CHAPTER 3: THE ANALYTICAL FRAMEWORK

3.1 INTRODUCTION

This chapter develops a framework to guide the analysis of *how* and *why* the hybridization profiles of four automobile subsidiaries in India differ from or resemble each other. With regard to the *how-question* the framework adopts and adapts Boyer's (1998) concept of different hybridization outcomes. These comprise: localization, hybridization, imitation and customization/novelty. Regarding the question of *why* different cases differ from one another this analytical framework suggests, as a starting point, a fourfold embeddedness of the subsidiary's production system under research. It is argued that subsidiaries are simultaneously embedded in a host country and parent company context (Rosenzweig and Singh, 1991) as well as in a strategic and institutional context. Starting from here it is assumed that hybridization outcomes rest on three interlinked steps that can vary (Beechler et al., 1998). These comprise: different transfer scenarios, different misfits/recontextualization pressures and different recontextualization modes (Beechler et al., 1998; Westney, 1987). Based on the research gaps identified above, it is argued that hardly any contribution has so far looked at the influence of both strategic and institutional fits/misfits on hybridization. Moreover, hardly any work has systematically looked at the question of how foreign parent strategic choices on the corporate and subsidiary level interact with transfer scenarios, contextual fits/misfits and recontextualization modes to influence hybridization outcomes. It is for this reason that four firms are selected denoting polar opposites with regard to their generic strategies and entry modes. How strategic choices as well as subsidiary specific strategic and institutional contexts play together to form hybrid outcomes is left open to exploration. Nonetheless, this chapter identifies broad dimensions of influence on hybridization outcomes.

This chapter is structured as follows: In a first step, a working definition of the unit of analysis – an automobile production system – is proposed. The hybridization outcome across the defined dimensions of the production system are the basis to determine the hybridization profile. Secondly, a typology is introduced to capture different possible hybridization outcomes (*how-question*). Finally, major factors that influence the hybridization outcomes are proposed (*why-question*).

3.2 UNIT OF ANALYSIS

The *unit of analysis* of this research project is the production systems of four automobile subsidiaries in India. The core goal is to identify, compare and explain the hybridization profiles of their production systems. Instead of identifying the hybridization profiles by asking if predefined aspects of a production template or model (e.g. the Japanese) were successfully applied or adapted (e.g. Abo et al., 1994), this project turns the identification of hybridization profiles upside down by asking about the contextual origins of the organizational configuration on functionally predefined dimensions of a production system. In such an approach transfers and adaptations are still relevant for the identification of the profile. However, this approach allows seeing hybridization profiles also as a result of more or less deliberate non-transfer. If, for example, a certain dimension of a production system is not targeted by transfer, it may either be locally constituted or neither locally nor foreign constituted. This perspective stresses the possibility that firms do not always undertake the transfer of clearly defined production templates. Instead, they may be very selective with regard to what they transfer, depending on particular strategic and institutional context conditions of their subsidiaries. The advantage of this approach is that instead of defining some abstract transfer model in advance – as is often the case in the Japanisation literature – that may or may not exist, a more functionalistic stance is taken by defining core dimensions of a production system and by trying to identify, what is transferred from where and what contextual origin a certain production system dimension reflects. However, before we come to understand the different possible outcomes that can establish a hybridization profile of a production system we first need to identify a production system's core dimensions.

DIMENSIONS OF A PRODUCTION SYSTEM

Defining a production system is no easy task as the question arises how comprehensively or detailed it should be defined. Trist, one of the leading thinkers of the socio-technical approach, stresses that researching a production system as a functioning whole always calls for a consideration of both the social and the technical components of a system (Trist, 1975: 201). In the early works of the socio-technical school the term 'primary work systems' takes the centre stage. A primary work system is understood as an operative subsystem of an organization. It centers on a functional task that assures system reproduction trough input-output transformations. Most importantly, a primary work system consists of a technical and a social subsystem and the relation between the two is a major field of inquiry (Trist, 1981: 7). By the same token, 'work organizations' are not just social systems but social and technical systems "where the substantive factors – the people and the equipment" interact (Trist, 1981: 10). Moreover, the use of the system term is a deliberate choice of what can be called an open system approach (c.f. Trist, 1981:12). The term stresses various kinds of

interdependencies inside the system as well as between the system and its environment. The latter mainly concerns input and output relations between the system and its environment. In its original focus the socio-technical system approach has only organisational subsystems – primary work systems – in mind. Subsequently, however, the idea of socio-technical systems is broadened and applied to organizations as a whole (Emery, 1959; c.f. Sydow, 1985: 27). According to Trist such 'whole organization systems' would be:

> *At one limit […] plants or equivalent self-standing workplaces. At the other they would be entire corporations or public agencies. They persist by maintaining a steady state with their environment. (Trist, 1981: 11)*

While the socio-technical approach is a helpful stepping stone towards a holistic definition of a production system, there is some lack of clarity with regard to its terminology and definitions that render the concept's operational usefulness problematic. Sydow (1985: 27) shows that even core terms of the approach lack a clear definition. In a comprehensive review of the approach Sydow finds that the key-term 'social system' generally refers to the members of an organization – including their entire personality – and the relations of interaction among them. While Trist applies the term to whole work roles of individuals others define the term to comprise a psychological system, mainly referring to attitudes and values. Emery (1959) understands the 'social system' as occupational roles, their structure, methods of payment, the supervisory relationship and the work culture etc. Similarly a 'technical system's' definition varies substantially. According to Sydow (1985), early studies limit the use of the term to technology. In later studies other aspects are included (c.f. Sydow, 1985) such as: the level of mechanization/automation, unit operations, the temporal-spatial scale of the production process, the material, the degree of centrality of the various productive operations, the character of the maintenance and supply operations, the immediate physical work setting (Emery, 1959), the information needed (Davis, 1971), the whole transformation process or the totality of requirements organisational members are facing (Susman, 1976).

