Developing effective ethics for effective behavior

Steven E. Wallis

Abstract

Purpose – The purpose of this paper is to investigate the internal structure of Gandhi's ethics as a way to determine opportunities for improving that system's ability to influence behavior. In this paper, the author aims to work under the idea that a system of ethics is a guide for social responsibility.

Design/methodology/approach – The data source is Gandhi's set of ethics as described by Naess. These simple (primarily quantitative) studies compare the concepts within the code of ethics, and their relationships to one another.

Findings – Gandhi's ethics are robust at the 0.25 level (the scale is zero to one – zero is lowest). This is consistent with theories of the social sciences (that do not work well in practice). Gandhi's success might be ascribed to his leadership ability.

Research limitations/implications – Some suggest this approach is reductionist because of its superficial similarity to approaches of physical science. The implications for research are profound. First, this approach provides an objective method for comparing (and so, advancing) systems of ethics. Second, this paper suggests the opportunity to compare the internal structure of ethics with “external” aspects – the implementation of ethical systems.

Practical implications – By itself, Gandhi's system of ethics cannot be reliably applied in practice - it cannot be expected to change behavior more than any other system of ethics. This raises concerns about other ethical codes as well. The practical implications of the form of analysis presented in this paper are immense because it provides a way for practitioners to objectively compare two codes of ethics and determine which one will be more effective.

Originality/value – The approach documented in the paper has never been applied to the field of ethics. It is unique in that it addresses the “internal” structure of a system of ethics (compared to the “external”, or application, of ethical systems).

Keywords Ethics, Philosophy, Individual behaviour, Corporate social responsibility

Paper type Research paper

1. Introduction and overview

The goal of this paper is to explore how effective a system of ethics might be in supporting change in socially responsible behavior. While a complete analysis is beyond the scope of this paper, this may be seen as a preliminary investigation to open a new research paradigm involving investigations of the structure of ethical codes; and, importantly, the relationship between the structure of ethics and the resulting behavior.

It seems reasonable to study ethics to gain insights into ethics because the idea of social responsibility and ethics have been linked in the business literature since 1963 with the publication of Business & Society. Indeed, social responsibility and ethics deal with “closely related, even overlapping, themes and concerns” (Carroll, 1999, p. 287). Therefore, for this paper, I will apply the term “ethics” (including ethical code and system of ethics) to refer to the formal/explicit representation of interrelated notions of individual and corporate social responsibility (CSR).
In this, I am shifting the conversation from “what is responsible” to “what is true?” After concluding that commonly applied logics have proved insufficient for this analysis, I seek another approach. First, I draw a parallel between ethics and theory – based on the idea that both are guides for behavior. This parallel opens the door to applying recent innovations in critical metatheoretical analysis to the study of ethics. Choosing to analyze Gandhi’s ethics, I create a diagram that is representative of his ethics as a system of interrelated propositions. Using this diagram, I conduct a propositional analysis of Gandhi’s ethics and objectively determine the formal robustness of that system.

This level of robustness is an indicator of the efficacy of that ethical code in application. Therefore, this approach will be very useful for academicians who wish to objectively analyze ethical codes. Similarly, practitioners who wish to test the potential effectiveness of an ethical code before applying it in a corporate setting will find this approach very useful. For the field of CSR, this approach will enable us to advance our thinking more rapidly because we will have a new tool for understanding and objectively advancing our ethical approaches.

2. Issues with ethics

In his *Principia Ethica*, Moore (2004, p. 23) notes, in regard to ethical truths, that it is important to judge an action, “not only that it generally does some good, but that it generally does the greatest good”. So, if we have the opportunity to choose between two different codes, we should choose the one that will result in the greatest good. This has long been a difficult choice because (for example) one person might claim that achieving profits are good while another claims that improving the environment is good. It is important, therefore, that we should have the ability to judge an ethical code by how much good it may support.

Moore (2004, p. iv) notes that important part of ethics is the question, “What kind of actions ought we to perform?” And, to support that decision, a code of ethics must contain propositions that explain causal truths. Yet, Moore claims that such propositions are difficult or impossible to prove, and so we must rely on intuition. Yet, as any gambler may aver, intuition is an unreliable tool.

If intuition were the only tool, Moore’s work might have ended with his preface. Instead, he went on to develop a chain of logical arguments developing his many insights into ethics. If such logical chains were sufficient, the study of ethics might have then been complete. However, such chains of logic include many weak links and opportunities for additional links. Importantly, the last link of the chain is always unclear (Steiner, 1988).

Therefore, it appears that we need a new form of logic to investigate our ethical propositions. In the present paper, I present a new form of logic with far reaching implications for the study of ethics, individual behavior, and corporate social responsibility.

