ESRC Social Contexts and Responses to Risk Network, University of Kent
ESRC Centre for Analysis of Risk and Regulation, London School of Economics

Conference:
Taking Stock of Trust

12th December 2005
Rosebery Hall
London School of Economics

TRUST AND UNCERTAINTY: THE EMOTIONAL BASIS OF RATIONALITY

Jack Barbalet
Sociology
University of Leicester

jmb34@le.ac.uk

D R A F T   O N L Y

Version: 28/11/05

TRUST AND UNCERTAINTY: THE EMOTIONAL BASIS OF RATIONALITY

Trust is a peculiar concept in many ways, some of which will be explored in the present paper. The value of trust in social relationships becomes especially apparent to those who face improbity and deception, yet trust offers no protection against these. Indeed, it is organization not trust that presents itself as a means of bringing regulation and certainty to relationships and is therefore a possible means of increasing the predictability of events. Organization may thus reduce reliance on trust as a means of achieving an agreed or desired outcome through joint or cooperative activity or engagement. But organization is an imperfect mechanism for successfully realizing a purpose or goal. Organizations cannot control their own environments, nor can they necessarily manage the internal developments that may result from changes in their environments, or even their internal dynamics. For some purposes and in some situations, then, in order to achieve an outcome otherwise not available, it is necessary that a person simply trust another. There may be no other way forward.

What is trust?

Trust is variously defined in terms of the benefits it provides (cooperation, social order, political cohesion, reliability, etc), or the dispositions of those who give trust (calculative, moral, pragmatic, affective, etc), or the character of the relationship between the trusting and the putatively trustworthy (dependent, reciprocal, contractual, exploitative, etc). The multiple understandings of trust found in the literature encourage the view that it is a problematic phenomenon in need of detailed clarification about which current discussion is unresolved.

Trust is defined here in terms of three characteristics. Given that trust may be required to achieve an outcome in the absence or failure of organization, and as organization is a means of regulating or controlling relationships, it might be inferred that trust is an alternative means of control. It is essential to appreciate that this is not the case: trust is not a means of control at all. Indeed the opposite holds; rather than control, trust is characterized by dependency. In operative terms, trust is a disposition on the part of the trust giver which enables or facilitates their cooperation with another. Cooperation is achieved through trust because trust is an acceptance of dependence on another (Luhmann 1979: 15, 22, 81). It is implicit in this statement that an act of trust entails the possibility of the other's defection from the relationship or the exploitation of the trust giver, for relations of dependence are inherently asymmetrical.

A second characteristic, then, is that trust can never be based on pertinent knowledge. It is only possible to know whether a trusting action was correct by determining whether the trust was honoured. The breaking of a trust, for instance, could only occur after trust had been given. Indeed, all events and knowledge of them that indicate whether a particular instance of trust giving was correct necessarily occur after the trust has been given (Luhmann 1979: 25). This is connected with a third essential feature of trust. As an action based on evidence concerning its correctness that is only available after it has been given, trust bridges the present and the future (Luhmann 1979: 10, 25). That is, trust is necessarily an anticipation of a future outcome that, if successful, it creates.

It is important that these three elements of trust be understood as working together to achieve the facticity of trust. For instance, emphasis on the first element at the expense of the others might support the notion that trust is simply a tranquilizer, say, as when Jens Beckert writes that

> Trust can be described as the social mechanism that expresses the shutdown of the latent uncertainty of the trust-giver: trust works as a tranquilizer in social relations enabling the trust-giver to remain calm despite the uncontrollable freedom of action of the trust-taker (Beckert 2005: 18).

While it is appropriate to point to the way in which trust shuts down the trust giver's latent uncertainty in face of the trust taker's freedom to defect, the idea that trust is a tranquilizer ignores entirely the creative capacity of trust to realize an outcome otherwise not available. The reality or facticity of trust is only achieved in its application and its application is primarily in the giving of trust through which an opportunity to realize a future outcome is achieved. The tranquilizing aspect of trust cannot cover its genuinely creative side. This latter is core to trust but compromised if only the shutdown of latent uncertainty is emphasized and it is forgotten that the uncertainty with which trust copes is overcome through the generation or production of a future only achieved through the giving of trust. By ignoring this latter aspect of trust Beckert shifts the focus from the trust giver to the subsequent acceptance of trust in the trust-taker (Beckert 2005: 8-10), which is necessarily the residual and secondary role in the trust relationship.

The notion of trust outlined here has to be distinguished from generalized trust that is a broad attitude toward institutions and persons without regard to particular and direct exchanges (Inglehart and Baker 2000). The trust discussed in the present paper is not general but specific to those dependent, asymmetrical and one-sided relations or exchanges in which a person's expectation of another's contribution to the realization of an outcome otherwise not available is formed in the absence of confirming evidence concerning the other's reliability. In this case terms such as 'anticipatory trust' (Sztompka 1999: 27) are redundant. As the bases on which trust is given are variable, it is possible to distinguish between distinct grounds of trustworthiness such as reputation, for instance, expert qualification or certification, rule governance and so on. But it is a mistake to distinguish types of trust in terms of distinct grounds or forms of trustworthiness, as some authors attempt (Sztompka 1999). If trustworthiness was the efficacious condition of trust, then trust would not be the problem it is. Trust cannot be explained in terms of its present conditions, including the qualifications of others, but in terms of the (anticipated) future behaviour of others. The other's claim to trustworthiness is part of the context in which trust is given but can not be the basis of trust. These problems of the one-sidedness of trust are not dissolved in cases of mutual or reciprocal trust (Coleman 1990: 306-10; Rose-Ackerman 2001: 535-8) which are simply mirrored in it in so far as now the trust giver is simultaneously a trust-taker, and vice versa.

