Research Dialogue

Beyond rationality: The content of preferences

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Abstract

The BDT literature has largely focused on demonstrations of violations of rationality (i.e. consistency) in individual decision making and has had little to say about the content of preferences. While researchers concluded that inconsistency implied preferences were constructed, some went so far as to presume that since preferences are constructed, substantive preferences do not exist prior to their revelation. In other words, they extended the findings that individuals do not always know exactly what they want to imply that consumer’s do not have any substantive preferences. This clearly overstepped the bounds of the evidence, which was agnostic toward the existence of reasonably stable substantive preferences. We applaud Simonson for calling attention to this point. While we do not believe that Simonson’s “inherent preferences” lead to preference orders that behave any more rationally or consistently than those studied in the BDT literature, we nevertheless join him in his call for further research into the content of preferences and make a variety of suggestions about where that research will bear most fruit.

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The principle of bounded rationality was the driving force behind the emergence of Behavioral Decision Theory (BDT). The field of individual decision making was consumed by the study of how choices or more precisely, preferences as revealed through choices, varied systematically from a normative benchmark provided by economic theories of consumer behavior. As we discuss next, BDT researchers in using the standard of rational preferences have focused on the origination of rational more than the origin of preferences. This is in line with an economic viewpoint that was indifferent to how preferences came about. The standard criterion used in the literature to define rationality of preferences is the principle of consistency (Rieskamp, Busemeyer, & Mellers, 2006) and over time, the focus shifted from a richer discussion of the rationality assumption and the implication of its violation in consumer choice to a nearly singular focus on demonstrations of inconsistency in decisions across different elicitation methods, choice contexts, situations, etc. This is the backdrop to Simonson’s (2008) call for a shift in focus to what he calls inherent preferences. We agree with his call for a shift away from demonstrations of inconsistencies and toward an understanding of how preferences are formed, how they change, and how they express themselves across choice situations, but we see several challenges in incorporating Simonson’s notion of inherent preferences in this endeavor. We begin by examining where BDT came from and conclude by suggesting where we think it might head.

There are at least two very different assumptions that are made in standard economics that are psychologically implausible and often lead to demonstrations of inconsistency. One assumption pertains to human ability to perfectly process all information when making choices. Clearly, not even economists (any longer) believe this assumption. The psychological reality of finite processing capacity and selective processing of information suggests that the use of consistency as a sufficient benchmark to label preferences as irrational is not quite correct. Thus, inconsistency in choices due to processing constraints such as time pressure, resource depletion, or cognitive load (cf. Dhar, Nowlis, & Sherman, 2000; Percheptsova, in press; Wang, Novemsky, Dhar, & Baumeister, 2008) in our view is not clear evidence of any irrationality in underlying preferences. These inconsistencies are interesting and important as they play out in the real world but they are not evidence of the presence or absence of inherent preferences and are not discussed further.

A second assumption in standard economics whose violation leads to inconsistent choices is the idea that people have comprehensive or complete preferences (i.e., the assumption of completeness or coherence requires people to have a stable
ordering over all possible alternatives). Many tests of constructed preferences in the BDT literature are based on an empirical demonstration of inconsistent ordering in relatively simple choices such that information processing constraints discussed earlier are not the source of inconsistency. We expect that violations of completeness are likely to hold even for objects or aspects for which consumers have stable inherent preferences. Hence completeness violations do not speak to the issue of inherent versus constructed preferences. For example, assuming for the moment that Simonson’s preferences for a pillow or its ingredients are indeed inherent, we still expect that the exact quantity, quality, dimensions, or price paid is likely to be influenced by the context as it is extremely unlikely that Simonson’s inherent preference for a pillow will also satisfy the assumption of completeness (i.e., people cannot be expected to have a comprehensive preference order for the infinite number of possible variations in pillows). In other words, even people who inherently like pillows are extremely unlikely to have complete stability in the attribute levels representing their most desired pillow and creative researchers would be able to show inconsistent choices for these people. This is not meant as a refutation of the usefulness of inherent preferences. In fact, it would appear from his paper that Simonson would agree with this characterization.

It is important to stress that evidence of construction as based on the principle of consistency says very little about whether or not people have substantive preferences. The fact that immediate context (e.g., options presented, frame, task, etc) can influence whether a consumer chooses a 1300 W Microwave for $99 or a 1500 W microwave for $129, does not imply that this same consumer does not have a very stable substantive preference for a microwave over a toaster oven. In other words, one can have a substantive preference for a microwave over a toaster oven without having a complete or consistent ordering over all possible microwave ovens. Unfortunately, the term preferences has referred to both the general content of preferences and the specific ordering that is revealed in particular choices. It is quite clear that the field has little to say about the content of preferences and that research has mainly shown how specific orderings of choice options are constructed.

