Institutional arrangements

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4.1 INTRODUCTION

This thesis is about studying port-port city relationships. The previous chapters have dealt with clusters and governance. The governance of the port city cluster is not performed in an isolated situation, but within a context. This context is the subject of this chapter, which researches the phenomena that influence the way in which governance takes place. As noted in Chapter 1 (section 1.10.3, footnote 4), policies, systems, and processes that organizations use to legislate, plan, and manage their activities can be seen as institutional arrangements. What we can experience in reality as an outcome of processes of governance is a result of behavior that is defined by institutions, which in turn are influenced by culture. Figure 4.1 illustrates these relationships.
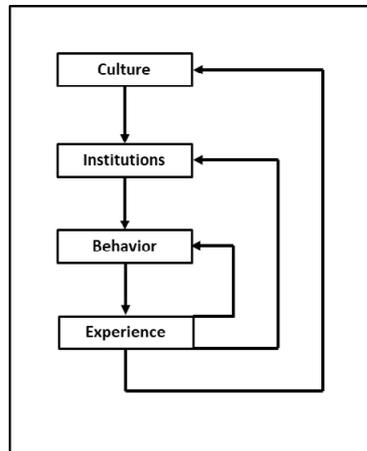

Figure 4.1 Cultural and institutional change (Source: Keizer 2008)

So, institutional arrangements can be studied by taking these elements into account. In this section, the elements institutions and culture of Figure 4.1 are briefly introduced. In section 4.1.1, the concept, institutions, is introduced (manmade rules), and in section 4.1.2 this is further elaborated on by connecting it to the idea of arrangements (manmade rules based on norms and values that govern behavior). As shown in Figure 4.1, these concepts can be related to culture, as discussed in section 4.1.3. In section 4.2, the relationship between institutions and behavior is further elaborated on. In section 4.3, the concept of culture is examined to provide the necessary background for the various institutional arrangements that can be found in port/port city clusters. Because of the lack of obvious operators of culture as a determinant for context, the research needs concepts that give insights into

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how different institutional arrangements express themselves in port/port city environments. In section 4.4, tacit knowledge as a manifestation of institutional arrangements is presented, and in section 4.5 the concept of economy of touch is introduced as another manifestation of institutional arrangements. Both concepts are given considerable attention as they are an important tool to conduct the empirical research regarding the configuration of institutional arrangements in social networks based on shared values.

These shared values play a role in the strength of social networks and the formalization of power as expressed in one of the characteristics of governance in port clusters: the devolution of port authorities. The tacit knowledge and the economy of touch concepts, within the framework of institutional arrangements, complete the theoretical framework. A framework to conduct the research to describe and analyze the differences in relationships between the actors in various port cities.

4.1.1 Institutions

According to Keizer (2008, p. 2), institutions are a set of manmade rules that govern behavior. The context in which a port/port city functions is not a universally existing situation that provides the same circumstances wherever cluster activities are involved. This context, which is determined by manmade rules, has various manifestations based on socio-cultural differences that are spatially distributed. For this thesis, the locus of these institutional structures is molded by the port region of Rotterdam, in the nation-state The Netherlands, the port region of Antwerp in the nation-state Belgium (and important for Belgium, to be precise: the province of Flanders!), and the port region of the city-state of Hamburg in the nation-state Germany. These different regions have different regulatory regimes based on political economic structures that are an outcome of these institutions (but in itself also influence them). Elaborating on this theme will be done in Chapter 5.

4.1.2 Arrangements

In the theoretical framework, these institutional structures are the third important category for studying port–port city relationships, following on from the discussion of cluster development in Chapter 2 and governance in Chapter 3. They are called institutional arrangements: the way in which actors interact because of an, often unspoken, structure of rules and norms, called arrangements, or to quote the *Penguin English Dictionary*: "arrangement" *n,* order, design (Garmonsway, 1969). Scott (2014, p. 358) adds to that: "it is an underlying normative pattern, in terms of which a group is organized." Stevens (1997) sees patterns of rules as a basis for long lasting expectations as institutions, and considers "predictability" as a feature of it

(Stevens, 1997, p.28). For that he implicitly combines the elements of institutions and arrangements in his definition. The institution concept is a topic of interest in various disciplines, from various perspectives. It can be seen as "a set of mores, folkways and patterns of behavior that deals with major social interests" (Scott, 2014, p. 357), and, as further elaborated by Scott, it is not about the group itself, but rather the underlying normative pattern. This normative pattern is defined by culture. These patterns of behavior are formalized (arranged) so that they are recognized by the actors in such a way that they can respond to them. This thesis uses the term institutional arrangement to get a greater grip on the concept of culture that underlies the political-economic context.