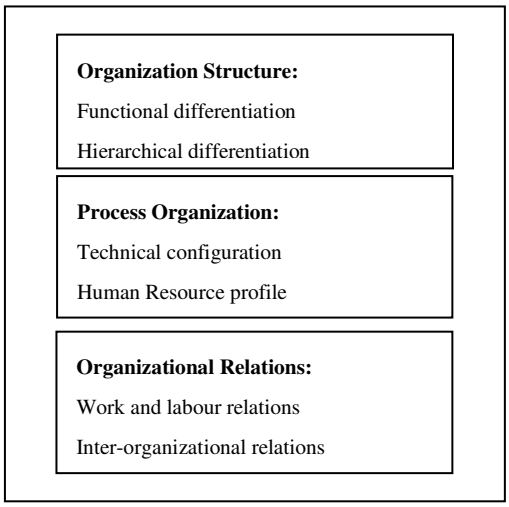
More recently, Sorge (1993) takes up the notion of a 'socio-technical work systems' and redefines them in a more comprehensive manner. According to him, work systems comprise four main components: organization structure, process organization, technical equipment, human competence (Sorge, 1993: 550). The *organization structure* indicates how comprehensive systems are differentiated by function, geographic location, products and markets into subsystems. The *process organization* indicates how inputs of various kind move through the system and are transformed into outputs. The transformative process is based on a specific combination of the technical equipment (tools, machines, aggregates) and the human competence (know how, knowledge, social dispositions, and mentality). According to Sorge, the organization of work, the work organization, together with technical equip-

ment and human qualification form the core of a work system. Sorge (1993) sees organizations such as firms, corporations or even divisions within companies as work systems that are furnished with a particularly high degree of autonomy and demarcation. The social and economic relations – work relations – between such demarcated and autonomous work systems (organizations) are defined by him as 'inter-organizational relations'. In contrast, the work relations within autonomous work systems are defined as labor relations. According to Sorge (1993), work systems, inter-organisational relations, and labor relations cannot be told neatly apart. For they partly consist of or interpenetrate each other.

The following definition of a 'production system' draws on the socio-technical school's and Sorge's concept of work systems. Based on this, a *production system is defined as a system that manufactures a specific product or a range of products,* which constitutes its primary task (e.g. parts, components or finished products such as automobiles as in this research case). The production system comprises an *organization structure* (i.e. functional units and hierarchical levels) and a *process organization.* The *process organization* is constituted by the interplay between a production system's *technical configuration* (physical infrastructure of plant, factory layout, aggregates, machines, tools, levels of mechanization, automation and flexibility, temporal-spatial organization of material flows) and *human resource profile* (skill levels, qualification, attitudes). These together define the *work organization*. Moreover, in line with Sorge (1993), two crucial relational aspects are looked at that closely interpenetrate and partly constitute a production system. These are: work and labor relations as well as inter-organizational relations (mainly supplier relations) (see figure 2). *Work and labor relations* appear particularly important to look at because smooth work and labor relations are seen as crucial ingredients – if not a sine qua non – for the functioning of modern production systems, particularly to implement high workforce involvement concepts. For where production models depart from traditional Taylorist modes and rely on the involvement of a polyvalent workforce, excellent work relations take on a facilitating role. The level of *inter-organisational relations* looked at in this work are pragmatically derived. Based on the selected research focus, the analysis is restricted to those relations that revolve around the primary task, i.e. the core material inputs to the production process. Therefore, the concentration lies on major aspects of *supplier relations of the automobile manufacturing sites*. This implies both relations that may be under one corporate legal structure and relations that are constituted by legally distinct entities. In short, the center of attention is on the character of *internal and external supplier relations*. This restricted focus on inter-organizational relations not only is justified on the ground of the research goal but is also based on the view that the success of production systems in the automobile industry is increasingly attributed to the structuring and process organization of supplier relations, i.e. essentialy the whole supply chain (Taylor and Brunt, 2001). What is more, the reshaping of the division of labor between final assemblers and suppliers, to the extent of even integrat-

ing suppliers on site for final assembly, blurs the line between an 'external' supplier and the core production system itself (i.e. if defined by spatial boundaries) (c.f. Camuffo, 2002). In other words, in the automobile industry the final assembler plays a diminishing role regarding the scale and scope of his contributions to the transformation and value creation (e.g. through modularity and increased outsourcing to suppliers who are operating on or off final assembly sites) of the finished product (Camuffo, 2002). This calls for an inclusion of supplier relations in an overall definition of a production system.

Figure 2: Dimensions of a production system



3.3 THE HOW-QUESTION: IDENTIFICATION OF DIFFERENT HYBRIDIZATION OUTCOMES

Asking how the contextual constitution of subsidiary production systems differs is about identifying different contextual origins in their configuration. The literature review above offers different concepts, how we can capture a subsidiary's contextual constitution. As we saw approaches from IB are utterly weak in typifying or describing to what extent organizational forms and practices reflect different contextual origins. For the most part, such typifications are dichotomous and vary between global and local solutions with little explicit consideration where they originate from. The IB literature practically offers no conceptualization to describe hybrid organizational forms. The same holds true for American Institutionalism, with the exception of Westney's (1993) work. European Institutionalism in contrast, details specific hybrid outcomes but fails, with exception of Boyer's (1998) work, to develop a systematic typology to capture different kinds of contextual constitution. While the Japanization literature, most notably the work of Abo et al. (1994), started to develop such typifications, it is probably Boyer (1998) who developed the most systematic classifi-

cation to capture the different contextual origins of production systems. We will therefore draw on Boyer's framework with some minor adaptations. In line with Boyer (1998), we can imagine four ideal-types of how subsidiary production systems and their dimensions can be contextually constituted (see table 10). These ideal types include: imitations, hybridizations, customizations/novelties and localizations. Specifically, a subsidiary or the different dimensions of its production system can:

1.) resemble a transferred foreign parent context organizational-template (*imitation*),
2.) resemble a local/host context organizational-template (*localization*),
3.) resemble both a transferred foreign parent context organizational-template and a local/host context organizational-template (*hybridization*),
4.) resemble neither a transferred foreign parent context organizational-template nor a local/host context organizational-template (*novelty/customization*).

Table 10: Different hybridization outcomes

Contextual origin		Local / host	
		Yes	No
Foreign parent	Yes	Hybrid	Imitated
	No	Local	Customized / novel

3.4 THE WHY-QUESTION: EXPLANATORY DIMENSIONS

TRANSFER, (MIS)FIT AND RECONTEXTUALIZATION

Drawing on Beechler et al.'s (1998) and Westney's (1987) work, it is argued in this analytical framework that an understanding of hybridization outcomes rests first of all on the dynamic relation between three crucial factors: The kind of transfer scenario, the kind of (mis)fit/recontextualization pressure and the kind or mode of recontextualization. Let us look at these factors respectively.

