Chapter 3
Crossing the Rubicon

Neoclassical economists have treated preferences as given and stable. This assumption allows these economists to explain changes in choice behavior over time or across different markets largely in terms of differences in income and prices. However, as we shall see, there are strong reasons to hold that preferences change over time and differ from one culture (and subculture) to another. Hence, this chapter argues that one needs to include in the study of choice behavior the forces that form preferences in the first place and those that reshape them over time. Moreover, these forces cannot be studied by relying upon the concepts and basic assumptions upon which economists rely. It hence seems necessary to "cross the Rubicon" that divides economics from the other social sciences such as sociology and psychology. These disciplines study many non-economic variables that account for the formation of and changes to preferences, but have not formed a consolidated theory of the forces that drive preferences and of the interactions among these and economic variables. If the turf on the economics side of the Rubicon—in which only preferences are found—is frozen and barren, on the non-economics side one is easily lost in the jungle.

Part I of this chapter examines the original position of many neoclassical economists on this matter and their various attempts to adapt economic theories to account for the observation that preferences are dynamic rather than stable. It concludes that the neoclassical paradigm employed by mainstream economics and its allied disciplines (Mäki 2009, pp. 352–353)—as well as the modified versions that followed—do not adequately explain changes in preference. Part II outlines the basic conceptualizations used by psychologists and sociologists to study preferences, and reveals the absence of a consolidated theory.

This chapter draws on "Crossing the Rubicon: Including Preference Formation in Theories of Choice Behavior" in *Challenge* 57 (2), (March/April 2014): 65–79.

A. Etzioni, *Happiness is the Wrong Metric*, Library of Public Policy and Public Administration 11, https://doi.org/10.1007/978-3-319-69623-2_3

3.1 From Given and Stable to Internally Modified

The definition of "preferences" is subject to some deliberation and debate.[1] However, a widely-used definition in economics is a ranking of possible choices prior to any consideration of resource constraints. Hausman (2011), for example, defines the concept as "total subjective comparative evaluations"—that is, a ranking of options based on all relevant information about value (p. 10), including social expectations and anticipated pleasure. Preferences are said to be "revealed" by the choices people make. However, critics held that this definition makes preferences tautological, because there are two observations based on the same data point. Whatever the person buys shows both his preference and what he actually got, hence there is no way of telling if he had a preference prior to the act of buying that influenced his choice. Thus economists write that a person who never consumed wine suddenly bought a bottle of wine—which shows that he must have had a preference for wine. In this kind of formulation, adding the term preference adds nothing to our understanding of choice behavior.

This flaw can be corrected if one presumes that preferences entail at least some measure of consistency over time, a choice predisposition. To return to the example just cited, one would say that the particular person's preference is not to consume wine and would seek to understand what made him act against his preference.

The field of economics has largely ignored the study of preference formation, as reflected by the consensus among economists that utility and preferences are "purely introspective" and subjective, and therefore beyond the scope of economic modeling (Keita 2012, p. 77). Above all, they assumed that economic agents were closed systems when making choices and that their preferences were stable (Martins 2011, p. 253). Stigler and Becker (1977) capture this quintessential neoclassical perspective in their famous quote: "One does not argue over tastes for the same reason that one does not argue over the Rocky Mountains—both are there, will be there next year, too, and are the same to all men" (Rizvi 2001, pp. 141–142). In short, economists either simply ignored preferences or deemed it "not useful for economics" (Rizvi 2001, pp. 141–142) to assume that preferences are changeable or to study their formation—sometimes referred to as "opening the preferences" (Etzioni 1985). Those economists who did recognize that preferences may be changeable did not advocate that preference formation be considered "part of the corpus of orthodox theory" because such a study would detract from the study of "logical action" in economics and thus "belong[ed] to sociology" (Drakopoulos 2012, pp. 541, 542). Economists thus largely ignored or left the study of preference formation to other disciplines, particularly those that adhere to paradigms other than the neoclassical one preferred by economics.[2] Moreover, several leading economists, particularly

[1] Economics' treatment of how people make decisions *based on* their preferences—that is, "rationally"—is a separate subject not discussed in this chapter. Rational choice theory has been itself subject to a whole range of criticisms.