3. Studies of ethics

The study of ethics may be broadly characterized according to the brief, but impressive overview provided by Kakabadse *et al.* (2002). They suggest that most studies in ethics are founded on two philosophical positions. First is teleological (contrasting the good of the individual with the good of the community). The second is deontological (the relative social norms, rights, and duties in various cultures and communities). They describe the current research into ethical codes saying that such codes are useful, but may be too general, too specific, incomplete, inconsistent, unworkable, unknown, unused, and may be different between different organizations or cultures.

In short, it seems that studies of ethics are focused on the creation and application of ethical codes. However, there is still something about ethical codes, themselves, that eludes our understanding. We are mainly studying the relationship between the code and the behavior. We are without a deeper understanding of the ethical code, itself.

There are, of course, many approaches to understanding ethical codes. Kakabadse *et al.* (2002, p. 126) suggest that people should be more reflexive – to consider outcomes,
participants, ethical standards, to reach a more ethical conclusion. Yet, such an approach, merely circles around the question of the system of ethics, itself.

Similarly, though more philosophically, Putnam (2004) suggests that we avoid discussions around truth and logic because ontological proofs of logic and mathematics are mainly made through their application (Putnam, 2004, pp. 64-6). This seems to suggest that the only way to determine an ethical truth is to test that ethical system in application. Such an approach, however, becomes extremely inconvenient when one considers the expense and results of testing non-trivial ethical decisions such as going to war (or not). Or, close to the business world, should a corporation embark on a new and costly strategic plan, or should they focus on improving people, profits, or some combination of the two? And, if there should be a specific combination, what should that combination be?

For Putnam, such decisions may be made depending on whether the ethical system in question, “makes sense.” This is important because it takes us back to the question of logic and truth – essentially, “How do we know what we know?”

In contrast to Putnam’s position, I suggest that the criteria of ‘making sense’ is too low a hurdle for making decisions of ethical importance. For example, a decision to “go to war” might “make sense” to one group of people, and not to another. Also, we have all engaged in behaviors that made sense at the time – but in retrospect were less than sensible. In short, Putnam’s arguments do not lead us to a useful conclusion, they lead us right back to the original question of ethics, “How do we know what to do?”

To summarize, briefly, it seems that most studies of ethics investigate what we might call the “external” aspect of the ethical code – the relationship between the ethical code and the behavior of those who are developing, applying (or not applying) that code in practice. However, that research has left open important questions about the truth-value of ethical systems. In response, authors have suggested that we should think more carefully about our ethical decisions (Kakabadse et al., 2002), and that we should simply do what makes sense (Putnam, 2004). These answers sidestep the central issue of how we determine what is valid or true, and so ignore the deeper question of how can we know that a system of ethics works. Taken as a whole, it seems there is a gap in the ethics literature.

To address this gap in the literature, to answer the question, “How do we know what to do?” it seems we must venture where Kakabadse et al. merely circled and where Putnam feared to tread. We must investigate the structure of the ethical code, itself. In this, I will not rush in foolishly; rather, I will explore carefully, using a set of conceptual tools that have proved useful in similar explorations.

By investigating the structure of an ethical code, this paper takes a metaethical approach which, “is the attempt to understand the metaphysical, epistemological, semantic, and psychological, presuppositions and commitments of moral thought, talk, and practice” (Sayre-McCord, 2008). This may also be seen as a cognitivist approach which, “holds that moral statements do express beliefs and that they are apt for truth and falsity” (van Roojen, 2009).

It is important that we believe our set of ethics has some foundational validity, otherwise, why would we adhere to them? For example, if one were given a set of ethics that appeared nonsensical, there would be no motive for one to change his or her behavior to follow those ethics – there would be no reason to believe that following nonsensical ethics would result in a better world. This may lead one to ask, in turn, how do we know what makes sense or what is true?

Traditionally, conversations around truth may be said to present truth claims that tend to resemble logic chains (A is true because of B, B is true because of C . . . and so on). The chain of steps (A, B, C, etc.) continues until the argument reaches a point where everyone agrees that some foundational claim is “true” (perhaps Z, in this case). Yet, every chain of logic is eventually based on some presupposition (Kaplan, 1964, p. 313). This is not a case of some chains having a weak link; this is a situation where all chains of logic are weak because they are ultimately founded on a set of “invisible” assumptions.
Assumptions (like theories, models, and schema) provide a guide for our expectations (Alvesson and Kärreman, 2007, p. 1266) in much the same way that our ethical codes guide our behavior. Insights from Argyris’ “ladder of inference,” however, suggest that those invisible assumptions are not necessarily reliable guides (Senge et al., 1994, pp. 242-3). Which suggests that relying on unproven assumptions may lead to folly as easily as wisdom. So, when we argue for ourselves or for others to follow a particular code of ethics, all arguments are weak (both, the argument to acquire an ethic as well as the argument inherent within the ethic, itself). Without a stronger argument, the potential for adopting the code is weakened. So, clearly, there is a need to make these assumptions more explicit (Weick, 1989).

