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The role of trust in cultivating relation-specific skills: The case of a multinational automotive supplier in Japan and Germany

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The Role of Trust in Cultivating Relation-specific Skills – The Case of a Multinational Automotive Supplier in Japan and Germany







Title: The Role of Trust in Cultivating Relation-specific Skills – the Case of a Multinational Automotive Supplier in Japan and Germany

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Abstract:

This research draws on Asanuma's concept of relation-specific skills in order to analyse collaboration between automaker and supplier. The cultivation of relation-specific skills has been conventionally regarded as a key factor of competitiveness in the Japanese automotive industry. Yet, the concept has been described mostly in economic terms only. This research attempts to extend this view by analysing the role of informal institutions (trust) in developing relation-specific skills. By drawing on expert interview data within the frame of a case study research approach, we gathered data from a leading multinational automotive supplier in its facilities in Japan and Germany. The results show that the influence of trust plays a role in determining relation-specific skills. In conclusion, we hypothezise that cultural homophily positively influences the cultivation of relation-specific skills.

Keywords:

Relation-specific skills, Banri Asanuma, automotive industry, supplier-maker relation, culture, trust, Japan

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1 Introduction

The relationship between automakers and suppliers in Japan are conventionally characterised as vertical in hierarchy, whereas the relationship of their US or European counterparts have a horizontal structure, characterised as contract-based, formal, competitive and, to a great extent, heterarchic. Though the vertical structure which evolved in Japan is hierarchical, information flows more freely and personal ties are fostered through informal gatherings (jap.: *Kyoryoku-kai*). The relationship is based on long-term commitment, cooperation, trust and mutual support (Clark and Fujimoto 1992). The literature concludes that the vertical type of supplier integration pursued in Japan resulted in higher product quality, higher productivity and shorter development cycles (Clark and Fujimoto 1992; Kotabe et al. 2003). Thus it was recognised by the industry as more sophisticated and gave impetus for questioning the horizontal approach pursued in the West.

The work of Asanuma (1985a, 1985b, 1989, 1992) has greatly contributed to a better understanding of the underlying factors determining the Japanese collaborative business system. He explains the mechanism of coordination between automaker and supplier. Auto parts suppliers have accumulated specific skills in transactions with their main customers that Asanuma calls "relation-specific skills". In comparison, Japanese automakers have organised both competition and learning for their suppliers. The automakers not only make the suppliers compete among each other to improve cost and product quality, but also trigger learning initiatives on how to improve manufacturing processes continuously through the long-term commitments to transactions.

Given that the competitiveness of the Japanese automotive industry is based on the approaches described above, multinational suppliers face the challenge of adjusting to the Japanese model in order to increase market share. Next to the common *Keiretsu* structure that represents a barrier to foreign suppliers (comprehensively studied by, e. g., Berglöf and Perotti 1994; Dow, McGuire and Yoshikawa 2009; McGuire and Dow 2008), research has to a lesser extent focused on informal institutions and their social embeddedness that may represent a barrier to establishing relation-specific skills. The aim of this paper is to explore how a foreign multinational supplier manages its supply-chain system to cater to Japanese customers by focusing on informal institutions, in particular, on trust, which is considered important for cultivating relation-specific skills.

In what follows, first, the theoretical framework is presented and the literature reviewed. Based on this, propositions are derived that are tested in the frame of a case study using the example of the Robert Bosch Group. Data were gathered through interviews with selected managers of the firm in Germany and Japan. The final section presents the results and outlines the contribution of the study to the theoretical advancement of inter-organisational studies and the concept of relation-specific skills.

2 Theoretical Background

2.1 Relation-specific Skills

Asanuma (1989) explained the role of suppliers in Japan according to the degree of initiative in design of the product and the process (Table 1). He classified auto parts (and suppliers) into "marketed goods (VII)", i. e. standardised parts that do not require any modification for the customer, and "ordered goods (I to VI)".

The "ordered goods" were procured by the method of "drawings supplied" (DS parts, I to III) and "drawings approved" (DA parts, IV to VI). DS parts mean that parts are manufactured by outside suppliers according to the drawings supplied by the core firm. DA parts mean that parts are manufactured by outside suppliers according to the drawings made by the respective suppliers themselves and approved by the core firm (Asanuma 1989).

