What is Trust? A Multidisciplinary Review, Critique, and Synthesis

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Abstract

Despite decades of interdisciplinary research on trust, the literature remains fragmented and balkanized with little consensus regarding its origins. This review documents how this came to be and attempts to offer a solution. Specifically, it evaluates issues of conceptualization found in the trust literature. I recommend that we move away from *varieties of trust* – multidimensional conceptualizations of trust – and toward a single trust concept built around four essential properties: actor A's beliefs, actor B's trustworthiness, the matter(s) at hand, and unknown outcomes. I finish the article by proposing a synthetic structural–cognitive theoretical framework for investigating the causes and consequences of trust in everyday life.

"I believe that the most serious and important problems that require our immediate and concerted attention are those of conceptualization and measurement, which have far too long been neglected."
    – Hubert M. Blalock, Jr. (1979: 882)

Introduction

Trust is one of those rare concepts in the social sciences that is routinely invoked by journalists, moral philosophers, politicians, and even natural scientists. Luminaries across these spheres of society note how markets, communities, and hierarchies all benefit from high rates of interpersonal trust. In sociology, James Coleman (1990) observed that "…a group whose members manifest trustworthiness and place extensive trust in one another will be able to accomplish much more than a comparable group lacking that trustworthiness and trust…In a farming community…where one farmer got his hay baled by another and where farm tools are extensively borrowed and lent, [trust] allows each farmer to get his work done with less physical capital in the form of tools and equipment (p. 304, 307)." Likewise, in economics, Kenneth Arrow (1972) famously stated that "virtually every commercial transaction has within itself an element of trust, certainly any transaction conducted over a period of time. It can be plausibly argued that much of the economic backwardness in the world can be explained by the lack of mutual confidence (p. 357)." Robert Putnam (2000) in political science has written of trust in a similar regard: "A society that relies on generalized reciprocity is more efficient than a distrustful society, for the same reason that money is more efficient than barter. Honesty and trust lubricate the inevitable frictions of social life (p. 135)."

    To state it plainly, trust matters. It matters for interpersonal relationships, group dynamics, civic engagement, and society at large. Yet trust is not an abstract sociological concept like *habitus* (Bourdieu 1990) or *institutional isomorphism* (DiMaggio and Powell 1983) that exists beyond the cognitions of people in their workaday affairs. It is, instead, an emergent property of social life embedded in social relations and personally experienced by everyday people. Individuals

appreciate and understand the importance of trust whenever they encounter the uncertainties and vagaries of modern society. When people hire a divorce lawyer, consult a neurosurgeon, seek an investment opportunity, or pay for a babysitter, trust and the possibility of deceit and betrayal are present. In other words, trust promotes cooperation and eases social interaction – regardless of the goals or what is at stake – in social life. With trust, social order is possible; without trust, social conflict is probable.

Despite the normatively desirable properties of trust, we still lack a common conceptual understanding of what constitutes trust. In this article, I argue that trust is fundamentally reductive, relational, and belief-based. My formulation of trust centers on *how* one trusts, *who* one trusts, and *what* one trusts another person to do. I propose a *structural-cognitive model of trust*, where trust is conceptualized as a belief about another person's trustworthiness with respect to a particular matter at hand that emerges under conditions of unknown outcomes. While this definition excludes common misconceptualizations such as perceptions of risk and uncertainty, risk-taking decisions, and behavior, I integrate each of these cognitions and actions into my structural-cognitive model as consequences – rather than properties – of trust. I then address the *varieties of trust* literature. I argue that the supposed *varieties of trust* are, in fact, not trust but alternative cognitive processes that serve as sources of trust. Given this review, critique, and synthesis, I contend that scholars should adopt relational conceptions of trust and abandon *varieties of trust* in order for the accumulation of knowledge about trust to move forward.

What is trust?

Conceptualizations of trust differ to a great extent. In fact, no single psychological or social element – besides the notion that trust emerges under conditions of unknown outcomes – is shared by the various conceptualizations of trust. In spite of this, conceptions of trust found in the literature can be categorized along three analytically distinct dimensions concerned with *how* to trust, *whom* to trust, and *what* to trust another to do. Or what Eric Uslaner (2003) calls the *varieties of trust* (see also Nannestad 2008; Newton and Zmerli 2011; Uslaner 2002). Below, I present my own version of these dimensions, propose a trust concept – what I and others call *relational trust* – and contrast this definition with the *varieties of trust*.

Varieties of trust

The first dimension – *how* – addresses the psychological foundations of trust, with the two most common being strategic versus moralistic. Within this dimension, trust is seen either as an individual's assessment of another grounded in social cognition (Coleman 1990; Hardin 2002; Schelling 1960) or as an internalized value that reflects how an individual should perceive and ought to behave toward others (Uslaner 2002).[1] For the former, trust is usually conceptualized as a belief or an expectation built from personal experiences with and contingent on the trustworthiness of others (Cook et al. 2005; Paxton and Glanville 2015). For the latter, while early life experiences are important (Flanagan and Stout 2010) – especially with parents (Dinesen 2009; Rotenberg 1995; Weissman and LaRue 1998) – trust is generally inherited via cultural transmission (Dinesen 2011, 2012a,2012b; Uslaner 2008) and dependent upon an individual's psychological predisposition rather than contingent on expectations of reciprocity, personal experiences, or perceived motivations. According to Uslaner (2002), even if moralistic trust does have elements of belief, such as "I believe that all Americans are fairly reliable and trustworthy", the choice to place this trust is non-rational and parallels the Weberian form of value-rational action (Weber [1922] 1978).[2] In contrast to strategic forms of trust, moralistic trust "…is a

general outlook on human nature and *mostly* [emphasis in the original] does not depend on personal experiences or upon the assumption that others are trustworthy (Uslaner 2002: 17)." It depends on the beliefs, norms, and values of one's culture (Almond and Verba 1963; Banfield 1958; Inglehart 1988).

While the first dimension refers to *how*, the second dimension addresses to *whom* trust is extended. Within this dimension, trust is conceived of as either particular or general.[3] Particular trust encapsulates the view that trust can only be placed in specific people we know or at least have information on (Baier 1986; Mayer et al. 1995; Rousseau et al. 1998). As Hardin (2002) notes, we trust others when we know a fair amount about whether their motivations align with our interests. Particular trust, then, is usually observed when actors trust specific people, such as friends and family, business associates, or neighbors.[4] At the other extreme lies the notion that the scope of trust can extend beyond the person (particular trust) and to people in general (general trust) (Rotter 1971; Uslaner 2002; Yamagishi and Yamagishi 1994; Yamagishi et al. 1998). This general trust applies to individuals we do not know very well or at all. Thus, when Simmel (1978, p. 178) wrote of peoples' trust in general others, this is the form of trust he was writing about. It is the idea that trust can be applied to everyone to the same extent, regardless of who they are or how well we know them.