[2] The question of what form preferences take, however, was very much a subject of economic inquiry. The discipline struggled for some time to describe preferences without having to model

law and economics scholars, led by Becker, have extended the application of preference-free analysis[3] to explain *non-economic* choices such as the selection of a mate (Frank 2011; Cigno 2011; Becker 1973), the decision to lead a life of crime (Matsueda et al. 2006, pp. 95–97; Becker 1968), the choice to have children (Becker 1993; Ermisch 1988), and even to choices involving religious behavior (Blasi 2009) and suicide (Chen et al. 2010; Hamermesh and Soss 1974).

The stability, exogeneity, and universality assumptions that substituted for an empirically-based theory of preference formation are crucial for neoclassical economics; if preferences are in flux due to social factors—such as leadership, persuasion, cultural changes, and social movements—and psychological factors that vary among individuals and societies,[4] neoclassical predictions about choice behavior become subject to a long series of caveats that limit their relevance (Martins 2011, p. 253). For instance, one can no longer predict what people will buy mainly on the bases of changes in prices and their income if their purchases are also affected by changes in what the culture considers proper items to consume or if people's relevant emotions are manipulated by advertising.

3.1.1 The Economists' Treatment of Preference Formation

Faced with mounting evidence that preferences are changeable, neoclassical economics has adapted the neoclassical paradigm in three major ways via the following approaches.[5]

Originally and in many current treatments, economists have not been concerned with preferences one way or the other, but have studied the effects of changes in income, prices, or some other economic factor on choice behavior. Thus, if saving increases between Time 1 and Time 2, economics will seek to determine the extent to which this change may be due to increased income of the population or to increased yields on savings.

---

the complicated "black box" processes by which they were formed. Economists largely concluded—following Samuelson—that choices "revealed" preferences. This revealed preference theory escaped the problem of preference formation's being a psychological and social phenomenon by relying instead on positivist, empirical data. This helped the discipline describe preferences for the purposes of economic inquiry, but offered no insight into how they were actually *formed*.

[3] Some recent articles that generally adhere to the idea that human behavior can be entirely explained by economic factors have relaxed the definition of cost, income, and utility, for example by suggesting that failure to follow socially prescribed behaviors leads to "costs" like guilt and increased stress.

[4] Or if preferences are "fuzzier" than they are clear and fixed. "This set of assumptions – and the precise conception of preferences it employs – is therefore essential to all neoclassical modeling" (Norton 1994, p. 312) and preferences are "marked by a certain amount of fuzziness and although their actual choices are perforce 'exact,' they are nonetheless the outcome of fuzzy preferences" (Basu 1983).

[5] Although this list is not comprehensive, it represents a sort of sketch of the ways in which the discipline has responded to the problem of modeling variable preferences.

Some economists recognize preferences, and accept that preference rankings are affected by values and a wealth of other "motivators," but see no need or reason to study what shapes and reshapes these preferences. They treat them as given and stable, and start their analysis with these preferences in place. Thus these economists recognize that, for various reasons, the Japanese have a much stronger preference for saving than Americans and even that this difference may be due to their culture rather than due to some factors modeled by economists. However, their analysis simply places whatever these preferences are at Time 1, and presumes that any that changes occurred in saving after that are due to changes in income and yield or other such economic factors—but not due to changes in preferences for saving, say due to changes in the culture. For instance, the strong emotional and political reaction to rising public deficits and debt reflect a conservative normative shift rather than clear economic consequences.

A merit of a study by Charness and Rabin (2002) is that it does find that people tend to prefer choices characterized by fairness, equal distribution, social welfare, and treating people the way they "deserve" to be treated. Moreover, they study the implications of these preferences for particular economic situations. However, they do not attempt to describe how propensities for fairness and so forth developed in the first place.