4.1.3 Institutional arrangements and culture

Culture is defined in various ways: "systems of meaning, ideas and patterns" (Van Maanen & Laurent, 1993, p. 275). "It is what goes without saying" (Van Maanen & Laurent, 1993 cited in Rosenzweig, 1994, p. 3), to which Rosenzweig (1994, p.1) adds: "there is a lack of clarity." Keizer relates it to the way in which people try to cope with the reality surrounding them and gives it a strong behavioral context: "Culture is a frame of interpretation or worldview of a group. It includes a set of values and norms. A society is characterized by a particular social structure, which means a ranking of groups according to the status they have towards each other" (Keizer, 2008, p. 2). Institutional arrangements as an articulation of culture reveal these interpretations of how a group perceives the world, the type of behavior that is valued as accepted and fruitful. Institutional arrangements as a term also shows that interaction is necessary, it is about relations between actors. This means that this thesis approaches culture from action-related indices that can describe and explain culturally determined (or influenced) behavior. These indices are: 1. tacit knowledge, emphasizing the unspoken character of arrangements; 2. economy of touch, expressing the physical presence of actors; and 3. the political-economic systems in which 1 and 2 are embedded.

4.2 INSTITUTIONS AND BEHAVIOR

Studying clusters and governance is all about studying relationships. Relationships are based on mutual dependence, determined partly by markets and hierarchies (Williamson, 1979) and partly by the system of which they are part, the networks (Klijn & Koppenjan, 2016). So, for research on clusters and governance, it is essential to study relationships and how they emerge and develop. Because, according to Keizer (2008), institutions are a set of manmade rules that govern behavior, it must

be realized that behavior is a result of relationships, two of them with the environment, one of them with oneself. The first relationship is the interrelationship between humans and non-humans (e.g. organizations): the drive to use non-human objects: the economic motivation or force. Humans are assumed to be perfectly rational actors, and economically motivated institutions are at hand to regulate these interactions. From a traditional neo-classical point of view, there is no emotional relationship, there is no culture, there is no feeling, no guilt; so, a political control system (policing agents) must be available to punish extreme deviations. This is the world according to theoretical economists: a world of economic, rational actors. They solve economic problems and that means: reduce scarcity, realize efficiency. This is the perfect economic society associated with Adam Smith (2012). In the extreme, this is the world of John Galt in *Atlas Shrugged*, the famous novel of Ayn Rand (1957).

The second relationship is the interrelationship between humans and other humans: social motivation. It is about maximizing our status in the eyes of socially relevant others. The actors are social beings (Keizer, 2008, p. 9). Institutions are used to minimize the costs of this social battle. They do so by creating stable systems of hierarchically ranked groups. People realize that humiliation of another group could in time backfire on themselves, so we all benefit from a culture that maximizes the lowest level of humiliation (p. 10). This can be related to John Rawls' (1974, p. 142) maximin criterion as stated in his second principle:

> Social and economic inequalities are to meet two conditions: they must be (a) to the greatest expected benefit of the least advantaged members of society (the maximin equity criterion) and (b) attached to offices and positions open to all under conditions of fair equality of opportunity.

The first part of this principle can be considered as the perfect condition for a truly democratic society.

The third relationship is the interrelationship between human and itself: the psychic motivation: to maximize our own status in our own eyes. The tension that needs to be reduced is the one between an individual's desired identity and actual identity. For this thesis, this is not the obvious relationship that should be elaborated on, but given the notion that "the psychic world is surrounded by the economic and the social world" (Keizer, 2008, p. 10), there undoubtedly is an interaction that is not only a downstream one (from economic, via social to psychic), but also an upstream one (the other way around), which in the case of powerful people can have interesting

(sometimes disastrous) effects on economic decisions, as demonstrated in the works of economist and psycho-analyst Manfred Kets de Vries. These three interactions, existing on different levels and expressed by behavior, form a confrontation between these different worlds and must be governed by rules to prevent undesired economic, social, and individual outcomes. This relationship, which can be expressed as shown in Figure 4.1, has checks and balances. Institutions control (govern) the individual actor's behavior, and behavior creates experience as an outcome of it. However, the institutions are also learning and correcting mechanisms influenced by feedback, based on experience; and, as an all-embracing fabric, culture governs these different manifestations of society, but in its turn is influenced by these manifestations. This feedback will have a different response times for the realization of its influence: behavior will respond much faster to the input from experience than culture will.