The third and final dimension concerns the scope of *what* one trusts another person to do; what I refer to as simplex versus multiplex trust. Simplex trust concerns the specific matter for which trust is placed: the issue or task a person trusts another person to do or not to do (Cook et al. 2005; Farrell 2009; Hardin 2002). Once the number of matters increases from one particular task or issue to many tasks or issues, simplex trust slowly moves toward the multiplex end of the pole (Rotter 1971, 1980; Uslaner 2002). For instance, trust as a two–part relation where actor A trusts actor B without any limits on the matters at hand, such as "I trust my wife with respect to everything", gravitates toward the multiplex end of the spectrum. At this extreme point, the scope of matters for which one trusts another person is unlimited. For instance, I might trust a friend (particular trust) or even strangers (general trust) to watch my newborn daughter or to drill away tooth decay. In short, simplex trust concerns specific matters, while multiplex trust concerns many matters.

Based on these three dimensions, we can see that concepts of trust vary to a great degree depending on one's theoretical and disciplinary bent. The problem is that conceptual diversity produces stilted and Balkanized forms of knowledge that has little bearing on the concept of interest. Yet we believe that trust, like institutions, is capable of maintaining social order as we personally experience the consequences of trust on a daily basis. But before plunging deeper into issues of conceptualization related to the *varieties of trust*, I first propose a definition of trust, and then compare and contrast this definition with the *varieties of trust*.

To assist in this endeavor, I focus on four basic elements of construct clarity (Bacharach 1989; Cohen 1989; Suddaby 2010): definitions, scope conditions, semantic relationships, and coherence. With this guide, I provide a *definition* of trust that is precise and parsimonious: a definition that captures the essential properties and elements of trust while avoiding tautology and circularity. I also outline the abstract *scope conditions* under which trust does and does not apply. That is, I delineate the circumstances in which trust emerges and is of causal importance. I then outline my definition's *semantic relationship* with prior concepts of trust. In other words, I show how my definition of trust differs from and improves upon extant trust constructs. Finally, I reveal the logical consistency, or *coherence*, of my definition of trust by embedding it within an overall theoretical framework. From this, I show how my definition of trust causally relates to prior essential properties of trust and previous trust constructs, such as the *varieties of trust*, perceived risk and uncertainty, risk-taking decisions, and cooperation and exchange.

Relational trust

If one builds upon the ideas of Hardin (1993, 2002) and colleagues (Cook et al. 2005; Farrell 2009), trust consists of several essential elements. First, and foremost, trust is a tripartite concept restricted to a three-part relation: the two parties involved, actor A (the truster) and actor B (the trustee), and the matter at hand, Y, where matters at hand are broadly defined as any resource, service, or behavioral capability of actor B that is valued by actor A.

According to this tripartite structure, dependence and interdependence are essential conditions for trust. As Linda Molm (1994) points out, dependence is the defining structure of exchange relations and networks, in which actors produce mutual benefit through direct and indirect exchange; while interdependence is the defining structure of corporate groups, in which actors produce mutual benefit through cooperation and productive exchange. Although interdependence might suggest that an actor, A, can trust a social unit, B, trust is always restricted to specific relational dyads embedded within social units. For instance, if actor A is part of a work group (or a social unit) that requires everyone's contribution to succeed (matter Y), where everyone consists of actors B and C, actor A does not trust the social unit *per se*.[5] Instead, actor A trusts each respective member of that social unit, actors B and C, to varying degrees depending on each actor's trustworthiness with respect to matter Y (contributions to the public good).

Second, trust is a cognitive process embedded within the family of knowledge and beliefs: it is, in general, a belief – or a proposition about the world – held by actor A that some future event, Y, will come to pass, and, specifically, a belief held by actor A that actor B will act trustworthily toward actor A with respect to some matter Y. Trust is cognitive in that it involves automatic and deliberative processes that are both impulsive and reflective (Fiske and Taylor 2013; Kunda 1999; Moskowitz 2005; Murray et al. 2011). That is, trust formation is a dual process of relatively conscious and unconscious procedures (Vaisey 2009). All of which is derived from perceptions of, prior experiences with, and knowledge about the social world. Interestingly, this conceptualization of trust is agnostic toward the Weberian ideal-typical forms of social action, in spite of its value in determining expected utility under conditions of unknown outcomes.[6] I might, for instance, find you trustworthy and not use this belief in any instrumental or consequential way, and, instead, exchange with you out of habit. In this way, trust is merely a belief about another person's trustworthiness that can be used to rationally or non-rationally achieve (or not achieve) one's goals and desires.

Third, trust is a function of the trustworthiness of others. I *a priori* define trustworthiness as the capability *and* commitment of a trustee to fulfill the goals and desires of a truster. In this way, actor B is trustworthy to the extent that he or she is capable *and* motivated to fulfill actor A's interests. Building from Fritz Heider (1958), I define capability as ability and competence, and commitment as motivation and exertion. Unlike prior work, I make no assumptions about the forms of commitment necessary and or sufficient to produce trust. Generally, sources of commitment tend to fall along two distinct analytical dimensions: (i) the extent to which commitment is either instrumentally or expressively motivated, and (ii) the extent to which commitment is either externally or internally motivated (Robbins 2014). Commitments based on *instrumental* motivations are characterized by a person's interest in the benefits received or costs avoided from an exchange (Hardin 2002), while a person's regard and respect for another's interests characterize commitments based on *expressive* motivations (Clark and Mills 1979). In contrast, commitments that are externally motivated refer to the alignment of a person's interests from incentives exogenous to an exchange relationship (Ingram and Clay 2000), while commitments that are internally motivated refer to a person's interest in an exchange partner or exchange relationship that is endogenous to an exchange relationship (Yamagishi and Yamagishi 1994). Instead of assuming the content of trustworthiness (and commitment and motivations in particular) as

theoretically given to produce trust, I argue that understanding how and why trustworthiness produces trust is an empirical question. For instance, how do different types of perceived trust-worthiness (expressively versus instrumentally motivated commitments) impact trust and why? I leave the resolution of this theoretical and conceptual problem to empirical research (see Mayer et al. 1995; Molm et al. 2007b; Robbins 2014).

Fourth, and finally, trust as a concept is restricted to conditions of unknown outcomes; that is, trust emerges under conditions that involve the potential for losses as well as gains (i.e. the outcome is unknown) *and* conditions that involve the ontological freedom on the part of actor B to pursue actions that are not in the interests of actor A (Deutsch 1958, 1960; Seligman 1997; Shklar 1984). As Giddens states, "There would be no need to trust anyone whose activities were continually visible and whose thought processes were transparent…It has been said that trust is 'a device for coping with the freedom of others,' but the prime condition of requirements for trust is not lack of power but lack of full information (1990: 33)." Trust, in other words, requires some level of risk and uncertainty so that there is a test of trust (Dasgupta 1988; Gambetta 1988 Molm et al. 2000): betrayal and wrongdoing are possible, but benign intentions are expected.

