

## 2.8 ON THE COMPLEXITY OF ORGANIZATIONAL TRUST: A MULTI-LEVEL CO-EVOLUTIONARY PERSPECTIVE AND GUIDELINES FOR FUTURE RESEARCH<sup>1</sup>

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### Introduction

During the past decade, scholars have made significant progress in the study of trust in organizational settings. For instance, significant theoretical advances have been achieved (e.g. Rousseau et al., 1998), as have empirical developments such as those published in special trust issues of *Organization Science* (McEvily et al., 2003) and *Organization Studies* (Bachmann et al., 2001). Despite this progress, however, ‘trust remains an under-theorized, under-researched, and, therefore, poorly understood phenomenon’ (Child, 2001: 274). The aim of this chapter is to spur research that moves beyond current theoretical and empirical approaches by using a multi-level and co-evolutionary framework for studying trust. We believe that trust researchers should devote greater attention to the complexity of trust and particularly its evolutionary nature. Our chapter is an attempt to explore the complexities of how trust evolves over time and how it is impacted by organizational context. This idea is consistent with the view of others such as Koza and Lewin (1998), who have argued that trust should not be viewed as a static construct. Also, we have argued elsewhere (Inkpen and Currall, 2004) that a co-evolutionary approach is useful for studying trust. We expand on those themes in this chapter.

Our thesis is this: it is possible to grasp the complexity of trust at one level (e.g. the interpersonal level) by examining trust at another level (e.g. the intergroup or inter-organizational level). As we will discuss in more detail later, Hackman (2003) recently argued that insights about a construct can be obtained when the researcher conducts analyses at one or more levels above or below the focal construct. With respect to trust, we suggest that the subtleties of the trust construct can be unearthed by understanding the organizational context of trust, which can involve, for example, explicating the impact of trust at one level of analysis on trust at another level of analysis. Indeed, we posit that trust at one level serves as the organizational context of trust at another level.

The plan of the chapter is as follows. We lay the foundation for our discussion based on a definition of trust that is suitable for exploring trust across the interpersonal, intergroup and inter-organizational levels. We then discuss a framework that can be used to think about trustors and trustees at different levels. The core of our argument comes next, where we posit linkages among trust at different levels and how trust at one level can affect trust at an adjacent level. We will refer frequently to the literature on joint ventures (JVs) and strategic alliances because a number of authors working in this area have addressed issues of trust at the interpersonal, intergroup and inter-

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organizational levels. And we will draw upon work that we have published on trust and JVs and alliances (e.g. Currall and Inkpen, 2002; Inkpen and Currall, 2004). Lastly, we conclude the chapter with several ideas that are intended to serve as guidelines for future research on trust.

### **A definition of trust that ‘travels’ across levels**

As we have discussed elsewhere (Currall, 1992; Currall and Judge, 1995; Inkpen and Currall, 1997; Currall and Inkpen, 2002; 2003; Currall and Epstein, 2003), trust involves two principal concepts: reliance (Giffin, 1967; Rotter, 1980) and risk (Mayer et al., 1995; Rousseau et al., 1998). Therefore, we define trust as the decision to rely on another party (i.e. person, group, or organization) under a condition of risk. Reliance is action through which one party permits its fate to be determined by another. Reliance is based on positive expectations of, or confidence in, the trustworthiness of another party (Rousseau et al., 1998). Risk is the potential that the trusting party will experience negative outcomes, that is, ‘injury or loss’ (March and Shapira, 1987; Sitkin and Pablo, 1992), if the other party proves untrustworthy. Thus, risk creates the opportunity for trust (Rousseau et al., 1998).

Most conceptualizations of trust focus on the interpersonal level (Rousseau et al., 1998). Yet our definition of trust can be applied to persons, groups and organizations because all three entities make trust decisions and exhibit the measurable actions that follow from such decisions. In fact, it is common for organizational researchers to study decision-making by individuals (e.g. Bazerman, 2001), groups (e.g. Bar-Tal, 1990; Hackman, 2003), and organizations (e.g. Huber, 1990). Because persons, groups and organizations all are capable of making trusting decisions, our conceptualization of trust ‘travels’ (Osigweh, 1989) from the interpersonal to the intergroup to the inter-organizational level. So, the conceptual equivalence across levels is the following: under a condition of risk, a person’s, group’s, or organization’s trust is signified by a decision to engage in action that allows its fate to be determined by another person, group or organization.

When referring to the parties involved in an interpersonal, intergroup or inter-organizational relationship, we find it useful to use the terms ‘trustor’ and ‘trustee’. Designation of the trustor answers the question ‘Who trusts?’ Designation of the trustee answers the question ‘Who is trusted?’ Distinguishing between trustors and trustees has the advantage of avoiding confusion regarding levels of analysis and who is trusting versus who is being trusted (Mayer et al., 1995). We now turn to a presentation of a multilevel model of trust. After discussing this model, we will address linkages among trust at the interpersonal, intergroup and inter-organizational levels.

### **A multilevel perspective on trust**

Some research on trust at multiple levels has been conducted in literature on inter-organizational relationships. For example, in writing on JVs, Barney and Hansen (1994) suggested that discrepancies can exist between interpersonal trust and inter-organizational trust within a JV because trust between partner organizations’ managers may be strong although trust between partner firms is weak. Doz (1996) examined how alliances evolve and how trust at one organizational level impacts the development of trust at another level. Doney and Cannon (1997) empirically studied buyer–seller relationships and found that inter-organizational trust differed from interpersonal trust. Also in the buyer–supplier setting, Zaheer et al. (1998) empirically examined

distinctions between inter-organizational and interpersonal trust. Jeffries and Reed (2000) focused on relational contracting among firms and explored the interaction between inter-organizational and interpersonal trust for the performance of inter-organizational relationships. Overall, however, the issue of trust and organizational levels has been under-explored and issues of similarities and differences in trust at the person, group and organization levels have received only limited attention (Currall and Inkpen, 2002).

### **Levels terminology**

Before proceeding with a discussion of trust at multiple levels, a bit of terminology is in order. 'Level of theory', 'level of measurement' and 'level of analysis' are fundamental concepts in cross-level research (e.g. Klein et al., 1994; Rousseau, 1985). 'Level of theory' refers to the unit (person, group, or organization) the researcher seeks to explain and about which attributions and generalizations are made. For example, if one examines how trust between JV parent organizations may affect the JV's financial performance, then the unit of theory is the organization. Alternatively, if the focus is on trust as a factor affecting negotiations between individuals, then the unit of theory is the person. Level of measurement refers to the source of information such as individual interviews, group surveys, or organization-level archival records of organizational performance. Levels of analysis concern the statistical processing of empirical data.

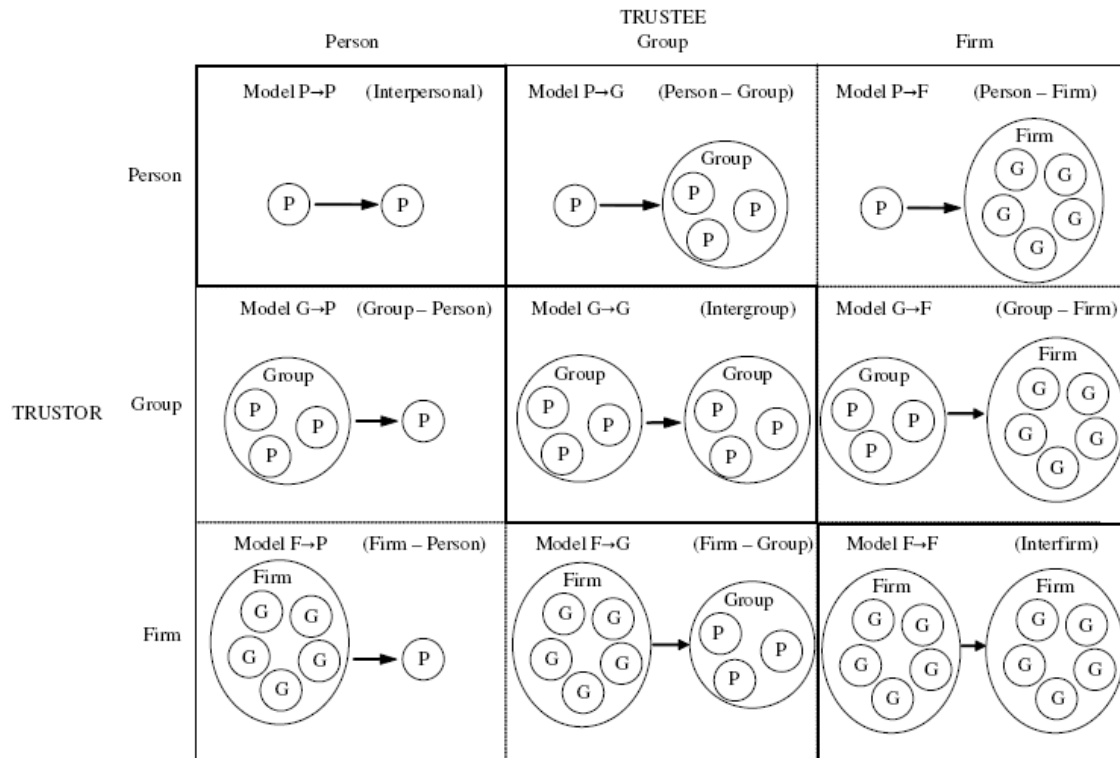
### ***A multilevel framework***

We now return to trust and multiple levels. Currall and Inkpen (2002) proposed a three-level model of interpersonal, intergroup and inter-organizational relations. The aim of the model was to articulate the level of theory, as well as trustors and trustees, at the person, group and organizational levels. By articulating the level of theory, our aim in Currall and Inkpen (2002) was to provide for researchers a foundation for considerations regarding the level of measurement and the level of analysis in multilevel empirical research on trust.