The necessary characteristics of trust indicated here, namely the asymmetry of dependence on another, the absence of pertinent knowledge concerning the other's future actions, and the bridging of time through trust in attempting to realize a future anticipated by the trust giver, all point in the direction of risk or uncertainty. While the decision to trust may be based 'not simply on [an] estimate of the probability of the trustee's keeping trust, but also in part on the use of negative sanction' (Coleman 1990: 115), risk-reducing sanctions are always external to trust while the 'risk … [of]

depend[ing] on the performance of another actor' (Coleman 1990: 91) is necessary to and unavoidable in trust. Yet the intellectual construction of the concept 'risk' tends to function by compromising the uncertainty trust faces and may overcome in its own non-deliberative way. The fundamental uncertainty that trust attempts to overcome refers to situations in which 'essential information about future events *cannot be known at the moment of decision* because this information does not exist and cannot be inferred from any existing data set' (Dequech 1999: 415-6; emphasis in original).

Risk or uncertainty.
The standard model of a market economy, as Partha Dasgupta notes, assumes that goods and services are delivered through operation of a price mechanism and failure to deliver is the result of insufficient care or bad luck, including natural disasters; the rectitude of agents is a matter simply beyond the scope or concern of the model (Dasgupta 1990: 49). The trustworthiness of economic agents is not a concern because the problem of trust does not arise. Trust, or one understanding of it, enters this model as a means to overcome the friction of transaction costs, where trust is an efficient lubricant because it acts as an implicit contract (Arrow 1974: 23). The problem of trust, namely that trust is given in the absence of pertinent knowledge, is not countenanced in the conception of trust as a lubricant because this conception regards trust as part of the 'background environment, present whenever called upon' (Dasgupta 1990: 49). Well it might be. But there is a further, associated reason why trust is regarded only as an implicit contract without acknowledging the contingency and precariousness of trust that comes not simply from time lag and possibility of trust-taker defection, but from the unavoidable uncertainty of the future. That reason is the propensity of market models to translate fundamental uncertainty into calculable risk. But in doing so trust is indeed converted into a lesser form, namely implicit contract.

The market model briefly described above has a special faith in the certain availability of knowledge or pertinent information. Situations of fundamental uncertainty, with which trust must deal, do not exist according to this account, at least in the economy, because there are only situations of risk and the extent or degree of risk can always be known through rational calculation. Thus it is the chance or possibility element of risk that lends itself to objective measurement that puts it in sharp contrast with the notion of fundamental uncertainty that confounds measurement as relevant information about it does not exist and cannot be inferred. And yet there is an aspect of trust that the concept of risk does capture, namely the component of choice essential to trust, as when Luhmann observes that trust presupposes a situation of risk rather than danger because while danger is inherent in a situation risks 'emerge only as a component of decision and action … if you refrain from action you run no risk' (Luhmann 1990: 100). But this aspect of risk is not captured by the notion of trust as a lubricant to reduce transaction costs which sees only the danger of avoidable expense.

While assumptions concerning information in market systems leads to a vocabulary of risk as opposed to fundamental uncertainty, not every situation will be subjected to rational assessment in this sense, however, because it is not denied that the cost of obtaining relevant information may be higher than the benefit of having that information. But in principle, according to this argument, it is possible to calibrate the risk involved in trusting another. This conceptualization is quite unlike the notion of trust in which trust is required to achieve a future good, otherwise not available, through precarious dependency on another. The dependency is precarious because expectation of a future outcome cannot be based on knowledge of the trust-taker's future behaviour, and a course of action is therefore taken in the face of fundamental uncertainty in order to realize an otherwise unobtainable outcome. This is an understanding of trust remote from the notion that trust is no more than an implicit contract, in which sanctions are assumed and agreement is premised on symmetry rather than asymmetry and any uncertainty is negotiated and mutual or shared.

The archetypical model of rational expectation that encourages a calculable risk model over acceptance of fundamental uncertainty is that of statistical probability as applied to such risk-taking behaviour as gambling. There is no doubt that probability statements of this type have the status of reliable knowledge. This is because they measure invariant existing systems with set rules. But the real world, including the real world of financial markets, for example, about which risk calculations are frequently offered, does not match these conditions (Pixley 2004: 37). Even if the actors' aims are entirely predictable, as the economic paradigm insists through its axiom of utility maximization, there remains uncertainty in achieving those aims. Sticking to the financial realm for the moment, Hyman Minsky, for instance, has shown that instability emerges from stability through the propensity of business units, over periods of prolonged prosperity, to take on higher levels of acceptable debt, so that there is a 'move from a financial structure dominated by large hedge finance units to a structure in which there is large weight to units engaged in speculative and Ponzi finance'. (Minsky 1992: 8). The relevance of this to present discussion is Minsky's appreciation of the temporal basis of uncertainty and the link between the present and future through unsubstantiable expectation.