Therefore, the present paper suggests a neo-cognitivist approach that focuses on the internal structure of the ethical statement as an alternative logic, rather than trying to prove the validity with a chain of logic and relying on some ultimately unprovable statement of validity. This approach promises to have useful practical applications. For example, if we can investigate the structure of two codes of ethics, we can determine which one is better – before going through the expense of changing a corporate strategy or going to war.

4. Metaethics and metatheory

While studying the internal structure of a code of ethics is an under addressed area of the ethics literature, we may gain insights into such an investigation by drawing from other branches of the social sciences, specifically the nascent branch of metatheory:

Metatheory is concerned [. . .] with the study of theories, theorists, communities of theorists, as well as with the larger intellectual and social context of theories and theorists (Ritzer, 1988, p. 188).

It is reasonable to apply insights from metatheory to the study of ethics because a set of ethics (or set of values) are, “the way one sees the world” and “guides the conduct of an individual” (Kakabadse et al., 2002, pp. 108-9). Similarly, a theory provides a lens to view the world (Edwards and Volkmann, 2008). Importantly for both, that lens determines how we understand the world and guides our behavior. If one thinks that a theory or ethical system will work, one is more likely to use that system.

Also, theories and ethical codes may be understood as conceptual systems made up of causal propositions. In both, the relationship between the propositions within those systems exist in a discernable relationship with one another – a structure. The idea of structure is important consideration because, theories of higher structure are considered to be more effective (Dubin, 1978).

A critical question becomes: “Why does one system of understanding have a profound impact on behavior while another system does not?” If a belief system, such as Gandhi’s ethics are so “good” why are they not adopted more quickly and more widely – with the attendant change in behavior that come from adhering to such a system?

An answer may be found by stepping back from an explicit ethical code, for a moment, and towards a more general discussion on theory, the same question may be asked as, “Why does one theory of science have a profound impact on behavior while another system does not?” Thomas Kuhn’s (1970) classic investigation into the history of science provides some insight.

Kuhn suggests that science may be understood as a paradigm – where each paradigm has its own theories, publications, terminology, instruments, and approaches to research. Each paradigm is a guide for what behavior is appropriate for scientists – in the same way that each system of ethics provides a guide for behavior that is appropriate for our daily lives as scholars, managers, and citizens.

Kuhn suggested that paradigms of behavior change through periodic revolutions. One paradigm would hold sway (guiding behavior in a particular way) because it seemed to be appropriate and useful. However, over time, experimental evidence accumulates that does
not “fit” the existing paradigm. Eventually, the evidence increases to the point that a new paradigm is formed – complete with new theories, and the attendant new behaviors.

Kuhn describes the social sciences as a “pre-paradigm” science. That is to say there is no dominant paradigm that guides our behavior as social scientists. While his conclusion may be disputed, it is based on reasonable observation – that there is no generally accepted, theory in the social sciences to guide our behavior. Instead there are a plethora of theories. This situation is reflected in our personal and corporate lives where we are faced with multitude recommendations for adopting a particular ethical perspective with its attendant behaviors (seemingly socially responsible, or not).

In judging theories of the social sciences, there is no generally accepted way to decide which theory is best (Dolan, 2008). Similarly, in daily life, there is no generally accepted way to choose what system of ethics we should adopt that would, in turn, reliably guide our behavior. Instead, we are tossed about by the charismatic calls of politicians, from Hitler to Gandhi and every stripe of the spectrum in-between. Again, we are back to the question, “How do we know what to do?” How does one choose an ethical code?

In contrast to the difficulty of deciding between ethical codes, there are theories of physics (such as Ohm’s law of electricity) that reliably guide the investigation of electrical phenomena and the design of effective tools such as cell phones and computers. Those theories reliably guide the behavior of countless scientists and engineers; and, they are not easily swayed from those behaviors.

According to Kuhn, great changes in behavior will arrive with paradigmatic revolutions. And, many authors claim that their theories and/or practices represent such a revolution (Clarke and Clegg, 2000, p. 45). However, that claim is not borne out by related changes in results. That is to say when a company adopts a new process such as total quality management (TQM), one would expect that the business would become more successful. However, such is rarely the case. These kinds of so-called “revolutionary” changes fail more often than they succeed. TQM fails at least 70 percent of the time (MacIntosh and MacLean, 1999), culture change efforts in organization development seem to fail about the same rate (Smith, 2003) and business process engineering (BPR) should not be considered a viable approach (Dekkers, 2008).

It is not difficult to imagine that a firm which adopts a new theory and new behavior is unlikely to continue that behavior if it does not make the firm more successful. The firm is likely to try a different theory (such as adopting a different corporate policy that leads to different behavior) until they find one that works. And, indeed, this is what we see in the business community; firms adopt a “flavor of the month” based on whatever the consultants can sell. Sadly, the change in behavior is temporary and of limited effectiveness because the underlying theory is not effective.