The combination of these four essential properties – beliefs, trustworthiness, matters at hand, and unknown outcomes – yield the following working definition of relational trust: *a belief about another person's trustworthiness with respect to a particular matter at hand that emerges under conditions of unknown outcomes.*[7] Although I refer to this definition of trust as *relational trust*, I employ the label *relational* to contrast it with the *varieties of trust*. What I call *relational trust*, then, is and simply should be viewed as trust.

What relational trust is Not

With this working definition and conceptualization, we can now identify what trust is not. Throughout much of the writings on trust, especially with respect to conceptualization, scholars have a tendency to conflate trust with cooperation. As noted previously, trust is not purposive action or behavior, as some like Fehr (2009) would lead us to believe. For Fehr (2009), trust is a particular action that people take when they place resources in the hands of another person without any legal oversight or contractual agreement. The issue with this conceptualization is that although the action might give compelling evidence for trust, the action itself is not trust. If we cooperate, there are many reasons to do so, some of which depend on trust and some of which do not (Rousseau et al. 1998). Consider Blau's theoretical discussion of reciprocal exchange and trust (see also Cook et al. 2005):

> "Typically…exchange relations evolve in a slow process, starting with minor transactions in which little trust is required because little risk is involved. A worker may help a colleague a few times. If the colleague fails to reciprocate, the worker has lost little and can easily protect himself against further loss by ceasing to furnish assistance. If the colleague does reciprocate…he proves himself trustworthy of continued and extended favors…Hence, processes of social exchange, which may originate in pure self-interest, generate trust in social relations through their recurrent and gradually expanding character (1964: 94)."

Many economic and social exchanges parallel this simple process: unknown trustworthiness yields low-levels of trust, but a decision to take a small risk leads to repeated exchange, which ultimately produces trust. To say that trust is an action is to confuse trust with something it is not. People do or do not trust to some degree, conditional on the evidence at hand. And people act or do not act, depending on a multitude of factors, many of which do not involve trust. I

might trust person B and take a small risk in my exchange with her or I could take a large risk and exchange with person C who I do not trust whatsoever (see Molm et al. 2007b for empirical support of this argument). If anything, trust is merely a sufficient condition for cooperation and not foundational or necessary in every cooperative endeavor.

Trust is also sometimes confused with acts of risk-taking (Mayer et al. 1995; Rousseau et al. 1998; Zand 1997) or what some call a leap of faith (Möllering 2006), lowering one's guard (Elster 2007), or making oneself vulnerable to the actions of others (Levi and Stoker 2000). But like cooperation, leaps of faith are not necessarily trust: trust, as we know, is a belief about a specific person's trustworthiness and not a matter of taking a risk or making a choice. For instance, with respect to matter Y, actor A might trust actors B, C, and D to the same degree. Actor A might then decide to take a leap of faith and exchange with the person who provides the greatest value of matter Y. In this case, trust is the belief actor A holds about the trustworthiness of actors B, C, and D, while actor A's leap of faith is the decision to take a risk and exchange with whoever that person might be (Coleman 1990).

To clarify, risk-taking stems from actor A's perceived risk and uncertainty, which can itself stem from any number of factors that are not trust. This includes physical constraints, such as trade routes and weather conditions, and social constraints, such as economic and labor market regulations. It also includes actor A's preferences, values, and attitudes. Stating it plainly: your perceived risk of a situation and your resulting leap of faith can spring from your trust in another person or any number of other factors, and in either case, trust is merely one of many inputs that can alter a person's perceived risk or uncertainty that can then lead them to take the proverbial leap of faith and cooperate. But in many situations, actor A neither trusts nor distrusts actor B: he or she holds neutral beliefs about actor B's trustworthiness (Ullmann-Margalit 2009). Under such conditions, those other factors, including physical and social constraints, play a key role in molding perceived risk and uncertainty.

This discussion brings us to a key distinction in the trust literature, one concerned with the difference between risk and uncertainty. Under conditions of risk, while the outcome is unknown, the distribution of possible outcomes *is* known. For instance, if I role a 6-sided die, I do not know the outcome, but I do know the distribution of all possible outcomes: there are six possible outcomes, each of which has an equal chance of landing. Under conditions of uncertainty, both the outcome *and* the distribution of possible outcomes are unknown. This would be akin to rolling a die of unknown size be it a 4-, 6-, 8-, 10-, 12-, 20-, or 100-sided die (interestingly though, in either case of risk or uncertainty, a person is – and must be – faced with at least two possible unknown outcomes in the real world). Trust can occur under both conditions, but conditions of uncertainty are most likely to prevail under many (if not most) real-world situations in which trust is relevant.

So how does trust relate to risk and uncertainty? Trust emerges under conditions of risk and uncertainty – conditions in which the outcome of matter Y is unknown. So in this case, risk and uncertainty are necessary conditions for trust. But as previously discussed, people also have subjective perceptions about risk and uncertainty. Briefly consider a 4-sided die in which four possible outcomes are possible, a roll of a 1, 2, 3, or 4. With an unbiased die, each outcome has a 25 percent chance of landing. People's perceptions about risk under these conditions are generally uniform in that everyone believes either a 1, 2, 3, or 4 will land with a 25 percent chance. Now, let's say that the 4-sided die is a police officer and the outcomes for a pedestrian are either (i) ignored, (ii) stopped-and-frisked, (iii) fined, or (iv) shot. Very few people might believe that each outcome has a 25 percent chance to occur, while the vast majority of people would view (i), (ii), or (iii) as more likely to occur. For instance, if one holds a stereotype that police "serve and protect", then their perceived risk of being "stopped-and-frisked" is low; while those who hold the stereotype that police "seize and profit", then their perceived risk of being stopped is high.

This exercise nicely illustrates the relationship between trust and perceived risk. As stated earlier, trust and perceived risk are analytically distinct concepts, but they are causally related in that actor A's trust (or distrust) in actor B increases (or decreases) actor A's subjective probability that actor B will accomplish matter Y. That is, actor A's subjective probability that matter Y will come to pass is weighted by actor A's trust in actor B with respect to matter Y. *If I believe that you're trustworthy to do whatever it is I need you to do, then this belief alters my perceived risk about the distribution of possible outcomes.*

My primary goal with this discussion was to illustrate how trust is not necessarily a perception of risk and uncertainty, a risk-taking decision, or a leap of faith. This is important given the conceptual slippages scientists routinely make about trust and anything related to risk and uncertainty.

Other conceptualizations treat trust as a one- or two-part relation. As outlined above, trust is a reductive and relational concept composed of two parties and a matter at hand. Without these three basic elements, trust is not present. For instance, actor A might trust actor B to keep a secret (matter Y) but to not repay a loan (matter Z), while actor A might trust actor C to repay a loan but to not keep a secret. Note that in this instance, there are various parties (the truster and the trustees) and the matters at hand (to keep a secret or to repay a loan): actor A trusts actor B with respect to matter Y and actor C with respect to matter Z. If trust, on the other hand, is merely a one-part relation, then actor A simply trusts everyone with respect to everything (i.e. general multiplex trust).

