



Connecting cognition and consumer choice



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ABSTRACT

We describe what can be gained from connecting cognition and consumer choice by discussing two contexts ripe for interaction between the two fields. The first—context effects on choice—has already been addressed by cognitive science yielding insights about cognitive process but there is promise for more interaction. The second is learning and representation in choice where relevant theories in cognitive science could be informed by consumer choice, and in return, could pose and answer new questions. We conclude by discussing how these two fields of research stand to benefit from more interaction, citing examples of how interfaces of cognitive science with other fields have been illuminating for theories of cognition.

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1. Introduction

Consumption is a ubiquitous and important aspect of people's lives. The theories of consumption and consumers developed in consumer research represent more than a domain of application—they represent an indispensable part of the behavioral sciences. Consumer research aims to understand consumption and consumers, developing theories that range from the altruistic (e.g., charitable giving) to the selfish (e.g., competitive influences on decisions), and from the concrete (e.g., expectations about a given product) to the abstract (e.g., expected or experienced happiness). But why should cognition and consumer research grow closer?

We can think of four reasons: First, some of the most consequential choices people make are consumer choices: Which house do I buy? How will I finance it? When do I replace my car, or should I rely on more environmentally friendly modes of transportation? Consumer choices are twice as large as the borrowing and savings of firms in the US (Tufano, 2009). Even trivial decisions can be impact-

ful. Spending \$4.73 on a cappuccino every day for a year amounts to \$1726 and 26,645 calories (which would take 121 h of walking to burn off). Over a lifetime, these choices affect health, wealth, and happiness.

Second, cognitive science can improve people's lives through its interaction with consumer choice. People do not always choose what is in their long-run interest, and consumers and policy-makers want to help consumers make better choices. We can use what we learn about cognitive principles to facilitate good decision making through the design of choice environments, for example. Cognitive science could bring a more sophisticated notion of consumer's cognitive abilities and limitations than what is presented in economics (see Chater, 2015) to the design of choice architecture.

Third, consumer settings provide rich data that are hard to match in the lab and in other applied. Firms, governments, and NGOs often run experiments involving large samples and consequential decisions in domains of interest to cognitive science. Field data has informed questions about thinking and decision making, including examinations of anchoring effects in credit card repayments (Navarro-Martinez et al., 2011), of reference-dependent valuation in demand shocks created by price changes

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(Hardie, Johnson, & Fader, 1993), and of attentional processes (Johnson, Moe, Fader, Bellman, & Lohse, 2004) and belief updating in consumer search (Moorthy, Ratchford, & Talukdar, 1997).

Finally, the consumer choice is natural domain to study basic cognitive processes. As Sloman (2015) notes, a recent trend is a shift from studying cognitive function for its own sake to studying cognition in the service of explaining other things, which sometimes means engaging with questions from other fields (e.g., “how can we help consumers make better decisions?”), and understanding the role of cognitive functions in these contexts can, in turn, produce basic insights about cognition (c.f. Baddeley, 2012). Indeed, much of the research program of Kahneman and Tversky was inspired by this kind of naturalistic observation.

Broadly speaking, consumer research can be described by three areas: One is “information processing”, focusing on the interplay of affective and motivational processes on cognitive process to understand areas like persuasion and implicit influences on consumer behavior (Johar, Maheswaran, & Peracchio, 2006). Its nearest neighbor in psychology is social cognition (Simonson, Carmon, Dhar, Drolet, & Nowlis, 2001), although topics often identified with cognitive science, like categorization and inference, are also examined (Loken, 2006). A second area is “consumer culture theory”, using qualitative data to examine the experiential and sociocultural dimensions of consumption (Arnould & Thompson, 2005). A third area is “behavioral decision research” which often compares normative (how people should make decisions), descriptive (how they actually decide), and prescriptive (how decisions can be improved) analyses of choice and its underlying process (Kahn, Luce, & Nowlis, 2006). Our focus is the engagement of cognitive science with (i) behavioral decision research in consumer behavior and (ii) field data from marketing (e.g., sales data, market shares, clickstream data, etc.). We describe two advancing areas of cognitive science that we think should be informed by and should inform consumer choice research.