An updated and amended version of the Currall and Inkpen (2002) framework is presented in Figure 13.1. The framework shows the three levels of trust. As depicted in the figure, model P.P refers to both the trustor and trustee as individual persons. Take, for example, the case of a JV or strategic alliance, in which a complex web of trust relations operates at the interpersonal, intergroup and inter-organizational levels. For example, in JVs three types of persons tend to be involved: business development executives in the parent organizations; operations managers in the JV itself; and the JV's board of directors, most of whom are top executives from the parent organizations. Relations among these individuals are important in shaping the partnership agreement between firms as well as in implementing and monitoring the JV. Variations of the interpersonal model are Model P.G. Using again the example of a JV, this is expressed in the form of a trustor as a single person and the trustee as a group of managers from the partner organization. Model P.F reflects a manager's trust in the partner organization as an entity. The figure shows that one can also envision trust between groups; on the diagonal of Figure 1 (13.1), model G.G defines one group of managers from a JV partner firm as the trustor and another group of managers from a partner organization as the trustee. Model F.F represents inter-organizational trust, a common conceptualization in previous empirical studies of interfirm relations such as JVs and strategic alliances.

Other variations of the P.P, G.G and F.F representations are shown in the off-diagonal cells of Figure 1 (13.1).

**Figure 1: (13.1)** A multilevel perspective on trust



Source: Adapted from Currall and Inkpen (2002).

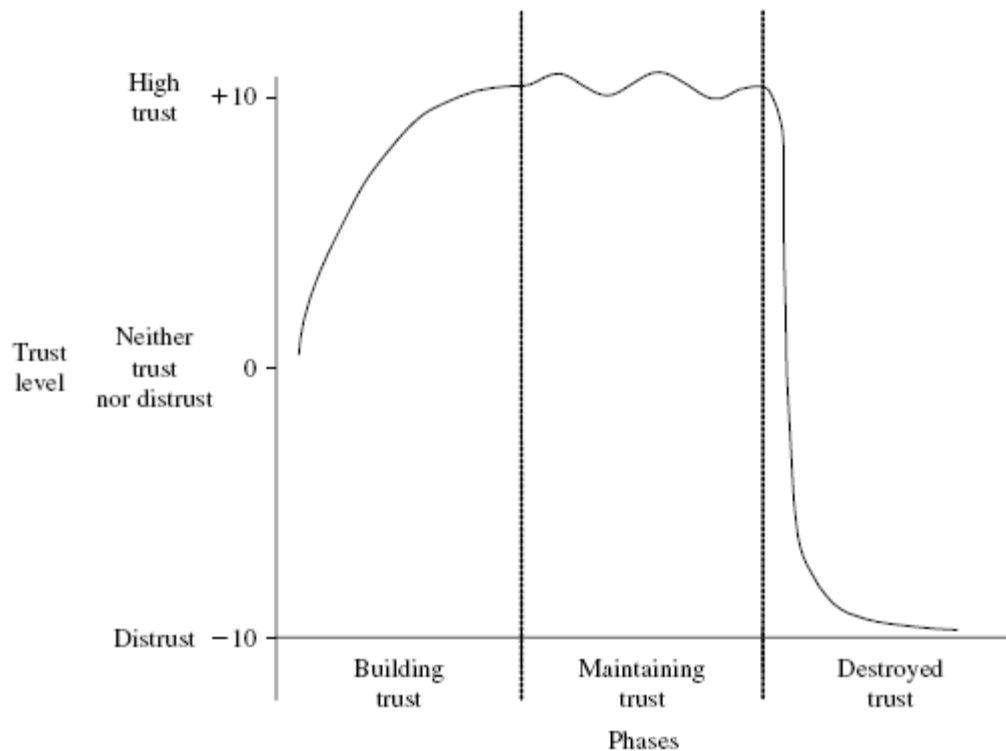
### *Development of trust and co-evolution of trust across levels*

Much of the interplay of trust at the interpersonal, inter-group and inter-organizational levels takes place during the development of trust. Currall and Epstein (2003) proposed trust's evolutionary phases as shown in Figure 2 (13.2). The diagram shows that early in a relationship trust starts around the zero point of neither trust nor distrust because the parties lack information about the trustworthiness of their counterpart. Development of trust is often slow and incremental because parties tend to be reticent about trusting. This is especially true of those whom we do not know or about whom we have uncertainty. Trust building therefore follows an incremental pattern; one may trust in small ways first, observe whether trust is upheld or violated, and then proceed with caution in trusting one step at a time.

Over time, if trust-building actions are taken, the level of trust grows until it begins to level off during the 'maintaining trust' phase. During this stage, the level of trust stays roughly constant, if neither party takes actions that erode trust. If trust-violating events occur, however, then the overall level of trust plummets into the 'destroyed trust' phase. Herculean trust-building efforts must take place simply to return to the zero point and even further efforts are then required to move into the positive trust domain.

Our main interest is the way that trust at one level may impact trust at another level during the ‘developing trust’ phase. In this sense, trust serves as the organizational context for trust at another level. This involves the co-evolution of trust at different levels, to which we now turn.

**Figure 2: (13.2) Evolutionary phases of trust**



Source: Currall and Epstein (2003).

### *The co-evolution of trust across levels*

What is ‘co-evolution’? Lewin and Volberda (1999) identified five properties of coevolutionary models of organizations: (1) multilevelness; (2) multidirectional causalities; (3) nonlinearity of relations among constructs; (4) feedback and interdependence between organizations; and (5) history dependence. In the present discussion, we focus primarily on multilevelness, multidirectional causalities (i.e. reciprocal relations) and history interdependence. In terms of multilevelness, we previously explained our multilevel framework for trust. With respect to multidirectional causalities, we will discuss in a moment how interpersonal, intergroup and inter-organizational trust affect each other in reciprocal ways. And, concerning history dependence, the interplay of interpersonal, intergroup and inter-organizational trust transpires over time. For example, interpersonal trust may develop as time passes to form inter-group trust, which may eventually expand to inter-organizational trust.

We believe that trust at one level can serve as an organizational contextual factor impacting the degree of trust at another level. A number of authors have written recently about organizational context (e.g. Heath and Sitkin, 2001; Johns, 2001; Rousseau and

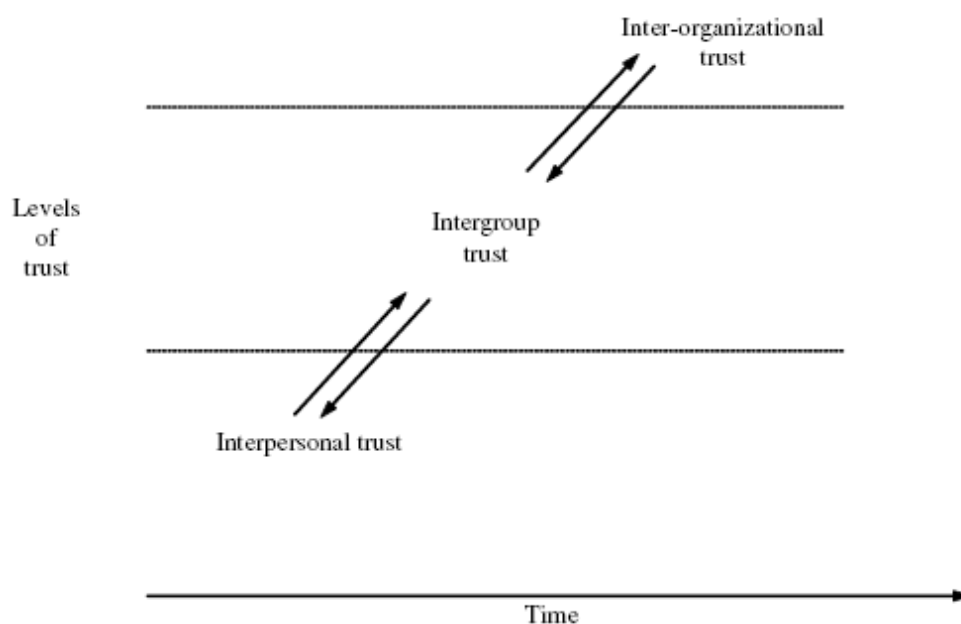
Fried, 2001). Johns (2001) has explained that organizational context ‘can be characterized as cross-level effects in which a stimulus or phenomenon at one level or unit of analysis has an impact at another level or unit of analysis’ (p. 32). Johns (2001: 31–2) added:

*“Cappelli and Sherer (1991: 56) define context in organizational behavior as the ‘surroundings associated with phenomena which help to illuminate that [sic] phenomena, typically factors associated with units of analysis above those expressly under investigation.’ Mowday and Sutton (1993, p. 198) define context as ‘stimuli and phenomena that surround and thus exist in the environment external to the individual, most often at a different level of analysis’”.*

Central to our conceptualization is the interplay of interpersonal, intergroup and inter-organizational trust, especially during the developing trust phase. The linkages of the three levels are depicted in Figure 3 (13.3), which posits, for example, that interpersonal trust between leaders from two organizations may serve as the organizational context for the development of trust between groups or trust between organizations. Conversely, a historical context of trust and partnerships between two organizations may foster the emergence of trust between groups of managers representing their respective organizations or interpersonal trust between two managers from the two firms. This reciprocal interplay of trust at the interpersonal, intergroup and inter-organizational levels over time is what we mean by the ‘co-evolution of trust’. In other words, trust at one level will evolve over time and, in so doing, will serve as the organizational context for trust dynamics at other levels.