On an individual level, one may simply change one’s system of ethics without great angst because there is no one system that can be proven more effective than any other. Clearly, we need a new way to guide how we choose our guides of ethics and theory.

5. A new approach

While Kuhn’s description of paradigmatic revolution was influential, it has also been criticized for not defining exactly what change in theory is required for a paradigmatic change in behavior (Wallis, 2009). Wallis suggested the need for a deeper understanding of paradigm revolution and conducted an investigation into the structure of theory as different scientists described that theory across the centuries. This study was done using propositional analysis, which enabled Wallis to objectively determine the formal robustness of each theory on a scale of zero to one (with zero being the lowest level).

Wallis found that theories of antiquity possessed a very low level of robustness ($R = 0.14$). During the scientific revolution, the robustness of theories increased rapidly, until a theory was developed with a very high robustness ($R = 1.0$). Wallis contends that the paradigm shifts of the scientific revolution were based as much on the robustness of theories, as on the
use of empirical data. Further, he found that the robustness of the theory had an important impact on the usefulness of the theory – and subsequent behavior.

For example, Plutarch (100 CE) noticed that rubbing a piece of amber would cause it to attract hair and other small objects. He theorized that this was due to “exhalations” on the part of the amber. In contrast, Gilbert (1550 CE) observed the same phenomenon, but instead of exhalations of air, he theorized that an invisible liquid caused the attraction. Both theories (more complex than described here) were shown to have a low robustness ($R = 0.14$ for Plutarch and $R = 0.17$ for Gilbert) and both theories were of very limited usefulness.

One might imagine, for example, attending a party and demonstrating this attractive effect. It would not matter which of those two theories one used to explain the effect. One might switch between the two theories without materially changing one’s behavior.

In contrast, following centuries of experimentation by the scientific community, Coulomb developed a theory of electrostatic attraction in 1785 with a robustness of $R = 1.0$. This is one of Kuhn’s paradigmatic revolutions and Coulomb’s electrostatic attraction theory is now accepted as “law” of physics. Further, electrostatic attraction is an integral part of over 7,000 US patents. Importantly, this law guides the behavior of scientists and engineers because violating that law (designing a cell phone using astrology, for example) would result in failure. And, unlike social theories or codes of ethics, it does not seem likely that their behavior will be easily changed.

Therefore, we may conclude that a theory with higher formal robustness is more likely to affect behavior over the long run (as in laws of electricity), while theories with lower robustness may be easily supplanted by other theories without significantly altering behavior (as in theories of the social sciences or codes of ethics).

A highly relevant question becomes, “How robust are our ethical codes?” Because, based on the similarity between theories and ethics, we might expect that a more robust system of ethics will engender significant and enduring changes in behavior for individuals and corporations interested in social responsibility.

6. Introduction to analysis

In this paper, I will apply propositional analysis to Gandhi’s ethical code. Gandhi’s code is chosen because it is complex, popular, and well documented. I will discuss the source of the data, describe that ethical code as a system, and identify the robustness of Gandhi’s system of ethics. And, I will suggest how Gandhi’s system of ethics might be improved (from a structural perspective) to create a more robust system with the attendant ability to engender significant and enduring changes in behavior. Using this example, scholars and practitioners may examine personal and corporate ethical codes to identify opportunities for objective improvement.

The source of data for the present analysis will be Naess’ (1958) condensed and rational reconstruction of, “Gandhi’s ethics of group struggle between 1907 and 1934.” His source was a large body of Gandhi’s writing, particularly: *Non Violence in Peace and War* (Garland Publishers).

Using Naess’ data, I will analyze Gandhi’s code of ethics from a systems perspective, and then analyze his code using propositional analysis to objectively determine the formal robustness, and so potential efficacy, of that code.

To summarize this section, Gandhi’s ethics may be seen as a social theory; however, the difficulty of testing that theory externally suggests the need for an alternative logic. Which, it is suggested, can be found with an internal test. The method of propositional analysis suggests an opportunity for achieving useful insights.

In the following sections, I will analyze Gandhi’s ethical code from a systems perspective drawing primarily on systems theory for the technique of identifying causal loops. Next, I will determine the robustness of Gandhi’s ethics. Recommendations will then be made for...
modifications to that code to suggest a more robust system of ethics that will be more reliably effective in practice.

7. Mapping the system of an ethical code

In this section I will discuss a systems approach to analysis as a tool for analyzing ethical codes. The study of organizational dynamics has long used concepts from systems thinking including those introduced by von Bertalanffy (1972) and popularized by Senge et al. (1994). Some popular examples from Senge include the ideas of “reinforcing loops,” and “vicious cycles.” By graphically linking the hypotheses, we may develop a better understanding of the entire system of ethics.

