness to serve one's nation, often militarily, for those who are eligible to do so. Patriotism thus amounts to engaging in actions that engender feelings of pride with respect to the prevailing national model —a model designed to fulfill optimally the aspirations of national leaders who often, but not necessarily, are its politicians.

Such cultural seduction promotes uncritical and automatic displays of "patriotic" practices, all of which are publicly touted as signs of allegiance to the national ideals, whatever those are assumed to be. The involved individuals, whether exploitive designers of such systems or merely its victims, may not be capable of engaging in a more critical analyses of what underlies their behavior with expect to "patriotic" issues. We note that such exploitively contrived patriotism may also be exhibited by individuals who seem capable of pursuing a more critical analysis but who fail to do so under the detractions of massive cultural seduction. In general, however, those who exhibit such contrived "patriotism," regardless of the extent of their intellectual readiness to analyze it, tend not to do so under the carefully produced cultural distractions that confront them. Nor do they

tend analytically to determine whether, how, and to what extent they are being exploited via their "patriotism," even when capable of doing so under appropriate stimulation—a further analytical activity rendered ever less probable by the cultural seduction to which they are being subjected.

A militaristic expression of blind patriotism may be encouraged by the offer of educational opportunities that, through economic and political contrivance, are kept otherwise largely unavailable. The affected individuals, under promise of such boosts up the domestic socioeconomic ladder, then behave "patriotically" in whatever ways the more intellectually capable people seem to expect of them. Given their contrived vulnerability to exploitation, their manipulators then specify to them the militaristic nature of, and extent to which, their blind patriotism can come to be expressed. One result of this exploitive approach is that an uncritical militaristic endorsement of the national leaders' political objectives can be executed by an all-volunteer military in which neither the political leaders, their family members, nor their close associates have to become endangered through military service, and rarely do so. However, the occurrence of an exception may be celebrated publicly, but typically in ways that focus on heroism (whatever that is supposed to be) while avoiding attention to the rarity of dangerous military service by such individuals and to the reasons why it is so rare.

The greater the extent and intensity of such seductive cultural influences, the more egregious the exploitation of the uncritical patriots can become, because such cultural seduction tends to render them increasingly easy to manipulate. For example, while the military occasionally fights an arguably righteous war, such as World War II for example, the military forces can just as easily be marshaled to enforce the predilections of capitalists to squelch the socialism that may arise in other countries, especially where such capitalists are striving to gain control of various markets. The unnecessary Vietnamese war, fought and lost by the United States in the 1960s and 1970s with more than 58,000 military fatalities, is a prime example of such an unnecessary war. After a lengthy program of cultural seduction to vilify anyone or any government labelled as "communistic," the Vietnamese war was then widely touted as a war to contain the spread of Chinese "communist" influence. With that kind of culturally seductive preparation, the American public could rather easily be distracted into fearing a Chinese-Vietnamese alliance for the spread of the ill-defined and little understood evil known as communism.

However, the Vietnamese have a very long history of disliking the Chinese and tend to resist any spread of Chinese political influence in their direction. Thus, the success of any kind of Chinese expansive intrusion into Vietnam was unlikely. In the Vietnam war we fought a potential ally against Chinese expansionism—a conflict widely misrepresented to disguise a war actually fought to bolster a puppet government in South Vietnam that was sympathetic to rampant capitalism. An explicit challenge to name a specific "freedom" that American citizens lost as a direct consequences of their country having been defeated in that war tends to go without a significant answer. For many culturally seduced citizens, the most significant implication of the Vietnam War Memorial in Washington, D. C. continues to remain obscured.

