

Williamson, trust and specific investments

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Abstract

In this article I give a critical discussion of ideas from the work of Oliver Williamson that I have found to be very fruitful: the choice between market and hierarchy, specific investments, the viability or not of trust in markets, hostages, and trilateral governance. In the discussion I use the notions of cognitive distance, organisational focus, a cycle of discovery, the extrinsic and intrinsic value of relations and I analyse the different kinds, foundations, conditions, limits and processes of trust.

Trust and cognition

In public, Williamson was adamant in claiming that trust is not viable in economic activities, and is to be reserved for friends and family (Williamson, 1993). In a few conversations I had with him, he was a little more open to the economics of trust. Williamson made two claims.

First, if trust does not go beyond calculative rationality it does not add anything. I agree: enlightened self-interest, with giving something in the expectation that one will get return at least as large, sooner or later, is already part of mainstream economics. My reply was that trust does go beyond calculative rationality, in a degree of instinctive, inborn benevolence, an inclination to trust without any guarantee of an adequate return, that developed from an evolutionary advantage to do so, for the sake of cooperation (Tomassello, 2016). This need not imply that trust is blind. While taking the risk of trust, one can maintain a watchful eye.

Second, Williamson argued that if trust indeed goes beyond calculative rationality, it cannot exist under the competition in markets, because it entails a giving without the certainty of adequate return, while under the pressure of competition one must take every advantage one can get. My answer was that in fact often competition is not so rigorous as to forbid any wager of trust, and rather than being non-viable, it is, on the contrary, needed to survive in markets, under the pressure to improve and innovate and use the opportunities of combining complementary resources, in collaboration. It can be seen as an uncertain investment, but there are so many of those.

More widely, trust is needed in economic transactions for what Campbell (2003, p. 60) called 'facilitating' conditions. Campbell noted that it is somewhat odd to consider cost, including transaction cost, as something to be minimized, while it *enables* transactions. Arrow (1983, p. 151) claimed that 'in the absence of trust, it would become very costly to arrange for alternative sanctions and guarantees, and many opportunities for beneficial co-operation would have to be foregone.' Collaboration can often be modelled as a repeated game, and in those games there are often multiple Nash equilibria. Who chooses the equilibrium to be followed? Binmore, (2003) proposed that one possibility is hierarchy, but another is fairness in the form of equitability, developed into an instinct in the ancient times of Man as hunter-gatherer, equally sharing spoils and duties. In that light, Williamson's division into hierarchy and markets with only self-interested agents is misguided. Self-interest may be prevalent, but collaboration can be carried by a morality of fairness. There can be extrinsic, instrumental value of a relationship for yielding profit, in combination with intrinsic value, in appreciation of reciprocity, fairness, empathy, forbearance, solidarity, openness (Frey, 1979). Often, extrinsic motivation shoulders out intrinsic motivation, greed gobbles the gentleman, but that is not necessarily so. They can be combined. And between rigorous quid pro quo and the

letting go of altruism, there is the more gentle reciprocity of gift giving, with informal and unspecified returns (Vandevelde, 2003).

From another angle, let us recognise that there are several types of trust (Nooteboom, 2002). One type, the type that presumably Williamson was talking about, is intentional trust, in the presumed absence of opportunism and the exercise of attention and dedication. Another kind of trust is 'competence' trust: trust in technical ability to perform according to an agreement. Any agreement is couched in language, for which one must at some point assume the ability to understand, and share all the tacit background assumptions underlying all communication, e.g. concerning institutions that are part of normal social interactions. Perhaps Williamson took that for granted, and in his argument against it in markets meant only intentional trust, in the exercise of fairness and dedication. Competence trust can be promoted by membership of a professional association, educational achievements, technical professional standards and routinisation (Zand, 1986).