2. Consumer choice in context

Choice, and particularly the study of context effects, has long been a focus of behavioral decision research and has generated a successful interaction with cognitive science. Researchers in consumer choice have documented violations of value maximization (see, e.g., Simonson & Tversky, 1992; Tversky & Simonson, 1993). One result, the attraction effect, showed that adding an asymmetrically-dominated third option to a binary choice increases the likelihood of choosing the asymmetrically-dominating option (Huber, Payne, & Puto, 1982). A second, the compromise effect, identified conditions where adding an option surrounded by two other options would gain choice share relative to that predicted by value maximization (Simonson, 1989). A third, the similarity effect, showed that introducing a third option too close to one of two other options causes it to split the share with its neighbor (Tversky, 1972). Because attraction and compromise effects violate the assumptions underlying discrete choice

models, which were the standard models for predicting consumer choice in quantitative marketing, this represented an important applied problem.

Cognitive science has attempted to produce models that account for these effects, many of which share the idea that evidence supporting a choice accumulates stochastically over time (Bhatia, 2013; Bogacz, Usher, Zhang, & McClelland, 2007; Roe, Busemeyer, & Townsend, 2001; Trueblood, Brown, & Heathcote, 2014; Tsetsos, Usher, & Chater, 2010; Tsuzuki & Guo, 2004; Usher & McClelland, 2001; Wollschläger & Diederich, 2012). Although none has emerged as the dominant account of these context effects, these models have been successful intellectual achievements. Each provides a unified framework for understanding three phenomena that seem very different: Adding a third option increases share in some cases, decreases it in others. These models also predict other variables, like decision time and information search. These secondary predictions allow the models to be more easily falsified, leading to useful modifications and innovations (Johnson, Schulte-Mecklenbeck, & Willemsen, 2008). And they seem highly generalizable: Context effects apply not just to preferential choice, but also to perceptual judgments (Trueblood, Brown, Heathcote, & Busemeyer, 2013), and some evidence suggests that these effects generalize to hummingbirds (Bateson, Healy, & Hurly, 2003), honeybees (Shafir, Waite, & Smith, 2002) and slime molds (Latty & Beekman, 2011).

We suggest that these modeling efforts could begin to be more informed by and to engage with consumer choice research to examine issues like (i) testing out-of-sample predictive accuracy, (ii) testing whether different parameters (or different models altogether) are needed for different consumers or types of goods, (iii) making use of field rather than laboratory data. So, why is this connection between cognition and consumer choice in its beginning stages?

First, these modeling efforts are largely concerned with producing the output—a successful model uses a general mechanism, common across individuals, to reproduce all three effects. However, much of consumer choice research uses boundary conditions, moderation of effects, and individual differences to build theories of choice processes (Kahn et al., 2006). Applying this logic to context effects generates a series of questions: Do context effects occur in experts (i.e., experienced consumers)? (See Trueblood, 2012 for evidence of individual differences.) Will they be similar in all kinds of product choices? Are they affected by the importance of the decision? Does order of consideration matter? (One of many reasons to expect it does: Firms pay significant money to ensure product placement at eye-level. See Noguchi & Stewart, 2014 for an investigation of how gaze transitions relate to context effects.) Most cognitive models do not have much to say about these issues, but could, and doing so would both increase their relevance for consumer choice and their ability to be applied in other choice domains, such as political science or health.

A second consideration is ease in applying these models. Although discrete choice models commonly used in consumer research may be oversimplified, using assump-

tions from economics, they make predictions using limited data (e.g., sales or market share), and handle heterogeneity well. Cognitive models' capacity to predict things that are important—like decision-times or the variability of choice across time—comes at a price: Most require extensive assumptions about parameters and extensive simulations to make predictions, although progress is being made on this front (see Trueblood et al., 2014).