The classification shown in table 1 can also be understood in terms of the competence level of a supplier's technological skills. Though the classification appears somewhat static, Asanuma points out that suppliers have opportunities to move up the classes. Mainly, DS parts suppliers have been promoted to DA parts supplier status. As a result, many suppliers in the Japanese auto industry (approximately 80%)

	Parts manufactured according to specifications provided by the core firm ("ordered goods")				Parts offered		
	Parts manufactured according to drawings provided by the core firm		Parts manufactured according to drawings provided by the supplier			by catalog ("marketed goods")	
	Ι	II	III	IV	V	VI	VII
Criterion for classi- fication	The core firm provides minute instructions for the manu- facturing process	The supplier designs the manufacturing process based on blueprints of products provided by the core firm	The core firm provides only rough draw- ings and their completion is entrusted to the supplier	specifications	Intermedi- ate region between IV and V	Although the core firm is- sues specifi- cations it has only limited knowledge concerning the process	The core firm selects from a catalog offered by the supplier
Example	Small parts assembled by firms offering assembly service	Small outer parts manufac- tured by firms offering stamp- ing service	Small plastic parts used in dashboard	Seat	Brakes, bearings, tires	Radios, electronic fuel injection systems, batteries	

Table 1: Classification of parts and suppliers

Source: Asanuma 1989

are now classified as DA parts suppliers (Fujimoto 1999). The promotion requires great effort and takes quite a long time for suppliers. A precondition is seen in the suppliers' ability to establish trust with the automaker.

By drawing on Williamson's (1979) classification of transactions and Aoki's (1988) work on relational quasi-rent, Asanuma proposes that the relation-specific skills in the Japanese auto industry have a quasi-rent. The relationship between manufacturer and supplier with relation-specific skills would enable both firms to reduce transaction cost and coordination cost as well as improve the quality of cooperation. However, the development of relation-specific skills requires a deep collaborative relationship over time between firms, open communication, the willingness to learn mutually while, at the same time, adopting ethical rules, like the acceptance of hierarchy, hence the acceptance of positions of inequality (inferior, superior), etc. Though understanding and aligning behaviour to these cultural standards is the precondition to establishing relation-specific skills, Asanuma explains relation-specific skills. One way to test this assumption is to consider the example of a multinational firm that is catering to Japanese and non-Japanese customers. Internationally exposed firms are in the best position to compare relational differences between customers from other countries.

Given that the development of relation-specific skills results in a win-win situation for maker and supplier that is established purely on economic terms, cultural differences should not influence the development of trust in order to benefit from relation-specific skills.

2.2 Trust and Cooperation

What is trust and why is it important in business transactions? Gambetta defines trust as "a particular level of the subjective probability with which an agent assesses that another agent or group of agents will perform a particular action, both before he can monitor such action (or independently of his capacity ever to be able to monitor it) and in a context in which it affects his own action" (Gambetta 2000: 218). Fukuyama stresses the embeddednes of trust: "Trust is the expectation that arises within a community of regular, honest, and cooperative behavior, based on commonly shared norms, on the part of other members of that community" (Fukuyama 1995: 26). Recently, experimental economics did provide empirical findings on different shades of trust, investigating its nature and influence under different conditions (e.g. Barr and Serra 2010; Buchan and Croson 2004; Buchan, Johnson and Croson 2006; Cameron, Chaudhuri, Erkal and Gangadharan 2009; Carpenter, Daniere and Takahashi 2004). On the basis of experimental studies, "mutual trust", it can be summarised, "is the key to actual cooperation" (Yamagishi 1986: 11). The working definition applied in this paper relates foremost to the idea Fukuyama had in

mind who underlines that trust emerges from expectations of a (good) outcome from cooperative behavior based on shared community norms.