Also relevant is the notion of optimal cognitive distance (Nooteboom et al., 1997). Thinking and perceiving differently is problematic, in yielding misunderstanding and error, harming efficiency, but it also has the advantage of offering the opportunity of innovation by Schumpeterian novel combinations. The challenge is to find partners at a distance sufficiently large to yield something new but not so large as to make that novelty incomprehensible. In other words: seek optimal distance. Distance, greater or smaller, carries greater or smaller risk. Relational risk in the form of misunderstanding is zero only at zero distance, which is devoid of novelty. In strategic interaction, beyond risk there is uncertainty: what the players of the game could do is not known, and hence has no calculable probability, not even for one's own actions, and neither is the pay-off of combinations of strategies.

Optimal cognitive distance is found by trial and error. It may be substantive, technical, depending on cumulative knowledge, measured, for example, by the number of patents. but also behavioural, concerning how to deal with each other, as a function of experience in dealing with others at cognitive distance. Optimal distance depends on absorptive capacity, on the side of the receiver, and rhetorical ability to make oneself understood, on the side of the source. The latter depends on communicative repertoire. That can be widened by the use of metaphors in which the unfamiliar is represented in terms of the familiar.

The idea is claimed to apply to both individuals and organisations. The variables involved are not easy to observe on the individual level, but on the organisational level they could be construed on the basis of the patent portfolios of firms (Nooteboom et al, 2007). Cognitive distance was measured as the difference in patent patterns of the incidence of patents in patent classes.

In Nooteboom (2009) I proposed that an internal feature of organisations is its 'focus', in what people share in ideas about the organisation's mission, intended product and market, values concerning the conduct of employees, with respect to customers, suppliers and the wider public, organisational culture, degree of innovation, and associated with that, the cognitive distance in its staff. Other terms that have been used are 'shared mental models' (Denzau & North, 1994) and 'scaffolding institutions' (Pettracca & Gallagher, 2020).

Underlying this is a view of cognition, based on a 'socially extended mind' (Gallagher, 2013). An issue here has been whether cognition is 'internal', with mental models, or 'external', imposed by external conditions. Mental models are internal, and scaffolding institutions more external, constraining choice, as in competition. This external determination is similar to Latsis's (1972) notion of 'situational determinism', with its 'single exit' situation imposed by competition. This is reminiscent of Williamson's claim that under competition one cannot afford any unconditional give and take of trust. On the other hand, competition is 'a learning device', as proposed by Hayek.

Cognition has both both internal and external determinants, and cognitive construction is more than ‘adaptation’ of a given mind to experience, which is still reminiscent of the idea of an autonomous individual that arose from old methodological individualism. The human being is *constituted* in an ongoing interaction process with the physical and social environment. As recognized by Pragmatism (Dewey) the subject is not given a priori, prior to experience, as an outside onlooker of the world, but is entangled with it and constituted in interaction with it.

The seminal characterization of innovation as ‘novel combinations’ of Schumpeter has spawned a large literature on what is combined (capital, routines), the role of markets, transaction costs, and institutions, and whether it is ‘top-down’, imposed by visionary management, or bottom up, emergent from the work floor (Harper, 2018), but little on how the combination of internal and external actually works

For the constitutive interaction between internal and external I have used the notion of ‘assimilation’ in existing cognitive frameworks, and ‘accommodation’ of that framework, when assimilation fails, adopted from Jean Piaget (Nooteboom, 2000). This yielded a ‘cycle of discovery’, as an alternation of a widening of content, in the differentiation of an innovation, in incremental innovation, to widen sales, a widening of context, in moving a product to a new market (‘selection environment’), with different markets and institutions, in ‘generalization’, with incremental innovation, in ‘widening’ in multiple alternatives of a product concept, differentiation in the new context, discovering new features of demand there, making adaptations to survive, finding that impossible, making new combinations of features of the existing product and features of local products that are successful where the focal product fails, in ‘reciprocation’, then finding inconsistencies and inefficiencies in combining old and new, which gives hints where to make more fundamental changes, in a attempts at a new and more coherent structure, in ‘accommodation’, with a narrowing of content, and then a widening of context to apply and test the new architecture, and further ‘consolidate’ the novelty in a narrowing into a ‘dominant design’. Then we are back at the beginning of the cycle.

The decision to ‘generalize’ is typically top down, to expand sales in a new market when the home market gets saturated. Subsequently, ‘bottom up’, expatriate efforts in the new market try to dodge home office constrictions to maintain the established order for the sake of efficiency of economy of scale, in order to adapt and experiment in the new local market.