But this is not how trust operates in the real world. To think that any one person would trust everyone with respect to everything to the same degree is an empirical stretch. Would you loan any random stranger on the street your car? Ask said stranger to care for your child while you and your wife went on vacation? Or employ a sociology professor to surgically remove a life threatening brain tumor? And that your trust in each of these people for each of these matters would be of the same degree or magnitude? My guess is that you would answer no to all of these questions, and that trust as a one-part relation would bear very little on your decision to exchange and cooperate in these situations.

Now take trust as a possible two-part relation where actor A trusts actor B. For instance, "I trust my wife", period, or "person A trusts her mother" without any limits on the matters for which trust is placed. This sort of trust, however, is very unlikely even in the closest of relationships. I may, for instance, trust my wife, but not surely for anything and everything. I might trust her to edit a paper or maintain fidelity but not with medical advice or to fly a plane. Under these conditions, I might assume that her motivations toward my interests are the same, regardless of the matter at hand, but her ability to actualize each of these matters will vary. As a result, my beliefs about her trustworthiness will vary from matter to matter. Now add an alternative matter to this equation: substance abuse. My wife's motivations for each of my interests might be the same, but her motivation to support and or provide me with drugs will differ from these other interests (editing, fidelity, advice, piloting).

This example illustrates how the concept of trust as a two-part relation – similar levels of trust for all matters – is something that very few of us experience. If trust is, in fact, a one- or two-part relation, then the theoretical scope of trust is too general (Cohen 1989; Suddaby 2010). With either conceptualization, a theory of trust that is restricted to these cases is severely limited empirically and, as a result, has no real bearing on the myriad of exchanges we experience in our daily lives. If anything, trust conceptualized as a one-part relation is likely an account of the positive expectations we have concerning the trustworthiness of strangers; while trust conceptualized as a two-part relation is likely an account of the unconditional faith or confidence we have in others in their relationship with us. One is a stereotype and the other is unconditional faith, neither of which are trust.

While equating trust with cooperation, perceived risk, risk-taking, and a one- or two-part relation are the most common conceptualizations found in the trust literature, other conceptualizations of trust exist as well. Yet to review them all would require another article or book.[8] I

will, however, now return to my discussion of the three dimensions that constitute the supposed *varieties of trust.*

Distinguishing relational trust from varieties of trust

Table 1 offers a number of definitions that encapsulate the three dimensions of *how, who,* and *what.* In returning to these three dimensions, we can see that my definition of relational trust – as well as other conceptual treatments of trust including Hardin's (2002) encapsulated interest account – falls within Cell 1. In this cell, trust is *strategic* and strictly reserved for *particular* trustees for specific (i.e. *simplex*) matters. While my definition of trust includes conditions of unknown outcomes, this core feature is found across (nearly) all conceptualizations of trust. As a result, risk and uncertainty were not treated as a dimension. One will also notice that my treatment of *strategic* trust across Cells 1 through 4 is belief-based, where other conceptualizations of trust as risk and uncertainty (e.g. Coleman 1990) and observed behavior (e.g. Fehr 2009) would fall along this strategic pole (and within Cell 1 specifically). I restrict strategic trust to beliefs as preference-based, attitude-based, or behavior-based forms of trust are not trust (this is something I have already discussed at length in this review).[9]

One can see that the remaining cells along the strategic pole are concerned with belief-based trust as one- or two-part relations. Cell 2 constitutes specific forms of faith we might have in particular people respecting all matters, while Cells 3 and 4 reflect stereotypes about people in general with

Table 1. The Varieties of Trust.

How		Who			
		Particular		**General**	
		What		**What**	
		Simplex	**Multiplex**	**Simplex**	**Multiplex**
		Cell 1	Cell 2	Cell 3	Cell 4
	Strategic	A belief about another person's trustworthiness with respect to a particular matter.	A belief about another person's trustworthiness with respect to all matters.	An expectation – or stereotype – about the cooperativeness and helpfulness of strangers with respect to a particular matter.	An expectation – or stereotype – about the cooperativeness and helpfulness of strangers with respect to all matters.
		Cell 5	Cell 6	Cell 7	Cell 8
	Moralistic	A value held by an individual that one should rely on and trust known others with respect to a particular matter.	A value held by an individual that one should rely on and trust known others with respect to all matters.	A value held by an individual that one should rely on and trust strangers with respect to a particular matter.	A value held by an individual that one should rely on and trust strangers with respect to all matters.

respect to simplex or multiplex matters. The contents of Cells 3 and 4 are more conceptually clear than the contents of Cell 2. As a result, I will spend some time discussing the contents of Cell 2.

To start, a key question concerns why the definition found in Cell 2 is not trust? Two reasons: this sort of belief rarely occurs in the real-world, and this sort of belief should be decomposed into trust beliefs for each respective matter. As a result, the definition found in Cell 2 does not encapsulate the multitude of trust relationships a person might experience in their day-to-day activities or even various forms of trust we have in a specific person for a great many things. For the conditions found in Cell 2 to occur, actor A must trust actor B for all matters of interest to him or her, such as fixing a car or flying a plane. This is not to say that the contents of Cell 2 are empirically negligible. But it does imply that there is not one form of trust in a particular person for all matters; each and every matter for a particular person can be decomposed into different trust beliefs, largely stemming from perceptions of capability *and* commitment.

Cells 5 through 8, on the other hand, consist of trust as moralistic in character, and obviously vary by *whom* to trust and *what* to trust. Regardless of the latter two dimensions, these forms of trust stand in stark contrast to my definition of relational trust. The reader will notice that these versions of trust harbor the same conceptual slippages as those previously discussed. First, if people are morally motivated to trust, then they would trust everyone with respect to everything to the same degree. Second, if trust is moral and people are morally motivated to trust, then trust is not a belief, it is a simple preference, desire, or value. We know empirically that this is not the case for trust since trust operates under conditions of risk and uncertainty, whereas preferences motivate – and are conditions for – action regardless of certainty, risk, uncertainty, or ignorance (Elster 2007).

Taken together, scholars who view trust other than anything but *strategic*, *particular*, and *simplex* – what I call relational trust – conflate trust with other cognitive processes. For instance, *moralistic* trust should actually be conceptualized as a personal value, a moral norm of trustworthiness, or a social preference, while *strategic general* trust should be conceptualized as a cognitive schema or stereotype about prototypical people.[10] Yet this is not to say that the *varieties of trust* are unimportant for trust and cooperation; the optimistic expectations (i.e. stereotypes) we have about strangers are vital in our willingness to trust, take risks, and cooperate with people we know very little about. But it is to say that many of these *varieties of trust* are not trust but other factors known to promote trust, perceived risk and uncertainty, risk-taking, and or cooperation. The distinction I want to make is that while stereotypes and values are not central to the concept of trust, they are nonetheless causally related to trust. For instance, *general* trust is nothing more than a stereotype, but a stereotype that can influence our beliefs about the trustworthiness of another person with respect to a particular matter. An outstanding empirical question, then, concerns the extent to which these *varieties of trust* influence and mutually reinforce each other (Paxton and Glanville 2015; Robbins 2016).

