

IS B. F. SKINNER’S RADICAL BEHAVIORISM A SECULAR HUMANIST PHILOSOPHY?

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Abstract: A philosophical tradition characterized by the praising of rationality, science, and critical thinking, secular humanism also consists in a cultural movement that opposes the resort to religious, ideological dogmas, pseudoscientific practices, and superstitions as criteria for morality and decision-making processes. Historically, different manifestos and declarations emerged as iconic expressions of such movement, one of the most important being the 1980 Secular Humanist Declaration. Taking as its starting point a controversy involving the presence of B. F. Skinner among the countersigners of the declaration, this piece examines the extent to which radical behaviorism could be considered a secular humanist philosophy. To this end, the ten tenets set out in the Secular Humanist Declaration are presented and evaluated in terms of their affinities or divergences in relation to Skinner’s stances expressed throughout his philosophical work. Finally, we evaluate how radical behaviorism could feasibly contribute to a secular humanist agenda, by providing more effective ways for the accomplishment of secular humanist values.

Keywords: Secular humanism. Radical behaviorism. B. F. Skinner. Values.

An important milestone in the contemporary humanist movement, *A secular humanist declaration* (Kurtz, 1980), conceived by the *Council for Democratic and Secular Humanism* (now the *Council for Secular Humanism*), completed four decades in 2020. Published in the inaugural issue of *Free Inquiry*, a journal founded to disseminate the ideals of secular humanism, it was signed by several scholars, scientists, artists, and politicians—all vocal, influential personalities in the public sphere. Isaac Asimov, Francis Crick, Albert Ellis, Sidney Hook, Ernest Nagel, A. J. Ayer, Barbara Wootton, Paul Kurtz (responsible for the declaration’s original draft), W. V. Quine, Shulamit Aloni, and B. F. Skinner were some among the notable subscribers.

The absence of one name drew attention immediately, but even more so when the motives involved were made public. Sir Karl Popper, possibly the most influential philosopher of science in the twentieth century and an icon of the rationalist movement, refused to sign the document. In a letter published in the following issue of *Free Inquiry*, he detailed two reasons for such refusal. One of them related to the tone of the manifesto: Popper (1981) was disappointed with the lack of emphasis on the value of intellectual modesty, which he considered to be “the first duty of all intellectuals” (p. 3). The biggest controversy, however, had to do with the other reason for Popper’s absence: Skinner’s presence.

Popper (1981) noted that he could not subscribe to a document already endorsed by an “enemy of freedom and democracy” (p. 3) and proponent of a “behaviorist dictatorship” (p. 3). Mentioning two works by Skinner, *Walden Two* (Skinner, 1948/2005) and *Beyond Freedom and Dignity* (Skinner, 1971/1973), he assessed that “there is a mixture of naiveté, sheer ignorance, arrogation of omniscience, and Caesarean megalomania in these books, which is, in my opinion, far more urgent to combat than the churches” (Popper, 1981, p. 3). Moreover, Popper (1981) stated that he doubted the proponents of the declaration had effectively read Skinner’s work, otherwise they would not have invited him.

In response to that, Skinner (1981) defended himself by stating that he was not an enemy of “the feeling of freedom,” nor an enemy of democracy: “I have *criticized* democracy, but is that not the first duty of those who love it?” (p. 3). He argued that his stance simply results from a perspective on human

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beings grounded in discoveries from the biological and behavioral sciences—a viewpoint strange to mainstream Western political philosophy. He also acknowledged that “those who call themselves humanists are likely to be more comfortable with Popper’s ‘open society’ than with a behaviorist’s version of a better world. I have had doubts about my position as a humanist for the same reasons” (p. 3). Skinner noted, however, that it would be shameful if efforts to solve human problems were mitigated by primitive notions, contrary to (what he considered to be) a scientific perspective on human nature.

Taking the Popper-Skinner quarrel as a starting point, the aim of this piece is to discuss the extent to which Skinner’s radical behaviorism could or could not be considered a secular humanist philosophy. To achieve such an aim, we took the following methodological steps: (1) we presented each of the tenets originally listed in *A Secular Humanist Declaration* (SHD, from now on); (2) next, we presented some of Skinner’s stances and statements on these matters; (3) then, we identified the extent to which they are aligned or divergent. Finally, we assess the potential of radical behaviorism to participate in contemporary philosophical debates involving themes and topics dear to secular humanists.

The 10 tenets of SHD – and their relation to Skinner’s viewpoints

1) Free inquiry

The opening tenet of SHD is the ideal of free inquiry: secular humanists commit to the freedom of individuals to hold their own beliefs and opinions and to state them publicly, free from censorship of any kind. The declaration establishes an opposition between secularism and orthodoxy by pointing out that the policy of thought once carried out by religion was then being performed by sectarian political ideologies. As in past days Catholic inquisition used to judge and convict heretics, governments and political parties then turned to the same *modus operandi*, demanding conformity and silencing dissent².

Given their advocacy for free inquiry, secular humanists are up-front opponents of censorship of any kind. For them, “free inquiry requires that we tolerate diversity of opinion and that we respect the right of individuals to express their beliefs, however unpopular they may be, without social or legal prohibition or fear of sanctions” (Kurtz, 1980, p. 4). At the root of this plea lies an epistemic assumption: that the search for truth depends on an environment able to accommodate viewpoint diversity—

The guiding premise of those who believe in free inquiry is that truth is more likely to be discovered if the opportunity exists for the free exchange of opposing opinions; the process of interchange is frequently as important as the result. (Kurtz, 1980, p. 4)

Several statements by Skinner demonstrate that he seems to be well-aligned with this first tenet. For instance, the opening chapter of *Science and Human Behavior* (Skinner, 1953/2005) presents the Skinnerian perspective on how science works. Perhaps one of the most exemplary statements is the one in which science is defined as a “set of attitudes.” Among these attitudes there must be the one to reject arguments based on authority—as was common in Scholasticism. Scientists’ commitment to facts, so celebrated by Skinner (1953/2005), may be interpreted as a commitment to free inquiry, given that the very logic of discovery (of facts) demands an environment in which scientific inquiry runs freely from authorities’ arbitrariness:

