Behavioral approaches have been successful in challenging the rational actor model of international legal analysis and supplementing that model with empirical evidence. Yet observing a set of features about the world requires ignoring or bracketing others. Behavioral approaches retain their own inevitable blind spots, which are not necessarily products of flawed experimental design, but stem from the paradigmatic traits of these approaches. These blind spots derive from an emphasis on methodological individualism, positivism, and experimentation. This emphasis may obscure the social aspects of international legal decision-making. For example, behavioral approaches to international law often use experimental data to describe cognitive tendencies. In doing so, these approaches may not seek and likely will not have tools to discover the meaning of a state action, or the human actions that produce that state action. That latter inquiry requires “historical, ethnographic and other sociological methods that analyze social life outside of the experimental setting.” In sum, behavioral approaches pursue both theoretical and empirical concerns different from those pursued in an interpretive mode of meaning-making.

Emerging scholarship on behavioral approaches has shed both critical and complementary light on conventional international law literature. Some scholars prioritize examining social environments for human rights violations and human rights offenders. They also seek to improve international law’s compliance pull by proposing “commitment strategies and specifically designed social situations that harness human biases.” Others, departing from the rational choice theory of international law, attempt to better understand treaty design by investigating a black box of state consent informed by cognitive biases, such as the status quo bias and the framing effect. To be certain, behavioral approaches help generate useful knowledge on state actors and their actions. The main aim of this short contribution is not to debunk the merits of behavioral approaches, but to expose the inevitable blind
spots of behavioral approaches and facilitate their self-reflectiveness so that these approaches can continue to improve their methods and modes of operating.

**Explanation Versus Understanding**

A cognitive behavioral model is applied, at a fundamental level, to explain rather than to understand state actions through exposing cognitive biases and heuristics. To the extent the model explains state action, its interdisciplinary value may parallel that of neorealism, which explains state actions through power, and neoliberalism, which explains state actions through domestic preferences or utilities. As in the rationalist tradition in the study of international relations, a cognitive behavioral approach is positivist and is interested in causality between international law and state actions. Thus, a cognitive behavioral approach is not meant to “understand” states and their actions. Understanding a state action requires an interpretation of what the state meant in taking that action. Granted, international law may benefit from the particular mode of explanation behavioral approaches employ, and the resulting prediction of state action extrapolated from human behaviors. Nonetheless, such an explanation comes from the external, objective perspective of researchers who employ behavioral approaches. This form of explanation features a different “style of reasoning” than that of understanding state actions from within, that is, from the internal, subjective perspective of states themselves.

Behavioral approaches focus predominantly on effortless heuristic-based cognition (“a predominantly unimodal view of information-processing”), rather than effortful deliberation-based cognition (“a deliberative mode of thought that functions by careful application of normative rules”). In some respects, the paradigmatic salience of behavioral approaches on the heuristic mode of thinking lies in the ontology of these approaches, which is methodological individualism. The behavioral approach, through experimentation as its predominant method, focuses on what an actor may reveal rather than on the meaning of an action itself, which requires an account of collective, inter-subjective meaning beyond the mere description of an actor’s subjective meaning. For example, behavioral approaches might explain opinio juris as an aggregation of “intrinsic” law-abiding motivations from individual states. However, such an explanation might not adequately construct an international customary rule in a way in which states “credit” one another with the rule through “mutual recognition of subtle normative expectations.” In this vein, some critics warn that a behavioral approach’s systematic focus on heuristic thinking may generate an “unrepresentative sample of findings” in legal decision-making.

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7 Regarding the distinction between “explaining” and “understanding” in social sciences, see **Martin Hollis**, *The Philosophy of Social Science* 183–201 (1994).

8 See **van Aaken & Broude**, *supra* note 1, at 1235.

9 **Ian Hackling**, *Historical Ontology* 159–77 (2002).