Socialism and Government

Communism is a rather extreme version of socialism, and socialism is an economic operation that can be adopted and promoted under any form of governance, including democracy. Consider the United States of America. With occasional minor exceptions, the American people entrust their democratically elected government to control and operate such critically important systems as the postal service, the educational system, the national highway system, the social security system, the right to operate a motor vehicle on public roadways, the recruitment and maintenance of military forces, the criminal justice system, the monetary system, the weather forecasting service, and the preservation of critical natural resources, ... among others. Thus, the United States operates generally in a rather extensive socialistic mode, with all of that on-going socialism ideally occurring under control by a democratically functioning system of governance.

Such democratic socialism tends to be of rather obvious necessity, and traditionally the American citizenry has tended to protect its various governmental expressions of socialism against the continual assaults by organized capitalism. The issue under contention is whether such governmental systems should operate exclusively to provide quality service, or alternatively, to generate a profit, and for whom. Thus, socialism is not without its vulnerabilities, insofar as socialism can operate both under contingencies of service and under contingencies of exploitation. Always lurking just below the surface of such debates is the question of where any profits, especially any potentially huge ones, should go.

Consider that, from a beginning about 250 years ago, the United States government has been in the addictive drug business, protecting the monopoly on nicotine enjoyed by the tobacco industry. With relevant government—enforced health and safety protections withheld, a large percentage of citizens could be encouraged to become nicotine addicts. At the same time, the government treated possession of, and addiction to, any competitive drugs as criminal. Once addicted to nicotine, people could purchase that highly addictive drug merely by paying sales taxes to the government, taxes that reduced the tax burdens on the generally wealthy manipulators of this system. This national drug business evolved rather naturally insofar as its source crop, tobacco, grows vigorously within the borders of this country. In recent years organized efforts to shut down this operation of organized addiction have had to occur amidst lingering government operations that continue to support this mass addiction for profit.

The public openness of this whole operation exposes the manipulative artistry of cultural seduction at its best. A vast segment of the population was culturally seduced into breathing smoke both for fun and for addictive relief, while doing so was killing a substantial fraction of them in a variety of horrible ways, albeit with a naturally occurring time delay that tended to obscure the functionality in what was occurring.

Despite the governmental involvement in that tobacco tragedy, citizens of countries such as the United States may enjoy a wide variety of government-operated systems that provide vital services, all operating as rather pure expressions of socialism. Those citizens can nevertheless be culturally seduced into hating any entity targeted with the adjective form of that term. Thus prepared, those citizens then can rather easily be induced to take up arms against other countries that more openly feature a heavily "socialistic" economic system via their governance. However, socialism and its version called communism are essentially economic systems, and the governance under which they operate can range from the harshest of selfserving dictatorships to unfettered democracies. Note, however, that the cultural seduction being explored here relies on the failure of the exploited "patriots" to dwell upon, or even notice, any such realities.

However, for a socialist tending democracy to thrive, the survival and favorable productivity of its institutional operations relies on the intelligence of voters, not merely on their numbers. Among the nations on this planet only a few national approximations of such intellectual sufficiency can be found—a dearth often attributable to inadequate educational opportunities for members of the voting public. Within the United States, the populations of large regions rather easily fall victim to cultural seduction by exploiters using the misdirection of inadequately educated voters to reach their own self– serving goals.

Only in limited areas of this nation, often small and relatively isolated, do a majority of voters occasionally exhibit sufficient independence for limited escapes from some of the cultural seduction arranged for their exploitation. However, the effectiveness of such uprisings may be muted by what typically amounts to the precise cancellation of large numbers of their potentially rebellious votes through various means that include gerrymandering, the purging of voter rolls to disenfranchise specific subclasses of people, and the manipulation of immigration procedures to prevent numerical increases in certain classes of voters. Convicted felons, upon being rehabilitated and released back into the general population, still may not legally vote. Also, blocks of voters may be disempowered if members of the electoral college can be persuaded to start casting counteractive votes. The result is that a majority at the ballot box may prove either insufficient to win an election or simply unrepresentative of the entire citizenry.