Science is first of all a set of attitudes. It is a disposition to deal with the facts rather than with what someone has said about them. Rejection of authority was the theme of the revival of learning, when men dedicated themselves to the study of “nature, not books.” *Science rejects even its own authorities when they interfere with the observation of nature.*

Science is a willingness to accept facts even when they are opposed to wishes. (p. 12, italics added)

Despite that, there are aspects of Skinner’s work—particularly in his novel, *Walden Two*, that may justify suspicion over his commitment to free inquiry. It is by the words of Frazier, the founder of Walden Two and sort of Skinner’s *alter ego* according to himself (Skinner, 1984), that the reader come

² The so-called “Lysenko affair” in soviet Russia may be one of the most dramatic examples of such concern in the history of modern science – see Joravsky (1962) for a detailed account.

to know the community's rules. Among them there is one that forbids any member to argue with their fellows in case of disagreement with any of the rules in Walden Two's code (Skinner, 1948/2005, p. 152). Besides this, the privileges assigned to the board of experts that rules Walden Two may sometimes seem at odds with a plain commitment with free inquiry. To guarantee their position, experts could go so far as to *falsify research* data and *lie* about what is actually known:

The people are in no position to evaluate experts. And elected experts are never able to act as they think best. They can't experiment. The amateur doesn't appreciate the need for experimentation. He wants his expert to know. And he's utterly incapable of sustaining the period of doubt during which an experiment works itself out. The experts *must* either *disguise their experiments* and *pretend to know the outcome in advance* or *stop experimenting altogether* and *struggle to maintain the status quo*. (Skinner, 1948/2005, p. 251, italics added)

This Skinnerian stance suggests that, under certain conditions, free inquiry could be subjugated to other values, which seems to occur mainly when it is in opposition to values prioritized by him—such as experimentation or “cultural survival” (Brunkow & Dittrich, 2021).

2) Separation of church and state

The second tenet of SHD refers to two powerful institutions ruling society to this day: church and state. As part of their rejection over religious authority and their commitment to a rationalist approach on human affairs, secular humanists reject attempts to establish religion as a moral guide to society at large. In fact, the crucial protest of the second tenet had to do not only with religion, but also ideology: from a secular humanist perspective, the main problem rests upon attempts to establish *one single* religion (or ideology) as a unique source for decision-making processes.

In other words, this stance of secular humanism implies the commitment to a *pluralistic* worldview, in which several viewpoints (religious, ideological) could peacefully coexist and dispute their share of influence over lawmaking:

The lessons of history are clear: wherever one religion or ideology is established and given a dominant position in the state, minority opinions are in jeopardy. A pluralistic, open democratic society allows all points of view to be heard. Any effort to impose an exclusive conception of Truth, Piety, Virtue, or Justice upon the whole of society is a violation of free inquiry. Clerical authorities should not be permitted to legislate their own parochial views—whether moral, philosophical, political, educational, or social—for the rest of society. (Kurtz, 1980, p. 4)

Skinner may seem aligned with this second principle of SHD if one considers his claims against governmental and religious practices aimed at crushing diversity, as well as his claims for the importance of designing diversity. When discussing the power exerted by the main controlling agencies of human behavior, Skinner (1953/2005) noted (and criticized) religion's overlaps with governmental acts: “Religious agencies are likely to favor censorship of movies, plays, and books, the enforcement of laws governing modesty of dress, the prohibition of the sale of alcoholic beverages, and so on, because these measures reduce occasions for sinful behavior.” (p. 354).

Moreover, from a Skinnerian perspective, concentration of power by government and religion “usually” implies less diversity: “The codes of governments and religions are usually quite explicit and allow little room for diversity or change. The only hope is planned diversification, in which the importance of variety is recognized” (p. 159). It is worthwhile to note that Skinner was more skeptical than his fellow subscribers of SHD over liberal democracy as a model of society that could allow such diversity—for him, only a scientifically managed community could truly achieve this aim. In fact, Skinner's stance on the priority of experimentation as a guiding principle of Walden Two (Skinner, 1948/2005) may be interpreted as one dimension of his claim for *planned diversification*, textually expressed only years later in his work (Skinner, 1971/1973).

3) The ideal of freedom

The third tenet of SHD involves personal freedom as an ideal to be praised and valued. Not only freedom of thought and inquiry, as well as freedom from religious coercion (expressed in the first and second tenets), but also freedom from constraints on several other realms of life. SHD's third tenet

espouses the notion of freedom most commonly held in liberal democratic societies, which encompasses their viewpoint regarding economic freedom:

As democratic secularists, we consistently defend the ideal of freedom, not only freedom of conscience and belief from those ecclesiastical, political, and economic interests that seek to repress them, but genuine political liberty, democratic decision-making based upon majority rule, and respect for minority rights and the rule of law. We stand not only for freedom from religious control but for freedom from jingoistic government control as well. We are for the defense of basic human rights, including the right to protect life, liberty, and the pursuit of happiness. In our view, a free society should also encourage some measure of economic freedom, subject only to such restrictions as are necessary in the public interest. This means that individuals and groups should be able to compete in the marketplace, organize free trade unions, and carry on their occupations and careers without undue interference by centralized political control. The right to private property is a human right without which other rights are nugatory. (Kurtz, 1980, p. 4)

This is perhaps the tenet to which Skinner's positions seem less aligned, or ambiguous at least. For instance, considering his critique of traditional concepts of freedom and dignity, and their worship in Western cultures (Skinner, 1971/1973; 1986), it makes one wonder what would have led Skinner to endorse a declaration so blatantly committed to such values. A possible explanation for this may be that Skinner's critical assessment of freedom, dignity, and other values commonly exalted by secular humanism by no means imply an attempt to diminish their historical relevance. In fact, Skinner's take on such values indicates that their main problem is that they simply were *not enough* to establish the good life they promised to provide—which explains the choice of “beyond” instead of “against” or “down with” in the title of Skinner's 1971 book.

