

Market cognition: How exchange norms alter social experience

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ABSTRACT

Market exchange and the ideologies that accompany it pervade human social interaction. How does this affect people's beliefs about themselves, each other, and human nature? Here we describe *market cognition* (MC) as social inferences and behaviors that are intensified by market contexts. We focus on prosociality, and two countervailing ways MC can affect it. On the one hand, marketplaces incentivize individuals to behave prosocially in order to be chosen as exchange partners—generalizing cooperation and trust beyond group boundaries. On the other hand, markets encourage a view of people as self-interested, and can thus taint people's interpretation of prosocial actions and erode more communal forms of cooperation. We close by considering how MCs can become self-fulfilling, altering relationships, communities, and cultural norms.

Economics are the method; the object is to change the heart and soul.

Margaret Thatcher, May 1981

Market exchange—in which people trade goods and services according to norms of pricing, supply, and demand—is a defining feature of modern life. Recent and steady de-regulation has intensified the role of market norms in politics, environmental management, and healthcare across much of the world (Harvey, 2007). Likewise, the ascendance of “sharing” and “gig” economies means individuals increasingly place their homes, cars, and time directly into the market. Summarizing these trends, the philosopher Michael Sandel (2012) argues these trends have fundamentally reshaped society, such that “...market values seep into every aspect of human endeavor... [and] social relations are made over in the image of the market.”

Neoliberalism and other free-market ideologies hold that a market society is aspirational. In the interview quoted above, Thatcher describes a psychological goal of the neoliberal project: to shift people’s “hearts and souls” towards individualism and personal advancement. Others, including Sandel (2013), argue that markets can be psychologically corrosive, because commodification corrupts our oldest and dearest social contracts.

How do markets affect cognition and behavior? Synthesizing previous work, we use the term “market cognition” (MC) to encapsulate the psychological effects of engaging with—and thinking about—market exchange as a primary form of human interaction. A wellspring of recent research has probed the effects of neoliberalism on concepts of the self, well-being, and attitudes towards inequality (Adams, Estrada-Villalta, Sullivan, & Markus, 2019; Bettache & Chiu, 2019; Hartwich & Becker, 2019). Here, we focus primarily on how MC alters prosociality: behaviors that help others, including cooperation and altruism.

Characterizing market cognition. It would be awkward to ask for the check at a friend's dinner party, and illegal to leave a restaurant without paying, instead thanking the chef and offering to have them over next week. Contexts shift how people behave and what they expect of each other; MC refers to such shifts that occur in the context of market-based interactions.

Crucially, this definition does not require that a behavior or cognition arise *only* in market contexts. It can—and more often does—describe behaviors and cognitions that are intensified, dampened, or altered during market exchange. Prosocial behaviors, for instance, long precede market exchange and commonly occur outside of it, but markets nonetheless affect both people's tendency to behave prosocially and their interpretations of others' prosociality.

Here we explore two key ways this occurs: (i) by *generalizing* prosocial behavior beyond kin and social groups, and (ii) by *tainting* interpretations of prosocial acts (see **Table 1** for a summary).

The light side: Generalized prosociality

A core tenet of capitalist philosophy holds that markets catalyze collective well-being by incentivizing people to help others—for instance by producing goods others need and exchanging them fairly. Crucially, this means that people will act prosocially even absent a prosocial *motive*. Adam Smith famously wrote, “It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own self-interest.”

In other words, marketplaces can align self-interest and the common good. One advantage of this combination is that it might “generalize” prosocial tendencies. Non-market

sources of prosociality, such as empathy, can be biased towards people who share one's kinship or social identity, leading to parochial prosociality that favors ingroup members (Bruneau, Cikara, & Saxe, 2017). By contrast, market settings might focus individuals on the value of cooperating with anyone who takes part in that marketplace, including strangers and outgroup members—a form of MC that could encourage prosocial behavior beyond group boundaries.