Finally, despite cognitive science's history of moving beyond the lab, cognitive science's interest in consumer choice is still nascent. Marketing offers an abundance of field data: Every time a web site presents three products, the site is performing a potential context effect experiment. Although this would be a great opportunity for generalization beyond the lab, such efforts are more likely to be found in economics or statistics than in cognitive science. These data sets are not only large and consequential, but they can offer tests of these dynamic models' predictions (e.g., the effect of position on a web page, the time needed to make a decision, etc.).

3. Learning and constructing value in context

Almost all consumer choices engage multiple cognitive functions that govern attention-driven encoding of information, retrieval of task-relevant information from memory, prediction of uncertain values, and post-choice satisfaction and updating. But, until recently most frameworks for understanding consumer choice have not incorporated this complexity (c.f., van Osselaer & Janiszewski, 2012; Willemsen, Böckenholt, & Johnson, 2011). Models in behavioral decision research are usually algebraic representations of one-shot decisions. Behavioral decision theory in consumer research has devoted less effort to modeling the inputs to these models, such as how value functions arise or where degrees of belief come from.

Several recent insights highlight the importance of learning mechanisms for understanding how people think about choice alternatives and the environments surrounding their choices. On learning about decision alternatives, newer approaches describe how attentional (e.g., Krajbich, Armel, & Rangel, 2010) and memory (Stewart, Chater, & Brown, 2006; Ungemach, Stewart, & Reimers, 2011) processes affect an alternative's perceived value. Research on "decisions from experience" finds that people choose differently when given the probabilities and outcome values (e.g., a 50% chance of \$100 versus a 90% chance of \$50) than when choosing between these same prospects in paradigms where these values are inferred from experience (Hertwig, Barron, Weber, & Erev, 2004; Ungemach, Chater, & Stewart, 2009). Many consumer choices better resemble "decisions from experience" than the contrasting "decisions from description" paradigm. Models that describe decisions from experience typically must characterize more stages of cognitive processing—including learning—than are characterized in simpler algebraic models.

Understanding how people learn about decision environments is important for understanding even simple consumer decisions—many of which represent dynamic,

sequential, oft-repeated choices. Consider foraging in a grocery store or selecting an entree in a restaurant: To understand these behaviors, consumer choice research may need to engage with more dynamic models of choice that include a learning component. (For discussions of stylized decisions of this sort, see Cohen, McClure, & Yu, 2007; Steyvers, Lee, & Wagenmakers, 2009; Yechiam & Busemeyer, 2005).

Some recent approaches explore roles for learning in helping to understand and explain some classic problems within consumer choice research. For example, some shed light on underexplored factors that affect consumers' tendency to make decisions that favor one's short-run over one's long-term interest. For example, in McGuire and Kable (2012), features of the environment (i.e., different distributions of wait times across the conditions) dictate whether its more beneficial to sustain or curtail persistence. People learn this structure through experience and, in some environments, learn to become (adaptively) impatient. Few previous approaches to understanding how people make short-term vs. long-term tradeoffs address the role of learning.

Similarly, Gureckis and Love (2009) suggest that one way to understand seemingly short-sighted choices is by reference to the mental representations people adopt for the decision environment. They used a repeated choice task where choosing to maximize short-term over longer-term rewards produced worse opportunities in future choices (c.f. Herrnstein, 1991; Tunney & Shanks, 2002). Their task provided people in some conditions with cues about the state of the decision environment and found that participants' representation of it (i.e., whether they understood the link between choices) influenced behavior. Sub-optimal performance did not result from trait impulsivity, use of incorrect heuristics, or miscalibrated perceptions of value (explanations commonly referenced in consumer choice). Rather "bad choices" derived from representations of the decision environment that were incongruous with its true dynamics.

Consistent with this perspective, a hallmark of cognitive approaches is the role they assign to mental representation for understanding behavior, and there are many consumer contexts in which representation may be the crucial issue affecting inference, judgment, and choice. Many studies that in the "information processing" theme of consumer research (Johar et al., 2006) examine the role of representation in how people react to new (Moreau, Markman, & Lehmann, 2001) and hybrid products (Lajos, Katona, Chattopadhyay, & Sarvary, 2009), construct and learn about product categories (Zhang & Markman, 1998), form beliefs about a product's features and benefits based on its brand (Schmitt & Dube, 1992), react to service failures as a function of the causal model they use to explain these failures (Folkes, 1984), and how expert and novice consumers' behavior vary (Alba & Hutchinson, 1987). (See, also, research on consumer categorization reviewed in Loken, 2006).