That is, Skinner's critique on ideals such as freedom and dignity may be seen not as a protest to abolish them, but an attempt to shed light on the environmental conditions that breed them and, consequently, take them *beyond* their ordinary meaning. When stating that “perhaps there is no part of the world in which everyone enjoys the rights to security and access to goods, but the Western democracies have gone farthest in that direction. In many ways they may have gone too far” (p. 570), Skinner (1986) simultaneously recognizes the importance of Western values *and* makes an alert on the problems involved in an uncritical devotion to them.

Still, the differences between the libertarian leaning of SHD and some of Skinner's other stances are evident. For example, SHD's claim on the importance of private property, as well as its critique of centralized government, are diametrically opposed to practices depicted in Skinner's utopian fantasy. In *Walden Two* not only there was no right to property ownership, but the government was entirely centralized by a board of experts (planners and managers) in charge of making all of the more crucial decisions on the community's fate. These features of the book are probably among those that made it be so badly conceived by other secular humanists, such as Popper.

Nevertheless, the incompatibility between a fully planned society like *Walden Two* and democratic societies does not necessarily mean, as it might seem at first sight, an opposition to freedom as a principle. What may be in conflict is the *means* of achieving it. In a Skinnerian, radical behaviorist perspective, behavioral control occurs pervasively, at all times. Thus, freedom is conceived as a byproduct more than a virtue in its traditional meaning (Skinner, 1971/1973). That way, cultural design is understood as the proper means for elucidating and manipulating controlling variables in ways that increase not only feelings of freedom, but also possibilities for people to control their own behavior.

4) Ethics based on critical intelligence

The fourth tenet of SHD concerns ethics: from a secular humanist viewpoint, ethical behavior must not be dictated by supernatural authority, but instead informed by the reasoning of free-agents, accountable individuals. Arising from a naturalistic approach, secular ethics is a matter of establishing common standards of acceptable and unacceptable practices, as well as forms to fairly adjudicate interpersonal conflicts by means of compromise and pacific deliberation. That way, it is mundane, earthly ethics, as opposed to religious ethics, which look for metaphysical foundations of “good” and “bad,” acceptable and unacceptable practices.

Such a stance implies that SHD is at odds with absolutist morals since there is no supernatural resource to inform us on our proper duties and deeds. Yet, that does not mean a commitment to

relativism nor subjectivism: even though secular humanists reject absolutism, their well-established rationalism lead to a stance that assumes that it is as possible as desired to achieve objective moral standards:

Morality that is not God-based need not be antisocial, subjective, or promiscuous, nor need it lead to the breakdown of moral standards. Although we believe in tolerating diverse lifestyles and social manners, we do not think they are immune to criticism. Nor do we believe that any one church should impose its views of moral virtue and sin, sexual conduct, marriage, divorce, birth control, or abortion, or legislate them for the rest of society.

As secular humanists we believe in the central importance of the value of human happiness here and now. We are opposed to Absolutist morality, yet we maintain that objective standards emerge, and ethical values and principles may be discovered, in the course of ethical deliberation. (Kurtz, 1980, p. 5)

SHD's leaning towards objectivism and realism—as expressed, respectively, in the assumptions that objective standards can be reached, and that ethical values and principles must be “discovered”—may seem objectionable for behaviorists that adhere to a pragmatic interpretation of their philosophy. The contextualism inherent to pragmatists' worldview leads to a replacement of the metaphors about “discovery” for metaphors about “creation.” From this perspective, ethical behavior should not be evaluated by comparison to any objective standard, nor values to be rationally discovered. Instead, pragmatic behaviorists think about ethics as a matter of (re-)describing “reality” to create ways of being (and behaving) that produce happiness as well as avoid pain and humiliation (Rocha & Dittrich, 2021).

Aligned with pragmatism, Skinner argued that ethical behavior occurred long before the human species was able to rationalize and verbally state critical judgments (see Dittrich, 2016). Ethical decisions are taken at every action that becomes more or less frequent in the behavioral repertoire. Fundamentally, these decisions are not to be rooted on a rationalist milestone: on the contrary, they rely on a sentimentalist one—or, as Rorty (1998) wrote, “most of the work of changing moral intuitions is being done by manipulating our feelings rather than by increasing our knowledge” (p. 172).

Nonetheless, the development of language and cognitive abilities made it possible to rationally assess values in a very contextual sense. As humans experience contingencies of reinforcement, they may critically analyze them, change them, and eventually create them. The science of behavior itself emerges as a means for a reasonable quest for values in a deliberate way (Skinner, 1971/1973). Thence, there seem to be agreements between SHD's fourth tenet and Skinnerian philosophy. In line with the declaration, Skinner (1948/2005; 1968; 1971/1973) also rejected the appeal to imposed, absolute ethical principles, as well as praised the importance of human happiness for an ethical life. As for the former, Skinner (1971/1973) noted that:

We say that there is something ‘morally wrong’ about a totalitarian state, a gambling enterprise, uncontrolled piecework wages, the sale of harmful drugs, or undue personal influence, *not because of any absolute set of values*, but because all these things have aversive consequences. The consequences are deferred, and a science that clarifies their relation to behavior is in the best possible position to specify a better world in an ethical or moral sense. (pp. 170-171, italics added)

As for the importance of happiness, Skinner's *Walden Two* is exemplary of its centrality as a value in cultural design—“Happiness is our first goal” (Skinner, 1948/2005, p. 194). Indeed, this aspect of Skinner's thinking was the source for theoretical analyses that identify it as solidary to philosophical hedonism in the Epicurean tradition (e.g., Neuringer & Englert, 2017).

But despite his alignment with hedonism and his refrain to defend specific sets of values, Skinner (1971/1973) also indicates the physical survival of members of the culture as a hierarchically superior value. The practices of any given culture conform to certain ethical standards to the extent that people access reinforcers for doing them. The result of these practices, however, has other long-term effects related to the survival of the members of that culture (Brunkow & Dittrich, 2021) “and whether we like it or not, survival is the ultimate criterion.” (Skinner, 1959/1972, p. 36). This value would not be chosen in the face of any rational criteria: cultures that did not produce their own survival as a valued goal would not, consequently, transmit their cultural practices, thus being susceptible (if not fated) to fade away:

‘Why should I care whether my way of life survives or contributes to the way of life of the future?’ An honest answer would seem to be, ‘There is no good reason, but if your culture has not convinced you that there is, so much the worse for your culture.’ (Skinner, 1969, p. 40)

That way, under specific conditions, Skinnerian ethics implies (in a stance somehow at odds with SHD’s) that cultural survival may overcome happiness: “There are circumstances under which a group is more likely to survive if it is not happy . . .” (Skinner, 1953/2005, p. 432).