Other economists acknowledge that one needs to study the forces that shape preferences. However, they delegate these tasks to other social sciences. For instance, Dietrich and List (2013) hold that an individual's preferences "depend on certain 'motivationally salient' properties of the alternatives over which the preferences are held." They hold that each alternative has characteristics, that individuals prefer particular characteristics, and that understanding those preferred characteristics explains preference formation and change. Individuals focus on some properties more than they do on others, and the set of such properties is known as their "motivational state." This motivational state "solves" the problem of understanding how competing motivators interact to form preferences. Dietrich and List then point out that "the question of which properties are motivationally salient for an agent in a given context […] is a psychological issue, which our formalism by itself cannot settle" (p. 615).

Other economists assert that preferences can be studied by using economic concepts and models. For example, behavioral economics has consistently found that human beings are risk-averse, such that people prefer avoiding losses to obtaining gains of similar size. Some economists have hence concluded that preferences are reference-dependent—that is, one's economic "status quo" influences one's economic preferences—and have held that they can thus be modeled, perhaps without recourse to the other social sciences.[6]

[6] "By directly constructing reference-dependent utility from consumption utility and assuming that the reference point is endogenously determined as rational expectations about outcomes, our theory provides an algorithm for translating a 'classical' reference-independent model into the corresponding reference-dependent one." When describing the situations to which the model might not apply, no mention is made of alternative factors that complicate their model (Kõszegi and Rabin 2006: 1155).

Although many variations on the idea that preferences are a product of one's economic environment exist, two main theories have developed within economics literature, specifically within the literature dealing with consumption. The first, intrinsic habit formation, holds that individuals' past consumption influences their future consumption preferences (Rozen 2010, p. 1341). To stay with our example: how much one seeks to save in the future is presumed to be affected by how much one saved in the past. The second, preference interdependence, sometimes referred to as "keeping up with the Joneses" or as "extrinsic habit formation," holds that the consumption patterns of others influence an individual's consumption preferences (Kapteyn et al. 1980, p. 125). That is, one's acquaintances' savings influence one's own savings.

Some attempt to combine both approaches and provide a unified theory of endogenous preference formation which holds that "an individual's welfare [preference] function is *identical* to the distribution of consumption patterns the individual has observed over time. This includes both his own consumption and the consumption [of] others in his social reference group" (Kapteyn et al. 1980, pp. 151–152).

One notes that the assertion that preferences are affected by economic factors does not contradict the fact that preferences are partially determined by *non-economic* factors—and thus, that any economic model of preference formation that limits itself to economic variables is partial.

Finally, economists sought to treat norms (defined as a specification of normative values), which play a major factor in shaping preferences according to psychologists and sociologists, as part of the environment. That is, the economic agents include the costs of violating them or the benefits from abiding by them in their rational analysis of their decision making. Psychologists and economists responded by arguing that norms (and the informal social controls that help enforce them) work on a subconscious level ("below the radar screen") and hence cannot be subjected to this kind of decision making and modeled in that way. Moreover, norms are internalized and become part of the self.

There seems to be no area of human choice in which the discrepancy between the neoclassical assumptions of preferences (including all the various adaptations) and the empirical evidence are further apart than in the study of persuasion, in particular of persuasive advertising. Adherents of the neoclassical approach to preferences have gone to great lengths to maintain their assumptions. "The classical economic theory of markets with perfect competition and rational agents is a deductive theory that requires almost no contact with empirical data once its assumptions are accepted" (Simon 1959, pp. 254–255)—a form of analysis that, supported by abstract models and mathematical proofs, helps to protect the economic theory from seemingly incompatible empirical evidence about choice behavior. Economists hence maintain that advertising—which is widely found to appeal to people's emotions, irrational fears, and cognitive biases to persuade individuals to purchase products[7]—is merely informative. However, evidence shows that a great deal of