In what passes as a democracy, those who, to further their own advantage, exploit the masses via some form of cultural seduction, often tend conspicuously to tout "democracy" while working surreptitiously to stifle it and suppress the effectiveness of its operations. For that strategy of hidden counter–control to succeed, most of the exploited individuals must continue to presume that they are part of a democracy that functions in accordance with the prevailing myth. As an important aspect of their cultural seduction, such people are frequently exposed to, and involved in, various "patriotic" activities intended to create the impression that they are celebrating their "democracy" and the idealism of its function. To bolster that notion, most such "patriots" are afforded copious reassurances that such is the case.

Obviously, some degree of seductive manipulation of the public may remain necessary if, for example, that public otherwise remains resistant to some unified actions that are necessary for a strong and well functioning nation. Such people require cultural guidance toward behavior that must occur for their own good just as they would require steerage toward other goals that instead serve potentially exploitive manipulators. As might be said, without an understanding of cultural seduction, individuals may not know when to go with the flow and when to resist it, nor how best to do either. The resolution of that conundrum awaits the educational sophistication that would stem from effective culture–wide training in the natural science of human behavior.

Conclusion

Those who steer the public with carefully contrived and exploitive cultural-seduction techniques, upon eventual revelation, may stand exposed as self-serving manipulators. However, unified cultural activity of a kind that cultural manipulators create may be required for mobilizing a relatively unresponsive population behind a righteous defense of credible threats. Democracy may provide each individual with the opportunity to participate, but democracy cannot guarantee that each so enabled person will exercise that privilege in some worthwhile way. Thus, democracy can empower individuals beyond their personal capabilities to behave appropriately and effectively.

That generality inheres, because the social behavior of each individual is driven fundamentally by an intrinsic propensity for self–service, an aspect of individualized character that affects each individual through its evolutionally evolved biological nature. Such a natural innate propensity, if tending to manifest to the detriment of others, can be overcome personally by the offending individual only via intellectually based counter–controls. Such a personal struggle with one's basic–but–unfair nature typically pits a relatively weak intellectuality against evolutionarily strengthened urges to self–serve (often at the expense of targeted others). This raises the question as to whether the general population is, via its fundamental nature, sufficiently prepared to operate as a democracy with fairness to all of its citizens.

Currently, to achieve effective unified action, contemporary human populations, in many cases, seemingly must be controlled via the technique of cultural manipulation. That often seems to be the only way to achieve the unified, timely action that a current threat demands. Simply waiting for each individual to analyze an issue effectively, identify its critical factors, and personally commit to an appropriate reaction could require more time and involvement than a current crisis would allow.

This article has considered some currently familiar examples of cultural seduction, but the list could be continued far beyond those considered herein. So many kinds of cultural seduction can be noted that little of an individual's total operant behavioral repertoire seems to fall outside of their general influence. An individual's becoming alerted to a specific kind of cultural seduction, which may lead to a decrease of its exploitive influence on that particular person, thus tends to leave that individual under the respective and often detrimental influence of various other kinds of cultural seduction.

For a given individual, there may be no complete escape from all forms of cultural manipulation. And perhaps a total avoidance of cultural seduction would represent an unaffordable social isolation. Perhaps a better strategy than a total avoidance of all types of cultural seduction would be for an individual to focus on certain kinds of cultural seduction that are working in identifiable and especially significant ways to the detriment of that individual and perhaps to the subculture in which that person holds membership. This selective approach, however, assumes that that person is sufficiently intelligent and educated to know, in the necessary detail, what is occurring to them in that regard.

The analyses necessary for such an analytical approach require that one ask and answer some relevant questions: Does my wellbeing depend on my yielding to this kind of cultural influence, or should I be resisting it? If this process occurs to my detriment, why is this process being masked as normalcy or treated as if appropriate? Who profits? How do they profit? Am I being used for their gain to my detriment, or do I gain too, albeit perhaps in a different way? Does my yielding to a particular form of cultural seduction result in damages with intolerable or undesirable implications for me? ... Or for others? Given an instance of cultural influence, while the goals of those involved may differ, are everyone's goals righteous? Is there a better or fairer way to attain relevant worthy objectives? Is fundamental equality being respected sufficiently? What happens to me if I conform to a particular kind of culture seduction, and what happens to me if I do not conform? What, if any, adverse implications may inhere in my working to restructure or rearrange the contingencies that currently drive an objectionable kind of cultural seduction?