2.3 Culture, Trust and Organisational Procedures in Maker-Supplier Relations

The influence of culture in the Japanese management approach of maker-supplier relationships has been studied by several authors. In a narrow sense, two opinion groups can be distinguished: those who believe culture is relevant, the "culturalists" (e.g. Herron and Hicks 2008; Hines et al. 2004 or Cousins and Stanwix 2001) and those who believe it is not, the "rationalists" (e.g. Dyer 2000; Lamming 1994; McMillan 1990). The culturalists focus on the culturally-induced challenges when it comes to transferability of Japanese management practices to a non-Japanese environment. The rationalists focus on procedural facts but do not consider their social embeddedness and institutional environment important and from which they derive their innovative spirit (Aoki 2001; David 2007; Nelson 2008; Nelson and Sampat 2001; Streeck and Thelen 2005). Research suggests that the high degree of trust and cooperation between maker and supplier is a key point for efficient supply chain management in Japan (Dyer and Chu 2006; Hagen and Choe 1998; Sako and Helper 1998). This leads to the following proposition:

Proposition 1: In a supply chain trust becomes an important factor for efficient collaboration.

Putnam (1993) emphasises the influence of norms of reciprocity on the willingness to cooperate voluntarily. Reciprocity in the form of frequent social exchange results over time in the emergence of trust and the establishment of social capital. Moreover, it curtails opportunistic behaviour. Building a positive social relationship thus presupposes a regular and reciprocal exchange.

For Ostrom and Ahn (2003), reciprocity is an internalised personal standard as well as a social exchange process. The decision for a reciprocal action is therefore significantly influenced by the reliability of the actors involved.

Transferring what has been said above to a supply chain leads to the following proposition:

Proposition 2: Due to norms of reciprocity interpersonal relationships deepen over time resulting in a higher level of trust between persons.

MacDuffie and Helper (2005) underline the lack of trust in the American automotive industry. Dyer and Chu's (2000) findings also imply a low level of trust between buyer and supplier in the US, whereas in Japan the trust level is universally high. In sum, a low degree of trust hinders communication and information sharing or a lack of trust acts against supply chain integration (Forslund and Jonsson 2009). Characteristically, low-trust cultures rely more on a contract (contract-based cultures) in business transactions, whereas Eastern cultures place to a great extend importance on personal relationships (relation-based cultures) (Pearce and Robinson 2000; Yi and Ellis 2000). The supply chain integration and performance management literature assumes that processes in a firm (e.g. logistics, ordering systems, release procedures, etc.) converge over time between firms in a supply chain so that both firms benefit of higher performance through more efficient procedures (Holmberg 2000; Tsang 2007; Herron and Hicks 2008). As procedure are to some extend influenced by the corporate culture of a firm, therewith by the culture in which a firm operates, it can be assumed that procedures of collaborating firms from different cultures may not fully converge. This indicates the following:

Proposition 3: Procedural differences may not converge between collaborating firms of contract-based and relation-based cultures.

2.4 Does Modularisation Affect Relation-specific Skills?

According to Takeishi and Fujimoto (2005), modularisation affects the product, production and the inter-firm systems. Changes in the inter-firm system could lead to changes in product architecture and vice versa. Hence, both have an influence on each other in two directions. It is further argued that modularisation in product architecture might change in some cases the division of labour. Especially in Europe, the trend towards modularisation is observed in the form of outsourcing, aiming towards higher efficiency in car production. Outsourcing, next to other items, is assumed to require a higher portion of

trust, as critical tasks are performed by sub-suppliers. In Japan, on the contrary, modularisation made first tier suppliers more important and powerful, while lower tier suppliers, formerly an integral part of the *Keiretsu*, had to fear for their existence (Schaede 2010).

Whether the trend to modularisation has an effect on the creation of relation-specific skills has not been researched by scholars so far as far as we are aware. While modularisation has an influence of the supply chain structure as outlined above, it possibly causes an effect on the relationship between supplier and automaker. We have included this question in our questionnaire in order to explore a possible influence but we refrain from putting forward a proposition that may stand on vague grounds in the absence of a literature base.