[7] "Obviously there is a lot of pandering to System 1 in advertising. I don't know if you have in mind the ads that encourage you to trade so as to beat the market and become rich. Those ads are clearly

advertising does next to nothing to increase individuals' knowledge about a subject (Lee 1997),[8] and instead seeks to sway them subconsciously.[9] Moreover, studies support the popular assertion that advertising is primarily about "manufacturing need" (Phillips 2011)—that is, firms do not produce goods in response to people's preferences but, instead, induce preferences for the goods they seek to market. Individuals never "needed" deodorant until deodorant manufacturers convinced them that their odors were "bad" ones that required correction. Appeals to impulses are antithetical to the idea of an informative advertisement intended to help "rational" consumers carefully reason about which product best suits their actual needs. In short, advertising demonstrates that the economic perspective on preference formation is far from complete—and that attempts to maintain it are guided by what Daniel Kahneman calls "theory-induced blindness" (Kahneman 2011).

In brief, the discipline of economics has historically "lack[ed] an empirical theory about the content of individual preferences" (Witt 1991, p. 563), and attempts to resolve this deficiency have so far been unsatisfactory. All of these observations—and the criticisms of these observations—show that a plausible theory of choice behavior must incorporate the social and psychological factors that initially form and continuously modify preferences, and must provide a specific model of how they do so.

3.1.2 The Ultimate Caveat

Faced with the preceding observations, economists argue that economic theory "needs" stable preferences not merely in order to assume that changes in behavior can be explained to a satisfactory level by economic variables, but also in order to assess the contribution of the economy to general welfare. The economy is assumed to function well when it provides the goods preferred by people at prices such that

---

directed at overconfident people, and are intended to enhance their overconfidence. Most of the advertisement is addressed to System 1, not to System 2. There is very little information in advertising, and anybody who watches programs with loads of advertising, such as the Super Bowl for example, would be hard put to find any information about any product. It is very striking—there is none. It's all appealing to different types of emotions" (Kahneman 2012, p. 10).

[8] To cite one example, using a sampling of individuals in non-battleground states during the 2000 presidential election, Huber and Arceneaux (2007, p. 957) found that people are not usually made more informed by political advertisements; they are simply persuaded *without* becoming more knowledgeable about the policy subjects or candidates under consideration.

[9] "Advertising in contemporary society is generally regarded as having two central and correlative functions, that of informing and that of persuading consumers. The informative function is likely to be stressed by defenders of the advertising practice, for by providing information to consumers about products, services, and prices advertising allows the consumer to make reasoned choices about the things on which he/she will spend his/her money" (Santilli 1983, p. 27).

"The overwhelming bulk of advertising in American mass media is designed to promote the sale of products and services" (Pearlin and Rosenberg 1952, p. 5).

supply equals demand. Individuals are thought to vote with their purchasing dollars so as to guide the economy toward that blessed state of equilibrium, which is considered the “holy grail” of neoclassical economics. If preferences can be manipulated by culture or corporations, by social pressures or advertising, then an economy that satisfies those preferences would appear not to serve the people but, rather, the manipulators who choose the preferences. Such a revelation would require economists to study the relative power of persuasion and political power exercised by various elites, a far cry from economics. Moreover, it calls into question the very fundamental precept that people are free agents, and undermines the value of liberty.

However, it is possible to acknowledge the reality of manipulation and the (re) formation of preferences by a variety of social forces while noting that there are limits to the extent to which people can be manipulated.

The cultural theory of preference formation posits something similar: that individual preferences come about when a person determines his or her group identities, and then observes the norms associated with those groups. Certain options are socially validated by those with whom an individual identifies, which leads her to adopt preferences for those options using heuristics and schemas (Wildavsky 1987, pp. 9–10). The responsive communitarian framework, to which this author subscribes, suggests that human beings are “multiple” beings, capable of acting in line with their internalized social norms (*superego*) and their pursuit of pure pleasure (*id*) (Etzioni 1988, pp. 11–12). The grand challenge facing the non-economic social sciences is that of determining how and to what degree each of these multiple selves, social norms, and processes of social validation contributes to specific preferences.