This process was confirmed in a conversation with a former CEO of Shell, who admitted that at first the move was aimed at more sales, until they discovered that it yielded innovation, after which the procedure discussed above was implemented deliberately.

The individual agent brings in his inherited cognitive potential and develops that in interaction, in a life process, along a path of life. To the extent that the environment is shared with others, the resulting cognitive frameworks will be similar, but never identical because paths of life and inherited potential are never identical. This produces cognitive distance.

The issue concerning what is internal and what is external in this process may be clarified with Aristotle’s multiple causality of efficient cause (the agent), the final cause (the agent’s goal or purpose), the formal cause (how the agent acts, in this case cognitive structure), the material cause, the conditional cause (external conditions that affect, enable and constrain cognitive construction, such as institutions), and exemplary cause (models followed as guiding examples to be emulated, such as role models or cultures). Here the internal factors in the process are the final cause and the formal cause, the external factors are, in large part, the material cause, the conditional cause and the exemplary cause. Organisational or wider culture generates the order to be followed, among people that collaborate in the organization: efficient, final, material, exemplary and in part the formal cause, in other words the organisational focus. Thereby the organisation is in part a ‘cognitive institution’. The focus is

maintained by leadership, role models (exemplary cause) , selection of staff and socialisation in the organisation. Focus is needed for coordinated production, but also has negative effects in what I have called a ‘system tragedy’ of myopia and prejudice, to be corrected with external contacts at a cognitive distance.

When the focus is on radical innovation, the appropriate internal cognitive distance will be relatively large, allowing for divergence of ideas and conduct, and when the focus is on efficient production the focus will be relatively narrow, to avoid misunderstandings. In the experimental study, the width of focus was measured by the extent that patents fall in different patent classes. It was found that, as expected, optimal distance was greater for firms with wider focus. (Nooteboom et al 2007). Not expected was the finding that for firms with large absorptive capacity (measured by cumulative number of patents), the upward slope of novelty with distance was lower, which indicated that the more one knew, the further away one had to look for something new. Thus there are both increasing returns to scale, in a larger optimal distance, and decreasing returns, in having to go further out for something new.

Specific investments and governance

Crossing cognitive distance often requires investments that are ‘specific’ to the relation, in increasing targeted absorptive capacity and rhetorical ability. The notion of ‘specific investments’ is taken from Williamson (1985), and I have benefitted greatly from it. It is an investment that loses part or all of its use value in another relationship. Once made, it makes one dependent on the partner. He can threaten to break the relationship and leave you with a worthless investment, and with that he can demand a greater share of the jointly produced value. The question then is how one can mitigate that risk. Williamson had already proposed that this can be done by sharing the ownership and hence the risk of the investment. Note, however, that the risk can also be reduced by balancing it with counter-power. If the investment is used to increase the uniqueness of what it contributes to the relationship, it produces a kind of monopoly. The partner will harm himself if he leverages his bargaining power, with the risk of losing that unique value. One may thus create a balance of power.

Another instrument is the use of a ‘hostage’, as Williamson (1969) also indicated. A hostage is defined as something surrendered to the partner which has value for the giver but not the taker, so that the taker will without hesitation destroy it if the giver does not behave according to the agreement. In former times it took the form of a family member or a nobleman from the court. Now it is sensitive information that can be divulged to his competitors when the partner does not stick to agreements.

Of course, one can also try to control relational risk with a contract. But that has three drawbacks. One is that by nailing down conditions on conduct, it constrains the scope for action needed for the exploration of innovation. A second is that one may not be able to monitor and control the other’s conduct. After all, there is cognitive distance. A third drawback is that a contract to control behavioural risk is a sign of distrust, which evokes reciprocal distrust, and once that is settled it is difficult to turn around. That is not necessarily so. However, a contract may also have a technical purpose, in a design to control competence, not behavioural risk: the matter at hand is technically complicated and needs to be specified to prevent misunderstanding (Klein Woolthuis & Nooteboom, 2005), which does not signal intentional distrust.