TRANSFER SCENARIOS

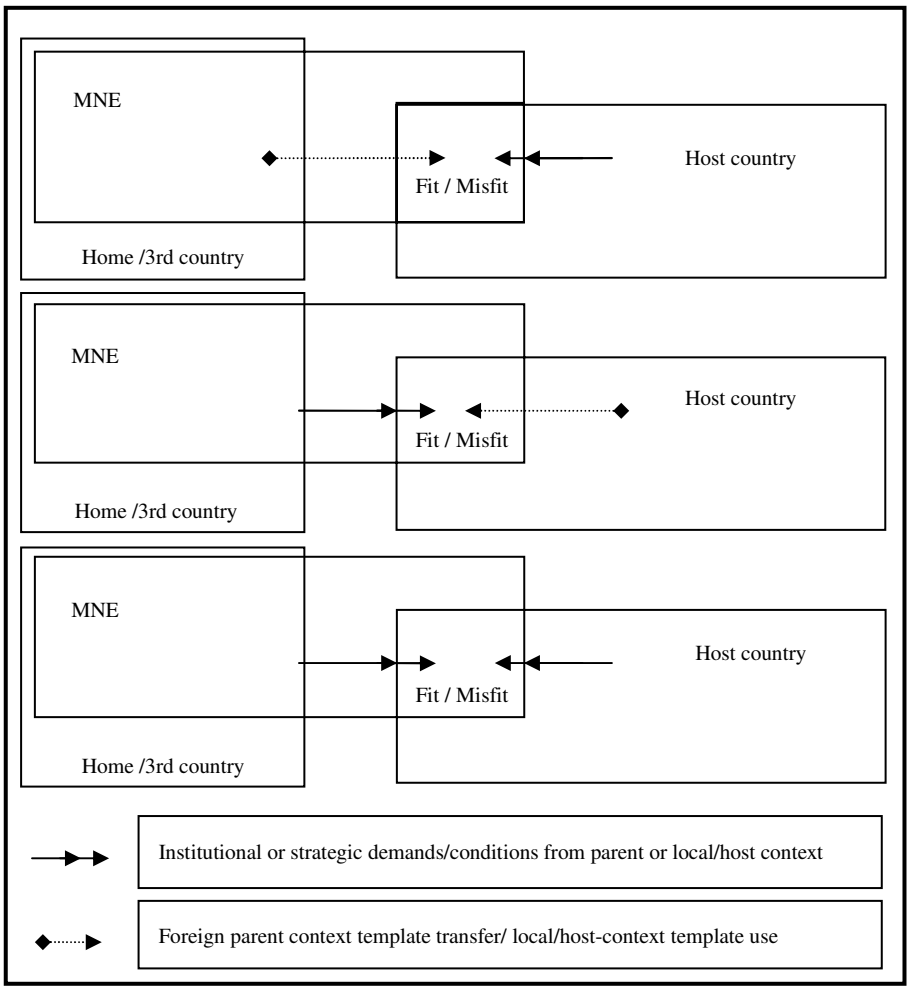
To explain the different hybridization outcomes it is crucial to understand that there are different starting points that strongly affect them. It is theorized that there are three ideal typical transfer scenarios: A foreign parent template transfer, a host/local template use or neither a foreign parent template transfer nor a local/host template use. The first principle starting point is the transfer of a foreign parent template (e.g. from the home or a 3rd country site). A second principle starting point is the use of a local/host context template (e.g. from the local parent). There is, however, also a third principle starting point defined by the

absence of a foreign parent context template transfer as well as the absence of a local/host context template use. Such an absence of a defined foreign parent and local/host context template does not mean, however, that the local production system does not have to respond to different foreign parent and host/local demands and conditions. A production system template is understood here as a coherent organizational pattern or structure that either exists or is defined as an ideal to configure some or all dimensions of a production system. In contrast to templates, demands are expectations vis-à-vis the local production system that vary much more with regard to their explicitness and coherence in defining a desired configurational state of the production system. Often demands may just involve pressures or expectations to achieve a certain result (e.g. local content rates) rather than defining a coherent organizational pattern or structure to achieve such a result.

(MIS)FIT/RECONTEXTUALIZATION PRESSURE

The different transfer scenarios can face *different kinds of fits or misfits* which influence the hybridization outcomes. In the first transfer scenario, the foreign parent template may either fit or misfit the local/host context conditions and demands. Depending on the misfit, the transferred template will be subject to pressures for recontextualization. Conversely, in the second transfer scenario, the local/host context template can either fit or misfit the foreign parent context conditions and demands. Again depending on the misfit, the local/host template will be subject to pressures for recontextualization. In the third transfer (or rather non-transfer) scenario there neither is a foreign parent context template transfer nor a local/host context template use. However, even in this scenario we can picture fits and misfit (see figure 3) between the local/host-context conditions and demands and foreign parent-context conditions and demands. In this scenario, the local production system possibly faces (more or less contradictiory) contextualization pressures from the foreign parent and/or the local/host context in the form of demands and conditions that need to be accomodated.

Figure 3: Different kinds of (mis)fits



MODES OF RECONTEXTUALIZATION

The final step in understanding different hybridization outcomes involves asking how different misfits and corresponding (re)contextualization pressures are resolved or responded to.

Let us start again with the first transfer scenario. If the foreign parent template fits well with local/host context conditions and demands and there is basically no recontextualization pressure. Therefore, we can expect a smooth transfer and imitation of the foreign parent template. However, if there is a foreign template misfit and a corresponding recontextualization pressure, there are three modes of recontextualization imaginable. The first mode is

to adapt the foreign template to the local/host context. That is, some or all aspects of the foreign parent template are adapted – selected/deselected, changed or created/added – to fit the local/host context conditions and demands. Here we can imagine outcomes ranging from hybrid to local solutions (possibly even novel) depending on how much the foreign parent template is adapted to the local/host context. The second mode of recontextualization involves overcoming the foreign parent template's misfit by adapting – selecting/deselecting, changing or creating – the host/local context to the foreign parent template. Depending on the extent to which the host/local context demands and conditions are adapted, we can imagine outcomes ranging from hybrid to imitation. The third form involves both an adaptation of the foreign parent template as well as of the host/local context demands and conditions with hybridization as the most likely outcome here.