From this, it can be concluded that behavior is constrained (or fostered) by institutions, consisting of rules made by humans from their different drives: economic, social, and psychic. As stated however, culture is the all-embracing fabric that determines the way in which these manifestations of economic, cultural, and psychic behaviors will be manifested. Furthermore, as cultures vary, institutions and actors' behavior also vary. The next section explores the variety in cultures.

4.3 CULTURE

From the notion that culture is a way of guiding human behavior, following a pattern, many perspectives have been used to elucidate the concept. Hall (1960) used the various 'languages' to describe national culture:

a. The language of time (scheduling or being more fluid);
b. The language of space (personal space);
c. The language of material goods (importance of material possessions);
d. The language of friendship (emphasis on one's personal relationships);
e. The language of agreement (spelled out or a handshake).

Hall approaches these national cultures strongly from the business point of view, and he touches manifestations of probably more profound, but hidden, values behind these languages. To gain more insight into these profound values, the notions of Hofstede (1984) are probably more valuable, grounded in empirical research as they are, but Hall's languages can be related to Hofstede's dimensions, as they are manifestations of these dimensions. Hofstede's notions, although dating back to the 1970s and the 1980s, are still valuable, as scholars still ground their research

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and findings on Hofstede's taxonomy of culture (Schwartz, 1999; Loenhoff, 2011; Trompenaars & Hampden-Turner, 2011).

Being a psychologist, Hofstede (1984, p. 82) defines culture "as the collective programming of the mind which distinguishes the members of one group or society from those of another." For him, culture is the reflection of meanings, the way people look at the world, their values, their beliefs, and their artistic expression. It is a "collective programming shared in the minds of otherwise different individuals and absent in the minds of individuals belonging to a different society" (p. 82). He looks especially at the dimensions of work-related values when describing the different values that actors attribute to interrelationships:
a. Individualism/collectivism;
b. Power distance;
c. Uncertainty avoidance;
d. Masculinity/femininity;
e. Long-term orientation/indulgence.

The last dichotomy, with the dimensions long-term orientation and indulgence, which he considers aspects of Confucianism (and can be seen as diligence, patience, or frugality), were added in a later phase because Hofstede (1980) wanted to incorporate East Asian cultures. His interest in culture stems from the fact that he relates it to management techniques, and the first sentence of his article's abstract makes management's position quite clear: "the nature of management skills is such that they are culturally specific: a management technique or philosophy that is appropriate in one national culture is not necessarily appropriate in another" (Hofstede, 1984, p. 81). Even within the Western approach to managing he observes distinctive differences. These differences are discussed in more detail in relation to political economic structures in Chapter 5 because these differences go deeper than just Hofstede's operationalization. The situation depicted in Figure 4.1 emerges when the dimensions are applied to the three countries where the ports under study are situated.[8]

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8   Note: Hofstede's dimensions are on country level. A citizen of Hamburg can be quite different compared to a citizen of Munich. Still, these dimensions on the aggregate level give a good insight as they are based on a huge amount of data, gathered over a long period.
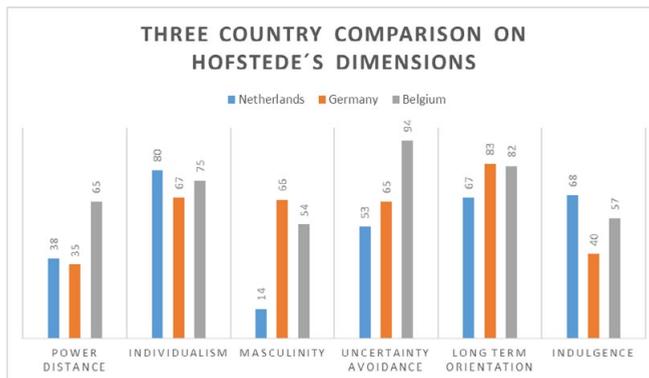
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Figure 4.2 Three country comparison: The Netherlands, Germany, and Belgium (Source: https://geert-hofstede.com/netherlands.html. Retrieved: 6 March 2017)