Reputation is another means of control: the partner behaves well because otherwise his unreliability gets known and spoils opportunities for collaboration with the present or alternative partners in the future. Such a reputation mechanism is not automatic and requires a mechanism to distinguish legitimate claims of misconduct from idle or malicious gossip, and

to broadcast the bad reputation. This may happen via bookkeepers, advisors, friends and acquaintances on the golf course.

An alternative to such measures of control is to take the leap of trust, and keep an eye on whether that is justified. In the debate with Williamson I claimed that this is necessary to take opportunities of complementary skills or assets and survive in markets, where increasingly innovation is required. This is the opposite of what Williamson claimed.

Outside the relationship, in the surrounding culture, there may be an impersonal, generalised trust among people at large (as measured in the well known international trust survey (Gothard & Sanjvee, 2010). A complication there is that the survey questions may be interpreted differently in different cultures. Also, it is not always clear what type of trust is intended. One type of trust regards competence: the technical ability to conform to agreements. The other concerns the intention and commitment to do so, to the best of one's ability. A failure here may be outright opportunism, or lack of attention and commitment.

Another more personal source of trust may lie in relationships with friends or (extended) family. Here, trust may be in part imposed, in relations of familial obligation. This type of trust can also be based on empathy or identification. The first is understanding how another thinks and feels, the second goes further, in thinking similarly and having a sense of a shared fate. The advantage of such trust-based relationships is that it can yield speed, in not having to set up contracts or develop reputations. It may also be perceived as having intrinsic value of bonding and solidarity. An economic disadvantage is that it may entail a lock-up in traditional modes of doing things, disregarding the opportunities arising outside the clan, lacking the 'discovery value' that Hayek attributed to competition. Here may lie the core of Williamson's argument that trust is to be reserved for family and friends, and should not be used in the economy.

There is a distinction to be made between reliability and trust. One can rely on a partner on the basis of control or trust. This is illustrated in table 1, derived from Nooteboom (2002). In the top row there is control, inside the relationship by hierarchy, and outside it by contracts and regulations, and by reputation. Trust goes beyond control, in generalized trust, in society, or particularized trust in clans.

The table can be used to diagnose a relationship and to find sources and opportunities for governance. By way of example, a comparison has been made between the US and Japan (Nooteboom 2019).

Table 1. sources of intentional reliability

	OUTSIDE	INSIDE
CONTROL (institutions)	<i>narrowing the space of conduct</i> <i>affecting choice</i>	authority, directives, incentives
	contract, reputation	hostages
TRUST (ethics)	general trust, morality	private trust: family, clan, friendship

In the US, as shown by the horizontal line, control is based on contract and reputation and internal hierarchy and incentives. A disadvantage of a contract is that it is expensive, yielding

high transaction costs, and slow. As Fukuyama (1995) claimed, the US has low generalized trust. But while he also claimed that Japan is a 'high trust society', the Japanese researchers Yamagishi and Yamagishi (1994) showed that generalised trust in Japan is low. There, shown with the vertical line, relationships in business are based on hierarchy and bonding in family and clans.

There is a sociological theory of 'relational signalling'. It proposes that in relations one can be in different mental frames (Lindenberg, 2003). A frame of thinking determines how one perceives and interprets observed actions, and how one responds to it. One frame is that of 'protecting one's resources'. It is self-interested, based on an instinct, developed in evolution, of survival. From that frame, one will scrutinise actions as possible evidence of threat. The default attitude here is suspicion and 'exit' as opposed to 'voice' (Hirschman, 1970). The second frame is that of 'solidarity', where one is prepared to trust and engage in informal give and take, and altruism, up to a point, from the instinct, also developed in evolution, of wanting to collaborate and engage in empathy and voice. There, when an expectation is unfulfilled, the default is to 'voice' this, with the intent of trying 'to sort things out' and trying to solve problems with mutual effort. When that fails one can fall back on exit. From a frame it can be difficult to switch to the other frame: the question is how robust the frame is that one is in. The frame of guarding resources is generally the more robust. The solidarity frame is needed for trust. One will observe actions as evidence of the frame the other is in, and to facilitate trust one will try to prevent the switch away from the solidarity frame. This is the notion of 'relational signalling', Seemingly trivial actions may count, such as failing to respond to an email even when that is not strictly required, or treatment of a waiter in a restaurant.