Starting from the second transfer scenario there is a similar range of modes of recontextualization thinkable. On the one hand, there may be a good fit between the local/host template and foreign parent context demands and conditions. If there is such a fit, the local/host context template is not likely to face much recontextualization pressure and we are likely to see a local outcome as a consequence. Things are different, on the other hand, if there is misfit and recontextualization pressure. The first mode of recontextualization involves an adaptation – selection/deselection, change, and creation/addition – of the local/host context template to fit the foreign parent context demands and conditions (or maybe even the requirements of a parent template). Here we can imagine results ranging from hybrid (possibly even novel) to almost full imitation as an outcome – where not much is left of the local/host context template – depending on its adaptation to foreign parent demands. Conversely, the second form involves an adaptation – selection/deselection, change, creation/addition – of parent context conditions and demands. In this case, we can imagine results ranging from hybrid to a continuation of local solutions – where not much is changed of the local/host context template – depending on how much foreign parent context demands and conditions are being adapted. The third form of recontextualization is again a combination of the first two with the most likely result being hybrid outcomes.

Finally, we can imagine a third transfer scenario. In this scenario neither a foreign parent context template is transferred nor is a host context template being used. There may be, however, different contextual conditions and demands to be met. To the extent that foreign parent context demands fit local/host context conditions and demands and vice versa, there is not any recontextualization of either required. The local production systems may be simply created, i.e. contextualized, to meet these demands and conditions. However, it is not easy to determine ex ante, if these organizational set-ups will resemble a typical foreign parent context (imitation) template, a host/local context (localization) template, both or none. Some aspects may be created in line with foreign parent demands and conditions in the absence of contradictory local/host context demands, which can – but does not have to – mean that they resemble imitated solutions. They may as well be just customized to foreign

parent context demands and conditions not reflecting any particular foreign parent template or pattern. In turn, some aspects may be created in line with local/host context demands and conditions in the absence of contradictory foreign parent context demands, which can – but does not have to – mean that they resemble local solutions. They may as well be just customized to local/host context demands and conditions not reflecting any typical host context template. Things become even more unpredictable under the scenario where foreign parent context demands misfit/contradict local/host context conditions and demands and vice versa. However, again two principle modes of recontextualization and their combination are possible. In line with this reasoning local/host context conditions and demands may be adapted to *foreign parent context demands* as much as the foreign parent context demands may be adapted to local/host context conditions and demands. In the first case, we would be more likely to see possible variations in organizational set-ups between imitated to hybrid or customized solutions and in the second between local to hybrid or customized. In turn, foreign parent conditions and demands may be adapted to *host/local context demands* as much as the local/host context demands may be adapted to foreign parent context conditions and demands. The former involving for the local subsidiary likely outcomes between local to hybrid or customized and in the latter between imitated to hybrid or customized. It is important to note that customized solutions are in all cases possible where demands are involved. Organizations following the demands of a particular context may develop organizational forms that come to reflect a typical template of that context. It is also possible, however, that something customized/novel comes about as demands may just define certain goals without defining the organizational means to achieve them (see table 11 for an overview). Novel solutions are probably most likely when an organizational set-up responds to contradictory contextual demands and conditions at the same time (c.f. Westney, 1993).

Table 11: Different transfer scenarios, misfits, recontextualization modes and outcomes

Is there a foreign parent template?														
Yes					No									
Is the foreign template transferred?					Is there a local template?									
Yes		No			No					Yes				
Does the foreign parent template fit the host/local strategic/institutional context conditions and demands?					Do host/local strategic/institutional context conditions and demands fit foreign parent strategic/institutional context conditions and demands?					Does the local template fit the foreign parent context strategic/institutional conditions and demands?				
Yes (fit)		No (misfit)			Yes (fit)			No (misfit)		Yes (fit)		No (misfit)		
Form of recontextualization?														
Foreign parent template adaptation not needed ⇒ no adaptation of local/host context conditions and demands		No/hardly any foreign parent template adaptation ⇒ adaptation of local/host context conditions and demands	Foreign parent template adaptation as well as ⇒ adaptation of local/host context conditions and demands	Partial or complete foreign parent template adaptation ⇒ hardly/no adaptation of local/host context conditions and demands	Set up of production system or parts thereof to meet foreign parent context and/or local/host context demands conditions ⇒ adaptation of local context in line with demands and conditions	Set up of production system or parts thereof to meet foreign parent-context demands and conditions ⇒ adaptation of local/host context demands and conditions	Set up of production system or parts thereof to meet foreign parent context and local/host context demands/ conditions ⇒ adaptation of both local/host context and foreign parent context demands and conditions	Set up of production system or parts thereof to meet local/host context demands and conditions ⇒ adaptation of foreign parent context demands and conditions	Local/host template adaptation is not needed ⇒ no adaptation of foreign parent context demands and conditions	No/hardly any local/host template adaptation ⇒ adaptation of foreign parent demands and conditions	Local template adaptation as well as ⇒ adaptation of foreign parent context demands and conditions	Partial or complete local template adaptation ⇒ hardly/no adaptation of foreign parent demands and conditions
Outcome														
Imitation (Local)	Variation between imitation and hybrid	Hybrid	Variation between hybrid and localization		Variation Imitation / localization or customized	Variation between Imitation/ hybrid or customized	Variation between hybrid or customized	Variation between localization/ hybrid or customized	Localization (Imitation)	Variation between localization and hybrid	Hybrid	Variation between hybrid and imitation		

Understanding the hybridization outcome implies as a first crucial step to conceive of the variations in starting points, variations in (mis)fit and corresponding recontextualization pressures as well as variations in modes of recontextualization (see figure 4).

Figure 4: Dynamic triad of transfer scenarios, (mis)fits/recontextualization pressures and modes

Different transfer scenarios:	**Different (mis)fits / recontextualization pressures between:**	**Basic recontextualization modes:**
Foreign parent context template	Foreign parent template and local/host context	Adaptation of foreign parent context templates, demands and conditions
Local/host context template	Local/host context template and foreign parent context	Adaptation of local/host context templates, demands and conditions
No template, but demands	Foreign parent and local/host context	

STRATEGIC AND INSTITUTIONAL CONTEXT AND DISTANCE

To take the analytical framework presented above a step further, we need to ask about the grounds for different (mis)fits as well as transfer scenario and recontextualization mode choices. This work proposes that contextual distance plays a key role for hybridization outcomes because it affects both transfer scenarios, misfits and possibly also recontextualization modes. Drawing on the literature discussion earlier, the dominant focus has been on the institutional (cultural) distance between the source context and the destination context (of a transfer or demand). In contrast, the role of strategic distance between the source context and the destination context (of a transfer or demand) has received much less attention. Furthermore, rarely has the impact of both strategic and institutional distance been conceptualized as different kinds of contextual distance affecting hybridization outcomes. Whether the institutional or strategic distance is more relevant for certain dimensions of a production system will be left open to exploration. It is important to understand, however, that a subsidiary's institutional and strategic embeddedness may differ from those of other units in the MNE and that this difference impacts, in turn, transfer scenarios, (mis)fits/recontextualization pressures and modes.