Fundamental to the ideas depicted in Figure 3 (13.3) is the reciprocity of relations among interpersonal, inter-group and inter-organizational trust. Therefore, we return for a moment to the definitions of organizational context by Cappelli and Sherer (1991) and Mowday and Sutton (1993). We observe that they referred mainly to lower-level constructs being influenced by higher-level constructs. On the one hand, this makes sense, as in the case of the impact of organizational culture (an organizational-level construct) on the extent to which individual managers trust each other. On the other hand, however, we believe that a bi-directional emphasis is important whereby lower-level dynamics (e.g. the level of trust between CEOs of two companies contemplating a merger) also can influence higher-level relations (e.g. the legal structure of the terms of a merger contract).

**Figure 3: (13.3)** The co-evolution of trust across levels



Thus, we posit the existence of a bi-directional and reciprocal relationship among trust at the interpersonal, intergroup and inter-organizational levels, which is depicted in Figure 3 (13.3). As further anecdotal support for the bi-directionality of lower-level to higher-level constructs, Johns (2001) cites the example of an individual whistleblower having a dramatic impact on an organization as a whole. Such instances have been observed in recent history, such as the case of Sherron Watkins, the whistleblower at Enron. What determines the movement of trust across levels?

Numerous factors determine the movement of trust across levels. For example, trust at the interpersonal level can impact trust at the intergroup level, which, in turn, may influence trust at the inter-organizational level. Indeed, developmentally speaking, trust may have its origins in one-on-one relationships between managers but, over time, such trust may diffuse within an organization by fostering trust among groups. Furthermore, when individual JV managers trust one another, the strength of their relationship can lead to inter-organizational trust because these managers influence other managers, group dynamics (e.g. group cohesion or effective conflict management), and organizational structures and routines. Additional support for this logic is the fact that when a new JV is formed, information about the partner firm and its managers will be incomplete. A manager may be aware of prior relationships between the partner firms and may have been told ‘our organization and the other organization have a strong relationship’ (Inkpen and Currall, 2004). Also, controls such as legal recourse can create structural assurance beliefs about the managers involved in the JV (McKnight et al., 1998). For example, the specific language of the JV shareholder agreement may provide for legal action if the partner violates certain provisions. If a manager believes that legal recourse for the organization provides safeguards about the partner’s future action, the manager will be more likely to trust counterpart managers (Inkpen and Currall, 1998; 2004). And intergroup trust may lay the foundation for inter-organizational collaboration and partnerships. Conversely,

distrust at the intergroup level may contaminate trust between two individuals or retard development of inter-organizational trust (Currall and Inkpen, 2002; Currall and Epstein, 2003).

Another factor that may cause trust to diffuse or travel from one level to another is that trust is an 'evidentiary' construct (Currall and Epstein, 2003). By that, we mean that it changes with evidence in favor of, or against, further trust. For example, Currall and Judge (1995) studied several psychological predictors of behavioral intentions to engage in trusting behavior such as one's attitude toward the trustee, social norms for (or against) trust, the extent to which the trustor has a trusting personality, and the degree to which the trustor believes that the trustee has been trustworthy in the past. Of these predictors, the perceived past trustworthiness of the trustee was the most significant determinant of intentions to engage in trusting behavior. This finding suggested that trustors are especially sensitive to evidence regarding a trustee's behavior and its impact on our assessment of his/her trustworthiness from one moment to another. Indeed, trustors are quite vigilant to the trustee's behavior and are constantly updating and recalibrating judgments regarding the degree to which another party can be trusted. In fact, when risk is great (i.e. when we have much at stake based on the trustee's trustworthiness or untrustworthiness), we may be hyper-vigilant regarding his/her behavior and its implications for our assessment of trustworthiness.

The implication of this dynamic is that trust between two individuals may be impacted by developments and information regarding the level of trust between two groups representing the partner firms, such that, if a counterpart group takes action that violates trust, this may sour the one-on-one relationship between two persons representing different firms. Along similar lines, if the board of directors of one partner firm issues a policy that is designed to withhold information from the other partner firm, groups or individuals may see this decision by the counterpart firm as evidence of untrustworthiness; hence inter-group or inter-personal trust may be contaminated.

Therefore, trust will move, or fail to move, from one level to another based on evidence regarding the trustworthiness of a trustee person, group, or organization. This is what makes trust a dynamic construct. It is not static because there is a constant flow of trust-related evidence based on a counterpart person's, group's, or organization's behavior. This information leads the counterpart to constantly update and recalibrate their assessment of the trustworthiness of the trustee.

What other factors might drive the downward flow from inter-organizational trust to inter-group or interpersonal trust? When inter-organizational trust exists in a new JV, the level of institutional resource commitment should play a key role in moving trust from organizations to groups to persons (Doz, 1996; Inkpen and Currall, 1998; 2004). Institutional commitment demonstrates the JV's legitimacy and strategic importance in the eyes of managers assigned to its operations (Inkpen and Currall, 1998). Such commitment may take the form of information technology infrastructure to foster communication among those working on the JV, dedication of stand-alone facilities to house JV personnel and operations, or dedicated facilitators (e.g. consultants) to mediate disputes between the firms or their representatives. These commitments facilitate the formation of trust between groups or persons because of the effective flow of information or because of munificence of resources available to groups or individuals. The idea of institutional commitment is akin to Zucker's (1986) notion of institution-based trust.

The movement of trust across levels also may be blocked (Inkpen and Currall, 2004). For example, in a situation of high competitive overlap between JV partner firms, the firms may feel compelled to write detailed contracts or policies that dictate



terms and procedures concerning aspects of JV operations, which are designed to prevent diffusion of knowledge outside the JV. When knowledge flow is inhibited, it may have the unintended side effect of arresting trust development among groups of JV managers or between individual managers (Inkpen and Currall, 1998; 2004). Moreover, JV contracts and policies may involve the compartmentalization of information in certain domains (e.g. proprietary technology or marketing information). These ‘don’t tell’ policies regarding certain types of information may inhibit the development of trust between managers from the JV partner firms because the act of withholding some information from their counterparts may raise suspicions in the counterpart regarding what else is being withheld.

### **Guidelines for future trust research**

We conclude by suggesting several guidelines for trust researchers to consider in future theoretical and empirical work. Our hope is that these guidelines will prompt others to study the intricacies of the trust construct and how trust at the inter-personal, inter-group and inter-organizational levels co-evolve over time.

#### **1. Study the organizational context of trust by studying trust at other levels**

There are several specific ways to explore the impact of organizational context on trust. First, attaining a deep understanding of the organizational setting in which we are studying trust will facilitate the development of hypotheses that tap the subtleties and complexities of trust. A deep knowledge of organizational context also facilitates the interpretation of empirical findings. Second, trust researchers should provide for readers details about the historical conditions and circumstances underlying trust between persons, groups and organizations. This will shed light on how strong or weak trust came to be. For instance, weak interpersonal trust between JV managers may be understood in the historical context of conflictual and acrimonious transactions between the JV parent firms. In this way, distrust at the inter-organizational level may explain why trust at the interpersonal level has failed to develop. Moreover, knowledge of historical conditions can assist the reader of research findings in drawing conclusions about the generalizability of empirical findings.

#### **2. ‘Bracket’ trust by studying trust below or above it**

In urging organizational researchers to conduct multilevel empirical analyses of organizational phenomena, Hackman (2003) drew upon the logic of the eminent physicist Freeman Dyson:

*“Except in trivial cases, you can decode the truth of a [mathematical] statement only by studying its meaning and its context in the larger world of mathematical ideas . . . The progress of science requires the growth of understanding in both directions, downward from the whole to the parts, and upward from the parts to the whole”.* (Dyson, 1995: 32)

Applying this to the study of organizations, Hackman suggested that elusive explanations for empirical findings often can be found by conducting analyses at one level up or one level down from the phenomenon of interest, an approach Hackman refers to as ‘bracketing’. Indeed, there is no guarantee that the most powerful explanatory variables operate at the same level of the phenomenon being studied;

without a bracketing strategy, deeper explanations for a phenomenon may lie undetected.

But, how does the organizational researcher go about empirically mining for explanations at levels outside the level of the focal phenomenon? For example, how does one discover how intergroup trust impacts interpersonal trust? Here, Hackman (2003) advocates ‘informed induction’ whereby the researcher uses both qualitative and quantitative methods to study specific settings or cases as a way to formulate more general explanatory factors that may operate above or below the focal construct. (For discussions of the integration of qualitative and quantitative methods see, e.g., Cresswell, 1994; Lee, 1999; Currall et al., 1999; and Currall and Towler, 2002.) For instance, in seeking to uncover the historical origins of trust between two persons, the researcher might conduct interviews with members of groups to which the two persons belong. It may be that by studying group norms or rituals the researcher uncovers the reasons why two individuals from different groups trust, or do not trust, each other.