Hofstede's dimensions can be related to Keizer's (2008) relationships in which human behavior is expressed. The dimensions of individualism, masculinity, and power distance are based on the social world, whereas uncertainty avoidance and indulgence can be considered as aspects of the psychic world. Long-term orientation is then an outcome of a strategy to cope with scarcity and create efficiency. But these dimensions do not exist in isolation. Reality cannot be cut with a razorblade but should be considered as a complex of interacting aspects of these dimensions based on economic, social, and psychic spheres.

To describe different cultures, features of interactions related to Hofstede's dichotomies are sometimes taken as a starting point (Doney et al., 1998). For Doney et al., national culture influences cognitive processes that via behavioral aspects influence trust. By stating that, they tread in the footsteps of Hofstede (1980) who recognized the variable, uncertainty avoidance (which is based on trusting the other). Trust between firms creates a source of competitive advantage (Doney et al., 1998, p. 601). This aspect of trust was dealt with in Chapter 4. Doney et al. acknowledge other aspects like intermediate institutions and organizational, relational, and individual factors, but their focus is on how people anticipate their own assumptions and their assumptions about other people's presumed behavior. Hofstede's dichotomy is the basis of Schwartz' framework. Schwartz (1999) also constructed dichotomies that were empirically tested: embeddedness vs autonomy; hierarchy vs egalitarianism; mastery vs harmony. He approaches the concept of culture from the values that give shape to a culture: "conceptions of the desirable that guide the way social actors (e.g. organizational leaders, policy-makers, individual persons) select actions, evaluate people and events, and explain their actions and evaluations" (p. 24). The fallacy of

using the term, culture, as a kind of bin for explaining everything is for Mitchell (1995) a reason to reject the term, as he fears that its use will justify existing patterns of differences in power. From the Marxist perspective, he thinks that:

- Culture is seen as a material relation;
- Culture is determined by the economy, by consumption;
- Culture is the domain of ideology and, often, hegemony (it reflects the values and ideas of the dominant class).

Mitchell opposes the concept of culture as having an ontological status that has causative power and that can be viewed as a domain. That position could justify the status quo, as he thinks it hides the division of power that is responsible for the inequalities in the world. He considers culture as an outcome of the "struggles by groups and individuals possessing radically different access to power" (Mitchell, 1995, p. 108). However, Mitchell's stand towards the concept of culture is much too dialectic to use it to explain the often-fruitful relationships between groups of actors with, albeit sometimes opposing, mutual interests. Loenhoff (2011, p. 62) defines culture as "a background of common meanings, which are interwoven with a common praxis." He strongly relates culture to the unspoken meanings of language and behavior. For that, he studies intercultural communication as a platform where cultures meet, and he needs the concept of implicit, or tacit, knowledge, because "the ability to frame communication and action as the identification of the context, in which things explicitly known can be applied, is the stuff of implicit knowledge" (Loenhoff, 2015, p. 62).

4.4 A PHENOMENON OF INTANGIBLE AGREEMENTS, THE CONCEPT OF TACIT KNOWLEDGE

4.4.1 Codified and non-codified knowledge

The idea of culture and its influences on behavior and the way in which society is organized brings in the aspects of recognizability, understanding, and measurability. Understanding differences is important in a world where so many cultures meet, not only between organizations, but also within organizations. Although we might think that, within and between organizations, understanding one another's behavior is based on rational principles that can be known, the transaction costs theory shows that the real world is much more complex and has hidden characteristics, known only by the insiders, e.g. the actors who are part of a certain network. Many rules that regulate behavior are codified; but many rules are also very implicit. This implicitness is a problem when behavior is being attributed to certain existing

but non-codified sets of knowledge: the way things are done, mores, or, using the term used to study this, tacit knowledge. It is in this implicitness that differences in culture can often be seen. This is expressed in the concept of tacit knowledge, and therefore it is worthwhile having a look at this phenomenon.