What is true of the economic and financial worlds is true of the social world in general. That is to say, fundamental uncertainty is unavoidable. Indeed, uncertainty is inherent in all systems of action as any given action changes the conditions of all future actions. This means, firstly, that uncertainty is not overcome with time, but is in fact a condition of time or rather temporality, of the distinction between the known present and the unknown future. Second, expectations about the future cannot be amenable to calculation because the future actions of others cannot be known at any given time of inquiry or decision. As Joan Robinson has put it, human action draws upon a past that cannot be undone and faces a future which cannot be known (Robinson: 1964: 73-4). In arguing this way she follows Keynes.

John Maynard Keynes sees the paradigm of risk, against the paradigm of uncertainty, in the terms described above, as the economists' form of whistling in the dark. Indeed he refers to the 'dark forces of time and ignorance that envelop our future' (Keynes 1936: 155) and 'accuse[s] the classical economic theory of being itself one of those pretty, polite techniques which tries to deal with the present by abstracting from the fact that we know very little about the future' (Keynes 1937: 115). In *The General Theory* Keynes moves from a discussion of the relevance of the state of confidence, which provides a 'theoretical link between today and tomorrow' (Keynes 1936: 145), to the schedule of the marginal efficiency of capital, which is in fact the schedule of investment, to the more general point concerning the tendency to project from present facts to future expectations of outcomes (Keynes 1936: 148). An understanding of the future is formed through projection, then, not calculation, and such an apprehension of current facts is a fabricated not a calculative rationality.

For Keynes the future is a matter about which there is unavoidable uncertainty. For this reason, he says, ‘most … of our decisions to do something positive … can only be taken as a result of animal spirits – of a spontaneous urge to action rather than inaction, and not as the outcome of a weighted average of quantitative benefits multiplied by quantitative probabilities’ (1936: 161). He goes on to write:

> … human decisions affecting the future, whether personal or political or economic, cannot depend on strict mathematical expectation, since the basis of making such calculation does not exist; and that in our innate urge to activity which makes the wheels go round, our rational selves choosing between the alternatives as best we are able, calculating where we can, but often falling back for our motive on whim or sentiment or chance (1936: 162-3).

Keynes’ reference here is to action in general and not cooperation in particular, so it is confidence not trust that is treated. Nevertheless, the formation of expectation in the context of the necessary uncertainty concerning the future is common to them both.

While Keynes’ formulations are apposite concerning the inaccessibility with mathematical expectation of the future, his characterization of the state of confidence requires closer examination. Keynes’ understanding of the problem of fundamental uncertainty appreciates that the future cannot be anticipated by a probabilistic estimate or rational calculation because it is yet to be realized or created. But an unknowable future does not imply complete ignorance. Knowing about uncertainty may direct those who face an unknowable future to practices that provide a present sense of stability and certainty, such as organization, contract, sanctions or incentives and so on, and also to practices that create future outcomes otherwise not obtainable, such as trust.

The basis of trust.

Situations of trust comprise an instance of what William James calls a forced option, a situation in which there is no possibility of not choosing (James 1956: 3): either A cooperates with B to achieve C, or A cannot have C. There is no position outside this alternative. One possibility is that A might choose not to have C rather than cooperate with B. Another possibility, because cooperation itself offers no guarantees, is that A cooperates with B, but because B is inadequate, C is not achieved. Another possibility is that A’s cooperation with B advantages B at A’s expense and A does not achieve C. In fact, though, A will only know whether cooperation with B will meet A’s expectations regarding C after A has cooperated with B. A’s cooperation, then, should it be given, is necessarily on trust. Trust is the means whereby an uncertain future is given the semblance of certainty so that things may proceed to an outcome or future otherwise not available. As Luhmann says:

> To show trust is to anticipate the future. It is to behave as though the future were certain […] This problem of time is bridged by trust, paid ahead of time as an advance on success (Luhmann 1979: 10, 25).

The question arises, then, of what does trust consist?

First it is necessary to eliminate certain things as definitely not constituting the basis of trust. Some writers (e.g. Fukuyama 1995; Putnam 1993) suggest that trust is a cultural facility that arises through familiarity which comes from communal and customary relationships. This is hardly helpful, however, in making sense of decisions to trust which functions in terms of both the contingency of trust – one’s choice to act is contingent on the future actions of another – and the precariousness of the outcome of trust – depending on the reliability of another. At best, custom and culture function to reduce both contingency and precariousness in the sense used here and therefore tend to remove the problems trust attempts to overcome. But even accepting the possibility of a communally-based 'trust' as trust, such a disposition would be likely to inhibit the possibility of trust of non-communal members and those outside the host ethnic, religious, residential or whatever community. Thus community is a basis of trust that prevents trust. Indeed, the prevention of trust through community is active within and not only between communities. The closeness of community that generates gossip and envy, the problem of the 'evil eye', is the likely source of not trust but distrust, which is an indifference to trust relations, and also mistrust, which undermines trust when it exists (see Bergmann 1993; Boissevain 1974; Eisenstadt and Roniger 1984).