### **3. Triangulate trust measures**

Currall and Inkpen (2002) provided a detailed discussion of different approaches to measurement of trust at the person, group and organizational levels. We will not repeat that material here. Suffice it to say, however, that the complex nature of trust should be captured through simultaneous assessment at multiple levels – that is, by triangulating measures of trust. Triangulation involves use of multiple operational measures of a construct to better understand its properties. The use of triangulation enables researchers to examine the convergent and discriminant validity of trust measures. For example, when aiming to characterize an overall degree of trust within an organization, one may wish to assess both interpersonal and inter-group trust. Such analyses can shed light on the nature of trust by identifying similarities and distinctions across levels, which enhances the methodological rigor of our empirical work. By identifying where trust is strong and where it is weak, multiple measurements across levels will sharpen our knowledge of the role of trust in various organizational outcomes, such as collaboration, flexibility and financial performance.

### **4. Use longitudinal research designs to examine co-evolution of trust across levels**

Many different organizational context factors can affect trust, such as communication effectiveness among individuals, demographic similarity among groups of managers, or resource complementarity among organizations. Yet our main thesis in this chapter was that an aspect of the organizational context of trust is the degree of trust or distrust operating at an adjacent level of analysis. Thus understanding organizational context involves cross-level relationships, namely, the interaction of the interpersonal, intergroup and inter-organizational and bi-directional linkages among them. Therefore, in addition to triangulating trust assessments by using measures at multiple levels, a fundamental element of understanding the co-evolution of trust is the use of longitudinal research designs whereby the researcher explores how trust dynamics at one level may, over time, be responsible for producing degrees of trust at adjacent levels.

## **Conclusion**

We began this chapter by arguing that trust research should move beyond single snapshots of interpersonal, intergroup, or inter-organizational trust. Such reductionistic approaches do not do justice to the intricacies of trust or the degree to which it changes

over time. Therefore, we call for a new era of trust research that shifts attention toward multilevel analyses of trust and the co-evolution of trust over time from one level to another. In other words, we have argued for a conceptualization of trust that incorporates the reciprocal and bi-directional linkages whereby trust at the interpersonal level may lead to inter-group trust, which may, in turn, spawn inter-organizational trust or vice versa. Such explorations of the co-evolution of trust across levels will yield a textured understanding of the intricacies of the trust construct, which, ultimately, will lead to more precise knowledge of the impact of trust on individual, group and organizational outcomes.

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## ON THE COMPLEXITY OF ORGANISATIONAL TRUST

**Interview with Steven Currall conducted by Harry Dimitriou and Richard Oades all of University College London**

Prof. Steven Currall, UCL Management Studies and UCL Centre for Enterprise & the Management of Innovation in conversation with Prof. Harry Dimitriou, and Richard Oades, OMEGA Centre, UCL, exploring the treatment of risk, uncertainty and complexity in decision-making in relation to the paper:

Steven C. Currall and Andrew C. Inkpen (2006), *On The Complexity Of Organisational Trust: A Multi-Level Co-Evolutionary Perspectives And Guidelines For Future Research* In Reinhard Bachmann and Akbar Zaheer,(Eds.) *Handbook Of Trust* Edward Elgar, Cheltenham, UK. That paper is reproduced here with the kind permission of Edward Elgar Publishers Ltd.

**Citing Child, (2001) you claim that “trust remains an under-theorized, under-researched and therefore poorly understood phenomenon” (p235, §1:5-6).**

**Question 1:** *You claim that trust remains under-theorised and under-researched. If you could briefly give your reasons why you think this is the case?*

**SC:** There are two reasons; one is because there have been inconsistencies within the conceptualisation of trust, and secondly, parallel to that there were more inconsistencies in the operational measures used to study trust than there is now. Today there is more uniformity in trust measures than there were around the late 1990s to 2000. There has been some convergence but historically there have been trust definitions, conceptual definitions and there was almost as many operational measures as there were different conceptualisations of trust. It has been a fairly Balkanised field but in the last five to seven years things have begun to converge more.

**You make two important points for our area of research: (1) you argue that greater attention needs to be paid to the complexity and dynamics (evolutionary nature) of trust over time (and place?) and how it is impacted by organizational context (p235:10-12) and (2) you “posit that trust at one level serves as the organizational context of trust at another level” (p235, §2: 8-9).**

**Question 2:** *Would you extend this argument of the impact (and importance of levels) of organisational context to national, regional and local governmental policy contexts? And if so, how would you propose to identify, trace and measure these impacts through both time and place?*

**SC:** I think that much of what I discussed in the paper about modes of transmission, or in other words the movement of trust from the inter-personal level to the inter-group level to the inter-organisational level could be easily extrapolated out into other levels such as local, regional and national levels as well. I see no real departure.

**HD:** I don't think anybody has done any work on that?

**SC:** I don't remember any work being done on local or regional trust. National trust: not recently nothing that really sticks out, there were some comments which might have been made by Julian Rotter. During the '80s, he studied trust from a personality standpoint. He said we all hold what he called 'generalised expectancies' for the trustworthiness of others so this would be a baseline. His argument was: given your family experience and experience with friends and significant others, each one of us develops a baseline of 'do we believe people are generally trustworthy or not trustworthy?', and he referred a little bit to cross-national differences but he was really much more interested in the psychology and personality aspects of it so I don't recall any significant work on the national differences in trust. I remember some work by George Gaskell from the London School of Economics looking at national differences in trust in technology, and I think the Euro Barometer has some items in it which look at trust issues. I know there are questions about trust in technology or trust in science, but I do not know whether those questions extend out to other areas and targets of trust by government and other institutions.

**HD:** I can identify with different levels of scepticism that different nationalities have, these are caricatures which probably don't stand up in reality but at the end of the day I suppose all businessmen are sceptical but nevertheless, in the Levant you are always highly sceptical, the Lebanese, Greeks and the Armenians, the risk-takers, would always be less trustworthy? It matters because we are dealing with 10 cultures in our project, and because we have different cultures in a globalised infrastructure industry.

**SC:** One way that we can usefully think about this with regard to trust is differences in the perception of risk. My conceptualisation of trust is that risk is a precondition, if there is no perceived risk then trust is irrelevant, it is not a construct which drives behaviour. To the extent that people perceived risk then some of their behaviour may be a function of trust so if you have cross national differences in risk perceptions, then that will have a follow-on effect to the trust dynamics.

**You provide a very useful definition of trust that 'travels' across levels. You also make the point that "trust involves two principle concepts: reliance and risk" where trust is defined as "the decision to rely on another party ... under a condition of risk" (p236, §1: 2-5).**

**Question 3:** *Taking into account the above what then is the relationship between trust and uncertainty, and complexity? You need more trust presumably with greater uncertainty which itself increases with greater complexity? Please elaborate.*

**SC:** So the logic is that complexity leads to uncertainty, and then uncertainty affects trust in two possible ways by my thinking, one is that we have uncertainty about the level of risk, and there are some very important issues associated with risk and how we define risk and how it relates to uncertainty so it's a very good point that you are articulating here. To my mind, risk refers to the magnitude of potential negative consequences, so risk refers to the damage that one will experience if another party is untrustworthy. So if you buy an electronic appliance from a store and you paid \$100 and you get it home and it doesn't work, versus buying another electronic appliance

which cost \$1,000, you have more at risk with the more expensive appliance because the amount of money you have lost is greater with the \$1,000 expense, so the issue of risk has to do with the magnitude of the down side, the magnitude of the loss and is not to be confused with uncertainty. Uncertainty is a probabilistic concept which refers to the likelihood of the negative consequence. Uncertainty has more to do with forecasting the counterpart's behaviour so if I'm in a negotiation with you, and I'm deciding whether or not to make a concession to you which probably involves trust because it involves risk because I'm giving up something, I have to think about how bad it is going to be for me if you turn out to be untrustworthy. That is the magnitude issue but the uncertainty issue is a forecast, it is a prediction about your behaviour, are you going to fulfil your commitment or not? That is where the uncertainty comes in. If I had just met you I have high uncertainty unless I have a lot of information about you from Richard, and Richard has told me about your habits and proclivities and so on, and so this is where the issue of reputation comes up which we will come to later on. So in deciding whether or not to trust you I have to consider both risk and uncertainty and the more complex the world, the more complex the project, the more complex negotiation, the more uncertainty I may have about both of those issues because I may not know how bad it is going to be if you turn out to be untrustworthy. There are a lot of situations where we don't even know how bad it is going to be, and it is always a question of whether or not you are going to fulfil your commitments and that's the uncertainty issue.

**HD:** If I can just add on to that, are you not taken back by the fact that in our field of Mega Projects; major transport projects or Olympic Games, complexity is huge and the risks are huge but many parties are not known by other parties and yet things go ahead. In a way, the argument you are presenting is a rationalistic one which I can understand the logic of. I suppose what I'm asking here, and it will be the first time that we've actually asked it, is there something in the entrepreneurial spirit that says 'there is not too much here, we can make this happen'?

**SC:** Yes, it is widely known that entrepreneurs have high risk tolerance, and politicians can be entrepreneurs as well, in a non-commercial situation.