Basic theoretical work in cognitive science has much to gain from connecting to marketing, where there is a vast repository of field data from firms. Ad-tracking companies project inferences about learning and preference formation

based on browsing history, e-tailers infer whether, when, how, and what we will buy (for whom) based on click-stream data, loyalty programs pay us to track our behavior. These contexts are ripe for engagement with cognitive theories, and these rich datasets represent a powerful incentive for moving some of our investigations out into the world.

4. An emergent view

Theories of cognition have been advanced by interfacing with other fields. Education research has informed models of learning, studying multi-tasking on the job has influenced models of attention (Broadbent, 1954), studies of eyewitness testimony have informed ideas about autobiographical memory, studying baggage screeners and radiologists has led to insights about visual search and perceptual learning (Myles-Worsley, Johnston, & Simons, 1988; Smith, Redford, Gent, & Washburn, 2005), to list few among many precedents. Some cognitive researchers might have viewed consumer choice research as merely developing techniques to sell goods. Hopefully, we have disabused the reader of this notion, suggesting instead that consumer choice, like reading or visual detection, is both important on its own, as well as a fruitful source of new data and theory.

We have presented many reasons for increased connection between cognition and consumer choice. We also acknowledge barriers, like differences in methodology and the fact that few institutions (e.g., journals and meetings) foster this connection. But we close by suggesting an additional benefit. Much cognitive research has prospered by deep analysis of a particular aspect of the system—memory, perception, or inference, etc. Understanding consumer choice requires spanning these areas, appreciating that the output of one system is the input to another. Even the two functions we have examined—choice in context, on the one hand, and learning and representation, on the other—are not as tightly integrated as might be expected. To understand consumer choice, we need to understand these kinds of linkages.

The point is that not all interfaces between cognitive science and pragmatic questions result in mere application to those settings. Much of what is left to be learned about basic cognitive issues may lie in understanding how they work in naturalistic decisions.