In summary, Simonson argues that the BDT agenda has focused on construction and de-emphasized the role and existence of inherent preferences. As pointed out above, the agenda has mainly focused on the rationality of preferences and is agnostic about the substantive content and origin of these preferences. Thus, the research program has had little to say about how these preferences come about, inherent or not, just that they are shown to manifest inconsistent ordering. Since preferences in almost every domain, regardless of their origin, are likely to violate the principle of consistency, these violations speak to the rationality assumption about preferences but have little to say about the substantive content of the preferences themselves. Thus, it is fair to say that the field has emphasized the “rational” in the term “rational preferences.” We agree that a leap was made in the literature when scholars inferred from the demonstration of preference inconsistency that somehow it is the same as demonstrating people do not have substantive preferences. What is demonstrated by these experiments is that people do not have complete or transitive preferences. This is an important point that may have been lost with the researchers (present company included) getting caught up in their clever demonstrations of various non-normative effects. We agree with the call to put greater emphasis on understanding the substance of preferences going forward.

**Deconstructing construction**

Simonson’s paper makes two important observations about the limitations of the empirical support for preference inconsistency. The first observation refers to the experimental tests that seemingly exaggerate the degree to which the ordering of preferences is constructed by examining unusual choices or tasks (perhaps in part because BDT researchers have little interest in the content of preferences). However, this is of less critical concern if one believes (as Simonson does) that people do not generally have utilities associated with specific values and that the ordering and the exact choice is influenced by the task and context even for objects where people have inherent preferences. Because the studies were not designed to shed any light on the content of preferences and because the gold standard of consistency can easily be shown to be violated for both usual and unusual tasks, this criticism is correct but not relevant to the discussion of inherent preferences.

Perhaps a more important criticism related to Simonson’s observation about BDT using unusual choices is that violations of consistency based on a lack of completeness were given a higher status in the BDT literature than they deserve in understanding the content of consumer preferences. If repeated demonstrations of such consistency violations in a wide range of domains are uninteresting (because refuting completeness does not require such a large number of consistency violations and the content of preferences is not illuminated by these demonstrations), then a different motivation for studying them could be that it helps researchers understand how decisions are made in real world. We agree with Simonson that if the motivation is on how the construction process or the specific phenomenon manifests in the marketplace (e.g., which microwave is chosen), researchers should make a greater attempt to mimic the marketplace purchase context.

Simonson’s second observation is that the field has developed “phenomenon-specific” explanations for a set of effects that all seem to be rooted in the use of relative comparisons among the options provided at the expense of absolute (normative) evaluations. Simonson makes an important contribution in integrating these local explanations. Perhaps if the field saw these many demonstrations of different phenomena as linked to a common (relative versus absolute) framework, the focus might have shifted away from finding “new”

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1. While completeness is often discussed in the context of incomparability of options, we use it here more generally to refer to the inability to choose among alternatives that require attribute tradeoffs.

2. We recognize that it is difficult to define substantive preferences. While there is ambiguity in a preference that has no reliance on attribute values, it still seems to be meaningful in many circumstances.
demonstrations that violate completeness sooner and toward questions relating to the specific content of preferences, how they are formed, and how they change over time.

Putting the focus on “Preferences” in “Rational preferences”

We agree with Simonson that the BDT research program got caught up in cataloging violations of consistency rather than examining other interesting questions about preferences, including the content of people’s preferences. We further agree that questions relating to the content of preferences, inherent or otherwise, should be an important area of future research, especially those that are hard for people to articulate in the absence of actual experience (i.e. dormant preferences). We are less certain that identifying inherent preferences will play an important role in this enterprise for reasons we outline below. We next discuss the kinds of research that could contribute to our understanding of the content of preferences.

While Simonson offers a definition of inherent preferences, he seems agonistic about whether these preferences are innate or learned over time. Nonetheless, establishing the innate source of a preference seems to be the least ambiguous way to identify an inherent preference. In an interesting study of risk aversion and altruism, Cesarini, Dawes, Johannesson, Lichtenstein, & Wallace (2008) provide initial evidence in an experimental setting after controlling for environmental influence, that preferences have a genetic component. Note that much of the literature on innate preferences focuses on preference content at a relatively high level of abstraction (e.g., risk, altruism) as opposed to product attributes (a 2-door versus a 4-door car) or even the corresponding benefits associated with these attributes. This high level of abstraction is very important, as otherwise, the study of innate preference content may boil down to a meticulous cataloging of the list of ingredient attributes preferred by one individual versus another.