Trilateral governance

One may also engage in 'trilateral' governance, with an intermediary or go-between, This can be faster, cheaper and more flexible than a contract. This was also proposed already by Williamson (1969). There are seven roles for go-betweens:

1. negotiate, and establish conditions for conduct, dynamically, instead of using a costly and fixed contract
2. safeguard hostages
3. be a check and broadcaster in a reputation system
4. monitor compliance to a contract
5. help in disentangling a relationship
6. eliminate misunderstandings and undue suspicions
7. counsel viable paths in developing the relationship

1 and 3 have already been explained. 2, the safeguard of hostages, is explained as follows. When the hostage is competition-sensitive information, the hostage holder needs to take care that it does not accidentally spill over to a competitor of the partner. He may be tempted to be lax and let it go, or not return it to the hostage giver when the agreement ends. This can be avoided by giving the go-between guardianship over the hostage, to guard against spillover and ensure return of the hostage. 4 has already been alluded to: the go-between may be better able to monitor and control compliance to the agreement without the risk of accidental spillover. The reasons for 5 are that a go-between may be better able to craft a reasonable give- and-take, with less emotion, combating the impulse of 'loss aversion', in ending a relationship. In such loss aversion people take more extreme actions in preventing a loss than in getting a gain. In 6, fear of losing out, or lack of self-confidence, may yield undue suspicions or misinterpretations of actions that a disinterested go-between may help to unravel. Such unwarranted suspicion arises, in

particular, in the 'calimero syndrome' of a small and vulnerable partner, such as a small firm with respect to large one. The rationale of 7 is that an experienced go-between may give counsel in the difficult process of developing an economic relationship of collaboration. Is there time to gradually build trust, in small steps of investment? To what extent is there one-sided specific investment, and can its ownership be shared? If not, how can a balance in dependence be achieved? Can a reliable reputation mechanism be set up? Are there unrealistic expectations? One result of studies on the basis of relational signaling is the lesson to prevent unrealistic expectations that risk disappointment and suspicion in lack of fulfillment. (Six 2003).

All this requires technical and behavioural competence and a reputation of fairness on the part of the go-between. Not all roles need to be played by the same go-between. Locally embedded bank branch offices to a greater or lesser extent already play such roles. This service could be extended and conducted more deliberately.

Another insight from Williamson (1975) was that given the transaction costs and risks of a collaborative relationship, or 'costs of the market', one may opt for 'organisation', integrating the work involved under a single 'hierarchy'. The idea is that under such a hierarchy one can demand more information, for better monitoring and for imposing a solution under conflict, than with respect to an independent partner.

The efficiency of this should not be overestimated: within organizations, under a hierarchy, there often are ways to obfuscate and dodge oversight. Another drawback is loss of cognitive distance as a source of variety, important for innovation. The loss of distance arises from socialisation in a common organisation. If there is no such loss, the focus of the organization may be too wide, due to diversity, which decreases efficiency of exploitation.

Integration may yield economies of scale, especially in firms oriented at efficient production. There are also diseconomies of scale. The number of possible direct connections with n agents is $n(n-1)/2$, which increases quadratically with n and soon internal communication will crowd out work. For that reason hierarchy was invented, to restrict communication, but with that, the highest levels of management get removed from the work floor, and communication gets delayed and distorted. Thus, organisations that want to remain small, fast, flexible and innovative, it is better to remain independent and master the art of collaboration at a distance, and the use of trust. Integration may be good when there are large economies of scale, and the organisation is oriented at efficient production rather than innovation.

Conclusion

Oliver Williamson has greatly contributed to organisation theory, with concepts of transaction costs. Discussed in this article were: specific investments and their sharing, governance of economic relations, market vs. hierarchy, the use of hostages, and trilateral governance. He also criticised the notion of trust, in economics, but this stance was here criticised in turn.

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