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References

- Alba, J. W., & Hutchinson, J. W. (1987). Dimensions of consumer expertise. *Journal of Consumer Research*, 13, 411–454.
- Arnould, E. J., & Thompson, C. T. (2005). Consumer culture theory (CCT): Twenty years of research. *Journal of Consumer Research*, 31, 868–882.
- Baddeley, A. (2012). Working memory: Theories, models, and controversies. *Annual Review of Psychology*, 63, 1–29.
- Bateson, M., Healy, S. D., & Hurly, T. A. (2003). Context-dependent foraging decisions in rufous hummingbirds. *Proceedings of the Royal Society of London Series B: Biological Sciences*, 270, 1271–1276.
- Bhatia, S. (2013). Associations and the accumulation of preference. *Psychological Review*, 120, 522–543.
- Bogacz, R., Usher, M., Zhang, J., & McClelland, J. L. (2007). Extending a biologically inspired model of choice: Multi-alternatives, nonlinearity and value-based multidimensional choice. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 362(1485), 1655–1670.
- Broadbent, D. E. (1954). The role of auditory localization in attention and memory span. *Journal of Experimental Psychology*, 47, 191.
- Chater, N. (2015). Can cognitive science create a cognitive economics? *Cognition*, 135, 52–55.
- Cohen, J. D., McClure, S. M., & Yu, A. J. (2007). Should I stay or should I go? How the human brain manages the trade-off between exploitation and exploration. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 362(1481), 933–942.
- Folkes, V. S. (1984). Consumer reactions to product failure: An attributional approach. *Journal of Consumer Research*, 10, 398–409.
- Gureckis, T. M., & Love, B. C. (2009). Short-term gains, long-term pains: How cues about state aid learning in dynamic environments. *Cognition*, 113, 293–313.
- Hardie, B. G., Johnson, E. J., & Fader, P. S. (1993). Modeling loss aversion and reference dependence effects on brand choice. *Marketing Science*, 12, 378–394.
- Herrnstein, R. (1991). Experiments on stable suboptimality in individual behavior. *The American Economic Review*, 81, 360–364.
- Hertwig, R., Barron, G., Weber, E. U., & Erev, I. (2004). Decisions from experience and the effect of rare events in risky choice. *Psychological Science*, 15, 534–539.
- Huber, J., Payne, J. W., & Puto, C. (1982). Adding asymmetrically dominated alternatives: Violations of regularity and the similarity hypothesis. *Journal of Consumer Research*, 9, 90–98.
- Johar, G. V., Maheswaran, D., & Peracchio, L. A. (2006). Mapping the frontiers: Theoretical advances in consumer research on memory, affect, and persuasion. *Journal of Consumer Research*, 33, 139–149.
- Johnson, E. J., Moe, W. W., Fader, P. S., Bellman, S., & Lohse, G. L. (2004). On the depth and dynamics of online search behavior. *Management Science*, 50, 299–308.
- Johnson, E. J., Schulte-Mecklenbeck, M., & Willemsen, M. C. (2008). Process models deserve process data: Comment on Brandstätter, Gigerenzer, and Hertwig (2006). *Psychological Review*, 115, 263–272.
- Kahn, B. E., Luce, M. F., & Knowliss, S. M. (2006). Debiasing insights from process tests. *Journal of Consumer Research*, 33, 131–138.
- Krajibich, I., Armel, C., & Rangel, A. (2010). Visual fixations and the computation and comparison of value in simple choice. *Nature Neuroscience*, 13, 1292–1298.
- Lajos, J., Katona, Z., Chattopadhyay, A., & Sarvary, M. (2009). Category activation model: A spreading activation network model of subcategory positioning when categorization uncertainty is high. *Journal of Consumer Research*, 36, 122–136.
- Latty, T., & Beekman, M. (2011). Irrational decision-making in an amoeboid organism: Transitivity and context-dependent preferences. *Proceedings of the Royal Society of London Series B: Biological Sciences*, 278, 307–312.
- Loken, B. (2006). Consumer psychology: Categorization, inferences, affect, and persuasion. *Annual Reviews of Psychology*, 57, 453–485.
- McGuire, J. T., & Kable, J. W. (2012). Decision makers calibrate behavioral persistence on the basis of time-interval experience. *Cognition*, 124, 216–226.
- Moorthy, S., Ratchford, B. T., & Talukdar, D. (1997). Consumer information search revisited: Theory and empirical analysis. *Journal of Consumer Research*, 23, 263–277.
- Moreau, C. P., Markman, A. B., & Lehmann, D. R. (2001). “What is it?” Categorization flexibility and consumers’ responses to really new products. *Journal of Consumer Research*, 27, 489–498.
- Myles-Worsley, M., Johnston, W. A., & Simons, M. A. (1988). The influence of expertise on X-ray image processing. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 14, 553.
- Navarro-Martinez, D., Salisbury, L. C., Lemon, K. N., Stewart, N., Matthews, W. J., & Harris, A. J. (2011). Minimum required payment and