One challenge when identifying inherent preferences is that preferences that evolve over time may have been influenced by the broader social and environmental context in the past. Because the field has under-examined the process by which preferences are learned, it would be very difficult to determine whether any particular preference evolved without the influence of incidental context sometime in the past. That is, it would be difficult to determine whether any evolving preference is inherent or not. Moreover, the cataloging of such preferences seems to have limited academic value. This is because it is hardly in dispute that people differ in the content of their preferences (e.g., tea versus coffee drinkers). In fact, while academics may not have studied such preferences, this is precisely what marketers do (under marketplace conditions) in order to identify the best fit with customer needs, or what Simonson would call active preferences, when designing products and services. Academics may be able to play an important role in this cataloguing if it is done at a sufficiently high level of abstraction, and across both individuals and situations. For example, determining when preferences for hedonic over utilitarian features will be expressed (cf. Dhar & Wertensbrom, 2000), or who will generally have social-based versus status-based preferences may be sufficiently general to garner academic interest.

The content of preferences that people cannot articulate prior to a relevant experience (Simonson’s dormant preferences) could also prove a fruitful area of research. For example, aesthetics in product design is seen as an important driver of purchase and consumption enjoyment but preferences in this area are probably difficult for most consumers to articulate or predict accurately prior to any exposure or experience. Any empirical regularity in dormant preferences could be used to enhance our understanding of how tradeoffs are made between active and dormant preferences prior to choice, and why post-choice these dormant preferences may lead to dissatisfaction. It would also be very interesting to examine the source of dormant preferences. If we are not aware of them and they apply to items that were never experienced, where did they come from?

Note that these dormant preferences could emerge immediately upon exposure to a new product or they could emerge over a longer period of time. In the latter case, they might be challenging to separate from constructed preferences. For example, Starbucks decision to launch coffee as opposed to tea bars in China (a tea drinking nation) may succeed not because of a dormant preference for coffee but because the combination of the set of product attributes (e.g., coffee made sweet), imagery factors (e.g., Starbucks experience) that are associated with the brand, and contextual factors (e.g. the framing of the choice) may induce the formation of a new preference for coffee. It is not clear how to demonstrate that a preference that emerges over time is decidedly inherent rather than constructed. Therefore, we believe a focus on immediate rather than slowly revealed dormant preferences would be particularly interesting.

There is some temptation to operationalize inherent preferences as stable preferences. However, stability over time could also arise from constructed preferences to the extent that the construction forces (e.g. contextual factors, accessible constructs, etc.) remain stable over time. Furthermore, even inherent preferences may not be stable as people may learn from new information or feedback (e.g. to be more or less risk-taking over time). Similarly, it is not clear that differential adaptation is evidence for the existence of an inherent preference. For example, recent research suggests that motivation can moderate whether repeated exposure leads to adaptation (Riis & McClure, in press).

Another complication in identifying inherent preferences comes from the relationship between these preferences and concrete choices. The same inherent preference can be expressed in very different choices. For example, someone who is an engineer may have an inherent preference for remarkably engineered devices. However, this inherent preference could ultimately be expressed as a preference for mechanical watches but not other equally impressive devices because of the context in which these devices were exposed to the individual. Thus, a preference for mechanical watches or phonographs may be based on the same inherent preference that is manifested in very different concrete preferences based
on incidental exposure, culture, social interactions, and other contextual variables. While these concerns call into doubt the usefulness of the label inherent preferences, they should not cast doubt on the enterprise of understanding the content of preferences.

While Simonson’s characterization of BDT as obsessed with violations of rationality principles is certainly accurate for the majority of work done by this field, there are some emerging trends where the focus seems to be on ideas that are unrelated to the economic benchmark. For example, there is a growing literature examining how goals drive choices (e.g. Novemsky & Dhar, 2005; Fishbach & Dhar, 2005), and how sequential choices interact (e.g. Khan & Dhar, 2006, 2007). These streams of research seek to identify broad regularities in the content of expressed preferences that have little to do with consistency or rationality more broadly.

Conclusion

Most BDT research in individual decision making has focused thus far on testing the consistency of preferences and identifying boundaries of rationality as opposed an understanding of the content of people’s preferences. A reason for doing so may be rooted in interdisciplinary nature of the field that was guided by the formalization of preference relations and its utility representation in economics. The field may have focused on this goal for so long at least in part because the articulation of interesting questions about the content of preferences may be quite difficult, since mere documentation does not seem to spark academic interest. We applaud Simonson for his efforts to begin to identify interesting questions concerning the content of preferences. In this commentary, we have attempted to provide additional ideas about what exactly might be interesting academic questions for future research into the content of preferences.

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References


