Contributions of Contingencies in Modern Societies to “Privacy” in the Behavioral Relations of Cognition and Emotion

Emmanuel Zagury Tourinho, Aécio Borba, Christian Vichi, and
Felipe Lustosa Leite
Universidade Federal do Pará, Brazil

The aim of this paper is to examine specific features of modern individualistic societies that contribute to “emotions” and “cognitions” becoming a matter of privacy. Although some behavior analysts identify emotions and cognitions as “private events,” we argue with Skinner (1945) that cognitions and emotions are relations among events and that their origin is in public events in the contingencies of reinforcement maintained by other people. Guided by Elias (1939/1996), we suggest that the shift from feudal economies to market economies involved the increasing individualization of society’s members. This individualizing process includes the socially maintained contingencies that bring some verbal responses under control of private stimulation and reduce the magnitude of some verbal responses to a covert level. Behavioral relations in which either stimuli or responses (or both) cannot be observed by others set the stage for a concept of “privacy.” Changes in societal contingencies that gave rise to individualization and the attribution of privacy to cognitions and emotions are suggested to include the following: (a) increasing frequency of individual consequences that have no apparent or direct relevance to the group; (b) increasing numbers of concurrent contingencies and choice requirements; (c) conflicts between immediate and delayed consequences for the individual; and (d) conflicts between consequences for the individual and for the group.

Key words: private events, cognitions, emotions, cultural contingencies

Ever since Skinner’s 1945 analysis of the phenomena that underlie psychological terms, behavior analysts have examined the role of private events in operant contingencies (e.g., Anderson, Hawkins, Freeman, & Scotti, 2000; Anderson, Hawkins, & Scotti, 1997; Friman, Hayes, & Wilson, 1998; Moore, 2000). This movement represents the realization of Skinner’s (1945) aim to make behavior analysis a version of behaviorism that explains “emotions” and “cognitions,” not as “mental” phenomena but rather as relations between stimuli and responses, some of which may be inaccessible to outside observers. In

that 1945 article, Skinner suggested several ways that verbal communities can arrange contingencies of reinforcement that (a) bring verbal responses under control of stimulation that occurs beneath the skin of the speaker and (b) account for the reduction in magnitude of responding to a level at which the responses are no longer observable to outsiders. Only when people can talk about covert stimuli and responses (i.e., when such tacting relations occur) does the concept of privacy arise.

It has been suggested that the notion of emotions and cognitions as *internal* or *private* phenomena is a product of modern societies characterized by market economies (Elias, 1939/1996). In this paper, we consider the conditions that could have given rise to those social contingencies, maintained by verbal communities, that result in the modern view of cognition and emotion as internal and private. First, we emphasize the importance of cognitions and emo-

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Correspondence should be sent to the first author (e-mail: eztourinho@gmail.com).

tions as behavioral relations in which all events are originally public. Second, we consider individualizing processes that arose in the context of market economies and contributed to the "privatization" of some events in cognitive and emotional relations. Third, we suggest several changes in the nature of social contingencies that occurred in the shift from feudal to market economies and contributed to that privatization. Finally, we conclude that the work of some sociologists can provide historical context for understanding the particulars of the behavioral contingencies that account for the concept of privacy in modern societies.

PRIVATE EVENTS AND BEHAVIORAL RELATIONS

We consider the concept of behavioral relation to be synonymous with that of behavior, by which we mean the relations between acts of organisms and events in the world that are functionally related to those acts. We thus avoid any confusion that may arise between behavior (understood as the relations between stimuli and responses) and responses (the action of the organism observed independent of its context). To the behavior analyst, environmental events that have function with respect to acts of organisms may originate in either the nonsocial or the social world, and may occur either inside or outside the skin. What is important is not the source of the stimulation but the role the event plays with respect to responses of the organism.