5) Moral education

The fifth tenet of SHD is presented as follows:

We believe that moral development should be cultivated in children and young adults. We do not believe that any particular sect can claim important values as their exclusive property; hence it is the duty of public education to deal with these values. Accordingly, we support moral education in the schools that is designed to develop an appreciation for moral virtues, intelligence, and the building of character. We wish to encourage wherever possible the growth of moral awareness and the capacity for free choice and an understanding of the consequences thereof. (Kurtz, 1980, p. 5)

A consequence of the secular approach to moral education is that secular humanists do not believe it is moral to submit infants—or any other individuals considered unable to consent—to religious sacraments, such as Catholic baptism. In their pursuit of improving moral beings, secularists refrain from paranormal guidance, relying on the development of individual agency as a means through which each one must become competent to rationally evaluate alternative courses of action and the consequences to which they lead. That way, “. . . secular humanism is not so much a specific morality as it is a method for the explanation and discovery of rational moral principles” (Kurtz, 1980, p. 5).

In this tenet, a specific point of divergence from Skinnerian philosophy involves freedom of choice. SHD proposes that individuals create their own sense of morality from reasoning and exposure to different moral standards. Behaviorists, for their part, consider that controlling variables are ubiquitous—individuals are never strictly free from their influence. So, for instance, even if a child is not baptized, it may still undergo influence of its family religious culture. Given that this sort of control almost invariably occurs, Skinner (1953/2005) points to *countercontrol* as a strategy to which individuals could resort to when controlling agencies exceeds their limits. Such limits can be either “outward”—as when one moral rule opposes another (e.g., conflict between religious and educational instructions on sexuality)—or “inward,” as when the agency’s rules bump into personal boundaries (e.g., a family moral rule with very aversive consequences for the individual). Countercontrol, it must be noted, may occur in several ways: the person under control can “simply leave the sphere of control of the agency, he may question the reality of the claimed contingencies, he may attack the agency by establishing a rival agency” (Skinner, 1953/2005, p. 358).

Therefore, except for this caveat, this is a tenet to which Skinner seems predominantly aligned. When discussing the role of culture in transmitting moral principles, Skinner (1978) emphatically argued that this must be a planned, deliberate process, in a way to which most secular humanists would probably agree:

Sooner or later a discussion of the goals of education turns to ethics and morals, and it is precisely here that the appeal to a natural process of growth is most damaging. That part of a culture which unquestionably demands transmission is its ethical and moral practices. People are not ethical or moral by nature, nor do they simply grow ethical or moral. It is the ethical and moral sanctions maintained by other members of a group which induce them to behave in ethical and moral ways. *To leave ethical and moral behavior to the natural endowment of the individual and a natural process of growth is to promote ethical and moral chaos.* We must accept that a culture imposes its ethical and moral standards upon its members. It can do nothing else. (p. 158, italics added)

6) Religious skepticism

Secular humanists are skeptical of religious faith in redemption: “They reject the idea that God has intervened miraculously in history or revealed himself to a chosen few, or that he can save or redeem sinners” (Kurtz, 1980, p. 5). Supernatural eyesight, “revelations,” apparitions of God and other deities are evaluated as either “meaningless,” “not yet demonstrated to be true,” or “tyrannically exploitative” (Kurtz, 1980, p. 5). In general, secularists doubt “paranormal” explanations of all kinds: given that the universe is conceived as a context of dynamic interaction of natural forces, they argue that the best method to examine it is by the means of scientific inquiry. Despite this, there is no conflict with religious experience *per se*; problems arise only when factual claims are founded in supernatural beliefs:

As secular humanists, we are generally skeptical about supernatural claims. We recognize the importance of religious experience: that experience that redirects and gives meaning to the lives of human beings. We deny, however, that such experiences have anything to do with the supernatural. (Kurtz, 1980, p.5)

In addition to the matter of faith, SHD also address the role of religion as an institutionalized social system. The declaration states that “religions have made negative as well as positive contributions toward the development of human civilization” (Kurtz, 1980, p.5). On the brighter side, religions aided in providing help to the neediest, by building schools, hospitals, and charity initiatives. Moreover, they provide relief and consolation for many in the face of existential concerns via the promise of divine grace and eternal life. On their negative side, however, many religions have been repressive, reducing human hopes and aspirations by perpetrating violence and waging wars for the sake of the sacred. Religions have also bred fear and intolerance towards those who do not conform with their dogmas. After pointing out these vices common to several religious systems, SHD highlights that the commitment to values and morals may be reached without resorting to religion: “the ethical life can be lived without the illusions of immortality or reincarnation” (Kurtz, 1980, p.5).

Mostly aligned with this fifth tenet, Skinner was not exceptionally outspoken on his critiques of religion. Perhaps his only piece entirely dedicated to the topic was published precisely by *Free Inquiry*, and titled *What religion means to me* (Skinner, 1987). This edition of the magazine brought about counterpoints to the idea that a moral life exempt from the influence of religious dogma would be impossible. Aiming such an end, *Free Inquiry* invited “distinguished humanists” to write on their perspectives on religion and morality. Skinner’s piece recalls elements of his personal history involving religious practices, such as attending a Presbyterian Sunday school. However, he claims not to have maintained a religious creed for long: “I soon lost my faith” (Skinner, 1987, p. 12).

Despite not having followed a specific religion throughout his life, Skinner discussed religious experience as a behavioral phenomenon, often mentioning personal instances: “Everyday I take communion—not in a church with God but with myself” (Skinner, 1987, p.12). Skinner (1987) described such a practice as routine, like enjoying music, or having a period of reflection as he walked towards the office, when he “practices a kind of Zen” as entering a process of discovery while writing. He describes feeling the same sense of wonder and gratitude many people report to feel in religious cults. He also reveals having the same existential concerns religious people do, such as “how did the world begin?” or “how did living things come to exist?”