THE INSTITUTIONAL CONTEXT DIMENSION

The Labor Process wing of the Japanization debate and Institutionalist approaches have largely looked at the transferability of organizational forms and practices from one institutional context to another. The major focus has been on the role of national institutional contexts – be they conceptualized as different expressions of capitalist relations, different institutional complexes of habitual regularities or different cognitive, normative and regulative frameworks. The basic reasoning is that firms or their organizational forms and practices are embedded and grow out of distinct institutional contexts. As such, their functioning is inextricably linked to a specific institutional context (c.f. Kostova, 1999). In other words, organizations and their elements are institutionally constituted. While European institutionalists have focused for the most part on institutional systems at the national level, more recent studies in this research tradition have extended the focus. In these studies the relevance of institutional conditions at the organizational level has also been recognized. Now, when foreign parent templates are transferred to a different local/host (local meaning here essentially the organizational) institutional context, chances are that misfits emerge between what the transferred templates (based on the source unit/country of origin context) institutionally require and what the local/host context conditions of the subsidiary (based on the target unit/country of destination) institutionally offer or demand. This is mainly because production system templates rely, albeit to different degrees, on specific institutional conditions, which may or may not be available in a local/host context of a subsidiary. Put differently, the misfit depends on the degree to which transfer templates depend on specific institutional contexts and the degree to which the receiving context provides such institutional conditions and favorable demands. Further, it is assumed that the recontextualization mode, the question whether an institutional distance induced misfit leads to an adaptation of the transfer template or to an adaptation of the local/host context, is linked to the interplay between the *willingness and ability* of a foreign parent to invest resources and the *nature and resilience* of the receiving (local/host) institutional context. What is more, the *institutional distance* may not only induce the misfit and potential recontextualization pressure after a transfer took place, but may impact the *transfer scenario* in the first place. If, for example, institutional conditions in the local/host contexts are very distant but rated advantageous, the foreign parent may refrain from template transfer and draw on a local/host template. Similarly, if institutional conditions in the host/local contexts are very distant but rated not very conducive in the face of the institutional requirements of a foreign parent template, the foreign parent may also refrain from its transfer. Thus, *institutional distance* is likely to impact the transfer scenario.

A large institutional distance is likely to cause transfer restraints and induce recontextualization pressures on transferred templates. We can conclude, therefore, that *transfer scenarios* and *needs for recontextualization* vary because: *there can be more or less of an institu-*

tional-contextual distance between the origins and destinations of a transfer template. It should be added that the institutional distance is not only relevant for the fit/misfit between a foreign parent template and local/host context conditions and demands. There may as well be an institutional distance between a local/host template and foreign parent demands and conditions, causing misfits and recontextualization pressures.

DEFINITIONS

Institutional distance is defined here as the difference between a foreign parent's local/home or local/3rd country site institutional context conditions and the local/host country institutional context conditions of the subsidiary under investigation. An *institutional misfit* is defined here as the mismatch/incompatibility between what a transferred template institutionally requires or is designed for, and what the local/host context institutionally offers or demands or alternatively as the mismatch/incompatibility between what a local/host template institutionally requires or is designed for, and what the foreign parent context institutionally offers or demands. Or in more simple terms, an *institutional misfit* is defined here as the mismatch/incompatibility between foreign parent templates or demands and the local/host institutional context conditions of a subsidiary or alternatively as the mismatch between local/host templates or demands with institutional context conditions of the foreign parent. Drawing on Sorge (2004), *institutions* are understood here as habitual regularities. At the level of a country or the societal level such habitual regularities find expression in differentiated yet 'reciprocally interdependent' institutional domains (Sorge, 2004). Firms and organizations are institutional domains themselves and are in an interdependent relationship with other institutional domains such as education systems, industrial relation systems etc.. The relevant institutional context for an organization in this approach is pragmatically derived, depending on 'reciprocal interdependencies' between the focal organization and other institutional domains. Such a pragmatic approach is also applied in this research context. Adopting and adapting earlier Societal Effect research in the manufacturing sector (Maurice et al., 1980), it is suggested that family structures, social stratification, education systems, industrial as well as supplier relations systems form core institutional domains that are in an interdependent relationship with a productions system's configuration.

The Societal Effect approach's insight to capture institutional context conditions is used here for three reasons. First, it belongs to the core strength of the framework that the mutual constitution of different institutional domains is theorized (Sorge, 2004). The approach underlines the 'reciprocal interdependence' (Sorge, 1995a: 115) between different institutional domains (e.g. the work organization in firms is linked, for example, with vocational training systems and vice versa). This allows us to absorb some of the criticism that has been voiced against institutional perspectives with regard to their (lacking) conceptualization of the organizations' ability to act on their environment (Saka 2003). For, if taken seri-

ously, the tenet of 'reciprocal interdependence' implies that organizations are not only constituted by their contexts but simultaneously constitute them. Second, from an empirical point-of-view, the Societal Effect contributions are particularly suited for this research context as they are empirically rooted in the manufacturing sector. As a concomitant those institutional aspects have been highlighted that are closely interrelated with the structuring of production systems in manufacturing operations (e.g. Maurice et al., 1980; Sorge and Warner, 1986). Third, the approach suggests an open approach as to what relevant institutional contexts are. This allows the researcher to discover in the research processes relevant institutional domains that have not been considered before.

THE STRATEGIC CONTEXT DIMENSION

The IB literature and also the Lean Production stream of the Japanization literature has largely ignored the institutional embeddedness of production system templates as well as the fact that institutional distance influences transfer scenarios and causes misfit induced recontextualization pressures. Moreover, there has also been little systematic attention to different recontextualization modes. In areas where institutional contextual misfits could not be entirely denied, it has been suggested that MNEs can adapt – select, change and create – contexts to their liking. This generally implied that only one mode of recontextualization has been considered, that is the adaptation of local/host institutional contexts to the foreign parent template, conditions and demands. Put simply, transfer contents do not necessarily change or have to be changed in the face of institutional contextual distance and misfit. Global or local solutions seem to be decided on rational strategic grounds with little concern for institutional mismatches upon arrival. Strangely, not even the growing body of Knowledge Transfer literature in IB has come to acknowledge the crucial role of institutional barriers to transfer. However, while there seems to be some underlying conviction about the global transferability and imitability, if strategically required, the IB literature and the Lean Production body of the Japanization literature can be read to suggest that there are strategic contextual misfits that affect transfer scenarios and misfits/recontextualization pressures. These impacts on transfer scenarios and needs for recontextualization mainly derive from different strategic roles, one could also say from the different strategic contexts of subsidiaries in MNEs. Specifically, from strategic contextual differences with regard to the task profiles as well as the demand and supply market conditions of subsidiaries.