Given my definition of relational trust, my discussion of what relational trust is and is not, and my review of the *varieties of trust*, I will now propose a synthetic structural-cognitive model of trust.

Structural-cognitive model of trust

Figure 1 is an illustration of my model. Here, I draw on Dietz (2011) and decompose the sources of trust into four analytical elements: (i) those pertaining to characteristics of actor A, the truster (e.g. preferences, emotions, genetics); (ii) those pertaining to characteristics of actor B, the trustee (e.g. perceived benevolence, status, reputation); (iii) those pertaining to characteristics of the A–B exchange relationship (e.g. social identity, power and dependence, generalized exchange); and (iv) those pertaining to characteristics of social forces external to, or beyond, the A–B exchange relationship (e.g. geographic constraints, physical constraints, social constraints).[11] Each of these
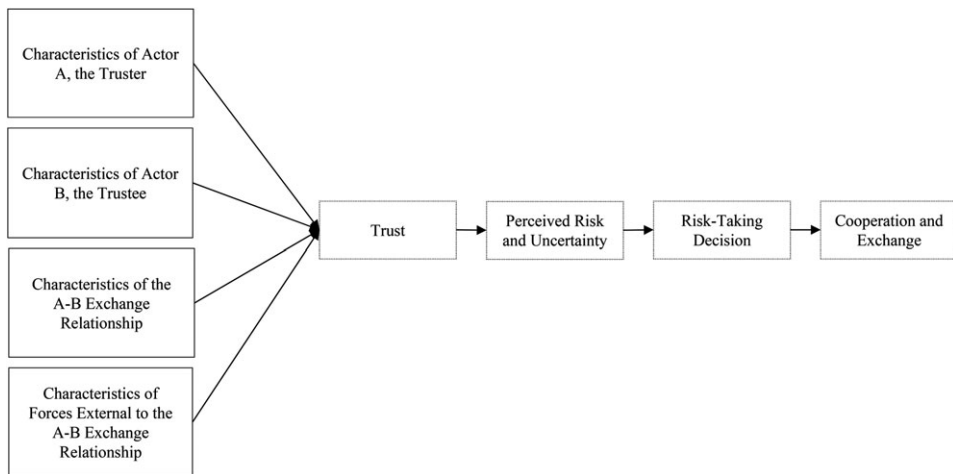
Figure 1 Structural-cognitive model of trust.

elements can and do impact trust, and there is a large literature investigating the influence of each element – either alone or in concert – on trust (e.g. Alesina and La Ferrara 2002; Buskens 2002; Campos-Castillo and Ewoodzie 2014; Foddy et al. 2009; Lount 2010; Molm et al. 2007a; Sapienza et al. 2013; Stanley et al. 2011; Sturgis et al. 2010).

The contribution of this model, however, is not necessarily with the exogenous elements, it is with the endogenous cognitive components that spring from and are influenced by trust.[12] As previously noted, trust should not be confused with perceived risk and uncertainty of an exchange, a risk–taking decision, or with cooperation itself. What I argue, and what Figure 1 illustrates, is that each of these psychological processes are influenced by trust and that each, in turn, is influenced by the other. In other words, perceptions of risk and uncertainty spring from trust – albeit not exclusively – and these perceptions, in turn, impact one's decision about whether to take the proverbial leap of faith and cooperate with another individual. A person will act, then, in accordance with this decision. All of these discrete cognitive elements are influenced by trust but should not be confused or conflated with trust, which is often done in the literature.

My hope with this discussion of the trust concept was to not only inform the reader of how trust has been conceptualized within the literature but also to underscore how these conceptualizations have produced a Balkanized accumulation of knowledge ostensibly about trust that, in reality, is more about alternative cognitive processes unable to speak to what the literature was originally intended to study. While this makes for lively and prolific empirical observations, it also makes for expert disagreement as to the causes and consequences of trust that are difficult to resolve until the conceptualization and operationalization of trust are closely aligned. This lack of alignment is partially a result of misconceptualization but also an artifact of the methods employed: sociologists and political scientists tend to rely on attitudinal measures of trust that ignore the matters at hand or the specific persons to whom trust is directed, while economists rely on behavioral indicators of trust that conflate beliefs with preferences and actions. A future review will address these issues in greater detail.

Discussion and conclusion

In this article, I have developed a conceptualization of trust – what I and others refer to as *relational trust* – that is informed by literatures across the social sciences. My formulation calls for an understanding of trust centered on *how* one trusts, *who* one trusts, and *what* one trusts another

person to do. In my proposed *structural-cognitive model of trust*, trust is recast as a relational concept consisting of a belief (*how*) about another person's trustworthiness (*who*) with respect to a particular matter at hand (*what*) that emerges under conditions of unknown outcomes. Thus, trust is not the perception or calculation of risk and uncertainty, the proverbial leap of faith or risk-taking decision, or the behavior or action that leads to exchange itself. These cognitions and actions, instead, result from trust and influence each other through a causal, processual chain. I have developed this framework by showing how the *varieties of trust* can be identified according to specific cognitive processes that serve as sources of trust. As such, trust is not a stereotype about others or faith in another person, where such treatments of trust are viewed as one- or two-part relations without any restrictions on who one trusts or what one trusts another to do. Yet I argue that the *varieties of trust* do exert causal influence on trust in the same way that Jon Elster (2007) treats beliefs as arising from other beliefs, emotions, preferences, and social constraints.

One way to read this review and my arguments is as a conceptual juncture. The trust literature – like many literatures – has particular idiosyncrasies, some originate from orientation while others derive from convenience. Rigid theoretical orientations and paradigmatic tastes guide how researchers conceptualize trust, while convenient data (e.g. General Social Survey) and "off-the-shelf" research designs (i.e. behavioral economic trust games) chaperon how researchers measure trust. But these orientations and this convenience come with a price: many concepts of trust better capture theoretical leanings than how trust actually operates in peoples' day-to-day lives; and common indicators of trust actually do not measure what they are intended to measure. Given the current state of trust research, there are two routes to take. Follow the current path where we obfuscate and pollute our knowledge about trust. Or take an alternative path, where we treat trust as a single concept – not as a "variety" like flavors of ice cream or breeds of dog – and abandon common measures of trust that better tap into the *varieties of trust*. If we all started here, then our literature would become a little less fractured and a little more coherent.