At least some data suggest that participation in markets does generalize prosociality. In a series of classic studies by Henrich *et al.* (2005; 2010), individuals from numerous cultures took part in simple economic games. The market integration of a given culture—for instance, the proportion of individuals' calories that they purchase, rather than produce themselves—predicted prosociality and trust toward strangers. More recently, Baldassarri (2020) left thousands of “lost letters” in the sidewalks of 188 Italian communities, which varied in their market integration. Letters left in communities with high market integration were more likely to be returned, another sign of generalized prosociality.

One way exchange norms generalize prosociality is by creating a “social marketplace.” When people have choices about who they interact with, individuals are incentivized to signal their honesty and trustworthiness in order to be chosen as partners (Barclay, 2016). MC could thus induce prosociality by turning it into a form of social advertisement.

Consistent with this idea, individuals are more likely to act prosocially in the context of social marketplaces. In iterated economic games, people cooperate more when individuals can choose partners from round to round (Rand, Arbesman, & Christakis, 2011), or when their actions are visible to others who will later choose partners (Barclay, 2016). In social marketplaces, people even engage in prosociality “arms races,” competing to act more generously than others in order to be chosen as partners (Barclay & Willer, 2007).

If MC generalizes prosociality, it should also increase *expectations* that others will act prosocially in market contexts, since it is in their best interest to do so. Consistent with this idea, a study of 39 countries found that nations with high relational mobility—where people report fluid relationships and high levels of choice about interaction partners—were also characterized by generalized trust in others (Thomson et al., 2018).

Economic and social marketplaces appear to go hand in hand. One recent study examined 22 Polish villages that were transitioning from primarily subsistence farming to more market-dependent economies. Across communities, market integration tracked the diversification of social connections, away from kin networks to broader ones based more on friendships chosen by the individual (Colleran, 2020). Similar differences arise across economic status. In the US, high SES individuals spend less time with family and more with friends, and are more likely to see relationships as expressions of individual choice (Adams et al., 2019; Bianchi & Vohs, 2016).

In sum, MC marries self-interest and prosociality in two ways. First, it redraws the boundaries of cooperation, away from kin and social group and towards any participant in a market. Second, it commodifies prosocial behavior as an ante that individuals pay in order to signal their value as social partners.

The dark side: Tainted prosociality

The economist Charles Schultze once praised the social effects of markets as follows: “market-like arrangements reduce the need for compassion, patriotism, brotherly love, and cultural solidarity.”¹

¹ Cited in Bowles (2016), pg 220.

But what are the costs of minimizing these human qualities in vast swaths of human interaction? As reviewed above, markets incentivize people to act prosocially even absent prosocial motives. But to people on the receiving end of those acts, motives matter, and self-interested kindness can appear shallow, inauthentic, or manipulative—a form of MC we refer to as *tainted prosociality*.

In one set of studies, observers rated generous acts accompanied by market incentives—such as tax breaks for charitable donations—as non-prosocial, and in some cases more selfish than not helping others at all (Carlson & Zaki, 2018). People are aware of this, and in some cases purposefully avoid incentives to signal the authenticity of their own prosocial behaviors (Kirgios, Chang, Levine, Milkman, & Kessler, 2020).

Likewise, in market contexts individuals typically trust strangers to hold up their end of a bargain so long as it is in their best interest. But these very same norms might limit people's trust outside the marketplace. In one study, participants in a trust game were given an option to select binding contracts that would penalize individuals for defecting. Contracts increased trust at first, but after they were removed, people trusted each other *less* than if no contract had ever been put in place (Malhotra & Murnighan, 2002).

MC can also alter people's interpretation of their *own* prosocial behaviors. If an individual is given market incentives to act kindly, they might interpret their action as motivated by self-interest and decide to abandon prosociality when those incentives are gone. This phenomenon is known in psychology as overjustification (Lepper, Greene, & Nisbett, 1973), and in economics as “crowding out” (Frey, 2017).