**HD:** If you take the Olympics and your rationalist approach, we are all over the place aren't we?

**SC:** So let me respond to that, I wouldn't say that mine is a rationalist approach because I don't believe people are rational. I know enough psychology to know that behaviour is fraught with all kinds of irrationalities. But what I am describing is a fairly simplistic baseline model and what I hear you say is 'yes, but what about when there are multiple parties?', there isn't a single inter-personal thing, it's a one-to-many, or many-to-many, so then you have this complex web of relationships which is obviously the case in a mega-project, where the complexity skyrockets, and the uncertainty skyrockets, so you have all kinds of obstacles to trust-building because it's so hard to process, you may not even know who all the players are, so it is very difficult. So I take on board these points completely, and what I'm trying to describe here is a baseline model, in the paper we talk about an interpersonal relationship as a point of departure, then we can go up to groups, firms, local, regions and multinationals, multi-party types of things and then we're into networks at that point we are not into dyads, we are into networks [15:00] and then the complexity just goes



much higher.

And I want to add something else about the issue of uncertainty, and you alluded to it, I think there is a thing called a 'certainty threshold' and it works this way in my mind; the greater the risk, the more certain I have to be about your behaviour, so it is sliding scale. So as risk goes up so my tolerance of uncertainty goes down, and my threshold goes up. So if I've got low risk, I might accept a 60% probability that you are going to be trustworthy, and if I've got a very high risk, I may require 90% certainty that you will be trustworthy. Now let's think about the mega projects; multi-party, multi-institutional, multiple individuals, regulatory constraints and all that stuff, all of those things make trust more difficult, and I hypothesise that this is part of the reason why these projects are slow or they ground to a halt sometimes, It is because it's like metal gears or metal parts which rub against each other. There is no trust as the lubricant so they are trying to move, and the forces are in opposition but there is no lubrication so they just freeze up, they just lock up, because there's no lubricant and trust is an example of lubricant.

**RO:** To going back to what Harry said, yes I can accept that but there is also quite surprising in this climate that things actually do still happen and they do go ahead even though the parties don't necessarily know each other very well. Is it something to do with a shared vision and a perception of what the other party has to lose and maybe if there is a lack of trust then it is a lose- lose situation, whereas if there is mutual trust it becomes a win-win.

**SC:** Good point, so I am reminded of the distinction between trust and gambling which Deutsch talked about in 1958 in his piece, and I will try to recall it correctly. So think about the Olympics; huge risks, but there is so much upside. There is a dramatic vision for London and UK and the positive impact on the East End of London and that was how we got the bid you know, there was that promised. So we have the situation with the Olympics that there are huge risks but we are willing to take a gamble, why? Because the upside is so great. I think as we talk about these kinds of projects trust refers to the potential downside, the risk side of the equation, but as you correctly point out, there is often this massive upside as well, the vision and the potential benefits and the completion of the project so that's part of what is driving people's behaviour as well. Does there come a point at which the vision to the potential positives and willingness to take the gamble get outweighed by the risks and lack of trust? And is that when things freeze up and lock up? I don't know, I'm just positing that, and so I think your point has helped us take a more balanced view of looking at these kind of dynamics in the context of big projects like the Olympics because we have to acknowledge both there are significant risks and how do we handle that, and also the whole potential upside is a driving factor as well.

**HD:** I am wondering whether your presentation of the sequence of thinking is more to do with micro-management issues. You quite rightly say there is a threshold beyond which the rules of the game change [20:00] and I do recollect from my chapter on risk and uncertainty there is the big bet, the roll of the dice, and I do feel that many of these big projects have this 'gambler' element to them, and if we are to accept that is a possibility we are to accept a change of values from the rational, the enclosed systematic approach that you describe, and then it gets so complex and so big that you just then judge; 'am I going to go for it, or am I not going to go for it?', and the vision can be undermined later on by developments, but until such time as they do, they go

for it. It may well be that we as analysts are looking for a language and value system of micro-decision-making that is more akin to gambling. It does seem at the end of the day, as you quite rightly point out, that these big projects are judgements; you can't go into the micro-trust assessments.

**SC:** Can I ask about the distinction between the gamble verses the trust issues; is it useful to think about these terms as applied to different phases of the project? Is the gamble key? Is the upside key in initiating the project? But then is the trust among the parties key in executing the project?

**HD:** The acid test is in execution, but also to get it off the ground. The gamble only becomes a gamble once there is no way out, I think because with contractors they know the game. The government is ultimately providing the guarantee, and that then provides you with the security. In a way these guys who are the gamblers will push up the stakes so high to make them tip over into a situation where they provide a guarantee, I think that this happens. You go along with the vision and the government tries to get you committed in a way whereby you share the risk but actually the government, the more badly it wants the project, the more risks it will take on. They may not say so, but we do know about the informal relationships between the politicians and industry. So the formal speak may be 'we will not provide you with the guarantee' but the informal speak over a gin at the Conservative club would be 'of course we won't let this project go'.

**SC:** Well, we would look at their [the government] past behaviour. If I was a contractor I wouldn't really care much about what they say, I would want to know what they've done in the past, because I would think they might do that again.

**HD:** Well governments are transitional, they change.

**SC:** Well, that creates uncertainty then, and it's hard to predict the government!

**HD:** But nevertheless if you can get them in a position where they have no other choice other than to guarantee the project, which is what happened with the CTRL, Eurotunnel, it's going to happen with Crossrail and the Olympic Games

**SC:** When the public see the government behind it in some way then they have to guarantee it

**HD:** by the way contractors are becoming increasingly confident and they are demanding guarantees. Some trying to cajole explicitly, it used to be more implicit, but now they're saying if you really want this project we want the guarantee on it.

**Your conceptualisation of trust is claimed to apply “to persons, groups and organisations ... from the inter-personal to the inter-group to the inter-organisational level” (p236, §2: 2-12).**

**Question 4:** *How do you think this conceptualization might work in the case of planning and appraising a complex mega project that involves not only partnerships and joint ventures (JVs) but also governments (at different levels) and communities*

*impacted by the completed project? How does one identify/plot/analyse the key areas of trust in such circumstances?*

**SC:** The joint-venture is an ideal type in some ways. Again what I try to do is to try to disaggregate these things into smaller chunks, and then theorise and do research on that in the hope then that I can re-aggregate and then go up to the levels of analysis and up the level of complexity. So I try to go down into looking at baseline interpersonal things then to go to groups, then firms, so I tried to get a baseline and then move up, so I don't have anything different to say about Joint Ventures.

**You claim that the “designation of the trustor” answers the question ‘Who trusts?’ And the “designation of the trustee” answers the question ‘Who is trusted?’ You furthermore argue that distinguishing between trustors and trustees has the merit of avoiding confusion regarding levels of analysis and who is trusting versus who is being trusted” (p236, §3: 2-6).**

**Question 5:** *Following-on from Question 4 re; complex mega projects involving the interface of private sector companies with both public sector agencies (at various levels) and community groups – how does one distinguish between trustors and trustees, and do these change over time, and if so, how and why? Finally, how do you best present this multi-level model of trust (graphically or verbally)?*

**SC:** What I really meant here in terms of levels, is what happened in the trust literature too much, is that there has been a fair amount of work, especially in the joint-venture and strategic alliance literature that confuses levels in the following way. They will theorise about a relationship between or among firms, but when they operationalise (26:55), they will send out a survey to the joint venture partner firms and they will ask one or a few key informants from each of the firms to comment on the degree of trust between them. And a lot of times what they really ask about is do you trust your counterparts in the other firm? So in other words, ‘do you trust the other person?’ Not the other firm, so it is confusing, so we confuse the trustee at that point. You're asking a trustor about his or her trust in a trustee, but you have just flipped, you have just gone from talking about the inter-firm level to the interpersonal level, and that's what I was trying to say here. We need to maintain the alignment between how we theorise and how we measure these things and don't get sloppy, because there is a lot of sloppy empirical work in trust literature where they say ‘it's too hard to really think about how firms trust one another, so I can measure how people trust each other, I just get these two people across the boundary of the two firms and measure that’.

**HD:** You say that's being sloppy and I know a few captains of industry, and they will basically go along with the fact that if I know this guy and he is heading up BP or whatever it is, I'm going to get a better performance because I know this guy and it is almost equivalent to champions, and this is why champions are hired and fired. So in a way, you call it sloppy, but it might also be realistic. I know the intellectually the analysis is sloppy...

**SC:** The analysis is sloppy, but what you described is absolutely true, and it allows us

to reflect in more detail on how organisations make decisions. Because remember my definition of trust is a decision to rely on another party under a condition of risk and that is a very deliberate way of conceptualising trust, because the ability of that definition to travel across levels from the interpersonal to inter-group, to inter-firm, that definition can travel. Why? Because it refers to a decision, and in order for that to work we have to accept the premise that groups can make decisions and organisations can make decisions. How do organisations make decisions? It's often on the basis of the CEO, or a board of directors, and they make decisions on behalf of the organisation. And in fact it might be the CEO having a drink and cigars with so-and-so down at the club and that might have been a decision whether to do a deal not.

**HD:** It also has to do surely the ability to deliver because if the CEO has lost the power base then you don't need to deal with them because they can't deliver. That has to do with power... this is the first time are talking about another dimension, it has to do with power doesn't it?