Acknowledgement

Short Biography

Blaine G. Robbins is an assistant professor of Social Research and Public Policy at New York University Abu Dhabi. His research focuses on trust and trustworthiness, collective action, social norms, and network formation. His work has appeared in the *Journal of Cross-Cultural Psychology, PLoS ONE, Rationality and Society, Social Science Research*, and other peer-reviewed journals. Current and ongoing projects include the analysis of betrayal, the causes of tax evasion, and the origins of social predation. He holds a BA in sociology and a BS in psychology from Pacific Lutheran University, and both an MA and PhD in sociology from the University of Washington.

Notes

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[1] Although this dimension includes affective-based trust (Jones 1996; Lewis and Weigert 1985; McAllister 1995; Miller 2000), I limit the discussion of this dimension to strategic and moral forms of trust due to their frequent use across the social sciences.

[2] A value-rational action is an action that is taken to attain goods or ends that are desired for their own sake, regardless of the consequences. Others refer to this as an immanent value (Hechter 1987), which can be described as an intrinsic motivation (Ryan and Deci 2000).

[3] Although Uslaner (2000) was one of the first scholars to distinguish between the different dimensions of trust as strategic versus moralistic and particular (or particularized) versus general (or generalized), his conception of particularized and generalized trust differs with respect to how I use it here. For Uslaner, "Generalized trust is the belief that most people can be trusted. Particularized trust is faith only in your own kind (2000: 573)." I argue that the difference between particularized trust and generalized trust is the scope of expectations – person (particularized) versus people (generalized) – and that the salience of social identity (i.e. "faith in your own kind") is just one factor that might impact the formation of trust. In other words, social identity is not central to the definition of trust as suggested by Uslaner, it is a causal variable that can either increase or decrease trust (see Flynn 2005).

[4] Particular trust does not suggest that a person can trust only one person at any one time. What it does suggest is that trust must be directed toward a specific person as opposed to people in general.

[5] Actor A, however, might hold a positive stereotype about the competence and commitment of the work group that influences the trust actor A forms about specific members of that group. Note that the stereotype is not trust. Recall that trust is a belief about the trustworthiness of a specific group member that can emerge, in part, from other beliefs and stereotypes.

[6] In *Economy and Society*, Weber ([1922] 1978) outlined four ideal-typical forms of social action: instrumental action, value-rational action, affective action, and traditional action.

[7] Although not embedded within the definition, trust, like other beliefs, varies in strength and confidence: ranging from negative to neutral to positive (Lewis and Weigert 1985; Ullmann-Margalit 2009). This is in line with alternative conceptualizations of trust that include "positive expectations (Rousseau et al. 1998: 395)", "expectation[s] that the [trustee] will perform a particular action important to the trustor (Mayer et al. 1995: 712)", and "a hope or expectation of positive outcomes (Lount 2010: 421)." Under such conditions, "neutral" does not necessarily imply distrust; it implies that actor A lacks sufficient knowledge or information about actor B to form a trust- or distrust-based belief about actor B (Ullmann-Margalit 2009). Thus, distrust is the negative expectation actor A holds about actor B's trustworthiness, with a concrete definition as follows: *a belief about another person's untrustworthiness with respect to a particular matter at hand that emerges under conditions of unknown outcomes.*

[8] If one is interested, see Hardin (2002) for a lengthy discussion of the other misconceptualizations of trust.

[9] Although I place my definition of relational trust toward the end of the strategic pole, it is not – by definition – strategic. Beliefs such as trust can be used strategically to assess perceived risk or expected value. But all beliefs do not have to be used in this way. Beliefs about the supernatural or political leaders or ideological stances are not always used to maximize payoffs. But unlike beliefs about the supernatural, trust is often treated strategically due to its nature as a specific proposition concerning the cooperativeness and trustworthiness of others. In this way, trust will often – though not always – be used to assess the expected value of exchanging or not exchanging with someone.

[10] The idea of a *general* trust is severely limited. Although it is an empirical issue, I find it difficult to imagine that anyone, anywhere trusts everyone in the entire world. In reality, the *general* in "general trust" should typically be reserved for more specific – or finer-grained – groups, such as "other Swedes" or "fellow Christians" or "the Marine Corps".

[11] Trust, then, can be informed by a number of cognitive and non-cognitive processes. What some scholars might call "affective-based" trust (McAllister 1995) is, in my model, one of many possible sources of trust.

[12] My structural-cognitive model of relational trust is a *representationalist model of belief*, where "belief often serves as the intrasubjective mechanism linking cultural scripts, frames, codes, and ideologies with their inferred effects on observable lines of action (Strand and Lizardo 2015: 46)." Various models across the social sciences conceptualize beliefs as such (Elster 2007; Geertz 1973; Hedström 2005; Reed 2011). A key issue with this model concerns the treatment of belief as a category of practice (e.g., water) *and* as a category of analysis (e.g., H_2O). Strand and Lizardo (2015) assert that by drawing on pragmatist theory and recasting belief as habit, they address flaws in the assumptions of representationalist models of belief. For them, "Belief is thus enacted in a field of objective tendencies, constituted by the 'pushes and pulls' that serve as the non-neutral or 'dynamic' conditions that provide action with an irreducible temporality (p. 65)." I contend that by substituting one category

of practice (belief) for another (habit) only serves to further confuse our understanding of beliefs. Habits are characterized as fixed routines of thinking, feeling, and behaving that occur automatically and unconsciously (Weber [1922] 1978), whereas beliefs constitute subjective propositions about the world (Rygdren 2009). Beliefs can be ephemeral or fixed, and they can emerge automatically and unconsciously with new experiences. The automatic and unconscious bases of belief formation should not be conflated with habits, which can drive belief formation but are not necessarily a belief. In other words, habits and beliefs should be treated as separate, causally interrelated constructs, not as holding constitutive features of the other.

References

Alesina, Alberto, and Eliana La Ferrara. 2002. 'Who Trusts Others?' *Journal of Public Economics* **85**: 207–34.

Almond, Gabriel A., and Sidney Verba. 1963. *The Civic Culture*. Princeton, NJ: Princeton University Press.

Arrow, Kenneth J. 1972. 'Gifts and Exchange.' *Philosophy and Public Affairs* **1**: 343–62.

Bacharach, Samuel B. 1989. 'Organizational Theories: Some Criteria for Evaluation.' *Academy of Management Journal* **14**: 496–515.

Baier, Annette. 1986. 'Trust and Antitrust.' *Ethics* **96**: 231–60.

Banfield, Edward C. 1958. *The Moral Basis of a Backward Society*. New York, NY: Free Press.

Blalock, Hubert. 1979. 'The Presidential Address: Measurement and Conceptualization Problems: The Major Obstacle to Integrating Theory and Research.' *American Sociological Review* **44**: 881–94.

Blau, Peter. 1964. *Exchange and Power in Social Life*. New York, NY: Wiley.

Bourdieu, Pierre. 1990. *The Logic of Practice*. Cambridge, UK: Polity Press.

Buskens, Vincent. 2002. *Social Networks and Trust*. Netherlands: Kluwer.