Gandhi’s ethics are based on normative statements (e.g. “Never resort to violence against your opponent”) and causal hypotheses (e.g. “Being violent counteracts long-term, universal reduction of violence”). The normative statements might be seen as declarations, or instructions. And, in a sense, each one might be taken independently; so there is not much of a system in that set of statements. The hypotheses, on the other hand, describe linkages between multiple phenomena – where a change in one indicates a change (or probability of change of change) in another. The causal nature of those relationships provides the opportunity to identify how a series of hypotheses might be linked and so suggest new insights into Gandhi’s ethics. In this section, we will look at the relational statements and portray those relations as a single diagram.

To begin with a simple example, Figure 1 shows the causal aspect of the hypothesis is noted in the box on the left. Also, the resultant aspects of the hypotheses are noted in the box on the left. The causal effect is noted by an arrow. For reference purposes, each hypothesis is noted in a circle. In this example, “H3. Being violent counteracts long-term, universal reduction of violence.” Might be portrayed as:

For Figure 2, all of the causal hypotheses from Gandhi’s ethical code have been combined into a single diagram. To reduce confusion, where Gandhi described “others,” this chart replaces that term with “opponent” as the goal seems similar in each case (to move them from conflict to collaboration).

In How to Build Social Theories, Shoemaker et al. (2004, p. 89) note the value of graphic representation for increasing the clarity of a model. This approach may also be applied to Gandhi’s ethics. Here, that system of ethics has been clarified. In creating the graphic representation for Figure 2, a number of issues become apparent. First, many concepts may be understood as what might be called “causal orphans.” That is to say that a hypothetical “concept A” might be diagrammed as causing change in another concept (“B”), but nothing seems to cause change in “A.” For example, “More sense of own fallibility” seems to have the effect of causing both “fewer misjudgments” and “more knowledge of opponent and situation.” Yet, the model does not describe how one increases one’s sense of one’s own fallibility. From a systems perspective, this seems to be a “broken link” and an opportunity to improve the model and so our understanding of the systemic interrelationships.

From what might be thought of as a postmodern perspective, a causal orphan concept seems atomistic or “reductive” and so of questionable academic validity, because it remains essentially undefined in the context of the very model of which it is (presumably) an important part.

**Figure 1** Simple example of diagram

![Diagram of causal loop](attachment:figure1.png)
Similarly, $H_{26}$ (less persistence on your part leads to more mistrust of you by your opponent) seems to be an “isolated” hypothesis as the concept of mistrust does not seem to cause change in any other areas.

Additionally, there do not appear to be any “feedback loops.” For example $H_{11}$ states, “more secrecy and distortion by you leads to more violence by your opponent.” We are not informed (for a hypothetical example) whether more violence by your opponent might then lead to greater or lesser secrecy on your part. The existence of feedback loops would be one way to adequately define orphan concepts. For example, we might speculate that more “violence by self” might lead to “more sense of own fallibility.” There may, however, be a “workaround” if we identify less evident, but still conceptually coherent, linkages between hypotheses. These linkages are seen in Figure 3.

Some of these linkages seem immediately evident. For example, “less violence by self” and “more violence by self” may be seen as a scalar, vector, or dimensional representation of the quantity of violence (greater or lesser) performed by one’s self. One might also see “destruction of property” as a form of violence and so extend the perceptual linkages.

Other linkages suggest themselves, but may not be so evident. For example, “more goal directed motivation” may be seen as perceptually similar to, and/or required for, “more
persistent appeal." Certainly the persistence of an appeal would be enhanced by motivation.

This systemic representation of Gandhi’s ethics opens the door for further analysis, particularly indicating where feedback loops are missing. However, this further clarification of the existing hypotheses may be problematic. For example, within the extant body of ethics, it is not clear how to better integrate the causal orphans and broken links noted above.

While these diagrams are useful for understanding the causal interplay between elements of Gandhi’s ethics, they do not provide a clear indicator of the efficacy of those ethics. For example, Gandhi says, that more self-sacrifice will lead to more sincerity – but how do we know that to be true? Different people might offer contrasting opinions backed by long chains of logic – and neither might change the views (or behaviors) of the other.

This is an important question because why would an individual or corporation change their behavior to fit a code of ethics without some sense of whether that code of ethics will prove successful? In the next section, I will conduct a propositional analysis to determine the
potential effectiveness of Gandhi’s ethics for changing behavior of individuals and organizations.

8. Propositional analysis

Robustness was recently introduced as a method for objectively identifying the core concepts of a body of theory where, “the Robust core of theory, consisting of co-causal propositions, supports the validity and testability of a theory” (Wallis, 2008a).