Dealing effectively with situations that subject one to adverse cultural seduction can be extremely difficult, especially if one must operate without the specific skills provided by a relevant basic natural science of behavior. Unless the independently organized natural science of behaviorology is rapidly incorporated into the educational curriculum of the general public, most people will be left to struggle only intuitively against whatever disadvantageous influences their cultures may be imposing. Peoples' common resort to mere intuitive avoidances of such scams can be unreliable: If or when such intuitive reliances do occur, they may tend to provide insufficient escapes from, or avoidance of, the ravages of the adverse cultural seductions that can be influencing so much of people's lives. After all, cultural seduction, unlike coercion, implies keeping the victim undisturbed by, and perhaps even complicit in, whatever is operating to their disadvantage. Without a greater behaviorrelated sophistication, people will remain easy prey for skilled exploiters who, for their own benefit, pursue the posturing of their prey for exploitation, while keeping the prey in a state of relaxed acceptance. Given the current state of the citizenry, such exploitive approaches tend to remain easier and less costly than are more detailed persuasive arguments that tend to characterize more righteous and/or fair kinds of persuasion.

With proper training, most people could act to distance themselves from adverse, culturally imposed, seduction. Just as a single elementary course in chemistry leaves one much less susceptible to foolish and wasteful indulgences in the putative magic of potions, or an elementary physics course leaves one effectively resistant to the notion that lightening bolts represent the wrath of an angered deity, a single elementary course in behaviorology leaves one much more resistant to a wide variety of potentially detrimental, culturally endorsed, urges: Should I kill for fun simply because doing so expresses an outmoded element of my inherent nature? Upon reaching the limits of my personal capacity to account for some occurring event, can I depend on the assistance of a conjured deity? In what ways may I be damaged by a modern academic institution's way of addressing my educational needs, given that the offered curriculum is presented within an organizational framework contrived to respect the norms of the culture that supports that institution? To what extent is my national allegiance being cultivated to celebrate my expenditure in service to the self–serving interests of exploiters? And the list goes on...

Contemporary human culture is embroiled in the adverse consequences of the prolonged mismanagement of its natural scientific foundations, especially its neglect of one critical natural science. In the United States the current cultural fester from that fundamental mismanagement has left a substantial majority of citizens bogged in a cultural mess—a predicament exacerbated and perpetuated by a democratic governance for which its citizens are inadequately prepared. Democracy merely empowers the majority. But the empowerment of a population, culturally seduced into incompetence, can be a recipe for cultural disaster.

Given a population that is too poorly educated to operate a democracy to its collective advantage, abandoning democracy may appear, invalidly, as the easiest fix. However, finally getting around to a substantial overhaul and improvement of the educational system is where a doable potential fix is to be found. Consider two familiar alternatives for the salvation of such a malfunctioning culture: (a) Dictatorship by a person deemed to be "of really good character," and who will remain "good," even as that leader's cost of shifting from service toward personal profiteering erodes toward insignificance, and (b) the general education of the citizenry until, individually, a substantial majority of citizens is prepared to participate productively in a shared democracy. The dictatorial option is quick, usually rather easily installed, and relatively inexpensive to undertake. However, opportunities for counter-control on a dictator's bad behavior are subject to rather quick erosion, which allows for an unopposed increase of greedy activity at the expense of the citizenry. Such greed expresses the intrinsic, biological nature of any individual, and hence tends to intrude, often soon and easily. On the other hand, the general education option, with its multiplicity of contributing variables, presents a time-consuming, endlessly difficult, and very costly option, the success of which relies on the behaviorological sophistication of the supportive population.