Campos-Castillo, Celeste, and Kwesi Ewoodzie. 2014. 'Relational Trustworthiness: How Status Affects Intra-Organizational Inequality in Job Autonomy.' *Social Science Research* **44**: 60–74.

Clark, Margaret S., and Judson Mills. 1979. 'Interpersonal Attraction in Exchange and Communal Relationships.' *Journal of Personality and Social Psychology* **37**: 12–24.

Cohen, Bernard P. 1989. *Developing Sociological Knowledge: Theory and Method*, 2nd edn. Chicago, IL: Nelson-Hall.

Coleman, James. 1990. *Foundations of Social Theory*. Cambridge, MA: Harvard University Press.

Cook, Karen S., Russell Hardin, and Margaret Levi. 2005. *Cooperation without Trust?* New York: Russell Sage Foundation.

Dasgupta, Partha. 1988. 'Trust as a Commodity.' Pp. 49–72 in *Trust: Making and Breaking Cooperative Relations*, edited by Diego Gambetta. New York, NY: Basil Blackwell.

Deutsch, Morton. 1958. 'Trust and Suspicion.' *Journal of Conflict Resolution* **2**: 265–79.

Deutsch, Morton. 1960. 'The Effect of Motivational Orientation upon Trust and Suspicion.' *Human Relations* **13**: 123–39.

Dietz, Graham. 2011. 'Going Back to the Source: Why do People Trust Each Other?' *Journal of Trust Research* **1**: 215–22.

DiMaggio, Paul J., and Walter W. Powell. 1983. 'The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields.' *American Sociological Review* **48**: 147–60.

Dinesen, Peter T. 2009. 'Upbringing, Early Experiences of Discrimination and Social Identity: Explaining Generalized Trust among Immigrants in Denmark.' *Scandinavian Political Studies* **33**: 93–111.

Dinesen, Peter T. 2011. 'Where You Come From or Where You Live? Examining the Cultural and Institutional Explanation of Generalized Trust Using Migration as a Natural Experiment.' *European Sociological Review* **29**: 114–28.

Dinesen, Peter T. 2012a. 'Parental Transmission of Trust or Perception of Institutional Fairness: Generalized Trust of Non-Western Immigrants in a High-Trust Society.' *Comparative Politics* **44**: 273–89.

Dinesen, Peter T. 2012b. 'Does Generalized (Dis)trust Travel? Examining the Impact of Cultural Heritage and Destination-Country Environment on Trust of Immigrants.' *Political Psychology* **20**: 1–17.

Elster, Jon. 2007. *Explaining Social Behavior: More Nuts and Bolts for the Social Sciences*. Cambridge: Cambridge University Press.

Farrell, Henry. 2009. *The Political Economy of Trust: Institutions, Interests, and Inter-Firm Cooperation in Italy and Germany*. Cambridge, MA: Cambridge University Press.

Fehr, Ernst. 2009. 'On the Economics and Biology of Trust.' *Journal of the European Economic Association* **7**: 235–66.

Fiske, Susan T., and Shelley E. Taylor. 2013. *Social Cognition: From Brains to Culture*, 2nd edn. London, UK: Sage.

Flanagan, Constance A., and Michael Stout. 2010. 'Developmental Patterns of Social Trust between Early and Late Adolescence: Age and School Climate Effects.' *Journal of Research on Adolescence* **20**: 748–73.

Flynn, Francis. 2005. 'Identity Orientations and Forms of Social Exchange in Organizations.' *Academy of Management Review* **30**: 737–50.

Foddy, Margaret, Michael J. Platow, and Toshio Yamagishi. 2009. 'Group-Based Trust in Strangers: The Role of Stereotypes and Expectations.' *Psychological Science* **20**: 419–22.

Gambetta, Diego (ed. or eds). 1988. *Trust: Making and Breaking Cooperative Relations*. New York, NY: Basil Blackwell, Inc..

Geertz, Clifford. 1973. *The Interpretation of Cultures*. New York, NY: Basic Books.

Giddens, Anthony. 1990. *The Consequences of Modernity*. Stanford, CA: Stanford University Press.

Hardin, Russell. 1993. 'The Street-Level Epistemology of Trust.' *Politics & Society* **21**: 505–29.

Hardin, Russell. 2002. *Trust & Trustworthiness.* New York, NY: Russell Sage Foundation.

Hechter, Michael. 1987. *Principles of Group Solidarity.* Berkeley, CA: University of California Press.

Hedström, Peter. 2005. *Dissecting the Social: On the Principles of Analytical Sociology.* New York, NY: Cambridge University Press.

Heider, Fritz. 1958. *The Psychology of Interpersonal Relations.* New York, NY: Wiley.

Inglehart, Ronald. 1988. 'The Renaissance of Political Culture.' *American Political Science Review* **82**: 1203–30.

Ingram, Paul, and Karen Clay. 2000. 'The Choice-Within-Constraints New Institutionalism and Implications for Sociology.' *Annual Review of Sociology* **26**: 525–46.

Jones, Karen. 1996. 'Trust as an Affective Attitude.' *Ethics* **107**: 4–25.

Kunda, Ziva. 1999. *Social Cognition: Making Sense of People.* Boston, MA: MIT Press.

Levi, Margaret, and Laura Stoker. 2000. 'Political Trust and Trustworthiness.' *Annual Review of Political Science* **3**: 475–507.

Lewis, J. David, and Andrew Weigert. 1985. 'Trust as a Social Reality.' *Social Forces* **63**: 967–85.

Lount, Robert B. 2010. 'The Impact of Positive Mood on Trust in Interpersonal and Intergroup Interactions.' *Journal of Personality and Social Psychology* **98**: 420–33.

Mayer, Roger C., James H. Davis, and F. David Schoorman. 1995. 'An Integrative Model of Organizational Trust.' *Academy of Management Review* **20**: 709–34.

McAllister, Daniel J. 1995. 'Affect- and Cognition-Based Trust as Foundations for Interpersonal Cooperation in Organizations.' *Academy of Management Journal* **38**: 24–59.

Miller, Jessica. 2000. 'Trust: The Importance of an Emotional Attitude.' *Practical Philosophy* **3**: 45–54.

Möllering, Guido. 2006. *Trust: Reason, Routine, Reflexivity.* Oxford, UK: Elsevier.

Molm, Linda D. 1994. 'Dependence and Risk: Transforming the Structure of Social Exchange.' *Social Psychology Quarterly* **57**: 163–76.

Molm, Linda D., Jessica L. Collett, and David R. Schaefer. 2007a. 'Building Solidarity through Generalized Exchange: A Theory of Reciprocity.' *American Journal of Sociology* **113**: 205–42.

Molm, Linda D., David R. Schaefer, and Jessica L. Collett. 2007b. 'The Value of Reciprocity.' *Social Psychology Quarterly* **70**: 199–217.