Adopting the IB literature's differentiated network perspective of the MNE, in which subsidiaries are seen to take on different and evolving roles (Birkinshaw, 2000) has three important implications for our understanding of transfer scenarios and recontextualization dynamics in subsidiaries. First, the differentiated-network perspective allows us to envision many more transfer origins than have commonly been considered in Japanization and Institutionalist approaches. In such a perspective, the parent is but one transfer source: other

subsidiaries and even other organizations, as part of local networks, come into the picture here. Second, by adopting a subsidiary perspective, we can see subsidiaries not only as instruments of the corporate parent but as actors in their own right, more or less resourceful and capable, needy and greedy for transfers. This also allows considering local transfer initiatives as much as changing transfer propensities and pressures for recontextualization as subsidiaries and their environments evolve over time. Thirdly, and probably most importantly, seeing subsidiaries with Birkinshaw (2000) as differentiated by their role, *defined as differences in resource/capability endowments and differences in charters* (i.e. *defining the latter as shared understandings between the subsidiary and the HQ regarding markets served, products manufactured, as well as functional areas covered*) suggests different transfer scenarios and misfits/recontextualization pressures on strategic grounds.

If a foreign parent template is transferred from one subsidiary to another, chances are that a strategic misfit emerges between what the transferred production system template was strategic contextually optimized for – with regard to task profile and supply/demand market conditions – and what the receiving subsidiary's strategic context offers or demands. This is the case because production systems rely, albeit to different degrees, on specific strategic conditions, which may or may not be present in the receiving local/host context. Put differently, the misfit depends on the degrees to which the transfer content depends on specific strategic contexts and the degree to which the receiving context offers similar strategic context conditions. We can therefore imagine different degrees of strategic contextual misfit between what a foreign parent production system template is strategic contextually optimized for and the strategic context of a subsidiary. For example, the more specific and distant the task profile of a subsidiary and the more specific and distant the host country market conditions (e.g. quality, quantity and price of input and output factors) from other operations in the MNE, the less likely a transfer of a foreign parent template without recontextualization pressure. Again, the question whether such a distance leads to an adaptation of the transfer template or to an adaptation of the local/host context is linked to the interplay between the *willingness and ability* of a foreign parent to invest resources and the *nature and resilience* of the local/host strategic context. It is important to note that the strategic distance may not only cause a misfit, a recontextualization pressure on what has been already transferred, but may influence the *transfer scenario* in the first place. If, for example, strategic conditions in the host/local contexts are very distant but rated advantageous (e.g. low labor costs) the foreign parent may refrain from template transfers and draw on a local/host template or a locally customized solution instead. Similarly, if strategic conditions in the host/local contexts are very distant but rated not conducive, given the strategic contextual requirements of a foreign parent template, the foreign parent may refrain entirely from its transfer. Thus, the strategic distance is likely to impact transfer scenarios.

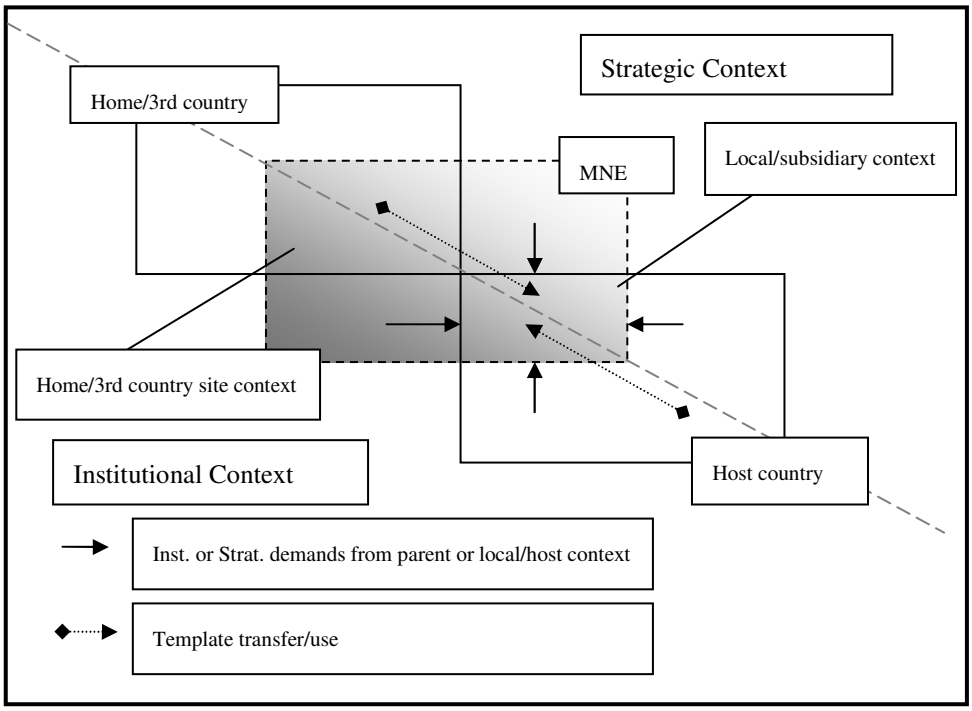
A large strategic distance is likely to cause transfer restraints and induce recontextualization pressures on transferred templates. Parallel to the reasoning on the institutional dimension

we can imagine that transfer templates can be more or less dependent on the strategic context of subsidiaries, defined by task profiles, capabilities/resources and supply/demand market conditions. We can, therefore, conclude that *transfer scenario* and *recontextualization needs* are likely to vary because: *there can be more or less of a strategic-contextual distance between potential origins and destinations of transfers.* It should be added, that the strategic distance is not only relevant for the (mis)fit between the foreign parent template and the local/host strategic context conditions and demands. There may as well be a strategic distance between the local/host template and the foreign parent strategic demands and conditions causing a misfit and recontextualization pressure.