Such considerations focus attention on the prevailing educational system. Currently, the training of educators,

as professionals who will pursue careers as teachers and other educational leaders, includes little or no formal training in the basic science that ultimately should inform most of their professional activity. Note, too, that educators can neither teach nor promote that of which they remain unaware.

The training of future educators would have to be redesigned. The scope of the necessary overhaul can be suggested if one imagines individuals preparing to work as astronomers absent even an introduction to physics and with no cluster of educators prepared to teach physics to them. Reliance on mere intuition for one's behavioral expertise is no more appropriate than would be a reliance on intuition to replace training in physics. The validity of behaviorological fundamentals, once they have been taught, may tend to be self–evident, readily verifiable, and, in general, readily applicable, So how best do we confront the cultural damage from centuries of neglect of what, arguably, may be our most important natural science?

As a practical matter, perhaps the impetus for change must be from the top downward on the professional ladder: Thus, the starting point would probably be within the natural-science college of a single universitythe organization of a new natural-science department that produces behaviorologically trained faculty members for positions of influence and leadership, especially in various contemporary educational programs-students who will go on to excel by applying their training in ways that come, ultimately, to affect all aspects of formal education. The ultimate goal would be that all citizens, through their formal schooling, would get some training in behaviorology. Those students who proceed to specialize in a behavior-related field could get a lot of such specialized training. The intensifying demand for the skills of behaviorologically trained students would pressure other institutions similarly to initiate or enlarge their natural-science training options to include behavior. Concurrently, a strong professional organization, operating independently of any particular institution of higher learning, would work to promote and preserve the intellectual and professional integrity of the field.

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- (See the BOOKS page at www.behaviorology.orgwhich does not sell books—for a full description and current sources for many of these books. Also see the JOURNAL page at this website for free access to articles in *Behaviorology Today* and *Journal of Behaviorology.*)

Editorial Review Board & Guest Reviewers for This Issue

Editorial Review Board members:

¾ [All TIBI Board members; see the last page]

Guest Reviews:

₩ Dr. Matthew Lewon

₩ Mr. Michael Shuler

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Stay informed by visiting the TIBI web site regularly (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* PDF 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 numerous behaviorology texts and study-question books, TIBI's certificate programs, course syllabi, and links to some other helpful related websites. Explore! **6**/9

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.

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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: Bruce Hamm, M.A., MLBC, BCBA Editor, *Journal of Behaviorology* 2171 Wellington Crescent Richmond BC V7B 1G9 CANADA E-mail: brucehamm@me.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 aspect 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 and 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), (b) should use the standard style exemplified by papers in past issues of the journal (as TIBI is uncommitted to any particular, formal "style"), and (c) should come from a Word-format document 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 pieceincluding 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 two lists of TIBI's current course syllabi. These lists show where to find the most up-to-date versions of these syllabi in number, title, and content. The first list organizes the syllabi by numerical course number. The second list organizes the syllabi by the chronological volume, number, and pages where you can find each course syllabus.

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

Current Syllabi by Course Number

BEHG 100: Child Rearing Principles and Practices; Volume 19, Number 2 (Fall 2016) 3–5. BEHG 110: Introduction to Behaviorology Terminology; Volume 20, Number 1 (Spring, 2017) 19–21. BEHG 210: Introduction to Behaviorology I; Volume 19, Number 2 (Fall 2016) 6–8. BEHG 211: Introduction to Behaviorology II; Volume 19, Number 2 (Fall 2016) 9–12. венд 330: Companion Animal Training; Volume 19, Number 2 (Fall 2016) 13–15. BEHG 340: Introduction to Verbal Behavior; Volume 19, Number 2 (Fall 2016) 16–18. BEHG 350: Behaviorology Philosophy and History; Volume 20, Number 1 (Spring, 2017) 22–24. BEHG 405: Basic Autism Intervention Methods; Volume 19, Number 2 (Fall 2016) 19–21. венG 425: Classroom Management and Preventing School Violence; Volume 19, Number 2 (Fall 2016) 22–24. BEHG 430: Resolving Problem Animal Behavior; Volume 20, Number 1 (Spring, 2017) 25–28. венд 435: Performance Management and Preventing Workplace Violence; Volume 19, Number 2 (Fall 2016) 25–27. BEHG 455: Behaviorological Thanatology and Dignified Dying; Volume 19, Number 2 (Fall 2016) 28–31. BEHG 465: Behaviorological Rehabilitation; Volume 19, Number 2 (Fall 2016) 32–34.