Yet, Skinner (1987) considers that assuming there may be no ultimate answer to some of those concerns is a more reasonable stance than simply accepting answers whose main function is to provide immediate relief. Thus, Skinner holds a stark skeptical stance over the supernatural: “Nature is marvelous but not, I think, miraculous. We began to learn more about it as soon as we stopped regarding it as the work of a god” (Skinner, 1987, p.12). Skinner (1987) explains that belief in the supernatural and the power it confers creates more problems it could ever solve: “the claimed power to intervene in supernatural rewards and punishments is the kind of power that corrupts, and it is no accident that religion today is so often associated with terrorism and repression” (p. 12).

In addition, by conceiving religion as a controlling agency of behavior, as extensively addressed in *Science and Human Behavior* (Skinner, 1953/2005), Skinnerian behaviorism deems it a powerful institution, responsible for controlling several sets of contingencies in the social environment. The power of religious institutions may be greater or lesser depending on the culture in which it is inserted;

their cultural practices generally involve holding beliefs, running rituals, and following rules over behaviors considered either virtuous or sinful:

The control which defines a religious agency in the narrowest possible sense derives from a claimed connection with the supernatural, through which the agency arranges or alters certain contingencies involving good or bad luck in the immediate future or eternal blessedness of damnation in the life to come. (Skinner, 1953/2005, p. 352)

Skinner (1953/2005) also argues that religions usually act on culture as one among different forms of ethical control. In addition to the metaphysical explanations it provides, religion is commonly justified due to its contribution for the maximization of virtues such as piety and solidarity—equivalent to other agencies aimed at exerting ethical control (i.e., government and its role to promote justice). From a Skinnerian perspective, therefore, religion is conceived as one of the many forms ethical control assumes. There are noteworthy affinities between Skinner's perspective and the sixth tenet of the SHD: rejection of the supernatural, recognition of the meaning of religious experiences, identification of positive and negative consequences of religion as an organized system, criticism of religion as a controlling agency, concerns over the hazards involved in dogmatic creeds and, finally, an assumption that morality and ethical behavior can be developed without resorting to divine intervention.

7) Reason

SHD's seventh tenet starts by stating that reason and science have been under attack lately (that is, then, the early 1980s). As part of their activism, secularists advocate prioritizing rationality and the scientific method as the most suitable paths to address human affairs and to inform decision-making. Within this context, secular humanists stress the importance of recognizing human fallibility and of maintaining a constant, ongoing critical stance regarding science. That means an openness towards change and rectification in their own methods for the discovery of reliable information. SHD's backers point out that, although it would be naive to believe that science can provide solutions to all our problems, it is still the best way for cultivating intelligence:

We are committed to the use of rational methods of inquiry, logic, and evidence in developing knowledge and testing claims to truth. Since human beings are prone to err, we are open to the modification of all principles, including those governing inquiry, believing that they may be in need of constant correction. (Kurtz, 1980, p.5)

In *About behaviorism*, Skinner (1974) discusses the radical behaviorist viewpoint about reason and knowledge, which contrasts with ordinary, common-sense conceptions on these same topics. Knowledge is understood by behaviorists not as an abstract possession of the individual, but as a kind of action-in-context that proves to be effective. Such an action may occur via direct interaction with the environment, or may be verbally mediated, as in the case of rule-governed behavior: "We do not act by putting knowledge to use; our knowledge is action, or at least the rules for action" (Skinner, 1974, p. 121). When it comes to rules, learning can occur more quickly, since instruction prevents undergoing trial and error, which has obvious advantages.

According to Skinner (1974), the evolution of verbal behavior occurred with people beginning to justify their actions, that is, to explain the reasons why they have acted in a given way. In short, "in addition to being affected by contingencies of reinforcement, they began to analyze them" (Skinner, 1974, p. 119). Although science is seen as the most reliable way of producing knowledge to inform effective action, there would be no fundamental, ontological difference between scientific knowledge and other kinds of knowledge. Considering the pragmatic concept of truth espoused by radical behaviorism (Leão et al., 2016), no knowledge is to be considered "closer to the truth" than any other. Skinner (1974) claims that

it is a mistake to say that the world described by science is somehow or other closer to "what is really there," but it is also a mistake to say that the personal experience of artist, composer, or poet is closer to "what is really there." All behavior is determined, directly or indirectly, by consequences, and the behaviors of both scientist and nonscientist are shaped by what is really there but in different ways. (p. 127)

Nevertheless, Skinner (1974) also argues that scientific knowledge is particularly objective, a feature that may be facilitated by validity tests, critical experiments and specific methods that reduce personal bias and other factors that could impair the results obtained by the researcher:

By learning the laws of science, a person is able to behave effectively under the contingencies of an extraordinarily complex world. *Science carries him beyond personal experience and beyond the defective sampling of nature inevitable in a single lifetime.* It also brings him under the control of conditions which could play no part in shaping and maintaining his behavior. He may stop smoking because of a rule derived from a statistical study of the consequences, although the consequences themselves are too deferred to have any reinforcing effect. (p. 124, emphasis added)

Therefore, even though radical behaviorist epistemology implies a particular view on what “reason” means, Skinner’s stances and SHD’s seem consonant in their defense of scientific rationality in the discovering and promoting of more useful courses of action in comparison to other forms of knowledge.

8) Science and technology

The eighth tenet is a restatement for scientific method as the most reliable way to understand the world. Sciences such as astronomy, physics, biology, and behavioral sciences are highlighted for their relevance in expanding the horizons of knowledge and their technological fallouts. Secular humanists are fierce opponents of attempts to limit or censor scientific research in the absence of reasonable justification. However, problems related to misuses of sciences and technology are also pointed out, such as those involved in their potentially destructive consequences for ecology and the preservation of the natural environment.