Power, both ideological or normative power (e.g. Coleman 1990; Williamson 1975) on the one hand, and generalized if not coercive power (Dunn 1990; Parsons 1969) on the other have been seen to facilitate trust, or at least the cooperation for which trust may be necessary. But again, these are situations that remove the problem of trust because the degree to which there is compulsion on an actor through exercise of or absorption in power means that the choice of not acting is reduced and the situation of forced option compromised.

A number of writers attempt to characterize the inclination to trust in terms of a calculative propensity of the trust giver. This has been dealt with above but additional aspects can be mentioned here. These approaches tend to focus on grounds for certainty that would encourage or facilitate calculation. Thus compensation for default to encourage trust, in the form of warranties or damages claims are institutional bases of certainty, as iteration through repeated games are behavioural bases that change the stakes for both trust giver and potential exploiter when the possibility of the trust giver's withdrawal affects the trust-taker's prospective gains (Dasgupta 1990: 52-3, 56-8). But none of these scenarios does justice to the requisite contingency of situations in which trust is required if things are to move forward. The more the outcome of exchanges becomes predictable the less trust is required to achieve the desired outcome. Calculation does not facilitate or explain trust, it displaces it.

The basis of trust is a choice of the trust giver to depend on another in spite of an absence of information concerning the outcome of the dependency. If the notion of trust is to have any integrity the basis of that choice cannot be custom or tradition, power or calculation. The idea, that trust is a type of knowledge or belief (Hardin 2001: 10) or faith (Giddens 1990: 33), begs the question of what type of belief or faith? Another possibility to be developed here is that the operative core of trust is emotional. This is accepted by Luhmann (1979: 22, 81), for instance, and ambiguously suggested by Keynes, discussed above. Trust as 'a human passion' is contrasted by Dunn with trust as a 'modality of action' (Dunn 1990: 73-5). Dunn appropriately makes the issue of choice crucial to trust but erroneously dismissed trust as a passion or sentiment on the grounds that we cannot choose our emotions but we can choose our strategies. The issue is not whether we can choose our emotions but whether our emotions help us to choose our strategies. The importance of emotion to trust is implicit in William James' account of forced option in which, through the absence of relevant information, action can only occur if there is a commitment to act. I would say emotional commitment but in that case the word emotion is redundant.

James' account of the 'Alpine climber', in which an actor's particular commitment leads to an unambiguous and singular material outcome, demonstrates the necessity and significance of an emotional choice in the absence of relevant evidence (James 1956: 96-7). According to James' account, an Alpine climber trapped on a narrow and icy precipice, in order to escape serious difficulty, must execute a dangerous leap which they have not previously performed. If engaged by confidence and hope the climber is likely to perform a feat that would be otherwise impossible. Fear and despondency, on the other hand, are likely to lead to hesitation, increasing the probability that the climber will miss their footing and possibly fall to their death. Whichever emotions are engaged will be commensurate with a particular outcome, but with contrastingly different consequences. In this narrative James touches on nearly all the issues of trust, namely its overcoming the problem of absent information and its tendency towards an outcome which, if achieved, realizes an expectation or generates a future it anticipates.

The conception of trust as an emotional facility or modality of action, which is to be developed here, must be distinguished from the idea that certain types of trust are emotional. Thus Susan Rose-Ackerman, for instance, distinguishes five broad categories which point to distinct processes 'by which trust is generated' (2001: 539), namely: encapsulated interest, expertise, rule-based organization, morality and affect. The last, affect-based trust is 'trustworthy behaviour encouraged by love and friendship' (Rose-Ackerman 2001: 540). Similarly, Barbara Misztal's treatment of 'trust as passion' is a discussion of trust in the context of family, friendship and the sentiment of national loyalty (Misztal 1996: 157-207). But these are instances of emotion, namely love and friendship, which structure the relationship in which trust might arise. Incidentally, it is not inconsistent to indicate that love and friendship may be the context of mistrust also. The focus of concern here is not the emotional basis of a relationship in which concerns of trust may arise. Rather, it will be shown here that underlying trust itself, which generates the types of choices that are made in trust, is an essentially emotional core. Indeed, emotion is the only human faculty able to deal with fundamental uncertainty.

Trust as an emotion.

Emotion is often a term of pejorative evaluation because it may suggest unreasonable excitement and irrational distraction from useful or valued pursuits. It is appropriate therefore, before considering trust as an emotion, to first say something about emotion in general, and the way in which emotions are typically regarded.

Emotions are conventionally characterized as reactive and highly visceral outbursts of short duration. Instances of fear, for instance, may be described in this way, and also anger. Indeed, in the psychological study of emotions in laboratory settings elicitation from experimental subjects, usually drawn from undergraduate populations, of readily provoked emotions that rapidly dissipate as the precipitating stimulus passes, may become representative of emotion in general. But not all emotions are highly labile and disruptive, and therefore suitable for scientific measurement. Some emotions may be calm and organizing, such as the emotion of satisfaction, for instance, and also regret. These are not frequently subjects of psychological research, but no less emotions for that.