In this use, robust does not mean “strong” or “widely applicable” (although those terms may also have use). The use of robust presented here is closer to the sense it which it may be used in physics to represent a formula where each concept of the formula is defined by the others. For example, in Newton’s \( F = ma \), each term of the equation is defined only by the other terms. This self-defining nature of robust models might be traced back to the Yin-Yang relationship as suggested by Zude and Yolles (2006). The authors note that forces such as Yin and Yang are “differentiable yet inseparable.” Another example of a robust system might be seen in Wilber’s (1996) idea of an “integral” theory. In his model, the ideas from a hundred theories relating to personal development were sorted into four quadrants and each quadrant is defined, explained, and understood by the other three quadrants.

Where a highly robust theory seems to be highly useful in application, thus generating changes in behavior, theories of low robustness seem to generate confusion and conversation. For example, one who happens to be in possession of a large book of ethical recommendations might be frustrated in one’s attempt to find the “best” norm to apply in a sudden situation. For another example, a human in possession of a single ethic and faced with a difficult situation might be tempted to reinterpret that ethic to provide a seemingly better fit to the situation. In a case where the ethic says, “do not kill,” he might interpret it to “mean,” “do not kill your friends” and so, by inference, believe that it is acceptable to kill non-friends. This obviously creates an issue of integrity for the system (in addition to the individual engaged in interpretation).

And yet, without interpretation, there might be no creation of meaning in the social constructed sense. Also, without the opening for interpretation, academicians might not be able to make long and worthy careers by discussing ethical statements.

Naess notes how the validity of each statement, “depends upon the truth and tenability of a set of empirical hypotheses, testable only by the techniques of the social sciences.” (Naess, 1958, p. 143, original italics). Naess says no more about testing, indeed it is generally considered difficult or impossible to test social theory – especially to the standards of falsifiability and predictive power (Popper, 2002). Wallis (2008b) suggests that Popper’s standard sets too high a hurdle for the present level of development of the social sciences. He suggests instead that we should use a variety of tests to triangulate our understanding. These include tests that are external to the theory (such as Popperian falsification or links between theory and action) as well as internal to the theory (such as the test of robustness).

From Wallis (2009), the robustness of a theory may be objectively determined in a straightforward manner (for an in-depth example, see Wallis (2008a)). First, the body of theory (or, in the present paper, an ethical code) is investigated to identify all clear propositions. Those propositions are then compared with one another to identify overlaps, and redundant aspects are dropped. Second, the propositions are investigated for conceptual relatedness between the aspects described in the propositions. Those propositions that are causal in nature are conceptually linked with aspects of the theory that are resultant.

Propositions that are “atomistic” (e.g. A is true) are not held to be of great value because they merely lead to the need for more propositions to support their validity. Similarly, propositions that are linear (e.g. A causes B) are not held to be of great value because the explanation that they represent is relatively simple. Indeed, it may even be considered a tautology or a non-useful “renaming.” However, linear propositions may be combined with other propositions to create more complex propositions that are more useful.
Those resultant aspects that are described by two or more causal aspects are understood to be “concatenated” (Dubin, 1978) and are considered to be more complex, more complete, and more useful than aspects that are not as complex, or as well structured. For example, if one explains A as being caused by B, that explanation is not so effective as explaining A as being caused by both B and C. This is an example of a double description (Bateson, 1979) that leads to a transcendent understanding. In short, a theory or code of ethics containing a higher percentage of transcendent understanding is more likely to be more useful, and so will be more likely to influence behavior.

Third, the number of concatenated aspects in the theory is divided by the total number of aspects in the theory to provide a ratio – a number between zero and one. This ratio is the robustness of the theory and represents the degree to which the theory is structured. A value of zero represents a theory with no robustness, as might be found in a bullet point list of concepts with no interrelationship between them. A theory with a value of one suggests a fully robust theory; an example is Ohm’s E = IR. Because of the successful application of robust theories in math and physics, it may be expected that a robust theory of the social science can be reliably applied in practice, and will be more easily falsifiable in the Popperian sense (Wallis, 2008a).

Metaphorically, bricks that are directly joined to other bricks would be highly robust (as found in a structured wall or home), while bricks that are scattered about would not be robust at all. A pile of bricks would be somewhere in the middle (as a pile might have slightly more structure than scattered bricks, though far less structure than a home).

For an abstract example of determining robustness, consider a code of ethics containing five aspects (A, B, C, D, and E), each representing differentiable concepts or phenomena. The causal relationships between these aspects are suggested by two propositions:

- **P1.** A causes B
- **P2.** More C and more D results in more E.

Of these, only E is concatenated because there are two aspects of the theory that are causal to E. Therefore, the robustness of this theory is 0.20 (the result of one concatenated aspect divided by five total aspects).

This method of propositional analysis allows us to examine a theory and assign a relatively objective measure of the structure of that ethical code. With this method of measurement in hand, we can apply the yardstick of robustness to codes of ethics to decide which among them is most effective – and so most likely to support changes in behavior and CSR.