In one classic study, Israeli preschools enacted fines for parents who picked up their children late. This ironically led to a substantial *increase* in late pickups, presumably because

parents re-construed their commitment to teachers in market-based terms (Gneezy & Rustichini, 2000). In a laboratory study, participants indicated the smallest financial incentive they would require to breach a partnership agreement. They were more willing to violate a promise when the contract included a damage clause (Wilkinson-Ryan, 2009), suggesting that market incentives made them view the relationship in more transactional terms. Likewise, in workplaces, certain incentives can cause employees to re-interpret their effort as *only* incentive-based, and reduce their overall performance (Frey, 2017).

Market incentives might also diminish people's sense of connection to one another. As Sandel (2013) writes, "...[t]he money that would buy the friendship dissolves the good I seek to acquire." Research across cultural anthropology and social psychology accords with Sandel's view. Fiske (1991) describes four key forms of social relations, including "communal sharing," in which closely bonded individuals do not monitor their contributions to a relationship. Clark and Mills (2011) apply a similar framework to personal ties, describing communal relationships marked by tight social connection and an absence of social "score keeping."

Communal relationships and norms are fundamental to well-being, in part because they generate a sense of unconditional social connection and acceptance. They are also fundamentally inconsistent with exchange norms. This highlights the possibility that even when markets increase prosociality, they might limit its power to build lasting community, connection, and solidarity. This could occur through at least two mechanisms: (i) tainting inferences about prosocial motives and (ii) causing even prosocial acts to be viewed as competitive within the social marketplace.

Little work has directly probed this effect, but in one fascinating set of studies, individuals were asked to imagine a near future defined by intensified neoliberal market norms—

such as hyper-individualism and deregulation. After participating in this exercise, people experienced lower well being and greater loneliness, in part because they were more likely to report a competitive stance towards others (Becker, Hartwich, & Haslam, 2021).

Finally, MC might taint people's view of human nature writ large. A self-interested view of humanity is so central to economics that it has created a new species: "homo economicus," characterized by a (mostly) singular quest to maximize personal utility. Homo economicus is surprisingly difficult to locate in the wild (Miller, 1999; Sen, 1977), but his image has nonetheless colonized lay theories about human nature (Boyer & Petersen, 2018).

This idea is tightly aligned with *cynicism*, or the view that people are fundamentally selfish and thus cannot be trusted. Cynics over-estimate the role of self-interest in driving behavior (Miller, 1999) and explain away others' prosociality as veiled selfishness (Critcher & Dunning, 2011; Kaplan, Bradley, & Ruscher, 2004). Consistent with the effects of neoliberalism on loneliness and well being, cynicism tracks deleterious health outcomes (Bunde & Suls, 2006) and corrodes social interaction. For instance, cynics are less likely to trust others' motives, and thus less likely to seek or offer social support (Kaplan et al., 2004).

Little research that we know of has directly tied cynicism to market exchange. Yet as reviewed above, market contexts and incentives can induce a number of cynical appraisals about prosocial actions. A crucial direction for future work on MC will be to empirically examine whether exposure to market norms—for instance across cultures or within experiments—increases people's likelihood of drawing cynical attributions.

One intriguing and related set of findings probes the field of economics itself. Numerous studies find that training in economics affects students' behaviors and inferences—for instance making them more likely to defect in economic games and lowering their expectations that

others will act prosocially (Etzioni, 2015). It is difficult to pinpoint exactly what drives these effects, but prolonged exposure to the cynical worldview of *homo economicus* seems a plausible culprit.

MC's self-fulfilling prophecy

Thus far, we have examined how MC alters individuals' inferences and behaviors. But market norms and beliefs can also propagate across people, becoming self-fulfilling prophecies.

Consider cynicism. When people believe others are inauthentic or untrustworthy, this can alter their own social behavior—for instance inducing them to act selfishly to preempt others' ability to take advantage of them. These behaviors, however, might color cynics' interactions and relationships. In a recent daily diary study, Stavrova *et al.* (2020) found that cynicism predicted individuals' tendency to behave disrespectfully, which in turn predicted others' disrespect towards them, thus producing the very social conditions that confirmed and reinforced cynics' expectations.