Another misunderstanding concerning emotion holds that those experiencing particular emotions are necessarily conscious of them, or aware of them as emotions. They need not be. Many emotions, including the most important for social processes, are experienced below the threshold of awareness, as Tom Scheff, for instance, has shown for shame (Scheff 1988). Indeed, self-knowledge may be attained as part of a process of becoming aware of the emotions underlying particular dispositions and inclinations. Much experience of emotions is back-grounded in the sense that they facilitate other, more salient processes, of which the subject is highly conscious, and in doing so are not experienced as emotions nor culturally labelled as such (Barbalet 1998: 59-60; see also Nussbaum 2003: 69-71). The emotions underlying scientific activity, for instance, including discovery and theory selection, operate in just this way (Barbalet 2004).

Against the idea that emotions are only involuntary and disordering physical processes is the notion that emotions have cognitive and evaluational functions (Nussbaum 2003; Oatley 1992). If emotions underscore values, interests and meanings in social life, then they are implicated in rational as well as irrational conduct and outlook. Thus the distinction between rational action and emotional action looses its relevance when emotion is seen to underlie all action (Barbalet 1998: 29-61). The question is then which particular emotions are implicated in distinct types of social interaction or processes.

Trust, as a modality of action that attempts to realize or create an uncertain future, has a distinctive emotional core. The emotional elements of trust are calm, unobtrusive and consonant with rationality. This latter point we shall return to below. Trust entails a positive feeling of expectation regarding another’s future actions. But the expectation is not disinterested as the other’s future actions will effectively impact on the trust giver’s wellbeing and the latter has no control over the other’s freedom of action. Trust also includes, then, the feeling that one can rely on, be dependent on another. Each of these feelings, of positive expectation and safe dependency, is a variant or application of confidence. Confidence is not the same as trust, not because of a difference in the degree of certainty attached to each (contra Misztal 1996: 16), but because of a difference of attribution between them (Luhmann 1990: 97): confidence relates to contingent events and trust to the subject’s own engagements. But the logical distinction between them is necessary for and does not prevent the fact that ‘trust implies confidence’ (Rose-Ackerman 2001: 526; see also Giddens 1990: 34). Trust is the feeling of confidence in another’s future actions and also confidence concerning one’s own judgement of another. Thus there is necessarily a double confidence within trust.

In discussing emotions it is necessary to overcome the ambiguities and silences in natural language concerning emotional states and experiences. One resolution of this problem, which permits a clear exposition of the emotional content of trust, for instance, distinguishes between ‘emotion tokens’ and ‘emotion types’, the former refers to natural language words for emotional states and the latter refers to characterizations of emotional states ‘in terms of their cognitive eliciting conditions’ (Ortony, Clore and Collins 1988: 173). Before treating trust as an emotion, specification of the emotion type ‘confidence’ can be indicated. The cognitive eliciting conditions of confidence are ‘approving of one’s own assured expectation’. The object of confidence is thus not primarily self or other, as with many emotions, such as shame (a negative self-regarding emotion) or love (a positive other-regarding emotion), but expectation of the future. Along with security, depression, and anxiety confidence is therefore an ‘anticipatory emotion’ (Kemper 1978: 72). Like all emotions, confidence has not only a phenomenal form and psychological tone, but also a social basis which includes acceptance and recognition, and the resources to which these provide access (Barbalet 1998: 84-90; Kemper 1978: 73-7; de Rivera 1977: 45-51).

The type specification of confidence underlying trust is ‘approving of one’s own assured expectation regarding another’s reliability’. It is important to understand trust in terms of the trust giver’s self-reference and not only the other’s qualities. Trust is not ‘appreciation’, for instance, the cognitive eliciting conditions of which are ‘approving of someone else’s praiseworthy action’. This is because trust is given before the other’s action can be known or praised. Neither is trust a mere prospect-based emotion like ‘hope’, for example, the cognitive eliciting conditions of which are ‘pleased about the prospect of a desirable event’. This is because hope does spring eternal, whereas confidence and trust are conditional on a self-based capacity for assessment of expectation. The significance of this latter aspect of trust is in the fact that when trust is broken there is not only generation of other-directed emotions, such as anger against the trust breaker, but also self-reproach and self-blame. This is what Luhmann refers to when he says that trust involves ‘an internal attribution’ and the possibility that one may ‘regret [one’s] trusting choice’ (Luhmann 1990: 98). The mistrust of a betrayed trust giver may prevent their trusting even those who are not only beyond reproach in general terms but would have met the subjective criteria of the betrayed prior to their betrayal. Broken trust reflects not only on the trust breaker but on the judgement of the trust giver.

Self-reference to the trust giver is as central to trust as the qualities of the trust taker: each is necessary and neither is sufficient. Because trust consists of feelings of expectation and confidence, the trustworthiness of the trust taker can never be more than a part of the context to trust giving. This context therefore includes not only the environment of sanctions and rules but also the qualities of the trust taker, including their reputation, self-presentation, certified qualifications and so on. This context can never provide conclusive grounds for trust and never constitute conclusive evidence for the reasonableness of trust when it is given. One’s trust of another will always be interactively generated not only in terms of perceptions of trustworthiness that might support a feeling of acceptance of dependence but also in terms of feelings of confidence in one’s capacities to form judgements or assessments of others and their future actions. Thus decisions to trust emerge as negotiated, internally reflexive and possibly idiosyncratic meanings. It is this hermeneutic element of trust that is so exasperating to those who want a formal account of it.