3 Method and Data Collection

3.1 Interview Partner Selection and Sector-specific Characteristics

In order to investigate the propositions raised in the prior section, we interviewed in 2009 and 2010 eight managers of the Bosch Group in two countries and five different locations. A judgment sampling strategy was applied for the selection of the interview partners (Marshall 1996a; Miles and Huberman 1994) in combination with key informant technique (Marshall 1996b; Tremblay 1989), according to which an ideal interview partner must a) occupy the appropriate position that exposes him or her to the information in demand, b) and be knowledgeable, c) willing, d) able to communicate openly and e) unbiased and objective (Tremblay 1989). Following these criteria, four managers of Bosch Germany (German nationals) were selected and four belonging to Bosch Japan (Japanese nationals, Table 2). The interviews took place at several locations of Bosch in Germany as well as in Japan. They were conducted with single persons and in groups for a duration of approximately 80–110 minutes respectively. The managers represent functions such as marketing, project management, key account management (sales), strategic sales planning and engineering. As the characteristics of the product impact the maker-supplier relationship and the competitive environment, it is important to underline that the interview partner reported their experiences in front of the background of the business division they belong to. These were fields of passive and active safety electronics and components that are distinguished within Bosch into separate units. For instance, the products of the automotive electronics unit are electronic control units, related components, semiconductors and sensors. The chassis systems units comprise products such as electronic brake-control systems, sensors, electronics for occupant and pedestrian safety and driver assistance systems. The brake systems units products are mainly hydraulic braking systems and wheel brakes. Hence, in reference to Asanuma's classification (table 1), this research focuses on a DA parts supplier, category VI. We selected an international supplier from this category because it is the last on Asanuma's part and competence classification (only followed by "marketed goods" suppliers that do have the lowest degree of interaction with the automaker). I.e. selecting a DA parts VI supplier means selecting a supplier with a high grade of interaction with and a high importance to the automaker.

All interviewees had experience in the automotive industry of 10 years or more. The German managers especially had extensive experience with working in Germany and Japan for several years. They are multilingual (German, Japanese and English) and familiar with both cultural environments.

3.2 Research Question Formulation

The questions asked the interview partner encompassed three dimensional categories, which we classified as a) business relationship characteristics, b) relational development and modularisation and c) procedural and cultural differences. The first category includes questions in relation to the typology of parts used as classified by Asanuma (1985a, 1985b), transaction-specific questions in relation to business initialisation and duration and either a hierarchical or network-like relationship between maker and supplier. The second category focuses on relational developments over time between maker and supplier, including a perceived trend towards modularisation requirements by vehicle makers. These questions were answered in relation to the questions of the previous category. The third category investigates procedural and cultural differences (Table 3).

No.	Division	Position	Function	Interview location
Ι	Chassis Systems Brakes	General Manager	Marketing	Germany
II	Automotive Electronics	General Manager	Project Management	
	Chassis Systems	General Manager	Key Account Management	
		Staff	Technical Sales	
III	Automotive Electronics	Section Manager	Technical Sales	Japan
IV	Automotive Electronics	Manager	Project Management	
		Manager		
		Director		

Table 2: Interview partner selection

Table 3: Interview logic and instrument

Торіс	Critical theme	Interview instrument
BusinessBusiness relationshiprelationshipbetween suppliercharacteristicsand automaker inGermany/Europe and Japan		[QI.1] What product types are most common in your division? <i>Type A</i> : Drawings-approved (DA) parts <i>Type B</i> : Drawings-supplied (DS) parts, or <i>Type C</i> : Marketed parts?
		[QI.2] How do you start the transaction with your customers? (E. g. bid- ding, nomination from your customer, R & D competition, or other ways)
		[QI.3] How can the business relationship be characterised between Ger- man/European (resp. Japanese) suppliers and automakers? (E. g. hierar- chical, network-like, trustful, collaborative, hybrid, etc.)
Relational developmentDynamics of the subjects above (No. I)		[QII.1] How has the business relationship quality between you and your customers changed over time, in relation to the subject above?
		[QII.2] Did the "modularisation" of the 1990s have any influence on the nature of your business relationships?
Procedural and cultural differencesComparison: Germany/Europe and Japan		[Q III.I] What do you think about the difference of business relationship between German supplier and Japanese automaker during the project acquisition and R & D phase?
		[QIII.II] Are there any cultural differences on individual and organiza- tional levels between German supplier and Japanese automaker?