Given such warning signs, one could conclude that a solution to these problems would be to lower the development of science and technologies derived from it. Nevertheless, SHD refuses such a solution—“we urge resistance to unthinking efforts to limit technological or scientific advances” (Kurtz, 1980, p. 6). Secularists’ suggestion to deal with such problems involves setting a balance between scientific development and advances in other fields of knowledge: “We appreciate the great benefits that science and technology (especially basic and applied research) can bring to humankind, but we also recognize the need to balance scientific and technological advances with cultural explorations in art, music and literature.” (Kurtz, 1980, p. 6)

In several instances, Skinner (e.g., 1953/2005, 1971/1973, 1974) emphatically defended the primacy of the scientific method: “The methods of science have been enormously successful wherever they have been tried” (Skinner, 1953/2005, p. 5). In fact, application of behavioral science and technology for the resolution of human, societal affairs may be one of Skinner’s greatest contributions. In the initial pages of *Beyond Freedom and Dignity*, Skinner (1971/1973) expressed concerns about misuses of science: problems such as wars and overpopulation have been intensified with industrialization and technology, threatening the very survival of the human species. Quoting Darlington, he restated that

every new source from which man has increased his power on the earth has been used to diminish the prospects of his successors. All his progress has been at the expense of damage to his environment which he cannot repair and could not foresee. (Skinner, 1971/1973, p. 9)

Skinner also notes that an appropriate response for the misuses of science is not to be mistaken for its abandon, neither the diminishing of its relative importance: “there is no virtue in ignorance for its own sake. Unfortunately, we cannot stand still: to bring scientific research to an end now would mean a return to famine and pestilence and the exhausting labors of a slave culture” (1953/2005, p. 5). From a Skinnerian viewpoint, problems are never in the sciences themselves, but in the ways they are applied. Although scientific developments have been useful to several different domains, up to that point in time scientific knowledge and interventions on human behavior were relatively scarce.

For behaviorists, the successful use of science depends on understanding human behavior, since doing science is, in itself, behaving in a given way: “If we can observe human behavior carefully from an objective point of view and come to understand it for what it is, we may be able to adopt a more sensible course of action” (Skinner, 1953/2005, p. 5). Moreover, the use of science in a way that could contribute to human and ecological development requires the study of the variables that control the very people who produce this kind of knowledge: “It is understood that there is no point in furthering a science of nature unless it includes a sizable science of human nature, because only in that case will the results be wisely used” (Skinner, 1953/2005, p.5).

Thence, when it comes to their perspectives on science and technology, Skinner and SHD agree for an advocacy of scientific research and its technological fallouts. Both also demonstrate a few concerns related to the misuse of science, both due to already identified mistakes made in the name of science and to threats regarding science’s potential impacts for the future of humankind. In this regard, the SHD signals the importance of developing other areas of knowledge in a balanced way with scientific knowledge—even though it does not offer a specific strategy to modify the problematic use of science. Skinner (1953/2005), for his turn, states that behavior analysis would be in a privileged position to help solve the problems of misuse of science. By progressively identifying the more critical controlling variables surrounding scientific behavior, behavior analysts would be precisely the ones better able to understand and to transform the behavior of developing, using, and applying scientific knowledge and its technological fallout.

9) Evolution

SHD states that despite differences among scientists about specific evolutionary mechanisms, the evolution of species as formulated in the Darwinian tradition is widely accepted and strongly supported by findings from several different sciences. The declaration also points out that the theory of evolution is often under attack by religious fundamentalists who demand creationist theories to be included in school science curricula. From a secular humanist perspective, “this is a serious threat both to academic freedom and to the integrity of the educational process” (Kurtz, 1980, p. 6) since the distinction between scientific truth and religious doctrine would not be clearly stated. There is no opposition to examining creationist theories in educational contexts related to religion or the history of ideas—secularists’ main concern relates to the establishment of a sharp distinction between scientific knowledge and religious faith.

Skinner’s adherence to evolutionary theory is widely known³, as it is extensively discussed in several publications (e.g., Skinner, 1953/2005, 1974, 1981). In his seminal work on the three levels of selection of human behavior, *Selection by consequences*, Skinner (1981) included species selection as the first selective level. Additionally, he presents similar concerns about the reaction of religious groups regarding the incompatibility of Darwinian evolution with creationist theory: “natural selection replaces a very special creator and is still challenged because it does so” (1981, p. 502). Thus, when it comes to Darwinian theory, the stances of SHD and Skinner are well-aligned, as both understand evolution as a scientific fact. Furthermore, aware of religious attempts to censor evolutionary theory, both express a combative stance towards such attacks.

10) Education

The final tenet of SHD addresses education, which is understood as the fundamental method for building “humane, free, and democratic” societies (Kurtz, 1980, p. 5). The declaration states that education has several aims, such as the transmission of knowledge, professional training, citizenship building, and encouragement of moral development. Within these purposes, an attempt to foster capabilities for critical intelligence would also be fundamental, both for the individual and for the group. Considering these aims, SHD expresses concern over the resort to mass media as the main source for information and education: “Although the electronic media provide unparalleled opportunities for extending cultural enrichment and enjoyment, and powerful learning opportunities, there has been a

³ If there is any controversy to be considered in this context, it concerns the adequacy and extension of evolutionary metaphors in Skinner's theory of selection by consequences – see Smith (2019) for a comprehensive exam on this issue.

serious misdirection of their purposes” (Kurtz, 1980, p. 6)⁴. Whereas in totalitarian regimes the media can serve as tools for indoctrination and propaganda, in democracies, media outlets such as radio, newspaper, and film “. . . have become banal wastelands” (Kurtz, 1980, p. 6).

Thence, SHD argues for the need to raise the intellectual levels of mass media content. In particular, there is a fierce critique of mass media’s religious bias, where often there would be unequal opportunities for secular worldview to be broadcasted. Such a critique is intended as a manifesto so there is room for viewpoint diversity on occasions when themes dear to both religious and secularists are addressed. At the end of the tenth tenet, SHD states a general aim regarding formal education: “we need to embark upon a long-term program of public education and enlightenment concerning the relevance of the secular outlook to the human condition” (Kurtz, 1980, p. 6).