In conducting this analysis, we begin by using Figure 3 as a representative of the propositions in Gandhi’s ethics. Here, one may identify 20 total aspects (sense of fallibility, knowledge of opponents and situation, misjudgments, etc.). Recall, that some similar ideas have been combined from Figure 2. Among these 20, there are five that are concatenated (misjudgments by you, violence by self, violence by opponent, moving of opponents to being supporters, mistrust of you by opponent). Therefore, the formal robustness of this model is 0.25 (the result of 20 total aspects divided by five concatenated aspects).

As such, Gandhi’s code of ethics is unlikely to engender significant or enduring changes in behavior. Similarly, if one adopts Gandhi’s code, it may appear to be easily replaceable by other codes because it does not have the validity or effective claim of transcendent truths. Certainly, it does not have the same strength to impel the continued use as a theory of physics (such as Ohm’s law).

### 9. Conversations and future studies

For Gandhi, the goal was nonviolence. For developing more effective ethics, the goal is robustness.

Although the present study suggests that Gandhi’s ethics do not represent a highly robust model, it does suggest interesting opportunities for future study. One possibility is to expand the present study to include other writings of Gandhi. It may be that the “missing
relationships” (of the potentially more robust model) might be found in other writings of Gandhi. A study of the broader scope of his writings might “fill in the blanks” and allow the creation of a more robust model.

From another approach, future studies might seek to identify what additional relationships between the existing concepts may be reasonably inferred. For example, it may be speculated that increasing violence leads to loss of oneness, or that varying forms of engagement lead to more knowledge.

Additionally, the addition of a few new dimensions might “round out” the relationship between the existing dimensions. Finding relationships between dimensional concepts in the model is important because it advances the legitimacy of the model; also, because those relationships may be used to identify strengths and leverage points within the model.

For a hypothetical example of a leverage point, \( H_{21} \) suggests that more sense of own fallibility causes fewer misjudgments. Also, \( H_{21} \) suggests that more sense of own fallibility leads to more knowledge of opponent and situation. The knowledge of opponent and situation is also seen as causing fewer misjudgments (\( H_{20} \)). This relationship may suggest that sense of fallibility is twice as important as knowledge of the situation. Such an understanding may have significant implications for the application of the model because (if true) an activist would know that her chances for success are improved if more time is spent understanding one’s self, than understanding another.

New dimensions added to the model might not even need to be “precisely” identified. Such a dimension may, for example, be identified as an “x” factor of (for example) “conflict resolution” – the exact meaning of which may be found after comparing the model with historical data to find out how the “x” might be understood.

Such an effort might be analogous to early explorations into electricity where scientists could observe flickering needles of primitive meters as the wires, bulbs, and cells of the circuits were manipulated – but did not have immediate understanding of the interrelationship between those causes and effects. Once the relationship had been established, it was possible to develop Ohm’s law (a robust theory), which then allowed the development of the electronics industry, as we know it today.

Another path for exploration might be found by linking Gandhian ethics with other systems of ethics. We may find that two systems together are more robust than either one alone (the whole is greater than the sum of the parts). Another path of exploration involves moving beyond ethics and into other areas of study. For an interdisciplinary example, one might reach into psychology to identify sources of motivation; which, for Gandhi, seems to exist only as a cause, not an effect. Similarly, one might draw on the study of learning to identify the origins of knowledge or political science to identify the sources of conflict. It may be that these studies will “fit” neatly into the model developed here, or additional dimensions may be added, or an entire re-conceptualization of the varied relationships may need to be developed.

When scholars are able to propose a fully robust (or, very nearly) version, that model will suggest opportunities for testing the ethical code in practice and/or testing by historical analyses. These experiments may also suggest the addition of new dimension(s). Such “applied” tests of a robust model suggest the opportunity to disprove the model in a Popperian sense (Popper, 2002). Such an action should be approached cautiously – as cautiously as a physicist might approach proposing a change in Einstein’s equations. For any new dimension proposed, the ethicist should identify clear conceptual cause and effect linkages between the new concept and two or more existing concepts (e.g. number of groups involved, complexity of the environment, predictability of unknown groups, etc.).

The approach presented in this paper suggests a set of potentially important research questions, including:

- What levels of robustness may be found in ethical codes developed in the CSR literature?
- For a specific company, industry, or geographic region, how has the robustness of their ethical codes changed over time?
How are those changes related to historical events (e.g. market upturns, downturns)?

On an individual level, does the robustness of an individual’s ethical code change as that person advances through stages of development?

What is the relationship between the robustness of an ethical code and the use of that code in one’s daily life?

How does the robustness of one’s code relate to one’s leadership style?

Are more robust codes easier to apply with greater consistency?

Are espoused ethics more different from enacted ethics when the ethics are less robust?

On an organizational level, how does the robustness of ethical codes relate to the performance of that organization (humanistically, environmentally, financially, etc.)