Emotions and cognitions, then, cannot be viewed as stimuli or responses but rather as relations between stimuli and responses. We illustrate this affirmation by addressing two concepts: happiness as an example of a basic, or primary, emotion (cf. Zelenski & Larsen, 2000), and problem solving as an example of what is considered to be cognition (cf. Kutnick & Kington, 2005).

An adult's happiness about a new job might include, for example, (a) a response of shouting, evoked by the announcement that he or she is being hired; (b) responses of purchasing gifts for family members; (c) self-descriptions of happiness under the control of social stimuli or bodily conditions; (d) cancellation of prescriptions for antidepressants under the control of self-descriptions of happiness, and so on. Given the idiosyncratic environmental histories of individuals, the particulars of the relations that define happiness vary from person to person and time to time.

Of course, bodily changes occur along with the relations that define one's happiness, just as they occur when one is playing soccer, watching a movie, or teaching a class. These changes in themselves do not define one's happiness unless or until the bodily condition acquires a stimulus function in a relation identified as happiness. The private stimulus is thus not itself the emotion of happiness, because it does not participate in a behavioral relation.

Cognition requires a somewhat different analysis, explored by Skinner (1966/1969) in his discussion of problem solving. One is faced with a problem when a response that may produce reinforcement cannot currently be emitted. Solving the problem consists of emitting precurrent responses that change the organism or the situation until a reinforceable response occurs. "The behavior which brings about the change [in the behavior himself or the situation] is properly called problem solving and the response it promotes [is called] a solution" (Skinner, 1966/1969, p. 133). Skinner added that precurrent responses may be covert, that is, may "not have public manifestations" (p. 124).

In everyday life we are faced with many kinds of problems that evoke precurrent responses. For example, we are faced with a problem when

calling a friend is likely to provide reinforcement, but we cannot recall his number. Looking for the number in a phone book is a precurent response that makes possible the response of calling. This does not mean (a) that a precurent response necessarily makes the consummatory response possible (sometimes we fail); (b) that a precurent response is always covert (in the example above, it is overt); or (c) that a given response (e.g., looking for the number in the phone book) is a precurent response in all possible contexts.

As behavioral phenomena, then, problem solving and happiness are neither private stimuli nor covert responses, but relations or sets of relations that may include a private stimulus or a covert response (cf. Tourinho, 2006). It should be noted that people are more likely to identify emotions with internal bodily conditions and cognitions as mental events. Similarly, behavior analysts may tend to identify emotions with private stimuli and cognitions with covert responses. In other words, it is not unusual to see happiness defined as a private stimulus or problem solving as a covert response.

Moore (2001) distinguished Skinner's analysis of the language of emotions and cognitions from the views on privacy of Wittgenstein (1953/1988) and Ryle (1949/1984) as follows:

Behavior analysis does agree with [Ryle's] conceptual analysis and Wittgenstein that verbal behavior cannot *originate* under the control of private stimuli. Indeed, to so allow would be a hallmark of dualism. However, behavior analysis argues that verbal behavior can originate under the control of public circumstances and control can then transfer to private stimuli, such that in specific instances, the verbal behavior in question can come to be occasioned by private stimuli. But the distinction between public and private in behavior analysis is at heart not an ontological distinction between physical and mental. Rather, it is distinction of access. (p. 177)

When a verbal response remains under the control of public stimuli, we have a verbal or linguistic phenomenon of the type described by Wittgenstein (1953/1988) and Ryle (1949/1984), one that does not require the analytic category of *privacy*. Skinner affirms that, once learned under the control of public events, a verbal response describing an emotion *can* be emitted under the discriminative control of an interoceptive or proprioceptive (i.e., private) stimulus. The discriminative control of a public event over a verbal response may or may not transfer automatically to private stimuli. A similar argument applies to Skinner's (1945) approach to covert responses. Any response may (or may not) recede to a covert level. The fact, for instance, that one person can solve a mathematical problem covertly does not mean that he or she can solve all math problems covertly, nor that all people can solve mathematical problems covertly.