**SC:** Yes this is a very interesting issue. There is a book by Nick Luhmann on Trust and Power and you need to be forewarned he is a German sociologist, so it's paragraph-length sentences and is very thought provoking. So what you described is absolutely true and it allows me then to focus back on my conceptual definition of trust which I claim still travels across these levels because it focuses on a decision and the premises that groups and organisations and governments can make decisions yet there are often done by chief executives or a small group at the top on behalf of them, but it is still a decision.

**RO:** So your definition remains robust at different levels of aggregation?

**SC:** That was a project which Inkpen and I launched in the late '90s to try and think about trust at multiple levels, and to do that we had to have a definition which travelled, so I sort of came up with this definition, we stated it was about a decision and if you don't accept that groups and organisations can make decisions, then my definition collapses. But I claim that they can, even if it's done on their behalf, that individuals and small groups can do it on behalf of the company.

**Where you discuss the framework for analysing three levels of trust for JVs you state: "Relations among these individuals are important in shaping the partnership agreement between firms as well as in implementing and monitoring the JVs (p237, §4: 3-11).**

**Question 6:** *Once again referring to the complex mega project context – how does one plot/show trust relationships in JVs over time given the frequent changing compositions (as old partners leave/go bankrupt and new partners enter), and what is the role of leadership in all this? With regard to the latter, one presumes JV leaders have higher levels of trust expected of them - derived from either a good past track record or through personalised connections (with governments and/or leading financial interests) or indeed sometimes both?*

**HD:** Going on to Q6, one of the main parts of this question I think is important is the one that you have the agreement on-going and you have a project on-going, as the

reality is guys come and go, partners come and go companies get bought out...

**SC:** It is a trust destroying event when that stuff happens

**HD:** So mergers and acquisitions can undermine trust?

**SC:** Absolutely, [SC refers to an illustration] so you've just invested all this time with someone, climbing up this, we're up here, and then they get fired or they get acquired, or whatever and what happens? We're back down here again and we've got to go through this cycle again of building up trust, we might even go down into here. [34:30]

**HD:** This is Eurostar, this is the Channel Tunnel. Are we seeing an acceptance by the gamblers of this rollercoaster behaviour? They may say 'it's a phase, so we buy you out and we know the trust is going to go down', so do we begin to accept it as a model of behaviour for certain kinds of projects? Or putting it another way, are we basically saying that for mega-projects your analysis, the micro-analysis, isn't going to work? On the contrary, what you have to do is stick several of them together and look over the time horizon, and we have this rollercoaster and that is life?

**SC:** We intended to depict that. What we intended was that you can take this framework and you stick it here, we didn't have room to do it in the paper.

**HD:** And so we are agreeing about that then?

**SC:** So you might have a single trustor and multiple trustees and all these cycles may be at different points, is that what you're thinking?

**RO:** But you are hoping that the rise and fall of these actually smoothes out to something along here I guess?

**HD:** Well at the end of the day the hope is that when the project becomes fully operational it plateaus, it has stability. I am just posing the question as to whether the gamblers of the field, because I'm beginning to think that globally there is this animal, there is this type of operator who will say 'its okay, we recognize this', they've got to be able to afford to take the losses but if we are the last party still hanging in there, we come out with all the chips. This is what happened with Canary Wharf they went bankrupt twice; they had a rough time at the beginning.

**SC:** They didn't have the occupancy?

**RO:** There wasn't an infrastructure to support the development

**HD:** It was more the economic climate – a global turndown

**SC:** When was that?

**RO:** around 1991 and 92, starting in the late 80s

**SC:** So they built it and then there unfortunately there happened to be the turndown..?

**RO:** The global downturn was not very predictable, but the fact that there wasn't the infrastructure was a tangible omission from the overall success if you like.

**HD:** They had retrofit afterwards

**SC:** So you're saying that survivors, the people who hung on, then rode the wave of the next cycle?

**HD:** Yes, I don't know all the exact details, but I think the original Canadian guys are back in there again. They did lose a lot, I'm not suggesting that that was their strategy, that they went in there to lose and ride that wave but I'm beginning to think there is an animal emerging, global players which are learning from this or if they aren't emerging they are in the process of learning that there are patterns to these big projects.

**SC:** Did they take a portfolio strategy? Do these big gamblers manage multiple projects at the same time because they know about this cyclical thing so if one is down the other is up?

**RO:** What didn't pay off for the Reichmann brothers was that the government didn't come in riding a charger and providing the infrastructure in time. Maybe they gambled on that and it didn't happen.

**HD:** But the sovereign funds now we're seeing; the Chinese and the Arabs are beginning to take the long-term view that investing and riding the storms... They have probably got a 20% stake

**SC:** Do they invest in multiple mega projects?

**HD:** Oh yes they do

**SC:** So they're playing a portfolio?

**HD:** that's another discussion in a way. But what about the American resistance of the Arab takeover of the port in New Orleans? I agree that US strategic infrastructure should not be bought out by foreign parties as you never know who owns it at the end of the day, so I believe that was the right decision for the wrong reason. [40:00].

**SC:** Well that's your transparency point here? The reason why you don't want them to buy it out, is because it isn't transparent? You don't know who's running it.

**HD:** We come onto transparency don't we. Transparency and trust is a huge issue. Bent Flyvbjerg talks about transparency and trust. Let's just move on. So just to finish off Q6, we have acknowledged that, you called these mergers and acquisitions a destroyer of trust, and we talked about some global players becoming a bit more aware of the long-term.

**SC:** We talked about changing composition.

**HD:** I liked this concept of the development of trust, I like this slow build-up and the trouble is with that as a concept when you have multiple parties is it is not, you have got some parties who have trust occurring at a faster pace than others.

**SC:** You are talking about the multiplicity of partners and the complexity. It would be interesting to see how you would depict it. But you can imagine a single trustor, multiple trustees, all at different points along this scale and then you could multiply that by all the other trustees. So each trustee could have a multiplicity of different 'trust curves' going on here depending on who you're talking about in the network. Then the complexity starts going up very quickly. So you could talk about the initial dyadic arrangement which is essentially what I'm talking about here, but then you've got other parties coming into play and as each one comes in that the thing is goes up exponentially doesn't it, in terms of complexity.

**HD:** I believe we are beginning to realise the value of graphics here, with the multiplicity of it. I can understand a single model, it is multiplicity of it that becomes so complex, so at the end of the day are we going back to what we had before; does gut feeling factor come into play?

**SC:** Right, so at what point does the complexity overwhelm one's attention?

**HD:** Yes that's what we have here; at what point does a tipping point occur? How could you plot the evolution period of trust with major turning points? How do you plot and analyse the evolutionary period between multiple parties? But now I go out of that relationship, and it's bad enough that we have governments and multiple companies but then we move into the world of the community, and as in the case of King's Cross where the trust collapsed within the community.

**SC:** Aren't we going to get this again for BLISS the life science research facility at St Pancras? I just saw a woman on BBC objecting, saying that there ought to be socially affordable housing on that side and not a big research centre. So you could see her gearing up for battle right there.

**HD:** Maybe I'm answering the question myself here, we're also seeing the introduction of new legislation on speeding up major national projects, and basically you've got a government steamrolling, that would be my reading of it.

**SC:** It's very interesting to me to watch the whole issue of Heathrow, and I have been puzzled by why it's so slow? The additional third runway issue is partly because it's the wrong location; it's too residential around there. In Houston it's 20 miles north and there's hardly any residential around there but that's water under the bridge at this point, Heathrow's where it is. But then you have this whole consultation process so it is a stalling strategy, they just drag their feet, and they try to keep it from ever happening.

**HD:** And the question here and I think it is legitimate for you to say that this model runs out of steam in a particular context. We're talking about the treatment of risk, uncertainty and complexity and importance of context, but what we're talking about here is multiple contexts, and we're talking about context that go way beyond the corporate model where you started off.

**SC:** Let me disagree slightly. They don't go beyond, they are multiplied. I claim that these dynamics operate in mega-projects but that they are multiplied, which I haven't claimed to try to grasp fortunately, you are trying to grapple with that?

**RO:** Multiplied in number and scale?

**SC:** Yes, multiplied by the number and scale

**HD:** yes we understand that. My question is the same one we discussed before. Does it go beyond - you've introduced this concept of threshold - does it go beyond the threshold where they basically they go into gambling, rather than the logic that you eloquently...

**RO:** Because you can't get to grips with the logic...

**HD:** Let me give you another example. This guy wrote a fantastic book on privatisation in Australia, a very good book and I had a discussion with him. He said that lawyers are drawing up international contracts for projects that they don't understand what the implications are. They are happy to tackle them when they need to be challenged. The complexities of these contracts are so great that they don't understand, and yet they go ahead with it.

**SC:** I completely agree with you. What I hear you saying is that it is there is an information-processing limitation that we have, especially in megaprojects, that we just can't process all this information. So with half a dozen partners you can juggle a lot of this in your head but at some point its just too much to process, and then - what you're saying Harry - is that we then start to manage with our gut which means we stop the sort of deliberate processing of information and we start making decisions on the basis of affect; do we like it or do we not? What is your gut telling you? Does it smell right or not? And this is what may happen in these megaprojects where people are overwhelmed.