Throughout his career, Skinner was a vocal advocate of designing teaching via behavioral principles, as it was extensively recorded in *The technology of teaching* (Skinner 1968). Education may be defined as a context for establishing behavioral repertoires that will be advantageous for the individual or for society in the long run (Skinner, 1953/2005, p. 402). Educational institutions usually design contingencies for establishing such repertoires, preparing the individual for situations that have not yet occurred, initially resorting to arbitrary forms of control in the acquisition of new patterns. Education, however, must at some point be maintained by natural consequences that ultimately control behavior in direct interaction:

The task of education is to build a repertoire of behavior that will eventually have reinforcing consequences in the daily and professional life of the graduate. Meanwhile, teachers provide temporary instructional contingencies, some of them social. (Skinner, 1987, p. 28)

Educational institutions, Skinner (1953/2005, p. 402) explains, are not immune to the political interests of governments and economic enterprises that fund them—which can, of course, lead to conflicts of interest that influence curricula content in a certain way. For instance, “the college supported by a religious agency engages in appropriate religious instruction and must not establish behavior opposed to the interests of the agency” (Skinner, 1953/2005, p. 411). Like any other controlling agency, educational institutions may use their power for their own growth and benefit. To acknowledge this permanent vice of controlling agencies is an important step in developing policies that aim at regulating agencies’ functioning for the sake of individuals under their control.

Considering these aspects of Skinner’s philosophy, SHD’s last tenet seems to represent another point of convergence between secular humanist and radical behaviorism. Skinner’s open defense on the worth of education and for educational institutions to provide quality and in-depth knowledge are aligned with this tenet. Both Skinner and secular humanists demonstrate concern over the impact of biases (e.g., ideological, religious) in educational processes, since it may harm the dissemination of reliable information in the search for objective knowledge.

Final remarks

We shall now return to the question in the title of this piece: is Skinner’s radical behaviorism a secular humanist philosophy? Considering the results of our comparative effort, we conclude that the answer for such a question depends mainly (albeit not exclusively) on an emphasis in the means or the ends involved in the pursuit of secular humanist values. That is, even though generally more aligned than at odds with SHD, Skinner’s viewpoints imply at times different interpretations on specific issues (e.g., SHD’s take on “the ideal of freedom”), as well as an alternative perspective on the most suitable

⁴ This was already a problem to be considered in 1980s, and even more so nowadays with the profusion of social networks and the consequent quick dissemination of (mis)information enabled by them. The concern is particularly dramatic when it comes to the threats for liberal democracy—the kind of political regime explicitly endorsed by SHD—as seen in recent years. In such context, social media may play a double role, either preventing or promoting the free streaming of information, fundamental for democratic societies’ stability. As noted by Sunstein (2018), “in the coming years, we will inevitably see a lot of experiments designed to help social media to counteract the recent threats and to make democracy work better” (p. 88).

means for the achievement of shared goals (e.g., Skinner's skepticism on the virtues of liberal democratic societies to provide the kind of good life they promise to).

Several of Skinner's stances converge with those of SHD, as in (generally) favoring free inquiry, the separation of church and state, the pursuit of personal "freedom," the exercise of ethics independently of religion, skepticism regarding the supernatural, criticism to religious institutions as controlling agencies of behavior, the defense of scientific knowledge, the assumption of evolution as a scientific fact, and the concern to promote reliable information in educational contexts. Despite this, there are disagreements regarding the means to achieve these goals. Radical behaviorism has its own particular way of conceiving ideas such as freedom, ethics, and knowledge, which imply particular paths for the consecution of secular humanist tenets.

For instance, the notion of freedom as individual self-determination seems incompatible with Skinner's behaviorism. Therefore, Skinner's suggestions on how to promote aims such as human freedom (tenet 3) or moral education (tenet 5) will be different. As stated in the declaration, for secular humanists the most suitable ways to promote principles 3 and 5 would be to reduce environmental control (in particular, forms of control deemed "oppressive") and to encourage individuals to form their own moral conscience, and to exert their inherent freedom. Radical behaviorism's selectionist viewpoint, in turn, led Skinner (1971/1973) to favor strategies such as "cultural design": to promote feelings commonly associated to freedom and dignity means, in fact, to guarantee environmental contingencies of positive reinforcement able to breed behavioral variability, without neglecting long-term consequences.

As an illustration of this, one shall consider Skinner's take on the "happy slave": individuals exposed to contingencies of positive reinforcement may feel free, even happy, even though subjected to postponed aversive consequences (Skinner, 1971/1973). Furthermore, Skinner (1986) also explored how modern societies, despite having spared us from innumerable aversive contingencies, are cursed with an obsession for the removal of aversive conditions, which Skinner deemed *libertas nervosa*: "people who avoid labor and have things done for them escape from many aversive consequences, but beyond a certain point they deprive themselves of strengthening consequences as well" (p. 21). That is, the pursuit of freedom as a mere feeling and absence of aversive conditions produced, as a side effect, people who are "bored, listless, or depressed" (Skinner, 1986, p. 15).

Such analyses can be extended to our current cultural context, in which technology has eliminated or reduced many aversive contingencies in addition to increasing access to various positive reinforcers, which is automatically associated with a greater sense of freedom. Nevertheless, the problems Skinner (1971/1973, 1986) warned us about persist: the erosion of reinforcement contingencies and the prevalence of delayed aversive contingencies for the enslavement of people controlled by immediate rewards. In sum, to pursue the feeling of freedom by overlooking long-term contingencies does not seem to be a sensible path for the achievement of ideals such as some expressed in SHD. According to the Skinnerian perspective, the pursuit of personal freedom (a goal dear to secular humanists) must not be led astray as a pursuit for feelings, but instead to the achievement of a social environment in which people are able to evaluate, possibly arbitrate, the contingencies to which they are submitted.