DEFINITIONS

Strategic distance is defined here as the difference between a foreign parent's local/home or local/3rd country site strategic context conditions and the local/host country strategic context conditions of the subsidiary under investigation. A *strategic misfit* is defined here as the mismatch/incompatibility between what a transferred template strategically requires or is designed for, and what the local/host context strategically offers or demands or alternatively as the mismatch/incompatibility between what a local/host template strategically requires or is designed for and what the foreign parent context strategically offers or demands. Or more simply, a *strategic misfit* is defined here as the mismatch/incompatibility between foreign parent templates or demands and the local/host strategic context conditions of a subsidiary or alternatively as the mismatch between local/host templates or demands with strategic context conditions of the foreign parent. Drawing loosely on Birkenshaw (2000), *strategic contexts* are defined as the task profiles of firms – constituted by markets served, quality and quantity of products manufactured, as well as functional areas covered – and their supply and demand market conditions – quality, quantity and price of supplies/inputs and quality, quantity and price demands for outputs. Clearly, task profiles of firms and market conditions mutually constitute each other. However, in the case of foreign subsidiaries, the local task profile and the host market conditions can be decoupled from one another as the local site can serve global markets. In the sample of cases researched in this work, this was only marginally the case. The FDI observed was for the most part market-seeking production FDI. In sum, more recent findings from the International Business and the Lean Production literature imply that there are varying transfer scenarios and pressures for recontextualization because subsidiaries in MNEs vary with regard to their local/host strategic context. Subsidiaries can be more or less strategic contextually distant from one another. A subsidiary that features a strategic context similar to that of other sites in the MNE, is much more likely to receive production system templates from those sites and face much less recontextualization pressure upon their arrival (see figure 5 summarizing core ideas of the analytical framework).

Figure 5: The fourfold embeddedness of the local subsidiaries' production systems



STRATEGIC CHOICES: GLOBAL PRODUCT STRATEGY AND ENTRY MODE

The final step in this analytical framework is to link the triad of transfer scenario, institutional and strategic (mis)fit/recontextualization pressure, recontextualization mode – and consequently the hybridization profiles of production systems – to strategic choices at the corporate and the subsidiary level. A core argument of this work is that this complex has been only weakly explored so far. It is asserted that specific strategic choices – the generic strategy of the MNE as well as entry modes – strongly interact with transfer scenarios, institutional and strategic (mis)fits as well as with pressures and modes of recontextualization. Furthermore, since we are dealing here with production systems, it is argued that generic strategies, i.e. global product strategies, will be of particular relevance. Without formulating specific propositions, leaving the specific patterns of interaction open to empirical exploration, a number of potential interactions that may impact hybridization outcomes shall be discussed here.

CORPORATE LEVEL: GENERIC STRATEGIES

Porter (1980) distinguishes three generic strategies: The segmentation/focus, the differentiation and the cost leadership strategy. These strategies rest on a demand side dimension – the

choice between a broad or a narrow market scope – and a supply side dimension – the strength or core competency of the firm – mainly varying between product differentiation/uniqueness and product cost/efficiency (see table 12).

Table 12: Porters generic strategies

Strategic strength Strategic scope	**Product uniqueness**	**Product cost (efficiency)**
Broad market scope	Differentiation strategy	Cost leadership
Narrow market scope	Segmentation / Focus Strategy	

Source: Adapted from Porter, 1980

With regard to the relationship between generic strategies and transfer scenarios, contextual misfits and recontextualization modes, the following associations can be asserted: firms whose competitive strategy mainly rest on controlling production costs and who have a narrow market scope, have the highest propensity to develop similar production sites when they internationalize. As the product portfolio does not vary much and cost control takes on a prime importance, there is a high incentive to develop standard production system templates for global operations. This is particularly the case when entry barriers to different markets disallow an export-led internationalization or servicing all markets from global/central hubs. In other words, firms with a *combination of cost leadership and focus strategies* are very likely to define and transfer templates when they engage in FDI. The moderate strategic distance between sites (based on narrow market scope implying similar task profiles and market environments across sites) allows these firms to develop/define standard templates. These firms also have strong incentives to control cost by applying standard templates in different locations. What is more, since contextual distance is moderate or low these firms will face less recontextualization pressure when they engage in template transfer. Finally, as cost control through standard template application forms a central part of their competitive strategy, they will have a strong preference for an adaptation of the local/host context to the foreign template, rather than the other way round. In summary: we can expect firms with a *combination of cost leadership and focus strategies* to have a high propensity to develop/define and transfer foreign parent templates, to face low strategic misfits/recontextualization pressures, to adapt the local/host context to their templates in the case of misfit and to feature high degrees of imitation as outcomes.

This is very much in contrast to what we can expect when firms with a differentiation strategy internationalize. These firms' competitive advantage rests on broad market scope and product uniqueness. Since their sites are likely to be strategically distant from each other – based on more differentiated task profiles and market conditions – and since cost advantage

plays less an important role for their competitive strength, they will also have less incentive to define/develop and transfer standard production system templates. However, when foreign parent transfers occur or demands are made, there is a high chance of strategic misfit and recontextualization pressure because the sites will be very strategically distant. At the same time, these firms may be more flexible and willing to adapt their templates or demands to the local/host context because differentiation and difference is a crucial element of their competitive advantage. In summary: we can expect firms with a *differentiation strategy* – compared to firms with *combination of cost leadership and focus strategies* – to be less likely to develop/define and transfer a foreign parent template, to face more strategic distance between different sites, to face more recontextualization pressures when they engage in transfers, to be more flexible to adapt their templates or demands to the local/host context and to feature a higher incidence of local, hybrid, and customized/novel solutions as a result. Finally, firms that combine *a differentiation and cost leadership* strategy or a *differentiation and focus strategy* are likely to be between the poles of high and low imitation. As will be shown in the next chapter, different generic strategies are one core selection criterion for the sampling of research cases.

SUBSIDIARY LEVEL: ENTRY MODES

The second aspect of strategic choice that has received remarkably little attention is the influence of entry modes – defined as the combination of establishment (Greenfield site vs. Brownfield site) and equity modes (wholly-owned vs. JV) (Pan and Tse, 2000; Harzing, 2002; Dikova, 2005) – on transfer scenarios, institutional/strategic misfits and recontextualization modes (see table 13 for different entry mode combinations).