10 Gregory Mitchell, *Taking Behavioralism Too Seriously - The Unwarranted Pessimism of the New Behavioral Analysis of Law*, 43 WM. & MARY L. REV. 1907, 2011, 2015–16 (2002). See also **Daniel Kahneman**, *Thinking, Fast and Slow* 21 (2011) (stating that “Although System 2 believes itself to be where the action is, the automatic System 1 is the hero of this book”) (emphasis added).

11 **Hollis**, *supra* note 7, at 148

12 See Sverre Grepperud, *Environmental Voluntary Behaviour and Crowding-Out Effects: Regulation or Laissez-Faire?*, 23 EUR. J. L. & ECON. 135, 136–37 (2007) (regarding an “extrinsic” motivation, such as that from monetary rewards, and an “intrinsic” motivation, such as that from moral norms).

13 **Hollis**, *supra* note 7, at 162

14 **Mitchell**, *supra* note 10, at 2016.
**Double Hermeneutic**

How can one mind, the experimenter’s, know the object of another, the mind being experimented upon? First, researchers may observe social actors’ behaviors through the researcher’s own sensory data, that is, what they see, hear, and record. Researchers test their hypotheses on certain behavioral patterns and prove or disprove them by studying those data sets. Through this scientific process, researchers may explain and even predict certain human phenomena. This is a typical example of positivism, as seen in the natural sciences. The cardinal assumption of scientific positivism is that an observed object, the social actor, is absolutely independent of an observing subject, the researcher. For example, when a particle physicist stares at an electron, that electron never stares back at the physicist. The physicist’s only concern is to study, or interpret, the data produced by the electron’s movement patterns. This is called the single hermeneutic. To the extent that the paradigmatic nature of inquiry by behavioral approaches concerns explanation, these approaches deal with the single hermeneutic. The assumption is that the experimenter would not communicate with the subject being experimented upon.

However, the subject being experimented upon does think and interpret for himself or herself. The subject can communicate with the researcher and take his or her cue from the researcher. Then, all positivist bets are off. This epistemological characteristic of an “interpretation of an interpretation” unique to human sciences is called the “double hermeneutic.” It is synonymous with the notion of “reflexivity,” which “refers to an awareness of the discourses within which both the research and the researcher are embedded, as well as to the ways in which the contexts of the research refer back, reflexively, to prior experiences and knowledge constructs.”

As anthropologists or interpretive sociologists often do, researchers must interpret social actors’ meanings and reasons for their behaviors from the latter’s perspective.

While an electron does not change its behavior due to a particle physicist’s theory, social actors may intentionally conform their behaviors to a researcher’s idea. For example, Keith Conners, a psychologist, was an early advocate for proactively identifying and treating “attention deficit/hyperactivity disorder” (ADHD) among children. According to Conners’ original investigation, only 1 or 2 percent of children would be subject to this disorder. While his research did raise awareness of ADHD, it proved to be a victim of its own success. He was later shocked to witness a skyrocketing over-diagnosis of ADHD, up to 15 percent of children, which he described as a “natural disaster of dangerous proportions.” This ostensible ADHD epidemic was attributable to a “concoction to justify the giving out of medication at unprecedented and unjustifiable levels.” The identification of the disorder became a “self-fulfilling prophecy.”