In summary, the stimuli and the responses in the behavioral relations called *emotion* and *cognition* are originally public. Events in those relations may later be all public, all private, or a mixture of public and private, but in all cases their origin is in the reinforcement contingencies arranged by verbal communities and in which all stimuli and responses are publicly observable events. In the next section we consider the cultural conditions under which behavioral relations that involve private stimuli and covert responses became increasingly common in human societies, and which resulted in the concept of privacy gaining social importance.

CULTURAL CONTINGENCIES UNDER WHICH COGNITIVE AND EMOTIONAL PHENOMENA BECOME RELATED TO PRIVACY

Understanding the behavior of humans often requires a consider-

ation of the kinds of cultural contingencies to which they have been exposed. This is the reason why, as pointed out by Andery, Micheletto, and Sérgio (2005), behavior analysis must include cultural phenomena in its subject matter. The conceptual and analytical strategies that enable behavior analysis to provide an understanding of cultural phenomena are under development (see Andery et al., 2005; Biglan, 1995; Glenn, 1988, 1991, 2003, 2004; Lamal, 1991). It is not, however, the aim of this paper to discuss or apply these conceptual tools to the analysis of privacy-related cultural contingencies. Rather, our aim is to use the sociological perspective of Elias (1939/1996, 1987/2001) to elucidate the nature of the contingencies in modern societies that contribute to the common view of emotions and cognitions as private, mental events.

Norbert Elias (1897–1990) was a German sociologist who discussed how, in western societies, the rise of market economies led to an increase in the complexity of society and to changes in the everyday behavior as well as the self-images of its citizens. Elias's approach is not aligned with the schools of sociology that rely on the development of an ideological theory prior to the investigation of phenomena, nor with the historical analyses based on the simple accumulation of data and lack a theoretical framework. Elias provides systematic empirical investigation and a careful interpretation of historical facts. This approach, combined with his preoccupation with explaining behavior as a function of events in the social environment rather than of ideas, values, or any other internal explanations, makes his work useful to behavior analysts interested in how emotions and cognitions become equated with privacy in modern societies.

Elias (e.g., 1939/1996, 1987/2001) developed an extensive and critical analysis of the modern concept of the

individual, coming to a view of humans that is broadly compatible with that of behavior analysis. According to Elias (1987/2001), the citizens of a market society have such differing functions in society that there is no apparent similarity in their behavior or in the contingencies that support their behavior as individuals. By contrast, in the feudal societies that predated market economies, the majority of people worked in the fields, hunted, and produced all the tools needed for doing their own work. Further, individuals interacted repeatedly with one another throughout their lives, and the relationships of dependence were well defined.

In a market society, towns are much larger than feudal villages and permit the development of differentiated roles (e.g., farmers, traders, soldiers, physicians, craftsmen, artists) with many individuals carrying out each function. The loss of one person's work becomes less critical to the general welfare when other individuals can replace him or her as supplier, physician, craftsman, and so on. Each worker (along with his or her dependents) was left more "on his or her own" as the interdependencies among them became increasingly less apparent.

Elias (1987/2001) suggested that as social functions became more numerous, specialized, and differentiated in a given society, individuals often benefitted by avoiding public display of emotions and thoughts. The archetypical example is the selling–buying negotiation. If the buyer shows too much interest in an item, the seller can set a high price, predicting that the buyer is likely to pay more for the item. Conversely, if the seller appears eager to sell the item, the buyer can offer less and get a better deal.

These changes in social contingencies in developing market economies led individuals to display overt behavior that was not necessarily con-

sistent with the stimuli and responses that participate in emotional and cognitive relations. To the extent that those stimuli and responses were private, conditions were in place to distinguish between acting (publicly observable) and thinking or feeling (privately observable). Driven by the changing social contingencies associated with changing economic contingencies, the distinction between public and private behavioral relations established a boundary between self and others. This, in turn, contributed further to the individualization that characterizes market economies. However, "the intuition of a wall, of something 'inside' man, separated from the 'outside' world, however genuine it may be as an intuition, corresponds to nothing in man having the character of a real wall" (Elias, 1939/1996, p. 212).