Similar norms can also exert broader cultural effects. Economic theories—for instance, the idea that people are driven by self-interest, and that markets are thus the most efficient way to promote cooperation—are framed as purely descriptive. But they are also used as the basis for government and organizational policies. Leaders often rely on exchange-based incentives and punishments to coerce prosociality out of self-interested actors, in what David Hume called “a constitution for knaves.”

As reviewed above, such policies might produce intended consequences—for instance when market exchange broadens cooperation and trust. But they might also backfire, for instance limiting the depth of social relationships, inducing people to conceive of themselves and

each other in more cynical ways, or encouraging the very self-interest they are meant to tame (Sandel, 2012; Bowles, 2016).

Moving forward, a key goal of research on MC should be to sharpen scientific understanding of when, how, and why market norms generate “light,” versus “dark” effects on social behavior. For instance, in contexts of relative abundance, it is possible to “enlarge the social pie” through trade, and the benefits of generalized prosociality might be maximized. By contrast, in times of relative scarcity, market norms might promote competition, taint social inferences, and corrode social bonds. Likewise, when markets create lopsided outcomes—such as soaring inequality across much of the world in recent decades—they also produce cynicism, resentment, and mistrust (Hartwich & Becker, 2019).

Another goal for future work on this topic should be to interrogate the role of research itself in generating MCs. Social scientists typically frame themselves as observers, but the process of observation can alter its target. For instance, researchers frequently draw broad inferences about trust, fairness, and altruism using economic games. But the very presence of monetary incentives might prime people to think in exchange terms, and thus express more market-driven actions and inferences than they would otherwise (Zaleskiewicz & Gasiorowska, 2016). Similarly, psychological research tends to highlight individualistic models of well being and experience, recasting human nature in neoliberal terms (Adams et al., 2019). Social scientists should be cautious about differentiating between the social tendencies they want to study and those their experiments might produce *in vitro*.

Our description of MC is preliminary and, we hope, paves the way for future research and exploration of related topics. As markets continue to dominate our lives, it is vital that we more clearly understand the effects they have on our minds.

Table 1*Theoretical mapping of market cognition*

Market effects	Components	Selected references
Generalized prosociality	Broadening of cooperation from kinship and group affiliation to external players within the same marketplace.	Henrich et al. (2010) Thomson et al. (2018) Colleran (2020)
	The commodification of prosociality in a way that inoculates the necessity of empathy and utilizes self-interest to increase the greater good.	Barclay (2016) Rand, Arbesman, and Christakis (2011)
Tainted prosociality	The interpretation of interpersonal relationships as transactional.	Fiske (1991) Malhotra and Murnighan (2002)
	The effects of market cognition on self-perception and ensuing trustworthiness.	Gneezy and Rustichini (2000) Frey (2017)
	The views on human nature as a species that is driven by self-interest.	Miller (1999) Cricher and Dunning (2011)

RECOMMENDED READINGS

Barclay, P. (2016). Biological markets and the effects of partner choice on cooperation and friendship. *Current Opinion in Psychology*, 7, 33-38. A review article outlining evidence that individuals select prosocial cooperation partners, and thus social marketplaces incentivize prosocial signaling among people who want to be selected as partners.

Becker, J. C *et al.* (2021). Neoliberalism can reduce well-being by promoting a sense of social disconnection, competition, and loneliness. *The British Journal of Social Psychology*. This recent set of studies finds—using correlational and experimental methods—that exposure to neoliberal market norms increases loneliness and decreases well being, in part through a focus on interpersonal competition.

Henrich, J., *et al.* (2010). Markets, religion, community size, and the evolution of fairness and punishment. *Science*, 327(5972), 1480-1484. A classic paper using economic games in a cross-cultural examination, which demonstrates that market integration generalizes prosocial behavior to non-kin.

Sandel, M. J. (2013). Market reasoning as moral reasoning: why economists should re-engage with political philosophy. *Journal of Economic Perspectives*, 27(4), 121-40. Summarizes, from a philosophical perspective, the moral consequences of expanding market norms into classically non-market social domains.

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