Two further conclusions follow from an appreciation of the emotional nature of trust, which relate to the concepts of social capital and rationality. Each of these conclusions is counterintuitive. Given the emotional nature of trust, trust cannot support the concept or theory of social capital. Second, the affectivity of trust makes it positively continuous with rationality. We shall consider each of these in turn.

Trust and social capital.
Capital, in conventional terms, is a self-augmenting quantity of money, money invested to produce more money. Social capital, then, is what persons put into social relationships in order to enhance or enrich their social resources. Institutional economists first introduced the term, social capital, in the late 1970s to overcome the notion that society is no more than an aggregation of independent individuals and their discrete actions. The concept of social capital points to those resources implicit in social processes which individuals implicated in those processes might draw upon in facilitating their actions (see Coleman 1990: 300-2). This idea, without reference to the term social capital, was outlined by those writers who demonstrated that the networks in which individuals operate are at the same time resources they may draw upon (Bott 1971; Granovetter 1973).

Social capital, as a term that refers to socially generated resources or facilities, is a second-order category in the sense that it is not possible to experience social capital as such. Social capital refers to particular aspects of a number of more concrete things. These include church attendance, voluntary association membership (from Red Cross to trade unions), community education programmes, credit associations and cooperatives, and similar forms of interaction, all frequently referred to in the relevant literature as both instances and generators of social capital (Putnam 1993a; 1995). These things have in common a capacity for individuals who participate in them to achieve through cooperation with others purposes in addition to those satisfied by the particular associations themselves. As James Coleman puts it, social capital 'is not a single entity, but a variety of different entities having two characteristics in common: they all consist of some aspect of a social structure, and they facilitate certain actions of individuals who are within the structure' (Coleman 1990: 302). According to this general argument, trust is central to social capital (Putnam 1993: 167, 170-1).

While social capital satisfies the purposes or interests of individuals within society, unlike conventional capital it cannot be individually possessed: it is a public never a private good (Coleman 1990: 315-8; Putnam 1993: 170). Additionally, social capital is a 'moral resource', which is to say that its supply increases with use and diminishes with disuse (Hirschman quoted in Dasgupta 1990: 56; Putnam 1993: 169-70). These are primary features of trust, its dependency on another and its emergent rather than extant nature. The more people trust each other, exponents of social capital hold, the more likely others will participate in trusting relationships and be confident in their dealings with others. Trust is indeed a social resource performatively generated by a social actor in cooperating with another. But there the similarity with social capital ends.

Putnam finds the Republican political tradition more conducive to the concept of social capital than the Liberal. And yet the best argument against trust as a form of social capital can be found in a key text of Republican political theory. In *The Discourses*, completed in 1518, Niccolo Machiavelli relates how Piero Soderini, Florentine head of state entrusted with the preservation of the republic's order and stability, responded with patience and tolerance to malevolent factionalism. In trusting his enemies, Soderini betrayed the trust of the Florentine citizenry who looked to him for the maintenance of civil peace (Machiavelli 1979: 393-4; Johnson 1993: 6-9).

Machiavelli's Soderini story is particularly interesting in understanding trust because it highlights an aspect of trust that is seldom noted or appreciated in the relevant literature, namely that trust is non-transitive. Transitivity is a particular property of relationships. Trust would be transitive if in all cases the following held: if A trusts B, and B trusts C, then A trusts C. In fact, however, not only does it not follow that A trusts C, it is always possible that B's trusting C may lead A to re-evaluate whether they should trust B. An obvious example: I trusted Tony Blair. But then Tony Blair trusted George W. Bush. Because Blair trusted Bush I stopped trusting Tony Blair. Social capital theory, on the other hand, assumes that trust is transitive (Coleman 1990: 318-9). This is partly because its model of society is formal not substantive, it assumes lineal rationality and has no sense of emergent contradiction. But more than that, because trust has a fundamental emotional element there can be no transitivity in trust.

Trust is not a generalized medium or mechanism of social interaction, like money or Parsonian power. The quality of trust, and therefore its consequences, is always dependent on who is trusted and for what purpose. The emotional form of the assessment, that allows one to be dependent on another, means that the efficacious or facilitating conditions or circumstances are always local and not general. It is not simply trust that is non-transitive, as reflection in this vein on love, hate, fear, and so on will readily demonstrate. Emotions in general cannot meet the conditions of transitivity.

Transitivity is a relationship between intrinsic properties, like the weight of an object or its length. In the social realm transitivity is found in relations of income and wealth, authority in hierarchical organization, certifiable skill, and so on. Trust cannot be transitive because its effective content is not derived from the formal characterization of its intrinsic properties, its definition, but from what the emoting subject brings to it. Like all emotions trust is contextual and conditional. An essential feature of all emotions, including trust, is a process of double non-deliberative appraisal. These are, appraisal of the object of the emotion, what it means to the emoting subject, and also appraisal of the subject's own needs, capacities, and possible action strategies or responses in relation to the object. This complex appraisal aspect of emotions, what might be called a double hermeneutic, is the basis of the conditional and contingent nature of all emotions experienced by persons, including trust. This is also why the characteristics of persons that are constituted or influenced by their emotions can never be adequately explained in terms of their social location or circumstances. Emotions always transcend given circumstances through the double hermeneutic just outlined.