The term, tacit knowledge, was first coined by Polanyi (1966) to explain the acquisition of knowledge by men surrounded by the world of nature. Later, to explore its use as a sustainable competitive advantage, it was more elaborated, for example by Ambrosini and Bowman (2001). They and others (Lam, 2000; Nonaka & von Krogh, 2009; Jones et al., 1997) relate the concept to organizational learning. To define tacit knowledge, they place it in opposition to expressed and obvious knowledge. Objective knowledge is codified; it can be possessed (not restricted to the firm or person/group of persons), and it can be shared. In contrast, tacit knowledge is difficult to write down and is a set of rules not known as such. Tacit knowledge is personal or shared within a specific group. It consists of mental models that individuals follow in certain situations; embedded, so for the user it is natural. It is context specific and deeply rooted in action. This last description is perhaps the most important one. It is in action that tacit knowledge (or the lack of it!) is manifested. The abovementioned authors give this resumé of characteristics based on the literature. Most of them are attributed to several scholars, but in fact Polanyi (1966) had already described them. What is missing, but what Polanyi also acknowledged, is the emphasis on the fact that it is about behavior: knowing how to behave, the mores, knowing what to expect from others. It is about "organized and 'typified' stocks of taken-for-granted-knowledge upon which activities are based and that 'in the natural attitude' are not questioned" (Scott, 2014, p. 100).

So, it should be more conative (on the action). Because it is in actions – what Polanyi (1966, p. 10) calls the distal term – that we can recognize the knowledge "that we may not be able to tell". It can only be transmitted through direct experience and personal interaction, in contrast to codified knowledge (Castree et al., 2013, p. 504). Ambrosini and Bowman (2001) see tacit knowledge as a resource of a firm and link tacit knowledge as an internal characteristic of a firm to the firm's performance. Therefore, according to the resource-based view of the firm (Barney, 2007), it can be seen as a distinctive, sustainable, and therefore competitive strength. If Barney's assessment of firms according to their VRIO[9] score is applied, tacit knowledge is

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9 Barney developed a framework to assess firms' competitive resources. He evaluates each resource by asking whether it is valuable, rare, imitable, and supported by the organization (VRIO). The answers to these questions determine whether a resource really contributes to a firm's competitiveness in terms of strength, uniqueness, and sustainability.

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inherently rare and inimitable; and, if this knowledge really contributes positively to the firm's performance, having relevant tacit knowledge can be regarded as a valuable resource (Barney, 2007, p. 150; Kapas, 2006). Nijdam (2010) scales up this ownership of knowledge to the cluster level by considering it an important function for leader firms within the cluster to implement fast diffusion and transfer of this knowledge. For him as well, this contributes to enhancing the cluster's competitiveness, although he does not mention the role of tacitness as the source of this competitive knowledge (Nijdam, 2010, p. 144). Lam (2000, p. 493) also links tacit knowledge to the resource-based view of the firm and uses the term, embedded knowledge, a knowledge "residing in the organizational routines and shared norms." Thanks to the shared beliefs and understanding within the organization, effective communication is possible, making it a valuable asset.

The tacit knowledge concept has many definitions. Its intangibility invites authors to make their own interpretations. Tacit knowledge is embodied knowledge to "assess the appropriateness of communications" and is studied in relation to intercultural communication (Loenhoff, 2011, p. 1). Loenhoff deals with the problem that may arise when representatives of different cultures meet: their communication might be restricted (or misunderstood) because of cultural differences embodied in behavior that is an articulation of unuttered values, mores, expectations: "We live as Europeans and Chinese, yet we don't 'know' how. We simply do it" (p. 58). This is a very interesting concept because different cultures meet within the same firm, thanks to mergers and takeovers, where middle and top management from different cultures meet, trying to achieve the firm's goals. Behavior might be inappropriate, unfruitful, or completely misunderstood. This makes this tacit knowledge concept fruitful for this thesis, researching port/port city clusters in various countries. One of the general dynamics described in Chapter 1, globalization, with its specific manifestation in port clusters, is responsible for mergers and takeovers. How this is perceived and dealt with is one outcome of the presence of tacit knowledge.