**HD:** I think this is quite important because it suggests that different kinds of decisions are being made. What I should point out, what we're beginning to find out in our research, is that leaders up until now of megaprojects have basically been project managers who have pretended that their projects are closed systems and are manageable close systems. Now that is a false premise because many of these projects are not closed systems, as they have an impact on the open-system; on the environment, on society or whatever and there are plenty of other disturbances going on outside.

Nevertheless, in order to remain sane, they carry on as project managers so the Peter Morris's of this world would see the project like this and we see it as being bigger, and that's where the dialogue begins. In a way it has the same relationship we are having with you; you're talking about the corporate parties but once it gets bigger. Now, is it possible that the project managers and the analyst of your kind are either brought in to add respect in retrospect the Big Dig, the Channel Tunnel and the big bets and basically, the level of respect for us is not too great. We are an instrument, we're going to go for this project, we are going to use our power to make it happen and let these guys draw their graphs and models to make it respectable.



**SC:** To rationalise it, post-rationalise it. We have made a decision on our gut, we're going to do the Big Dig, do the London Olympics and what we need is for you all to say the right thing that helps us explain this to the public about why this is going to be good, and not a bad thing.

**HD:** but this goes back to a point that you made in one of your papers - I forget which - somehow the public forgive technocrats but they don't forgive politicians.

**SC:** Well – what technocrats?! You can boot the politicians out!

**RO:** *Well there aren't any mechanisms for not forgiving technocrats!*

**HD:** It gets better, politicians kick bureaucrats. I think it's a very important point is that they can get away with their lack of trustworthiness by virtue of having the technocrats take the punches.

**SC:** I am completely prepared to accept that there are multiple levels of things, not 'individual', 'group' or 'organisation', but levels of dialogue, levels of decision-making and levels of power and politics that operate. I'll give you an example, an anecdote that was close to my home at the time that was the purchase by Hewlett-Packard of Compaq Computers – Compaq headquarters were in Houston and I knew the CEO. The story is, the mythology is, that it was Carly Fiorina and Michael Capellas, as Carly was the CEO of HP and Michael was the CEO of Compaq and they had dinner one night and they said 'wouldn't it be neat just to be the biggest, we could kick IBM's ass and all that stuff. And if we just merged, we would be the biggest and we would really dominate'. And no analysis of the appropriateness, no analysis of whether the cultures could be merged but again they sort of did, it is very complex to think about merging these two, so who could figure out all that stuff anyway? It's very hard, you have to get the consultants in and they would tell you this and that, but we think it's the right thing to do because it's a big vision. It's a big impact vision, and what we need you technical people, what you investment bankers and consultants need to do is to give us a way to rationalising the decision we have already made. I am completely prepared to accept that. It's part of what goes on.

**HD:** Imperial College and UCL three years ago proposed a merger and it was because the two guys were ex-industrialists and there was merit in the idea actually.

**You cite Cappelli and Shearer (1991) to define and explain organisational behaviour as the 'context' for judging trust, and draw on Mowday and Sutton (1993) to define context as "stimuli and phenomena that surround and thus exist in the environmental external to the individual, most often at a level of analysis". You go on to claim that "... a historical context of trust and partnerships between two organisations may foster the emergence of trust between group managers representing their respective organizations or interpersonal trust ... contributing to the 'co-evolution of trust' (p240, §3-4).**

**Question 8:** *What about the historical (including institutional) contexts of projects? Do past failed initiatives, re-visiting old ideas and tweaking them to be made good*

*into a viable project (as in the Eurostar) etc. generate from the outset a distrust which then needs to be overcome by a new approach, persuasion, more political commitment and/or inducements? Can this mistrust be “bought-out” with financial incentives? How does your analysis of the treatment of ‘historical context’ deal with this?*

**HD:** You can't buy trust?

**SC:** I don't believe it. That is about the incentives, that is the upside. Trust is about managing risk.

**HD:** The point here in question eight is quite an important one. When you have a history of failure, the Big Dig, or the Channel Tunnel, the Eurostar it's already started, you can't get out of it. You're revisiting an old idea or an old project which has been started, you are being asked to tweak them, and you really are starting off from the outset with a history of distrust which needs to be overcome. What I can say here is that rather being at zero you start off negative and there are guys who specialise in that. Who charge presumably for overcoming that distrust and charge a premium? I suppose there is another dimension of buying-out and I know that's not what we have just spoken about. I wonder if you could respond to that or would it take you too far out of your model?

**SC:** Who are they, what are the examples of the people who are sort of designed to overcome this distrust?

**HD:** Well, I think some of the private equity companies now are beginning to do that if they see they can turn around a business, they're going to fix it and sell it. That's who they are in some cases, but I don't know how many times really Eurostar has been restructured but it is being financed by the English and French governments whatever the rhetoric is, that's the guaranteed part that no-one's talking about. They start with a minus trust several times over, and they keep on fiddling the statistics and they get away with it.

**SC:** Why do they get away with it? Is it because people find the vision so compelling?

**HD:** They can't get out of it, because the tunnel is there, so there is no choice on one level. We could ask the question ‘why is it that the professionals, the technocrats, are given more credence in terms of trust by the public?’ They bring in technocrats to turn around this trust. Engineers, you hear the name Bechtel, I know what they are, they're fixers, and somehow, some people think ‘Bechtel they can fix it’, they can fix most things.

**RO:** It is an issue of trust and track record, and is probably seen as a low-risk decision to go that route so they build up momentum, don't they.

**HD:** Well actually there are dual reputations. There are reputations which are peddled in levels of acceptability and power, which says Bechtel, can do things, and there are those who work for Bechtel and know what Bechtel actually do. And if you really know the story, Bechtel is just a body shop, a little like the Enron thing. It's a

fabricated reputation of Mr Fix It, when they are you and I hired for this project, sub-contracted out. My question really is, if we start here, not there [refers to an illustration], there are instances in big projects particularly when they have been taken over, how does this work in your model, in you're thinking? [1:00:00]

**SC:** Slower, it is often slower. If you start down here because people will need to climb up, maybe not to here, but they need to climb up to some point to even function.

**HD:** Are we also saying that this period here is very often guaranteed by government to help them get up to that level?

**SC:** You're in better position to answer that than I am, because you know the context.

**HD:** in the big projects I'm thinking of, the only way they can move there to there is to have a government as guarantor of the project.

**SC:** This is a way to jumpstart, so they absorb the risk. This is an examples when - as I was saying earlier - sometimes things are locked up, because there is no lubrication and the government comes in and provides a guarantee which reduces the risk and that's the lubrication.

**HD:** This is a little bit like Northern Rock at the moment actually. How would we describe that? Its not 'un-locking' risk is it?

**SC:** Well by reducing risk, it unlocks the blockage...

**RO:** It changes the perception of risk for all the parties. Well not just the perception but the reality.

**SC:** Then it can also make them hugely inefficient, because they say the government is the safety net so we can spend whatever. That's why costs go up. Is that where the costs of mega-projects skyrocket?

**HD:** yes absolutely of course.

**SC:** Is that the upshot? Megaprojects always overrun in terms of cost because the risks are so high, you've got to have a guarantor. The guarantor then creates inefficiency in a way that the parties execute the project, which makes the price go up.

**HD:** My position on that is part of what we're doing. There are several reasons and I think context matters. What you said is one and there are many other reasons. It must be said that there are some projects which have finished on time. There's been a lot of exposure to mega-projects with overruns as opposed to the concentration on those which have actually finished, and it's most important to find out those which were undertaken and did finish.

**You cite Johns (2001) as offering an “example of an individual whistleblower having a dramatic impact on an organisation as a whole” (p241, §1: 4-5) but do not elaborate further on this as a potential dismantler of trust.**

**Question 9:** *Please could you elaborate on this and if appropriate relate this discussion to efforts to expose errors, faults and problems of major projects by community groups and special interest groups. Surely, the status of such groups (or individuals) as whistleblowers matters as this can attract or detract trust? If such parties have no track record of trust what is it that will make the powers that be heed their claimed exposure of a wrong-doing and here does the media (and different parts of it) fit into all this?*

**HD:** This whistleblower question is actually quite important. If you can find as we have, Bent Flyvbjerg is a whistleblower on megaprojects. He basically argues that there was intense explicit manipulation of forecasts and so projects get politically accepted. This was an accusation and I happen to believe that he was right in certain instances and wrong in others but he was a whistleblower. [1.04.00] Whistleblowers can attract and detract trust, but unfortunately their status matters as whistleblowers does it not? If the King's Cross guy blows the whistle he has got a vested interest, an academic supposedly has not got a vested interest.

**SC:** In the Enron example the whistleblower was Sharon Watkins; she was an accountant, and she was seen as credible from the internal controls of Enron, or the lack thereof.

**HD:** We do not have enough whistleblowers in megaprojects. It is quite incredible that we are one of the very few institutions globally that is doing this work, when billions of dollars are just going to one project. It's quite incredible. You either get cynical and say the reason for that is that no one really wants to know, or the other one is we're too busy doing the job to spend time researching it. Make your own choice.

**RO:** I have just written down the word 'conspiracy' here. You can go from a situation of trust into, if you have got some outside agency that is bailing you out, you can become a conspiracy I suppose, as well, the parties collaborating or colluding is a better word, colluding rather than developing, moving up this ladder of trust. In certain types of project, they might enter into a climate where they are colluding together against an outside party.