Molm, Linda D., Nobuyuki Takahashi, and Gretchen Peterson. 2000. 'Risk and Trust in Social Exchange: An Experimental Test of a Classical Proposition.' *American Journal of Sociology* **105**: 1396–427.

Moskowitz, Gordon B. 2005. *Social Cognition: Understanding Self and Others.* New York, NY: The Guilford Press.

Murray, Sandra L., Rebecca T. Pinkus, John G. Holmes, Brianna Harris, Sarah Gomillion, Maya Aloni, Jaye L. Derrick, and Sadie Leder. 2011. "Signaling when (and when not) to be Cautious and Self-Protective: Impulsive and Reflective Trust in Close Relationships." *Journal of Personality and Social Psychology* **101**: 485–502.

Nannestad, Peter. 2008. 'What Have we Learned about Generalized Trust, if Anything?' *Annual Review of Political Science* **11**: 413–36.

Newton, Ken, and Sonja Zmerli. 2011. 'Three Forms of Trust and their Association.' *European Political Science Review* **3**: 169–200.

Paxton, Pamela, and Jennifer L. Glanville. 2015. 'Is Trust Rigid or Malleable? A Laboratory Experiment.' *Social Psychology Quarterly* **78**: 194–204.

Putnam, Robert. 2000. *Bowling Alone: The Collapse and Revival of American Community.* New York, NY: Free Press.

Reed, Isaac. 2011. *The Interpretation of Social Knowledge: On the Use of Theory in Human Knowledge.* Chicago, IL: University of Chicago Press.

Robbins, Blaine. 2014. 'On the Origins of Trust.' Ph.D. dissertation, University of Washington, Seattle.

Robbins, Blaine. 2016. 'From the General to the Specific: How Social Trust Motivates Relational Trust.' *Social Science Research* **55**: 16–30.

Rotenberg, Ken J. 1995. 'The Socialization of Trust: Parents' and Childrens' Interpersonal Trust.' *International Journal of Behavioral Deviance* **18**: 713–26.

Rotter, Julian B. 1971. 'Generalized Expectancies for Interpersonal Trust.' *American Psychologist* **26**: 443–50.

Rotter, Julian B. 1980. 'Interpersonal Trust, Trustworthiness, and Gullibility.' *American Psychologist* **35**: 1–7.

Rousseau, Denise M., Sim B. Sitkin, Ronald S. Burt, and Colin Camerer. 1998. 'Not So Different After All: A Cross-Discipline View of Trust.' *Academy of Management Review* **23**: 393–404.

Ryan, Richard M., and Edward L. Deci. 2000. 'Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being.' *American Psychologist* **55**: 68–78.

Rygdren, Jens. 2009. "Beliefs." Pp. 72–93 in *The Oxford Handbook of Analytical Sociology*, edited by Peter Bearman and Peter Hedström. Oxford, UK: Oxford University Press.

Sapienza, Paola, Anna Toldra-Simats, and Luigi Zingales. 2013. 'Understanding Trust.' *The Economic Journal* **123**: 1313–32.

Schelling, Thomas. 1960. *The Strategy of Conflict.* Cambridge, MA: Harvard University Press.

Seligman, Adam B. 1997. *The Problem of Trust*. Princeton, N. J: Princeton University Press.

Shklar, Judith N. 1984. *Ordinary Vices*. Cambridge, MA: Harvard University Press.

Simmel, Georg. 1978. *Philosophy of Money*. London, UK: Routledge.

Stanley, Damian A., Peter Sokol-Hessner, Mahzarin R. Banaji, and Elizabeth A. Phelps. 2011. 'Implicit Race Attitudes Predict Trustworthiness Judgments and Economic Trust Decision.' *PNAS* **108**: 7710–5.

Strand, Michael and Omar Lizardo. 2015. "Beyond World Images: Beliefs as Embodied Action in the World." *Sociological Theory* **33**: 44–70.

Sturgis, Patrick, Sanna Read, Peter K. Hatemi, Gu Zhu, Tim Trull, Margaret J. Wright, and Nicholas G. Martin. 2010. 'A Genetic Basis for Social Trust.' *Political Behavior* **32**: 205–30.

Suddaby, Roy. 2010. 'Editor's Comments: Construct Clarity in Theories of Management and Organization.' *Academy of Management Review* **35**: 346–57.

Ullmann-Margalit, Edna. 2009. 'Trust, Distrust, and In Between.' Pp. 60–82 in *Distrust*, edited by Russell Hardin. New York, NY: Russell Sage Foundation.

Uslaner, Eric M. 2000. 'Producing and Consuming Trust.' *Political Science Quarterly* **115**: 569–90.

Uslaner, Eric M. 2002. *The Moral Foundations of Trust*. Cambridge, UK: Cambridge University Press.

Uslaner, Eric M. 2003. 'Varieties of Trust.' *European Political Science* **2**: 43–9.

Uslaner, Eric. 2008. 'Where we Stand Depends Upon Where Your Grandparents Sat: The Inheritability of Generalized Trust.' *Public Opinion Quarterly* **72**: 725–40.

Vaisey, Stephen. 2009. 'Motivation and Justification: A Dual-Process Model of Culture in Action.' *American Journal of Sociology* **114**: 1675–715.

Weber, Max. [1922]. 1978. *Economy and Society, Volume I*. Berkeley, CA: University of California Press.

Weissman, Marsha, and Candace M. LaRue. 1998. 'Earning Trust from Youths with None to Spare.' *Child Welfare League of America* **77**: 579–94.

Yamagishi, Toshio, Karen S. Cook, and Motoki Watabe. 1998. 'Uncertainty, Trust, and Commitment Formation in the United States and Japan.' *American Journal of Sociology* **104**: 165–94.

Yamagishi, Toshio, and Midori Yamagishi. 1994. 'Trust and Commitment in the United States and Japan.' *Motivation and Emotion* **18**: 129–66.

Zand, Dale E. 1997. *The Leadership Triad: Knowledge, Trust, and Power*. New York, NY: Oxford University Press.

Further Reading

Barber, Bernard. 1983. *The Logic and Limits of Trust*. New Brunswick, NJ: Rutgers University Press.

Castillo, Marco, and Ragan Petrie. 2010. 'Discrimination in the Lab: Does Information Trump Appearance?' *Games and Economic Behavior* **68**: 50–9.

Emerson, Richard. 1972a. 'Exchange Theory, Part I: A Psychological Basis for Social Exchange.' Pp. 38–57 in *Sociological Theories in Progress*, edited by J. Berger, M. Zelditch Jr. and B. Anderson, vol. **2**. Boston, MA: Houghton-Mifflin.

Emerson, Richard. 1972b. 'Exchange Theory, Part II: Exchange Rules and Networks.' Pp. 58–87 in *Sociological Theories in Progress*, edited by J. Berger, M. Zelditch Jr. and B. Anderson, vol. **2**. Boston, MA: Houghton-Mifflin.

Hardin, Russell. 2006. *Trust*. Cambridge, UK: Polity Press.