That there is a relationship between location and the nature of tacit knowledge was examined (and contested) by Gertler (2003). He contends that the production of this knowledge is the central theme. It is often assumed that this knowledge can be shared when people have shared values, language, and culture, a common social context, so to speak. So, geography seems to matter when he sums up the arguments:

- Tacit knowledge is difficult to exchange over long distances because it should be acquired experimentally;
- "Its context-specific nature makes it spatially sticky" (Gertler, 2003, p. 79).

The interesting element introduced by Gertler is that he relates tacit knowledge to firms and poses three problems: First, how is tacit knowledge produced? Second, how do firms find it and appropriate it? And third, how is tacit knowledge shared? In relation to the second problem he introduces – without using the term – the cluster, as he considers that the existence of tacit knowledge in regions where it is produced and shared is decisive for locating there (Gertler, 2003, p. 81) So, tacit knowledge becomes a centripetal force. The third problem, how to share it, makes him question whether cultural commonality is important, or whether relational proximity is the crucial factor (p. 83), what he calls spatial stickiness. Apparently, Gertler observes an opposition between the strength of a firm's culture, which defines a firm's tacit knowledge, and the environment in which a firm is located and which is decisive for the firm's tacit knowledge. I prefer to make that distinction more inter-relational. It is not an opposition but a co-existence. Both phenomena are present. They are:

a. Internal tacit knowledge

Internal tacit knowledge can be seen as a firm's 'private' tacit knowledge, only within the company. It is the "unsurpassed tacit knowledge of the organization…. A deep understanding of the markets, its customers and suppliers" (Alderson, 2012, p. 401). It is a tacit knowledge that needs to be distributed throughout the whole organization, and eventually globally if it is multinational. Gertler's (2003) above-mentioned problems refer to this.

b. External tacit knowledge

External tacit knowledge can also be called common tacit knowledge, although this is a contradiction in terms. It is, however, about common values and so on, known exclusively by the insiders, the group where the tacit knowledge is shared. This goes beyond the firm and can be linked to the concept of commonalities as posed in Chapter 2 where cluster theory was discussed. In the management of multinationals, this problem has to be coped with when a firm is being managed in a setting that is different than that of the mother firm.

For Gertler (2003, p. 95), the spreading of innovation has more to do with "local opportunities to share or monitor codified knowledge." Knowledge, to be truly tacit, is in his opinion limited by the social context. That may be so, but this social context is very often spatially bound because of the characteristics of its interaction. When Lam (2000, p. 490) states that "the transfer of tacit knowledge requires close interaction and the buildup of shared understanding and trust among them," we can say that tacit knowledge is indeed a phenomenon with cultural aspects that needs to be considered in discussions about the behavior of firms in clusters (see also Van den

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Berg, Braun, & Van Winden, 2001, p 178, discussing the importance of knowledge for the growth of clusters). In view of the clusters under study, it is interesting to note that especially in the Rhineland (= Rhenish or German) culture, the master–student relationship, as was the custom in the Middle Ages throughout Europe, is still a model applied to pass on knowledge within a company. Consequently, it should come as no surprise that vocational studies are highly valued in Germany.

4.4.2 Operationalizing tacit knowledge

But how can one research the unspoken, the unarticulated, the implicit? Like Nonaka and von Krogh (2009), Ambrosini and Bowman (2001) distinguish a continuum of tacitness, based on the fact that tacit knowledge should be replaced by tacit skills. In doing so, they, like Polanyi, agree that, in the end, tacitness is recognized only in actions. It is not about "knowing in the abstract, but knowing about action" (Ambrosini & Bowman, 2001, p. 814). Using the degree of codifying and articulation, they propose a continuum as depicted in Figure 4.3.
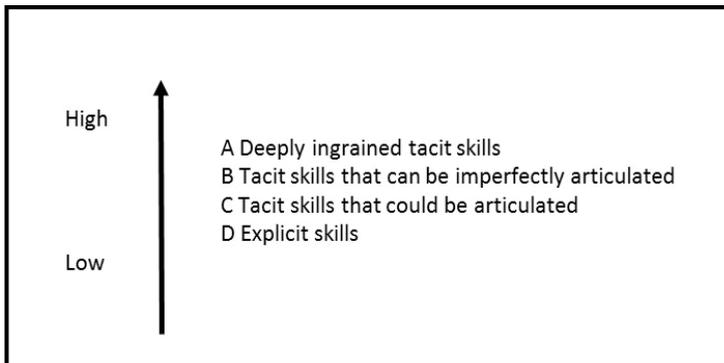