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15 Obviously, quantum mechanics challenges this conventional premise in the world of small particles. See notably Alexander Wendt, *Quantum Mind and Social Science: Unifying Physical and Social Ontology* (2015).
16 Hollis, supra note 7, at 146, 161; Anthony Giddens, *The Constitution of Society: Outline of the Theory of Structuration* (1984) (“The ‘findings’ of the social sciences very often enter constitutively into the world they describe.”). Importantly, double hermeneutic is more than a methodological issue as seen in threats to “internal validity,” derived from a control failure in an experimental setting. For example, an experimenter may manipulate the outcome of an experiment by informing the subjects of what the former desires. See generally Rose McDermott, “Experimental Methods in Political Science,” *5 Ann. Rev. Pol. Sc.* 31, 36–37 (2002).
17 Lace Marie Brogden, “Double Hermeneutic,” in *Encyclopedia of Case Study Research* 322 (Albert J. Mills et al. eds., 2010).
18 Regarding this example, see Gregg Henriques, “ADHD and the Problem of the Double Hermeneutic,” *Psychol. Today* (Dec. 17, 2013). See also Alan Schwartz, “The Selling of Attention Deficit Disorder,” *N.Y. Times* (Dec. 14, 2013).
19 Henriques, supra note 18; Schwartz, supra note 18.
20 Henriques, supra note 18; Schwartz, supra note 18.
21 Giddens, supra note 16, at xxiii (“the causal conditions involved in generalizations about human social conduct are inherently unstable in respect of the very knowledge (or beliefs) that actors have about the circumstances of their own action”). See also Andre Kukla, *The Structure of Self-Fulfilling and Self-Negating Prophecies*, 4 Theo. & Psycholog. 5 (1994).
Prospect theory, the queen of all heuristic theories, generates several suppositions such as loss aversion, endowment effects, or status quo bias that create framing effects. Those framing effects explain how people may evaluate the same situation differently depending on how the situation is portrayed.22 A state, upon being informed about prospect theory, may proactively seek to implement the theory. It may seek to avoid state responsibility by strategically characterizing its wrongdoing differently, that is to say, in a more innocuous fashion. For example, discriminatory trade restrictions, which violate World Trade Organization rules, may be framed as legitimate safety or environmental policies, which exculpate such a violation.23 This behavior could indicate another manifestation of a self-fulfilling prophecy as an observed social actor (in this case, the state) frames their behavior in terms of the framing effect theory originally advanced by an observer (the researcher).24

Likewise, in a military operation, the size of collateral damages in the form of civilian causalities speaks to the proportionality test under the law of war.25 If one style of wording may somehow render the operation more innocuous and therefore agreeable under this test, that style of description would be not only preferred but also encouraged in the future, despite potential costs. Here, as in the previous example of the ADHD study, the framing will be learned by the observed, the military personnel, in a way that helps rationalize a military choice. Indeed, many commentators warn about this possibility, especially in light of controversial drone strikes. Conor Friedersdorf argues that the label of a “surgical” drone strike evokes an image of precision corresponding to surgeons and thus tends to underestimate collateral casualties.26 Michael Boyle observes that employing the nebulous label of “militants” to the targets of drone strikes entails a “guilt by association” approach, which “implies an indifference to the combatant status of the potential victims that is at odds with the legal and moral responsibility to make this determination before killing them.”27

Relatedly, in the “law and development” debate, mainstream development theorists argue that the promotion of Western-style rule of law is a prerequisite for economic development in developing countries. Unfortunately, however, this theory of economic neoliberalism, or the so-called “Washington Consensus,” does not seem to have demonstrated noticeable success, although foreign investors often accept it. Dani Rodrik and his co-authors argue that:

Obviously, the presence of clear property rights for investors is a key, if not the key, element in the institutional environment that shapes economic performance. . . . But nothing is implied about the actual form that property rights should take. We cannot even necessarily deduce that enacting a private property rights regime would produce superior results compared to alternative forms of property rights.28

Here, the targets of research (developing countries) may self-fulfill the researcher’s theory (the neoliberal development theory) by following it and adopting Western style rule of law. Nonetheless, economic development in a particular developing country may be attributed to different factors from Western style rule of law.