3.3 Evaluation

Transcriptions that were prepared based on the interviews conducted were evaluated using content analysis (Miles and Huberman 1994; Mayring 2008). The advantage of this method lies in its analytical procedure. It contains pre-defined interpretation steps that are in the course of the analysis finally generalised, which enables traceability and makes the result inter-subjectively verifiable. The principal component of this approach is the paraphrasing and generalisation of the material out of which the essentially reduced statement is generated. In the following, the results of the survey are presented.

3.4 Business Relationship Characteristics

Major product type: In Europe and Japan Type A parts prevail (i. e. DA parts) in the division of the firm. By definition, these are drawings-approved parts that are manufactured by the supplier according to the drawings made by the supplier and approved by the maker. The supplier usually provides the contract specification that includes the drawing the maker is asked to approve. Until the quotation is submitted, technical and commercial negotiations take place.

Business transaction initialisation and duration: In Japan and in Germany early customer contacts are important especially where innovative products are concerned. Depending on product, platform size and automaker strategy, all three major forms (i. e. bidding, nomination by the maker and R&D competition) can be found. Whereas in the case of innovative products R&D competition is in most cases conducted, online bidding has become popular. For commodity products price and quality are the most

important factors, hence bidding is the major mode of sourcing. High volume platforms are usually sourced by bidding too.

For foreign suppliers in Japan the *Keiretsu* system is a hurdle to negotiate for market access. Our interview partners confirm that most of the market share is occupied by *Keiretsu* suppliers. The remaining share on the domestic market is very small.

Maker-supplier relationship: There are differences in Europe and in Japan. In Europe, it is usually a softhierarchical relationship in which experts on the supplier and customer side usually talk with each other at eye-level. But there are network tendencies too, for example, standardisation initiatives are often coordinated in a network or some suppliers, e. g. Bosch, sell their own produced parts to competitors. Contrary to the *Keiretsu* structure, German suppliers prefer to spread business risks by customer portfolio diversification. Therefore, suppliers have to be competent to handle different requests and specifications by several automakers. The Japanese interview partners underline that two levels are to be distinguished important in describing the maker-supplier relationship: the company level and the personal level. On a company level, compared with Europe, the hierarchy between the automaker and the supplier is much steeper and more rigid. This is enforced by the automaker and generally accepted. Japanese automakers have therefore more power to steer the supplier. On a personal level, establishing person-depending trust is key. Japanese engineers of the automaker are usually hesitant to accept supplier engineers' proposals if no personal trust-base exists. Only after several years of trustful relationship building does access become easier. If there is no trust, many details are required that make things precede very slowly.

3.5 Relational Development and Modularisation

Relational development: In this section we asked the interview partners about the development of the relationship over time relating to the items questioned in the previous section. We observed a different perception of the interview partners from Germany and Japan. The German interview partners could not perceive a difference or change in quality of the relationship with the German and European customers over time. In contrast to the German interview partners, the Japanese interview partners often used the term "friendship" or "friendship-like relationship" during the interviews in order to better explain the nature of the relationship. This component, a rather sentimental and emotional feature of a relationship, was not mentioned among the German interview partners, who believe that personal relationships are not too important or more influential than the hard facts, such as technological competence, quality and process competence. The interview partners from Japan clearly observe that over time the relationship quality towards the automaker improves causing e.g. an increase in the bargaining power of the supplier. Reasons given to explain this development are the establishment of trust and good performance over time. The Japanese and German interview partners concluded that the role of developing interpersonal trust is an important difference in inter-firm collaboration in Japan with important implications. Anecdotes were given by the interview partners in order to describe these implications in more detail (Table 4).