Thousands of studies examine various elements of the general process of preference formation. However, they have not yielded reached a consensus regarding which variables to study or about the relationship among them, that is, have not been consolidated into an overarching theory of preference formations and dynamics. Instead, a thousand flowers bloom. Various studies that stress the role of broad categories of variables relevant to preference formation and change include biological (Witt 1991) and neurological (Simion 2005) factors and processes, cognitive patterns and heuristics, social norms (Bicchieri 2010, p. 297; Binmore 2010, p. 142), demographic characteristics, structural positions, and a host of cultural factors. There are also numerous differences of scholarly opinion about how socialization occurs; for example, not all psychologists agree that children attach to and attempt to emulate their primary caregiver in a single way, and there is no consensus about the relative influence exercised by each individual in a child’s life (Maccoby 1992). Additionally, because many of these processes and social factors influence preferences subconsciously—they operate “under the radar”—social scientists further disagree about how to model them objectively, without resorting to imprecise subjective ways of evaluating their influence.

A full survey of the non-economic approaches to preference formation and the hundreds and thousands of precise variables thought to play a part is beyond the scope of this chapter. Suffice it to say that the non-economic disciplines have not yet presented a *consolidated* theory of preference formation. Furthermore, as was previously demonstrated, the relatively unified theory provided by economics has disintegrated in recent years due to empirical challenges and failure to take into consideration a host of social and psychological variables that influence preference formation.

It is additionally beyond the scope of this chapter—and perhaps beyond the scope of human science—to present such a comprehensive, consolidated theory. The task of presenting a formal, universal theory is further complicated by the sheer variety of human experience. However, the lesson to be taken from these observations is simple: human preference formation cannot be reduced to a defined set of economic factors. Instead, it must be acknowledged that an indefinite number of environmental, biological, neurological, and—above all, because how we are socialized determines to a large degree how we respond to the environmental, biological, and neurological conditions of our existence—*sociological* variables, through processes that are not yet precisely described, account for vastly more variance in preferences than do economic factors. By taking a step back and considering the big picture rather than remaining wedded to a single discipline's assumptions, it becomes possible to sketch out a rough framework for how preferences might be formed and change, and hence the non-economic factors that ultimately affect choice behavior.

Developing such a big picture theory would have three main benefits. First, it would go a long way toward helping to organize the sprawling literature on human preference and choice. Once a general framework is established, it will be much easier to understand how each study relates to the others, which, in turn, may help scholars to understand how the thousands of variables they disparately describe interact with each other. Second, it will facilitate a "crossing of the Rubicon" between economic and non-economic disciplines that will ultimately yield a still-incomplete but wiser, interdisciplinary approach to preference formation divorced from the "theory-induced blindness" and jockeying for influence that is characteristic of today's theories. Third, such a framework would be much better for policymakers, who need a way of thinking about preferences that is universally applicable—not because it is a comprehensive theory of everything with models that are theoretically elegant but clumsy and unwieldy in the real world, but because of its flexibility and the ability to "plug in" variables in the appropriate location when needed.

References

Basu, K. 1983. Fuzzy revealed preference theory. *Journal of Economic Theory* 32: 212–227.

Becker, G.S. 1968. Crime and punishment: An economic approach. *Journal of Political Economy* 76: 169–217.

———. 1973. A theory of marriage: Part I. *Journal of Political Economy* 81: 813–846.

———. 1993. *A treatise on the family*. Cambridge, MA: Harvard University Press.

Bicchieri, C. 2010. Norms, preferences, and conditional behavior. *Politics, Philosophy, and Economics* 9: 297–313.

Binmore, K. 2010. Social norms or social preferences? *Mind & Society* 9: 139–157.

Blasi, A.J. 2009. A market theory of religion. *Social Compass* 56: 263–272.

Charness, G., and M. Rabin. 2002. Understanding social preferences with simple tests. *The Quarterly Journal of Economics* 117: 817–869.

Chen, J., Y.J. Choi, K. Mori, Y. Sawada, and S. Sugano. 2010. Socio-Economic studies on suicide: A survey. *Journal of Economic Surveys* 26: 273–284.