Because trust is non-transitive its support for social capital theory is limited. But this does not mean reliance on trust is irrational.

Trust and rationality.

The preceding discussion does not encourage the view that trust is based on strictly rational action. The facts about which actors have rational grounds for confidence are those pertaining to existing or present situations. But action is directed to future situations and therefore functions in terms of outcomes which at the time of action have not occurred. Action is therefore based on expectation, not calculation. The special precariousness of trust is a consequence of the fact that in it one actor's expectations refer to the future actions of another actor. Action, then, which brings one possible future into the present, does so through a psychological mechanism in which the reverse projection, of the present into the future, occurs. This is how the uncertainty of the future is routinely faced, with a constructed or more properly fabricated 'rationality' based on projection rather than calculation. Confidence is prior to action and trust to cooperation for which information concerning its outcome is not available. Trust cannot be a rational modality of action in the sense understood by rationalist arguments.

This reading of the situation is not exceptional: as Diego Gambetta says, 'if evidence could solve the problem of trust, then trust would not be a problem at all' (Gambetta 1990: 233). But Gambetta goes on to say that it is nevertheless rational to trust trust, because if they do not actors will never find out, and as trust is not a resource depleted through use, it does not have to be saved for one-off trials (1990: 234). Indeed, even if trust is always misplaced, Gambetta continues, it can not do worse than distrust, 'and the expectation that it might do at least marginally better is therefore plausible' (1990: 234). Gambetta's last word: 'Asking too little of trust is just as ill advised as asking too much' (1990: 235). From Luhmann's perspective such a conclusion raises rather than resolves the question of rationality: because a decision to trust cannot be based on pertinent knowledge, we 'have to conclude, therefore, that whether or not action is founded on trust amounts to an essential distinction [or division] in the rationality of action which appears capable of attainment' (Luhmann 1979: 25). But, he goes on, in being essential for action, trust is rational in some other sense.

The rationality of trust in this second non-calculative sense derives from the necessity of trust for action. Luhmann says:

> Without trust only very simple forms of human cooperation which can be transacted on the spot are possible, and even individual action is much too sensitive to disruption to be capable of being planned, without trust, beyond the immediately assured moment. Trust is indispensable in order to increase a social system's potential for action beyond these elementary forms (Luhmann 1979: 88).

In this context, rationality does not refer to the decisions concerning action but the meaningfulness of the action taken (Luhmann 1979: 88). This is the distinction between what Max Weber calls formal and substantive rationality (Weber 1978: 85-6).

Substantive rationality is concerned with outcome, the appropriate orientation of the actor to their circumstances. Formal rationality, on the other hand, is concerned with the quality of an actor's decision or the basis on which it is taken. Weber was aware that formal rationality did not necessarily lead to substantive rationality and indeed was likely to undermine it in the long run. The importance of emotion to substantive rationality, even though it confounds formal rationality, has been acknowledged from different perspectives. The contribution of emotion to substantive rationality and the limits of formal rationality are discussed by the economist Robert Frank (1988), for instance. Similarly, psychologist Keith Oatley (1992), in treating emotional experience as signifying failure or success of personal plans, claims that it is emotion that is rational and thought often irrational.

It has been argued here that trust, based on emotional commitments, confounds the formal rationality of calculative reason that is unable to cope with the contingency and precariousness of trust, but is essential to the substantive rationality of agency under conditions of uncertainty through temporality. This is not an appeal to the concept of bounded rationality, which is a concession to the limitations of human capacities from the point of view of strict rationality. Herbert Simon believed that 'boundedly rational agents experience limits in formulating and solving complex problems and in processing (receiving, storing, retrieving, transmitting) information', so that while they remain 'intendedly rational' their 'analytical and data-processing' capacities are of 'limited competence' (quoted in Williamson 1981: 553). What is pointed to in the present paper, on the other hand, is the incapacity of calculative rationality to cope with the problem of uncertainty that trust overcomes, and which in doing so trust enhances substantive rationality to which neither formal nor bounded rationality can contribute.

References.

Arrow, Kenneth J. 1974. *The Limits of Organization*. New York: Norton.

Barbalet, J.M. 1998. *Emotion, Social Theory and Social Structure: A Macrosociological Approach*. Cambridge: Cambridge University Press.

Barbalet, Jack 2004. 'Consciousness, Emotions, and Science'. Pp. 245-72 in *Theory and Research on Human Emotions. Advances in Group Processes: A Research Annual*, volume 21, edited by Jonathan H. Turner. Amsterdam: Elsevier.

Beckert, Jens. 2005. 'Trust and the Performative Construction of Markets'. *Discussion Paper 05/8*. Cologne: Max Planck Institute for the Study of Societies [originally published in German in *Zeitschrift für Soziologie* 31(1): 27-43].

Bergmann, Jörg R. 1993. *Discreet Indiscretions: The Social Organization of Gossip*. New York: de Gruyter.

Boissevain, Jeremy 1974. *Friends of Friends: Networks, Manipulators and Coalitions*. New York: St. Martin's Press.

Bott, Elizabeth 1971. *Family and Social Network*. Second edition. New York: Free Press.