Category	Citation	Nationality of the interview partners
General	"Without the development of interpersonal trust collaboration becomes difficult"	Japanese
Communication/ negotiation	"It is often burdensome and time consuming developing trust. We have to accept the role of an inferior, have to meet a business partner often after office hours, apply polite Japanese language and be always frank. Japanese customers don't like neat negotiation and communication tactics from their supplier. That is not considered an appropriate behaviour in their role"	Japanese
Professionalism	"It is a German virtue to separate business from private affairs and concentrate on competent business behaviour. Surely, trust building is important, but it is more important delivering what the customer wants and professionally handle procedures and conflicts once they occur"	German
After-work events	"One should not get drunk with a business partner. That would appear uncon- trolled and leave a bad impression of oneself and the firm"	German

Table 4: Anecdotal evidence on the im	portance of developing	interpersonal trust

Modularisation versus cherry picking: The trend towards modularisation could not be confirmed among the interview partners in relation to their products (electronics). In general, the experts observe a tendency to change from the system approach to single component sourcing. Only a few Japanese automakers still prefer system sourcing over component sourcing. In sum, the interview partners mention that single component sourcing has always been the major mode of purchasing in this specific field. Hence, relations between automaker and supplier are not affected by the product design in this field. Though we have not formulated a research proposition on this subject, we believe our findings are interesting as the trend towards modularisation appears to exclude critical electronical parts. Hence, broadly formulated conclusions on modularisation and its implications for the automotive industry may easily run into risk of being imprecise and one-sided as the modularisation trend may not be generalized over all product categories in the automotive industry.

3.6 Procedural and Cultural Differences

Differences during the project acquisition and R & D phase: Japanese automakers are perceived to have high information and communication needs. This increases the transaction costs in relation to the communication efforts of the supplier. In contrast, Western automakers rely more on contractually agreed terms and technical specifications. Moreover, Japanese automakers rely to a much lesser extent on international standards (e.g. ISO). This again results in higher communication costs for clarifying specifications. There are many time intensive activities required before an official business relationship starts. On the whole, Japanese automakers try to solve issues before they take place. Usually, problem-solving activities start after a project is awarded, i. e. after the contract is signed, and at the time they take place. A supplier has to invest many resources before a contract is signed and an official business relationship can start.

Moreover, the *Keiretsu* system is still viewed as exclusive for foreign suppliers and a major barrier to gaining acceptance on the Japanese market. In the Japanese automotive component market the potential market share of foreign suppliers is considered small. However, as regards markets outside of Japan it is different. Such markets are rather attractive for foreign suppliers, especially for those in possession of global production and R & D facilities as only a few suppliers can offer a global network to cater to local markets.

Individual and organisation cultural differences: Both, Japanese and German organisations are hierarchy conscious, but hierarchy in Japan is much steeper. The Japanese management style is more focused on hierarchy-oriented group consensus, while German management style promotes different individual opinions, creative problem solving and equality. Communication ways are different and lead to inefficiencies. In Germany, interdisciplinary functions, such as the project manager who has commercial as well as engineering related responsibilities, are considered important for the steering of the project. In Japan sales representatives are used to talking to purchasing representatives and engineers to engineers. Hence, functions are more separated, which again leads to higher transaction costs.

Moreover, the interview results also show that the supplier-internal communication between the headquarter and facilities abroad is challenging. We learned that Japanese automakers do face a similar problem, but some seem to overcome this hurdle by establishing a "dual management structure", i. e. positions abroad are double-staffed featuring one Japanese national who reports to the Japanese headquarter and a local person managing mostly domestic affairs. It can be assumed that procedural, or even culture-related differences, lead to higher transaction cost. However, more research needs to be done to analyse this observation further. All experts interviewed regret that often improvement proposals from the suppliers to Japanese automakers are not really appreciated. The Japanese interview partners believe that accepting improvement proposals is influenced by the relationship quality, i. e. the degree of trust. The more trust is established over time, the more improvement proposals are considered an option for the automaker.

4 Summary

We show in our case study that a different appreciation towards the value of trust in business relations exists, which may cause an increase in transaction complexity, instead of a decrease. Both groups of interview partners appreciate trust but it is differently pronounced. In that regard, the persistence of a steeper hierarchy between maker and supplier makes it more difficult for the supplier to enforce improvement proposals on the maker. Whereas the latter is the typical perception mentioned by the German interview partners, the Japanese interview partners clearly perceive that an increase in trust over time led to better and more efficient inter-firm collaboration. Due to the different perceptions of the Japanese and German interview partners, proposition 1 cannot be answered clearly. Whereas in Japan trust is key to supplier-maker collaboration, it plays in Germany a secondary role.