CHANGES IN CONTINGENCIES ASSOCIATED WITH THE SHIFT TO MARKET ECONOMIES

In the following sections, we identify and discuss four distinct characteristics of social contingencies in modern societies that contribute to the individuation of persons and the correlated view of cognitions and emotions as internal, private and, ultimately, nonphysical events (rather than relations between public and private stimuli and responses).

Increasing Frequency of Individual Consequences That Have No Apparent or Direct Relevance to the Group

The idea that the individual is an autonomous entity has been called an illusion both by psychologists (e.g., Skinner, 1971/2002), and sociologists (e.g., Elias, 1939/1996, 1987/2001). In every social group in every domain of daily life, there is a high degree of interdependence among group members. In preindustrial societies, however, that interdependence was far more evident than it is to the people

who live in the advanced market economies of today.

Elias (1939/1996, 1987/2001) argued that interdependence is most easily recognized when the responses of each individual have consequences that quickly affect not only that individual but also other people who are members of their society. In subsistence economies, for example, survival depends on production of the crops that sustain the whole group, which creates immediately evident interdependence among the contingencies involved in planting and harvesting crops.

Skinner (1987) discussed some of the cultural practices in the western world that have "eroded contingencies of reinforcement" (p. 18). Among problems he identified was the alienation of workers. He attributed that alienation to specialization in work functions and the resulting repetitiveness of work.

Alienation of the worker is inevitable if the world is to profit from specialization and division of labor. ... There is no question of the gain from such specialization, but the inevitable consequence is that a person spends a greater amount of time doing only one kind of thing. Every one knows what it means to be tired of doing too often the things one enjoys, and that is another reason why industries turn to essentially aversive measures to maintain behavior of their workers. (Skinner, 1987, p. 20)

The behavioral consequences that maintain work in modern societies often are not work products at all, but rather are salaries. If salaries have any reinforcement function, they reinforce the behavior of individuals who receive them and have no function with respect to the behavior of other contributors to the work product. Even though specialization means that keeping one's job (and salary) depends on the work of others, a worker seldom interacts with those who produced the goods and instruments used in a job, or those who bring them to the workplace, or the workers involved

in other steps of production, or of the function of their work products in the larger production process. By contrast,

In the Middle Ages, as in any societies in which the state is weak or plays only a symbolic role, the individual depended for protection upon a community or patron. A person had nothing that he or she could call his or her own—not even his or her own body. Everything was in jeopardy, and only willingness to accept dependency ensured survival. (Ariès, 1986/2003, p. 9)

In the transition from the Middle Ages to modern societies, interpersonal relationships shifted from a condition in which decisions, planning, problem solving, and so on, were collective actions to one in which they have become individual actions. When problem solving has consequences of immediate relevance only to the individual behaving, that behavior is of little importance to others. Under such conditions, verbal problem solving may become aversive to others, eventually becoming covert to avoid others' suppressive measures. Skinner (1957/1992) noted this type of problem when discussing verbal behavior. He stated that "verbal behavior is frequently punished. Audible behavior in the child is reinforced and tolerated up to a point; then it becomes annoying, and the child is punished for speaking. Comparable aversive consequences continue into the adult years" (p. 436).

In addition, competitive contingencies in market economics tend to drive the responses involved in problem solving to the covert level. Alerting competitors to identified problems or to solutions can be counterproductive. Thus, social contingencies in modern cultures have changed to favor the emission of responses in a covert form under some conditions. The self-observation of covert responses contributes to the attribution of autonomy and causality to those private events because individuals who observe their

own covert responses rarely can describe their origins in social contingencies in which both stimuli and responses were overt.