The present study opens a new window onto the study of ethics as a truth claim (how we know what we know) by investigating and quantifying the internal structure of a code of ethics. These questions open a broad new range of opportunities for research. Importantly, such research will be objective, rather than subjected to the interpretations of the researcher. Answering these questions will provide a clear understanding of ethical codes and how they are related to behavior.

Further, they are likely to suggest new standards and approaches to the theory and practice of CSR. Also, this paper serves as an example that scholars and practitioners might follow in the process of analyzing and comparing their own ethics.

10. Conclusion

Working from the assumption that ethical codes might be useful representation of our standards of social responsibility, I began this paper by raising key concerns around the difficulty of studying ethics in a way that might improve our ability to improve behavior and achieve a higher level of CSR. I drew a meaningful parallel between social theory and ethical codes based on the idea that both have internal structures and both serve as guides to behavior. I also described new insights from metatheory that reflect on an important relationship between the internal structure of a theory and the effectiveness of that theory in influencing behavior. The analysis of the interrelated nature of the propositions represents a new logic for understanding systems of ethics.

Next, I analyzed Gandhi’s code of ethics as an example that scholars and practitioners might use when analyzing their own ethics. This code of ethics was subjected to two forms of analysis – systemic mapping and propositional analysis. The systemic mapping found Gandhi’s ethics to be primarily axiomatic and normative. That is to say, Gandhi does not provide a map for understanding the situation so much as he tells people what to do and how to behave. One weakness is the apparent contradiction of using a declarative/normative/axiomatic theory as a method for shifting rulers from conflict to collaboration. That is to say, Gandhi may be seen as dictating to the people that they should avoid dictators.

The second study (propositional analysis) attained a deeper, more objective, level of understanding and identified how future studies might develop a robust theory of Gandhian ethics – with the opportunity to create a falsifiable (and so improvable) ethical code and social theory of conflict resolution.

It is suggested in this study that Gandhi’s ethics have a low level of robustness (0.25 on a scale of zero to one). Based on the revolutionary metatheoretical insight, that more robust theories are more effective in practice, that process and the accompanying results provide a new answer to a very old question.

The question, “Why can’t we all just get along?” might be rephrased as, “Why doesn’t everyone adopt Gandhi’s system of ethics?” The question may now be answered, “Because the proposed system (however well intended) is of low robustness.” And, that low level of robustness means that his ethics are not likely to work reliably in practice. Further, the low
level of robustness means that his ethic may be easily replaced by another – almost on a whim – resulting in inconsistent behavior.

In comparison to the low-robust system of ethics studied in this paper, the highly robust models of physics (e.g. Ohm's law of $E = IR$) have been readily adopted around the world and have led to enduring changes in behavior because scientists and engineers have relied on the world-view created by such theories.

This paper clarifies how systems of ethics (Gandhi's, and quite possibly, others) have a low level of robustness. And, this paper clarifies how people find such perspectives unreliable and so are not compelled to alter their behavior to fit any one particular system of ethics.

Or, from another point of view, because each ethical system is of low robustness, low reliability, and low effectiveness in application, people are free to switch their ethical allegiances at the drop of a hat – in much the same way that changing religions does not seem to alter one's ability to pray for rain with any greater or lesser effectiveness.

In short, ethics of low levels of robustness are easily changed by individual behavior, while ethics of high robustness may be more useful than less robust codes of ethics in changing individual behavior. The opportunity to compare the objective structure of ethical systems with the observable behavior of individuals suggests a new research stream that is likely to produce profound insights.

To conclude, the present paper has profound implications for individuals and organizations seeking to adopt and engender consistent behavior that is congruent with higher standards of ethics and social responsibility. The highly robust models of physics have vastly changed the behavior of everyone on the planet by supporting a technological revolution leading to increased living standards. In contrast, codes of social responsibility that are less robust are likely to be dropped when individuals and firms face great difficulties.

Imagine, now, what sort of social revolution we might achieve by employing robust codes of ethics that support more effective behavior and solid, predictable, levels of social responsibility.

References


Wilber, K. (1996), A Brief History of Everything, Shambala, Boston, MA.


About the author

Steven E. Wallis received his PhD from Fielding Graduate University in 2006. He has a decade of experience as an organizational development consultant in Northern California and a broad range of interdisciplinary interests. He is the founding director of the Foundation for the Advancement of Social Theory – dedicated to identifying objective paths for the validation of social theory, benchmarking the advancement of theory, and supporting the falsification and application of effective theory in social systems. Through this metatheoretical approach, Dr Wallis is working to accelerate the advancement of the social sciences for the benefit of scholars and practitioners around the globe. Steven E. Wallis can be contacted at: swallis@ProjectFAST.org

To purchase reprints of this article please e-mail: reprints@emeraldinsight.com
Or visit our web site for further details: www.emeraldinsight.com/reprints