- supplemental information disclosure effects on consumer debt repayment decisions. *Journal of Marketing Research*, 48, S60–S77.
- Noguchi, T., & Stewart, N. (2014). In the attraction, compromise, and similarity effects, alternatives are repeatedly compared in pairs on single dimensions. *Cognition*, 132, 44–56.
- Roe, R. M., Busemeyer, J. R., & Townsend, J. T. (2001). Multialternative decision field theory: A dynamic connectionist model of decision making. *Psychological Review*, 108, 370–392.
- Schmitt, B. H., & Dube, L. (1992). Contextualized representations of brand extensions: Are feature lists or frames the basic components of consumer cognition? *Marketing Letters*, 3, 115–126.
- Shafir, S., Waite, T. A., & Smith, B. H. (2002). Context-dependent violations of rational choice in honeybees (*Apis mellifera*) and gray jays (*Perisoreus canadensis*). *Behavioral Ecology and Sociobiology*, 51, 180–187.
- Simonson, I. (1989). Choice based on reasons: The case of attraction and compromise effects. *Journal of Consumer Research*, 158–174.
- Simonson, I., Carmon, Z., Dhar, R., Drolet, A., & Nowlis, S. M. (2001). Consumer research: In search of identity. *Annual Reviews of Psychology*, 52, 249–275.
- Simonson, I., & Tversky, A. (1992). Choice in context: Tradeoff contrast and extremeness aversion. *Journal of Marketing Research*, 29, 281–295.
- Slooman, S. A. (2015). Opening editorial: The changing face of cognition. *Cognition*, 135, 1–3.
- Smith, J. D., Redford, J. S., Gent, L. C., & Washburn, D. A. (2005). Visual search and the collapse of categorization. *Journal of Experimental Psychology: General*, 134, 443–460.
- Stewart, N., Chater, N., & Brown, G. D. (2006). Decision by sampling. *Cognitive Psychology*, 53, 1–26.
- Steyvers, M., Lee, M. D., & Wagenmakers, E. J. (2009). A Bayesian analysis of human decision-making on bandit problems. *Journal of Mathematical Psychology*, 53(3), 168–179.
- Trueblood, J. S. (2012). Multi-alternative context effects obtained using an inference task. *Psychonomic Bulletin and Review*, 19, 962–968.
- Trueblood, J. S., Brown, S. D., & Heathcote, A. (2014). The multiattribute linear ballistic accumulator model of context effects in multialternative choice. *Psychological Review*, 121, 179.
- Trueblood, J. S., Brown, S. D., Heathcote, A., & Busemeyer, J. R. (2013). Not just for consumers context effects are fundamental to decision making. *Psychological Science*, 24, 901–908.
- Tsetsos, K., Usher, M., & Chater, N. (2010). Preference reversal in multiattribute choice. *Psychological Review*, 117(4), 1275.
- Tsuzuki, T., & Guo, F. Y. (2004). A stochastic comparison-grouping model of multialternative choice: explaining decoy effects. In *Proceedings of the twenty-sixth annual conference of the cognitive science society* (pp. 1351–1356).
- Tufano, P. (2009). Consumer finance. *Annual Review of Financial Economics*, 1, 227–247.
- Tunney, R. J., & Shanks, D. R. (2002). A re-examination of melioration and rational choice. *Journal of Behavioral Decision Making*, 15, 291–311.
- Tversky, A. (1972). Elimination by aspects: A theory of choice. *Psychological Review*, 79, 281–299.
- Tversky, A., & Simonson, I. (1993). Context-dependent preferences. *Management Science*, 39, 1179–1189.
- Ungemach, C., Chater, N., & Stewart, N. (2009). Are probabilities overweighted or underweighted when rare outcomes are experienced (rarely)? *Psychological Science*, 20, 473–479.
- Ungemach, C., Stewart, N., & Reimers, S. (2011). How incidental values from the environment affect decisions about money, risk, and delay. *Psychological Science*.
- Usher, M., & McClelland, J. L. (2001). The time course of perceptual choice: The leaky, competing accumulator model. *Psychological Review*, 108, 550–592.
- Van Osselaer, S. M., & Janiszewski, C. (2012). A goal-based model of product evaluation and choice. *Journal of Consumer Research*, 39, 260–292.
- Willemsen, M. C., Böckenholt, U., & Johnson, E. J. (2011). Choice by value encoding and value construction: Processes of loss aversion. *Journal of Experimental Psychology: General*, 140, 303–324.
- Wollschläger, L. M., & Diederich, A. (2012). The 2n-ary choice tree model for n-alternative preferential choice. *Frontiers in Psychology*, 3.
- Yechiam, E., & Busemeyer, J. R. (2005). Comparison of basic assumptions embedded in learning models for experience-based decision making. *Psychonomic bulletin & review*, 12(3), 387–402.
- Zhang, S., & Markman, A. B. (1998). Overcoming the early entrant advantage: The role of alignable and nonalignable differences. *Journal of Marketing Research*, 35, 413–426.