Table 13: Entry mode combinations

Equity mode **Establishment mode**	**Wholly-owned**	**Joint venture**
Greenfield	Wholly-owned Greenfield	Greenfield JV
Brownfield	Acquisition	Brownfield JV

While there are a few works that have looked at the effects of *establishment modes* on the transferability of organizational practices, there is remarkably little work on how different equity modes affect hybridization outcomes. Regarding the importance of establishment modes for hybridization outcomes Sharpe (1997) has shown, for example, that different levels of institutionalization between Greenfield and Brownfield sites within the same firm strongly influence the ease to transfer templates from institutionally distant origins. Saka (2003) has also stressed the importance of the internal institutional set-ups. Thus, there is

evidence to suggest that Greenfield sites either reduce or mediate institutional distance which reduces, in turn, institutional misfit and recontextualization pressure. In this work it is argued that the establishment mode impacts all components constituting hybridization outcomes including: transfer scenarios, misfits/ recontextualization pressures and recontextualization modes. In contrast to Brownfield sites, Greenfield sites lack existing production systems. Their local institutional contexts and local strategic contexts have to be created afresh. This implies that they are in need of some configuration which increases the likelihood of a template transfer. Moreover, their low level of institutionalization implies a lower contextual distance compared to Brownfield sites which poses less constraints for the transfer of a foreign parent template or the realization of foreign parent demands. By the same token, Greenfield sites are likely to show lower levels of misfit and recontextualization pressures when transfer occurs. Again, lower levels of local institutionalization and strategic context imply that there is less exiting context that can be incompatible with what is being transferred. Finally, even if some misfit occurs, it is comparatively easier to adapt the local context to foreign parent demands and templates because there is a lower level of institutionalization. Thus, in contrast to Brownfield sites, Greenfield sites are expected to have a higher propensity for a foreign parent template transfer, to have lower levels of misfit when transfer occurs, to find it easier to adapt a local context to foreign templates or demands and to feature, as a result, higher degrees of imitation. Conversely, Brownfield sites may require less foreign parent template transfer because of an existing local production system (i.e. an existing local institutional and strategic context). And even if there is no intention to draw on or use the local institutional/strategic contexts of an existing site (e.g. because of institutional or strategic misfit with foreign parent templates or demands), these very same existing conditions may make a transfer of foreign parent templates more difficult and misfit related recontextualization pressures more likely. Finally, in the face of an existing institutional context, an adaptation of the local context to foreign demands and templates is less likely than in Greenfield sites. Thus, in contrast to Greenfield sites, Brownfield sites are less likely to see a transfer of a foreign parent template, will face higher levels of misfit when transfer takes place, will find it more difficult to adapt a local context to the foreign template and will feature higher degrees of localization as an outcome.

However, the establishment mode is only one crucial aspect of entry mode choice to affect the hybridization outcomes. With respect to *equity modes* it is suggested that they impact all components constituting hybridization outcomes as well. It is assumed here that the equity mode has an influence on whose management controls the company and whose management can decide: What is or can be transferred or demanded? What is rated as a misfit and requires recontextualization? And to what extent the foreign parent template/demands/conditions or local/host templates/demands and conditions have to be adapted, rejected or responded to?

Now, in the case of a wholly-owned subsidiary the situation is rather clear. As the foreign parent is in full control we can expect here a higher propensity of foreign parent template transfer and demands as in JVs. At the same time, given the stronger foreign parent transfer and demand propensity, there is also more scope for misfit and recontextualization pressure. However, where misfits and recontextualization pressures occur, foreign parents with full ownership will find it easier to put through their templates and demands without facing the intervening power of a local partner. As a consequence, adaptation of the local context (e.g. local templates, demands) to foreign demands and templates may be a more prevalent re-contextualization mode than in JVs.

In JVs, certainly also depending on whether there is a minority or majority equity of the foreign partner, the situation is different. Here shared ownership increases the number of template sources and demands (local partner vs. foreign partner) that can potentially play into the configuration of a production system. Shared ownership can imply divided responsibilities and the simultaneous impact of different demands and templates. This situation probably increases the chance of hybrid and/or customized/novel outcomes because templates and demands from markedly different contexts may be integrated or observed at the same time.

However, in JVs the equity share of the parties involved may play an important role. For the equity share may be decisive for the question whose management controls the site. For example, if the foreign parent takes a minority position, the foreign parent may be less likely to transfer templates because of fears of knowledge loss or a lacking permission. In this scenario the chance of misfit and recontextualization pressure is also less because there is less foreign parent influence or presence that can potentially cause a misfit and induce recontextualization pressure. Moreover, even if a foreign parent transfer takes place and a misfit occurs, the adaptation of foreign parent demands and templates to the local/host context is more likely because the local parent is in control giving preference to local/host solutions. As a result JVs where the foreign parent takes a minority position will have a high propensity to feature hybridization outcomes between hybrid and local solutions. Thus, the higher the local parent equity, the higher the chance that the site uses local/host templates and responds to local/host context demands, the lower the chance of misfits/recontextualization pressures, the higher the likelihood that foreign parent templates and demands are adapted to the local context in the case of misfit and as a consequence, the more likely localization as an outcome. The opposite is asserted when the foreign parent holds the majority in the JV. If the foreign parent takes a majority position, the foreign parent may be more likely to transfer templates or pose demands because it controls the site. At the same time the chance of misfit and recontextualization pressure is higher because there is more foreign parent influence or presence that can potentially cause a misfit and induce recontextualization pressure. When misfit occurs, the adaptation of the local/host context to foreign parent demands and templates is more likely because the foreign parent is

in power and will give preference to foreign parent solutions. As a result, JVs where the foreign parent takes a majority position will have a higher propensity to feature hybridization outcomes between hybrid and imitated solutions. Therefore, it is asserted that the higher the foreign parent equity, the more likely are we to see the transfer of foreign parent templates and/or the influence of foreign parent demands, the higher the chance of misfit and recontextualization pressure, but also the more likely an adaptation of the local context to foreign parent templates and demands as the dominant recontextualization mode and as a consequence a higher the likelihood of imitation as an outcome.

Referring to entry modes as a whole we can expect – based on the foregoing reasoning – wholly-owned Greenfield sites to feature the highest degree of imitation and Brownfield minority JVs the highest degree of localization. Based on these assumptions, the second important selection criterion of research cases is based on different entry modes. (Figure 6 summarizes the core relations to be explored in this work).

Figure 6: Core relations to be explored in this work