In that connection, hierarchical group consensus, predominant in Japan, causes for a firm originated in a culture that values individual achievement and self-fulfillment delays in decision-making and discouragement, e.g. when improvement proposals remain unheard. On an interpersonal level, again, the German interview partners do not perceive a business relationship featuring reciprocal social actions over time to develop into a rather deeper personalised direction or friendship. More important appears to be maintaining professional behaviour. The Japanese interview partners, in comparison, clearly see a deepening of trust levels and reciprocal interpersonal actions as leading over time to an increase in trust and a closer relationship. The ability to develop a trustful friendship-like personal relationship can be regarded as a professional skill necessary to perform a job successfully. Again, due to the different perceptions of the Japanese and German interview partners, proposition 2 cannot be answered clearly. Though the Japanese and German interview partners both appreciate trust in social transactions, the pronounciation greatly differs. Contrary to the Japanese interview partners, for the German interview partners the ability to establish trust and friendship appears to be less relevant as a professional skill. With this finding, we believe we have identified an underlying key factor to establish relation-specific skills, whose relevance is just judged differently across cultures.

Cultural differences can be observed in procedures, too. Whereas online bidding is in Western countries a standard procedure conducted by an automaker to purchase components, it appears that this form of sourcing is in Japan applied to a far lesser extent. A reason might be that online bidding prevents personal communication, and hence does not contribute to establish an interpersonal relationship important in the Japanese business system. Other organisational differences on group and industrial level could be observed. From a German point of view the lack of inter-functional professional positions in Japan is perceived as a barrier to problem solving. Positions that include commercial as well as engineering responsibilities (e.g. project management) appear to be rare. This fact can also be viewed in the background of relation-specific skills that obviously in our case have not resulted in the firms' adjustment to the other organisational forms, but rather developed away from each other. This fact corresponds affirmatively to proposition 3.

On an industry level, it is surprising to see that the traditional *Keiretsu* organisation has not really been diluted today. It is still seen as the most significant barrier to acquiring market share in Japan in the automotive component segment. However, it has to be noted that the rigid organisation has finally begun to change after Great East Japan Earthquake of March 2011. Japanese automakers found alternative partners and switched from *Keiretsu* suppliers to foreign suppliers in order to restart their plants as soon as they could (Nikkei Sangyo Shimbun 2012; Freescale Semiconductor Japan 2012; Fujimoto 2011). We assume that the March 2011 Earthquake was a turning point for many Japanese automakers to reform their purchasing policy. As our expert interviews in Japan and Germany took place shortly before the earthquake, we were not able to explore its effect in relation to supply chain management issues of Japanese automaker deeper, unfortunately.

5 Limitations

Our findings have to be viewed in the light of the limitations of the study. First, the data gathered represent rather a small sample. They were gathered among experts representing a firm that corresponds

to Asanuma's DA parts category VI only. Data representative of the other categories would have contributed to a broader view of the influence of trust on the development of relation-specific skills. Moreover, experts were recruited from one firm only. As corporate culture varies across firms, it has different influences on managerial behaviour. Future research would benefit from applying comparative or multicase analysis by increasing the number of organisations to be analysed. Nevertheless, the results may stimulate further inquiry into this subject for future research that is established based on a broader data base.

6 Conclusion

Asanuma's concept of relation-specific skills contributed greatly to a better understanding of the Japanese collaborative business system. Several scholars have referred directly or indirectly to Asanuma's work explaining the source of competitive advantage Japanese firms generated based on the cultivation of relation-specific skills. Though the latter has been explained in economic terms only, our findings indicate that the establishment of trust proceeds in different ways across cultures.

Our results suggest that these cultural differences affect the cultivation of relation-specific skills, and thus need to be considered integral to the concept. Based on the findings, we propose the hypothesis that cultural homophily (McPherson et al. 2001) positively influences the cultivation of relation-specific skills. Future research should shed more light on this assumption.

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