Increasing Numbers of Concurrent Contingencies and Choice Requirements

Individualization and the specialization of social functions occur in economic environments that also provide new instruments, goods, and services that give rise to an ever-growing number of alternative actions. In behavior-analytic terms, the process of individualization occurs in environments that consist of ever-increasing numbers of concurrent contingencies of reinforcement. In such environments, the individual is often required to choose between different courses of action in the absence of any other members of their society. Elias (1987/2001) argues that it is because the individual is faced with a plurality of possible courses of action, and the relation of those actions to the larger group is complex and obscure, he or she will describe him- or herself as autonomous. This contrasts radically with the cultural environment typical of societies in which individualization has not taken place. "In the earlier, closer communities, the most important factor in controlling individual behavior is the constant presence of others, the knowledge of being tied for life to others and not least the direct fear of others" (Elias, 1987/2001, p. 128). In simpler societies, there are fewer alternatives, fewer opportunities for choice.

In the simplest ones, there is often only a single, straight path before people from childhood on—one path for women and another for men. Crossroads are rare, and seldom is a person placed alone before a decision. (Elias, 1987/2001, p. 131)

Exposure to concurrent contingencies of reinforcement and the impact of this exposure on the control of

human behavior have been discussed in the behavior-analytic literature, and choice behavior under those conditions has been the subject of extensive research (e.g., Baum, 2010; Mazur & Biondi, 2011; McDowell, 1989; Pierce & Epling, 1983). In societies in which individualization has been underway for a long time, choice making is an independent, individual action rather than the interdependent action of group members; and to the extent that individual choices have conflicting consequences for the individual and the group, they are very likely to involve covert responses. Elias (1939/1996) developed an extensive analysis of how the changes he described gave rise to a widespread need for self-observation and for prediction of the behavior of one's self and others. Consequently, western societies developed practices that make individuals observe their own bodies and "control their emotions." This control may imply the learning of emotional behavior distinct in topography from the primarily motor responses in emotional relations in preindustrial societies. In much of modern society, acceptable responses in the relations of anger are not aggressive motor responses, but rather verbal responses such as "I must tell you that [what you are doing] makes me angry [or upsets or bothers me]."

In summary, the need for predictable behavior in an environment that consists of numerous concurrent contingencies gives rise to cultural practices that promote self-observation and verbal alternatives to motor responses in emotional relations. From a behavior-analytic perspective, the individuals in modern individualist societies are exposed to contingencies of reinforcement that require them to analyze (often covertly) their needs (motivational and emotional states) and their behavioral options, and to respond under the control of many social rules.

Conflicts Between Immediate and Delayed Consequences

In addition to increasing in number, the concurrent contingencies of reinforcement to which the individual is exposed in modern society also vary greatly with respect to the delay and magnitude of the consequences that are contingent on each possible response. In the behavior-analytic literature, this phenomenon has been treated in the literature on self-control (Rachlin, 1974). Self-control, in this sense, means responding that produces larger, delayed reinforcers rather than responding that produces smaller, immediate reinforcers (cf. Rachlin, 1974; Rachlin & Green, 1972). Individuals choose between buying an item at full price now, for example, or waiting for the sale price available in 1 month; or choose between partying tonight or studying for a job interview next week; or choose between going on vacation or writing papers for publication. This makes the assessment of various consequences much harder, and self-control needs to be taught from early childhood (cf. Ariès, 1960/1973; Skinner, 1948).

Given the temporal separation of responses and delayed consequences, and even the possibility that a consequence may have lost its value when it becomes available, Elias (1987/2001) argues that the self-control required in modern societies depends on social support (i.e., reinforcement). Self-control was, in the vision of Elias (1939/1996, 1987/2001), the principal product of the social contingencies that also produced the concept of an inner world. Widespread self-control among members of a complex modern society is required when the dependencies among the behaviors of participants are not immediately evident. It is not found where members of a society are controlled efficiently by external agents, or where impulsive behavior does not detract from social func-

tioning. According to Elias (1987/2001):

The change in human relationships towards large, more centralized and specialized groups led to a greater restraint of momentary individual impulses. This may have been first imposed or maintained by the direct fear of others, overseers or the people nominated by the central ruler. But slowly the element of self-control in the harmonization of people to each other's activities became something more taken for granted. An increased use of clocks, to give only one example, is a sign of this. For whatever their importance as instruments for measuring non-human events, in their daily use by society they are primarily instruments for co-ordinating at a distance the activities of many people who are capable of a relatively high degree of self-control. (pp. 136–137)

Once again, controlling overt emotional responses avoids problems. For example, a public celebration of a new position may engender enmity; public display of interest towards a desired partner may generate competition; expressions of negative feelings or thoughts may make someone unpopular among colleagues, and so on.