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

Dasgupta, Partha 1990. 'Trust as a Commodity'. Pp. 49-72 in *Trust: Making and Breaking Cooperative Relations*, edited by Diego Gambetta. Oxford: Blackwell.

Dequech, David 1999. 'Expectations and Confidence under Uncertainty'. *Journal of Post Keynesian Economics*. 21(3): 415-30.

Dunn, John 1990. 'Trust and Political Agency'. Pp. 73-93 in *Trust: Making and Breaking Cooperative Relations*, edited by Diego Gambetta. Oxford: Blackwell.

Eisenstadt, S.N. and L. Roniger 1984. *Patrons, Clients and Friends: Interpersonal Relations and the Structure of Trust in Society*. Cambridge: Cambridge University Press.

Frank, Robert H. 1988. *Reasons within Passions: The Strategic Role of the Emotions*. New York: Norton.

Fukuyama, Francis. 1995. *Trust: The Social Virtues and the Creation of Prosperity*. London: Hamish Hamilton.

Gambetta, Diego 1990. 'Can We Trust Trust?' Pp. 213-37 in *Trust: Making and Breaking Cooperative Relations*, edited by Diego Gambetta. Oxford: Blackwell.

Giddens, Anthony 1990. *The Consequences of Modernity*. Oxford: Polity.

Granovetter, Mark S. 1973. 'The Strength of Weak Ties'. *American Journal of Sociology*. 78: 1360-80.

Hardin, Russell 2001. 'Conceptions and Explanations of Trust'. Pp. 3-39 in *Trust in Society*, edited by Karen S. Cook. New York: Russell Sage.

Inglehart, Ronald and Wayne E. Baker 2000. 'Modernization and Cultural Change, and the Persistence of Traditional Values'. *American Sociological Review*. 65: 19-51

James, William. 1956. *The Will to Believe and Other Essays in Popular Philosophy*. New York: Dover.

Johnson, Peter 1993. *Frames of Deceit: A Study of the Loss and Recovery of Public and Private Trust*. Cambridge: Cambridge University Press.

Kemper, Theodore D. 1978. *A Social Interactional Theory of Emotions*. New York: Wiley.

Keynes, John Maynard. 1936. *The General Theory of Employment, Interest and Money*. London: Macmillan.

Keynes, John Maynard. 1937 [1973]. ‘The General Theory of Employment’. Pp 109-23 in *The General Theory and After. Part II Defence and Development*, edited by Donald Moggridge. London: Macmillan.
Luhmann, Niklas. 1979. *Trust and Power*. New York: Wiley.
Luhmann, Niklas 1990. ‘Familiarity, Confidence, Trust: Problems and Alternatives’. Pp. 94-107 in *Trust: Making and Breaking Cooperative Relations*, edited by Diego Gambetta. Oxford: Blackwell.
Machiavelli, Niccolo 1979. *The Discourses*. Harmonsdsworth: Penguin.
Minsky, Hyman P. 1992. ‘The Financial Instability Hypothesis’. *Working Paper No 74*. The Jerome Levy Economic Institute of Bard College.
Misztal, Barbara A. 1996. *Trust in Modern Societies: The Search for the Bases of Social Order*. Cambridge: Polity.
Nussbaum, Martha C. 2003. *Upheavals of Thought: The Intelligence of Emotions*. Cambridge: Cambridge University Press.
Oatley, Keith 1992. *Best Laid Schemes: The Psychology of Emotions*. Cambridge: Cambridge University Press.
Ortony, Andrew, Gerald L. Clore and Allan Collins 1988. *The Cognitive Structure of Emotions*. Cambridge: Cambridge University Press.
Parsons, Talcott 1969. ‘On the Concept of Political Power’. Pp. 352-404 in his *Politics and Social Structure*. New York: Free Press
Pixley, Jocelyn 2004. *Emotion in Finance: Distrust and Uncertainty in Global Markets*. Cambridge: Cambridge University Press.
Putnam, Robert D. 1993.*Making Democracy Work: Civic Traditions in Modern Italy*. Princeton, NJ: Princeton University Press.
Putnam, Robert D. 1993a. ‘The Prosperous Community: Social Capital and Public Life’. *The American Prospect*. 13: 35-42.
Putnam, Robert D. 1995. ‘Bowling Along: America’s Declining Social Capital’, *Journal of Democracy*. 6(1): 65-78.
Rivera, Joseph de 1977. *A Structural Theory of the Emotions*. New York: International Universities Press.
Robinson, Joan 1964. *Economic Philosophy*. Harmondsworth: Penguin.
Rose-Ackerman, Susan 2001. ‘Trust, Honesty and Corruption: Reflection on the State-building Process’. European Journal of Sociology. 42 (3): 526-70.
Scheff, Thomas J.1988. ‘Shame and Conformity: The Deference-Emotion System’. *American Sociological Review*. 53 (3): 395-406.
Sztompka, Piotr 1999. *Trust: A Sociological Theory*. Cambridge: Cambridge University Press.
Weber, Max 1978. *Economy and Society*. Volume 1. Berkeley: University of California Press
Williamson, Oliver 1975. *Markets and Hierarchies*. New York: Free Press.
Williamson, Oliver 1981. ‘The Economics of Organization: The Transaction Cost Approach’. *American Journal of Sociology*. 87(3): 548-77.