22 See notably Amos Tversky & Daniel Kahneman, The Framing of Decisions and the Psychology of Decisions, 211 SCI. 453 (1981).
23 Regarding “covert protectionism” that refers to domestic regulations discriminating against foreign imports in practice, although they are labeled (framed) as being aimed at legitimate policy objectives, such as health and environmental protection, see John O. McGinnis & Mark L. Movsesian, The World Trade Constitution, 114 HARV. L. REV. 511, 549–50 (2000).
24 Cf. Alberto Alemanno & Alessandro Spina, Nudging Legally: On the Clocks and Balances of Behavioral Regulation, 12 INT’L J. CONST. L. 432, 446 (2014) (viewing that the government’s use of framing may lead to propaganda).
25 Tomer Broude, Behavioral International Law, 163 U. PA. L. REV. 1099, 1150–56 (2015).
26 Conor Friedersdorf, Calling U.S. Drone Strikes ‘Surgical’ Is Orwellian Propaganda, ATLANTIC (Sept. 27, 2012).
27 Michael J. Boyle, The Costs and Consequences of Drone Warfare, 89 INT’L AFF. 1, 7–8 (2013).
28 Dani Rodrik et al., Institutions Rule: The Primary of Institutions over Geography and Integration in Economic Development, 9 J. ECON. GROWTH 131, 157–58 (2004).
Therefore, there exists an inevitable “epistemic gap between the world of research and that of actual practice.”

Social scientists often “construe the world as a spectacle, as a set of significations to be interpreted, rather than as concrete problems to be solved practically.” Such an epistemic gap might generate tensions between the observer (an experimenter who engages in behavioral research) and the observed (a social agent who is the subject of the experiment) over whose version of legal reality must form the basis of a corresponding normative product. Consider a field manual. Should a field manual be informed by a military commander’s own account of the battlefield experience or a behavioral researcher’s interpretation of experiment data regarding that commander’s behaviors?

Behavioral approaches hinge principally on the hard-wired brain structure and therefore must be universal across tempo-spatial contexts. In other words, behavioral approaches assume uniformity of human decision-making based on common cognitive characteristics. But this assumption may be challenged. Consider the military context. Is every commander in every combat situation prone to identical military decision-making as long as the main parameters, such as civilian casualties, remain the same? Would a Roman centurion, in pursuit of *bellum Romanum* (“all-out-war”), reach the same choice in a battlefield as a NATO commander who is attentive to an emerging international custom of “responsibility to protect”? This situation-specific decision-making appears to provoke more effortful non-heuristic thinking (which cognitive behavioral approaches do not examine) than effortless heuristic thinking (which these approaches study). In most cases, critical military decision-making is a product of culture, training, and even philosophy. Indeed, a good military leader requires a long period of education, training, and battle experience, and a high moral character. These sociological aspects do not appear to be the main theoretical concern of behavioral approaches.

**Conclusion**

The international relations/international law field profits from cognitive behavioral research in explaining the cognitive origins of state actions. Yet this essay has raised the question of whether the study of international law can be a science, in that it conjectures a hypothesis, tests that hypothesis, and formulates a theory therefrom. Is the main mission of international legal study to explain and predict state action, as a Keplerian theory explains and predicts planetary movement? A state, let alone the human beings behind it, is different from a rock or a mouse. International law may benefit from experimentation and measurement to better capture underlying facts. However, as a norm-centered field of study, international law’s ultimate mission is to interpret, judge, and discipline, which does not necessarily dovetail with the nature of inquiry pursued predominantly by behavioral approaches.

In closing, the main role of behavioral approaches might better be understood as advisory rather than instructive. Experimental and other empirical findings may demonstrate the existence of certain mental mechanisms that play out under certain conditions. These findings may inform certain aspects of treaty design and, to that extent, may stimulate normative consideration. Nonetheless, such findings themselves cannot, and should not, replace normative judgments, much as a judge must ultimately determine the outcome of litigation by his or her interpretation, even with the aid of expert witnesses, including psychologists. Behavioral approaches may have the first word on international law, but not the last one.

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29 Vincent Pouliot, “Sobjectivism”: Toward a Constructivist Methodology, 51 Int’l Stud. Q. 359, 368, n. 10 (2007).
30 Loïc J.D. Wacquant, *Toward a Social Praxeology: The Structure and Logic of Bourdieu’s Sociology* in *An Invitation to Reflexive Sociology* 39 (Pierre Bourdieu & Loïc J.D. Wacquant eds., 1992).
31 Pouliot, *supra* note 29, at 368.