In this section, we have suggested that the contingencies characteristic of modern societies inhibit impulsive responses and make likely those responses designated as self-control. The socially inhibited controlling relations still occur, however, and can be observed by the individual as the covert emission of responses and the control over verbal responses by private bodily stimuli.

Conflicts Between the Consequences of Behavior for the Individual versus the Group

Another important feature of complex modern societies is that consequences that function as reinforcers for individuals may contribute negatively to the larger society. Because the concurrent contingencies found in modern societies are often individualized, and because the individual and the group sometimes have conflicting interests, the type of self-

control found in individualized societies is very often a function of social sanctions that are contingent on responses that have short- or long-term effects on others. For example, a teacher who is late for his class stops his car when the traffic light is red because running the red light can result in a fine; the fine itself is imposed in societies in which the safety of strangers is of no immediate relevance to the individual who is fined.

In Elias' (1939/1996) view of self-control, "rational thinking" or "moral consciousness" (i.e., self-stated rules) can help individuals to refrain from behavior that contributes negatively to the well-being of the larger society. In the above example of running a red light, the driver who stopped at the red light may have never been fined. His behavior of stopping is, rather, under control of a rule. The rule may simply state that running a red light risks a fine; or it may state the relation between running a red light and a risk of injuring or killing another person. Behavior under control of such rules exemplifies what Skinner (1968, p. 191) called "ethical self-management." As suggested by the example, ethical self-management is the result of social sanctions that suppress the individual's impulsive responses on behalf of others. These sanctions are established to protect the individual from the aversive consequences of his or her own behavior and preserve the interests of the group as a whole (Marchezini-Cunha, 2004).

Discussing ethical self-management, Skinner (1968) provided an example that refers to the roles of both rules and emotional reactions:

The usual solution is to teach precept rather than practice. Rather than learning to behave well, the child learns rules which he is to follow in order to behave well. An old copybook maxim will serve as an example. A culture presumably gains if its members do not act violently toward each other in anger. The culture cannot conveniently

restrain all its angry members by force, however, and it will only generate other problems if it tries to punish violence so that men will either be afraid to attack each other or will be automatically reinforced when they engage in nonviolent behavior. Another possibility is to teach each child to say to himself "Count to ten before acting in anger." (p. 192)

In this context, covert responses are related to self-control, and self-control responses impede impulsiveness. Thus, in both types of consequence conflicts (delayed vs. immediate consequences and individual vs. group consequences), social contingencies suppress the overt responses of emotional and cognitive relations. However, covert stimuli and responses in emotional and cognitive relations may remain intact and contribute further to the "intuition of the existence of a boundary" that separates the individual from the rest of the world and gives credence to the modern view of privacy.

CONCLUSION

The analysis we have developed here highlights the cultural context in which emotions and cognitions become a matter of privacy. We described this context as an individualization process that, in turn, may be analyzed in terms of the contingencies of reinforcement that prevail in social environments that are typical of market economies. In our analysis, we drew primarily on the works of Skinner (1945, 1948, 1957/1992, 1966/1969, 1968, 1971/2002, 1987) and Elias (1939/1996, 1987/2001) to show that behavior analysis may benefit from historical and sociological research. Such research can provide the facts needed to understand the contingencies that lead modern humans to view cognitions and emotions as events rather than as relations and as private and mental rather than public and socially organized by contingencies of reinforcement.

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