Cigno, A. 2011. The economics of marriage. *Perspektiven der Wirtschaftspolitik* 12: 28–41.

Dietrich, F., and C. List. 2013. Where do preferences come from? *International Journal of Game Theory* 42: 613–637.

Drakopoulous, S.A. 2012. The history of attitudes towards interdependent preferences. *Journal of the History of Economic Thought* 34: 541–557.

Ermisch, J. 1988. Economic influences on birth rates. *National Institute Economic Review* 126: 71–92.

Etzioni, A. 1985. Opening the preferences: A socio-economic research agenda. *The Journal of Behavioral Economics* 14: 183–198.

———. 1988. *The moral dimension: Toward a new economics*. New York: Free Press.

Frank, R.H. 2011. Supply, demand and marriage. *New York Times*.

Hamermesh, D.S., and N.M. Soss. 1974. An economic theory of suicide. *Journal of Political Economy* 82: 83–98.

Hausman, D.M. 2011. Mistakes about preferences in the social sciences. *Philosophy of the Social Sciences* 41 (1): 1–25.

Huber, G.A., and K. Arceneaux. 2007. Identifying the persuasive effects of presidential advertising. *American Journal of Political Science* 51: 957–977.

Kahneman, D. 2011. *Bias, blindness, and how we truly think (Part 2)*. Bloomberg.com.

———. 2012. The human side of decision making: Thinking things through with Daniel Kahneman, PhD. *The Journal of Investment Consulting* 13: 5–14.

Kapteyn, A., T. Wansbeek, and J. Buyze. 1980. The dynamics of preference formation. *Journal of Economic Behavior and Organization* 1: 123–157.

Keita, L. 2012. Revealed preference theory, rationality, and neoclassical economics: Science or ideology. *Africa Development* 37: 73–116.

Kõszegi, B., and M. Rabin. 2006. A model of reference-dependent preferences. *The Quarterly Journal of Economics* 121: 1133–1165.

Lee, L.W. 1997. Persuasive advertising and socialization. *International Journal of the Business of Economics* 4: 203–214.

Maccoby, E.E. 1992. The role of parents in the socialization of children: An historical overview. *Developmental Psychology* 28: 1006–1017.

Mäki, U. 2009. Economics imperialism: Concept and constraints. *Philosophy of the Social Sciences* 39: 351–380.

Martins, N. 2011. Can neuroscience inform economics? Rationality, emotions, and preference formation. *Cambridge Journal of Economics* 35: 251–267.

Matsueda, R.L., D.A. Kreager, and D. Huizinga. 2006. Deterring delinquents: A rational choice model of theft and violence. *American Sociological Review* 71: 95–122.

Norton, B.G. 1994. Economists' preferences and the preferences of economists. *Environmental Values* 3: 311–332.

Pearlin, L.I., and M. Rosenberg. 1952. Propaganda techniques in institutional advertising. *The Public Opinion Quarterly* 16: 5–26.

Phillips, K. 2011. The manufactured wants and unmet needs of young America. *Forbes*.

Rozen, K. 2010. Foundations of intrinsic habit formation. *Econometrica* 78: 1341–1373.

Rizvi, S.A.T. 2001. Preference formation and the axioms of choice. *Review of Political Economy* 13: 141–159.

Santilli, P.C. 1983. The informative and persuasive functions of advertising: A moral appraisal. *Journal of Business Ethics* 2: 27–33.

Simion, C. 2005. Orienting and preference: an enquiry into the mechanisms underlying human decision making. Dissertation, California Institute of Technology.

Simon, H.A. 1959. Theories of decision-making in economics and behavioral science. *The American Economic Review* 49: 23–53.
Stigler, G.J., and G.S. Becker. 1977. De gustibus non est disputandum. *The American Economic Review* 67: 76–90.
Wildavsky, A. 1987. Choosing preferences by constructing institutions: A cultural theory of preference formation. *American Political Science Review* 81: 4–21.
Witt, U. 1991. Economics, sociobiology, and behavioral psychology on preferences. *Journal of Economic Psychology* 12: 155–171.