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

Current Syllabi by Volume & Number

BEHG 100: Child Rearing Principles and Practices; Volume 19, Number 2 (Fall 2016) 3–5. BEHG 210: Introduction to Behaviorology I; Volume 19, Number 2 (Fall 2016) 6-8. BEHG 211: Introduction to Behaviorology II; Volume 19, Number 2 (Fall 2016) 9–12. венс 330: Companion Animal Training; Volume 19, Number 2 (Fall 2016) 13–15. BEHG 340: Introduction to Verbal Behavior; Volume 19, Number 2 (Fall 2016) 16–18. BEHG 405: Basic Autism Intervention Methods; Volume 19, Number 2 (Fall 2016) 19–21. венс 425: Classroom Management and Preventing School Violence; Volume 19, Number 2 (Fall 2016) 22–24. венд 435: Performance Management and Preventing Workplace Violence; Volume 19, Number 2 (Fall 2016) 25–27. BEHG 455: Behaviorological Thanatology and Dignified Dying; Volume 19, Number 2 (Fall 2016) 28–31. BEHG 465: Behaviorological Rehabilitation; Volume 19, Number 2 (Fall 2016) 32–34. BEHG 512: Advanced Behaviorology I; Volume 19, Number 2 (Fall 2016) 35–37. венс 513: Advanced Behaviorology II; Volume 19, Number 2 (Fall 2016) 38–40. BEHG 541: Advanced Verbal Behavior; Volume 19, Number 2 (Fall 2016) 41–43. BEHG IIO: Introduction to Behaviorology Terminology; Volume 20, Number 1 (Spring, 2017) 19–21. BEHG 350: Behaviorology Philosophy and History; Volume 20, Number 1 (Spring, 2017) 22–24. BEHG 430: Resolving Problem Animal Behavior; Volume 20, Number 1 (Spring, 2017) 25–28. BEHG 480: Green Contingency Engineering; Volume 20, Number 1 (Spring, 2017) 29-31. C3

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

TIBIA Membership Costs & Criteria & Benefits

The intrinsic value of TIBIA membership rests on giving the member status as a contributing part of an organization helping to extend and disseminate the findings and applications of the natural science of behavior, behaviorology, for the benefit of humanity. The levels of TIBIA membership include one "free" level and four paid levels, which have increasing amounts of basic benefits. The four annual paid membership levels are Student, Affiliate, Associate, and Advocate. The Student and Affiliate are non-voting categories, and the Associate and Advocate are voting categories. All new members are admitted provisionally to TIBIA at the appropriate membership level. Advocate members consider each provisional member and then vote on whether to elect each provisional member to the full status of her or his membership level or to accept the provisional member at a different membership level. Here are all the membership levels and their criteria and basic benefits (with dues details under TIBIA Membership Cost Details on the application–form page):

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

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

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

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

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

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

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

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

Affiliate	The lesser of 0.2% of
member	annual income, or \$40.00
Associate	The lesser of 0.3% of
member	annual income, or \$60.oo
Advocate	The lesser of 0.4% of
member	annual income, or \$80.oo