Thus, differences between radical behaviorism and secular humanism that at first sight may seem irreconcilable may actually not be so: Skinner's philosophy is compatible with secular humanism in the sense of defending several shared goals. This is why Popper's charge (1981) that Skinner was an enemy of freedom and democracy is at least debatable. What Skinnerian philosophy diverges from are the traditional ways in which societal problems are addressed and, consequently, the ways proposed to solve them. In other words, Skinner not only was not an enemy of freedom, dignity, nor any other secular humanist value, but a behavioral scientist looking precisely for more effective methods to ensure that people could in fact experience such values. One hypothesis to be considered, then, is that perhaps it was precisely the agreement on the most general and decisive issues that led Skinner to sign the SHD, despite differences in relation to preferred methods and interpretations on specific and lateral ideas.

Although SHD (now forty-three years old) encompasses marks of the historical moment in which it was released (i.e., in the middle of the Cold War), its claims remain current. Religious fundamentalists are still a hazard to be dealt with. Since the declaration was issued, worldwide there have been horrors perpetrated by extremist groups such as *Daesh* and *Hamas* in the Middle East, as well as religious lobbying over legislators to overturn minorities' rights achievements (e.g., the overturn of *Roe v. Wade* in the USA). Moreover, ideological fundamentalism also proved to remain a threat to scientific progress

and humanistic values. As in the destructive influence of Trofim Lysenko over Soviet agriculture in mid-20th century, “Lysenkoist” attitudes persist in the 21st century—as in the case of anti-vaxxers academics sympathetic to science denialist political leaders campaigning against immunization (e.g., Jair Bolsonaro’s administration in Brazil⁵), which became particularly dreadful in the context of the recent Covid-19 pandemic.

As experts in human behavior, properly trained to trace the variables involved in behavioral control, behavior analysts are in a privileged position to act as ambassadors of secular humanism by democratizing their knowledge as much as possible. That way, behaviorists could work to disseminate their analytical skills as tools for lay people to be able to identify controlling variables to which they are subjected by different controlling agencies of behavior. Such an approach was accurately formulated by Pessotti (2016):

. . . the positive political role of the behavior analyst is to scatter to the four winds, without choosing parties nor headquarters, nor groups, nor categories of people, the techniques used by various holders of control: government, manufacturers, traders, publicity agents, the media, religious leaders or political activists (behaviorists or not). It is about providing a kind of mass vaccination against reckless submission to controlling techniques. To inform any citizen in plain language how and to what extent their behavior is manipulated, almost always for the benefit of those who manipulate it. *If any countercontrol initiative results from these insights, it must be the product of decisions by the contolee, and not of any enlightened scientific project by the behavior analyst.* (pp. 112-113, emphasis added)

Aligned with Pessotti’s approach, we believe that radical behaviorism not only may be considered a secular humanist philosophy, but also that behavior analysts could offer a scientifically informed approach to effectively achieve SHD’s cherished values. We acknowledge, however, that there may be no consensus between behaviorists over the adoption of more prescriptive stances regarding a particular set of values and worldviews. For instance, on the one hand, there are those as Mellon (2015) who favor a more aggressive approach, suggesting that behavior analysts should mirror the strategies adopted by exponents of the *New Atheism* movement in order to spread what he deems “behavioral enlightenment.” On the other hand, there are those as Staddon (2003, 2019), who, while recognizing Skinner’s radical behaviorism alignment with secular humanism, criticize these philosophies, deeming the former a sort of “scientific imperialism,” and the later a disguised form of religion. That is, even if radical behaviorism is to be considered a secular humanist philosophy, the endorsement of secular humanist values or worldview is by no means unanimous among behavior analysts.

Whilst aligned with his sympathy for secular humanism, we do not endorse Mellon’s position, primarily for considering it unnecessarily overbearing, but also for recognizing (as SHD does) the virtues of religious experience for many people’s pursuit of meaning and happiness. The place we stand is therefore committed to secular humanist values, but parsimonious and forbearing in the attempts to achieve them. Such qualities are particularly important when it came to the adherence to specific moral or ideological postures promoted by other, influential behaviorists. Skinner’s skepticism towards liberal democracy and preference for a technocratic model (Skinner, 1948/2005), for example, need not be endorsed by those willing to accept a radical behaviorist explanation for the way people are controlled.

Furthermore, our stance’s commitment with secular humanism is staunch, meaning that while we may agree with some of Staddon’s (2003) critiques (e.g., the acknowledgement of a technocratic, potentially “imperialist” leaning in Skinner’s and some other secular humanists’ approaches about the relation between science and values), we do not endorse Staddon’s (2019) interpretation of secular humanism as a disguised form of religion. Such an interpretation could perhaps find grounds in a few stances of more vocal militants (e.g., strident activists of the *New Atheism* movement), but by no means does it represent the whole movement for secular humanism, nor the whole community of radical behaviorists. See Coyne (2019) for a thorough response to Staddon’s (2019) take on secular humanism.

Let us be clear that while do recognize the contributions of critical perspectives such as Mellon’s (2015) and Staddon’s (2003, 2019) for the viewpoint diversity they provide to the debate on the relations between radical behaviorism and secular humanism, our stance does not identify with any of them

⁵ See Marques & de Almeida (2021) for a detailed analysis on the impact of brazilian presidential stances in the context of the Covid-19 pandemic.

entirely. Alternatively, resonating the claim by Pessotti (2015), we believe that the dissemination of behavioral science knowledge may itself favor the achievement of a more secular humanist society. That must not be mistaken by the suggestion that the behaviorist worldview should be indoctrinated. Our suggestion is simply that knowledge about the variables affecting behavior (along with the potential for countercontrol enabled by it) would bring about actual conditions for the pursuit of freedom in a scientifically informed way.

We conclude, ultimately, that Skinner's radical behaviorism may be deemed a secular humanist philosophy. As such, Skinner's reinterpretation of themes and topics dear to secular humanism need not be seen as an attack, but rather as constructive criticism. When awarded the "Humanist of the year" prize, Skinner (1978) stated that "the age-old mistake is to look for salvation in the character of autonomous men and women rather than in the social environments that have appeared in the evolution of cultures and that can now be explicitly designed" (pp. 54-55). The statement summarizes Skinner's idiosyncratic stance, with which we agree, as a hope that a radical behaviorist perspective on secular humanist's tenets may eventually provide more effective ways to achieve them.

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