**SC:** Maybe they don't even need to move out? In a lot of circumstances they don't. Although I guess my retort to that is that they have moved up by colluding, because colluding requires some trust.

**RO:** Yes you're right, a huge dose of trust, doesn't it? Because if you then get a whistle blower you're in mega-trouble!

**HD:** I have got this relationship between lack of trust / conspiracy / transparency; whatever the relationship is, transparency comes up again as the critical.

**SC:** Transparency is the key because that's how you forecast other people's behaviour. If I can't see your motives or your techniques or methods or whatever, how do I know? And again trust is evidentiary based, so I need some evidence. Why? Because I have something to risk.

**HD:** So why is it then, that in megaprojects, and it goes back to an earlier question, why is it when there is evidence in some instances of fabricated figures that over time one realises the credibility of these figures were very dubious. What happens is that these figures are discredited, and what happens is that we go to a new set of figures again not plucked up by the politician but provided by the technocrats. So we move from the discredited position which should generate distrust, to a new set of figures which generates artificially new trust. Why are government and the public so forgiving of these practices - especially for public projects? Why is it that the critics of such developments are often less trusted than those that produced the misleading evidence? Now, I think this is also an issue; we need to talk about the media here. The people, who are the least trusted in some instances, are the guys who raise the questions! And we've purposefully kept a low-key in our work, as we know this is messy and we would much prefer not to offend people and to collect information and let the stories tell. But I can tell you from a personal context that I know that if we stuck our necks out, we would be the ones pinned as being distrustful, whereas actually we know full well that the figures, the fabricated figures, should generate distrust amongst the public. I'm a little bit puzzled.

**SC:** So why were the government and public so forgiving?

**HD:** Were these guys coming up with figures which in retrospect they know didn't add up.

**SC:** There is a justice thing here I think. Forgiveness, reflecting on that word, I'm not sure they forgive them; they're just willing to fire them. If the people who produced the original figures are discredited and then they are fired... okay, we don't forgive those guys but we'll let the process continue because now we have some new people in there and they'll do better. [1:10:00]

**HD:** I think with contractors you are right, like with Metronet - well actually that's not true because Metronet is made up of partners who are still operating, they hedged their risk very nicely - I think what you're saying sounds good, but the evidence doesn't back it up because the consultants, Ove Arup or whichever, have all in their day produced figures which pleased clients because that's their job. They've not got it right but they've still got hired for other jobs somewhere else and that they get more right presumably that wrong, and I suppose that's the answer. These consultants won't always be accepted if they have a track record of malpractice, but in the case of contractors and operators you can remove them from the market, but because some of them have artificial identities, their artificial identities move, are not the real ones.

**SC:** They have aliases

**HD:** *Particularly joint ventures*

**SC:** Because they are sort of ephemeral

**RO:** They can go to the wall and the parent companies are still fine. They're set up with the possibility of failure in many instances.

**HD:** So my question remains the same, why am I expecting you to have the answer? It's a bit unfair of me too! I'm just asking you how come untrustworthy behaviour gets accepted?

**SC:** I think the government and the public forgive the project. They'll still stay behind the project even if the people who came out with the projections have turned out to be untrustworthy. So I think they forgive the project, but they don't forgive the people who deceived them.

**HD:** So it's a commitment to the project and not to the...

**SC:** That's my perception, so the forgiveness has to do with the project overall, but if the consultancy firm does poorly then they're not readily forgiven by the public but as you say, they might change their name.

**RO:** I think it depends what questions for example the consultants were asked in the first instance.

**SC:** Well that could be their defence.

**RO:** Exactly. We have talked about post-rationalisation or justifying, and they may have been in that game, where they are almost asked to produce an optimistic view.

**SC:** Because that's the tool to get the thing approved

**RO:** It is the context of when again, when and why they were asked to come up with their particular figures, and you got to take that in context is well.

**SC:** And then there is the interest of the politicians, who drive these things forward. And they might be motivated by careerist impulses because, in a way they don't really care if the thing collapses, what they want to do is to get credit for doing part of it and then they're all onto their next job and the damage, the collateral damage, somebody else can clean up and that may be why they use these technocrats in the way they do.

**You claim that “trustors are quite vigilant to the trustee’s behaviour and are constantly updating and recalibrating judgements regarding the degree to which another party can be trusted” You go on to argue that. “In fact, when risk is great ...we may be hyper-vigilant regarding his/her behaviour and its implications for our assessment of trustworthiness” (p242, §2: 9-13).**

**Question 10:** *Is the behaviour you describe above more likely to prevail in a private sector context rather than a public sector setting, and does it even more prevail in a public-private sector context?*

**HD:** In question 11 you talk about the hyper vigilance. My question is really is this hyper vigilance more the characteristics you'll find in the private sector rather than the public-private sector?

**SC:** No, I would say that the hyper vigilance is a generic dynamic that can occur for

profit or non-profit and can be depend on risk. So the more risk, the more hyper vigilant one will be, except as you say, there may be certain circumstances. You rightly raise the issue of power and politics of these projects, and I'm completely sympathetic to that sort of paradigm, which I don't think is necessarily in conflict with the trust stuff and risk, they can fit together but I would submit that this hyper-vigilance issue is an issue of the threshold that we talked about before; high risk needs a higher threshold of certainty: more vigilance. It's a sort of generic principle. Now there may be circumstances when it's all a farce, or a façade. You may want to appear hyper vigilant, but in fact you don't really care.

**HD:** On the other hand it can be the opposite, as I think has happened in Britain; we've become so hyper vigilant, we've become risk averse and we don't do anything. We've become paralysed. I think it is a very British thing up until recently with their infrastructure.

**RO:** Paralysis of analysis.

**HD:** Well, they don't even bother doing analysis even in some cases!

**You argue that the “effective flow if information” among parties in a JV promotes trust and that with technology advancements the scope for data sharing is growing fast (p242, §5: 6-13).**

**Question 11:** *What exactly is the relationship then between information access, trust and transparency? And what happens to the intelligence/knowledge that is gathered by a JV once it is disbanded? Does the loss of this information (to the public realm) pose a high opportunity cost in lesson-sharing and learning or is it justified to be regarded as privileged “knowledge capital” that the private sector is entitled to take onto the next project leaving the old project perhaps less informed and the new one more informed (or prejudiced) by the old project experience?*

**HD:** This is quite important, the with-holding of information... Trust is reliant on the exchange of information, on the free flow of information. I give you an example here where you basically have public sector quangos set up, and the free flow of information. There are two issues; one is the public-private sector issue when basically the public sector, the quango, is helping set up the private sector which in itself might be a quango, and one treats the other as a foreign party. Because like with SEEDA, the Eurostar saying you're not private, we're not going to share our information, and yet the quango's job was to lay all the foundations for this. So the sharing of information, the principle that you laid out, is not quite that.

The next question is, what happens when the joint ventures disband, that information that they shared and accumulated, I know they take it away with them to their next project as an individual, but what happens with it with regard to the project itself? So if information is the basis of trust, and for one reason or another the information is not shared because one party sees the other one as not quite the same animal, or because the joint ventures splits where does the trust go with the absence of information?

**SC:** Well I think it does. What I would add to that is when we talked about trust, trust

being the sort of context for trust, in the sense that trust at time one can then serve as the context for subsequent transactions or negotiations and things like that. But in your scenario all the information about trust worthiness and trust building has gone, because it was disbanded. So then that means they're back down here in the early trust building phase when in fact the information exists, if they could harness, capture the information, they could be moved up this curve much quicker. But they've got to start over because all the information has just disappeared.

**HD:** This high information level is the foundation, I would have argued, for further partnerships and collaborations. And it may well be that practices like Eurostar holding back information or preventing SEEDA from getting information is actually shooting itself in its foot because essentially this information can serve as a platform for subsequent collaborations. So this is really moving into question 13, I thought the effective flow of information promotes trust is actually quite an important, and with that of course goes transparency, doesn't it?

**SC:** Again it's all about forecasting the other parties' behaviour because that's essentially what we are trying to do, we're trying to predict so there is the issues of information flow and transparency.

**HD:** One point which is not a question here of forecasting others' behaviour is all well and good if you know who they are [1:20:00], but with the private equity companies, their identity is not necessarily known.

**SC:** They're private, private equity. That means they're not publicly held, which means they're not transparent and that's part of the controversy about that is that we just don't know what's happening with them.

**HD:** So your argument is that with private equity entities the trust element is a special issue?

**SC:** Why have the private equity firms received such a public backlash lately? There has been suspicion of them. Why? Because there has been no transparency.

**HD:** There has been backlash, but aren't getting away with it?

**SC:** I don't know, it's too early to say.

***HD:** What we're trying to further conclude on from all this, and from our discussion, what of this is generic, and what of this is not? I think we have identified a few phases where the tipping point actually into the big gamble for example as a different context and if you come up with contextual factors that make yours generic to a context, then we're are into meaningful dialogue for us.*

**SC:** Generic principles that work in this context?

**HD:** Mike Batty did one on complexity in cities it's a conceptual question but it is important. With complexity you have boundaries of entities which are interacting. So you can have generic knowledge within those boundaries, but this suggests if you change the boundary generic knowledge becomes smaller or bigger. So I suppose



what we're saying here is that what are these principles which can be taken outside of yours, which is basically corporate management, into the public arena of public corporate interface.