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	i Form		
(For contributions, a form ensures acknowledgement but is not required.)				
Copy and complete this form (please type or print)— <i>for membership, contributions, back issues, or subscriptions</i> —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 affi	liate membership. **	*Back issues: Us\$20 each		
***For Student Membership: I verify that the above person is enrolled as a stude	nt at:			
Name & Signature of advisor or Dept. Chair:				

TIBI/TIBIA Purposes*

 $\mathcal{T}_{\text{IBI},\text{ as a non-profit educational corporation, is}}$ dedicated to many concerns. TIBI is dedicated to teaching behaviorology, especially to those who do not have university behaviorology departments or programs available to them. TIBI is also dedicated to expanding and disseminating the behaviorological literature at least through the fully peer-reviewed Journal of Behaviorology (originally called TIBI News Time and then Behaviorology *Today*) with editors being appointed by the TIBI Board of Directors, usually from among the TIBIA Advocate members. TIBI is a professional organization also dedicated to organizing behaviorological scientists and practitioners into an association (The International Behaviorology Institute Association—TIBIA) so they can engage in coordinated activities that carry out the purposes of TIBI/TIBIA. These activities include (a) encouraging and assisting members to host visiting scholars who are studying behaviorology as well as holding conventions and conferences; (b) enabling TIBI faculty to arrange or provide training for behaviorology students; and (c) providing TIBI certificates to students who successfully complete specified behaviorology curriculum requirements). And TIBI is a professional organization dedicated to representing and developing the philosophical, conceptual, analytical, experimental, and technological components of the discipline of behaviorology, the comprehensive natural science discipline of the functional relations between behavior and independent variables including determinants from the environment, both socio-cultural and physical, as well as determinants from the biological history of the species. Therefore, recognizing that behaviorology's principles and contributions are generally relevant to all cultures and species, the purposes of TIBI and TIBIA are:

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

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

*Adapted from the 2017–updated TIBI Bylaws. 🕫

Another Free–Access Behaviorology Website

Due to pandemic-related delays, by the middle of 2022, behaviorologists, friends, and everyone may finally be able to access freely another behavior-related website, <u>www.BehaviorInfo.com</u>. Primarily, and initially, this website features Stephen Ledoux's sets of newspaper columns about behaviorology so that more people can gain additional familiarity with this natural science. Humanity needs this, because human behavior causes global problems and changes in human behavior help solve these problems. The first set of columns, on basics, leads into the second set, on scientific answers to ancient human questions (e.g., on values, rights, ethics, morals, language, consciousness, personhood, life, death, reality, and even evolutions and robotics). Then may come columns by other authors. (Interested in writing some? Contact Ledoux at ledoux@canton.edu.)



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

TIBI BOARD-MEMBER CONTACT INFO:

Traci Cihon, Ph.D., DLBC, BCBA–Đ Dept. of Behavior Analysis, UNT Denton TX traci.cihon@unt.edu

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

John B. Ferreira, Ph.D., DLBC, LPC Ess–Plus Behaviorological Counseling (Retired) Mattapoisett MA jbf721@aol.com

Lawrence E. Fraley, Ed.D., DLBC Professor (Retired) West Virginia University at Morgantown Ifraley@citlink.net Bruce Hamm, M.A., MLBC, BCBA (JoB Editor) Director, Blackbird Academy of Childhood Education Vancouver BC brucehamm@me.com

Stephen F. Ledoux, Ph.D., DLBC (JoB Co–Managing Ed.) Professor Emeritus, SUNY–Canton ledoux@canton.edu

Werner Matthijs, M.A., MLBC Team Coördinator van de Toegepaste Gedragsologie Universitair Psychiatrisch Centrum Sint Kamillus, Bierbeek Belgium (Retired) werner-matthijs@hotmail.com

James O'Heare, DLBC (TIBI Board Chair) Companion Animal Sciences Institute jamesoheare@gmail.com

Katie Rinald, M.A., BCBA, MLBC Blackbird Academy of Childhood Education Vancouver BC katierinald@gmail.com