High

A Deeply ingrained tacit skills
B Tacit skills that can be imperfectly articulated
C Tacit skills that could be articulated
D Explicit skills

Low

Figure 4.3 Degree of tacitness (Source: Ambrosini & Bowman, 2001)

These four categories have implications for the forms of tacit knowledge (or tacit skills as the authors prefer to call it) that can be researched and for the methods that are suited to researching this. Skills in the explicit category (category D in Figure 4.3) can hardly be called tacit skills as they are completely explicit and thus probably codified if transferability is needed. Category A in Figure 4.3 comprises skills that are so deeply ingrained that they are not accessible for the knowers, let alone the outsider. So, they cannot be transferred. Between these two extremes of this continuum, there are two categories that the authors think could or can be articulated. For that, they think that the simple question referring to action: How do you do that? would be the opening question for a model of relationships (causal maps) or the start of a narrative (Ambrosini & Bowman, 2001, p. 815). Tacit skills that could

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be articulated, the C category can be researched using causal maps. This is useful because it focuses on action, or rather behavior, because, in the end, tacit skills are about action. These authors think that building a causal map should be a group activity. I do not fully agree: in a group, experiences might converge, so possible aberrations might not surface. In that case, individual maps should be preferred. If these different maps converge in the end by comparative analysis, the stronger the case made. The B category, the tacit skills that can be imperfectly articulated, cannot be dealt with in this way. The skills can only be recognized by talking about and around them. The narrative approach should be used with storytelling and the use of metaphors:

- To give tacit knowledge a voice;
- Making a vague idea concrete;
- People may be able to explain complex organizational phenomena;
- Images are not discrete; they reflect a process. Tacit skills are a process (they are capabilities).

Although the term, tacit skills, is a logical expression because it describes the action, I still prefer the term tacit knowledge because it is knowledge that anticipates these skills. It is a dual element, which Polanyi described by the terms proximal and distal. Realizing the outcome (for Ambrosini and Bowman, 2001, these are the skills) makes us aware of the existence of that which produces these skills (or actions). It is this awareness of this unarticulated existence that Polanyi calls tacit knowledge (Polanyi, 1966, pp. 8–11).

Tacit knowledge is about unarticulated knowledge that can be discovered by certain actions (Polanyi, 1966; Loenhoff, 2015). It is about social learning, is context specific, and hardly travels spatially (Gertler, 2003). It is normative and collective (Loenhoff, 2015). It can be seen in firm behavior (Alderson, 2012) and especially in its organizational learning (Ambrosini & Bowman, 2001; Jones et al., 1997; Lam, 2000; Nonaka & von Krogh, 2009). It is the narrative that can be the medium to communicate the tacit knowledge to a broader audience. This tool can be used to give a voice to what is needed to foster the community. For research, this means that open interviews with actors are best suited to discover and discuss this narrative.

The way in which people interact is one of the manifestations of these actions, based on tacit knowledge and skills that can be related to the abovementioned aspects (social learning, context, spatial stickiness). The context makes this interaction culturally determined. This is particularly important for the development of industries and might be more prominent in places where these industries are

spatially concentrated: the cluster. Therefore, these interactions can be studied as culturally determined expressions of tacit knowledge. A cluster is more than just the firm. The relationships within the cluster concern all participants: the leading firms, competitors, related and supporting industries, local suppliers and customers, governmental and non-governmental organizations (Porter, 1990a). This brings us to the next section where the characteristics of cluster actors are described from the perspective of the existence of such a tacit knowledge. The strength of such a cluster-spanning tacit knowledge 'immersion' varies between different clusters located in different socio-political economies. To put it clearly: in some regions, tacit knowledge is more profound and used compared to other regions, and it has an impact.

4.5 A PHENOMENON OF INTANGIBLE AGREEMENTS: THE CONCEPT OF AN ECONOMY OF TOUCH

4.5.1 Relations between intangible phenomena

The physical presence of actors is strongly related to tacit knowledge. In section 4.4.1, Lam (2000, p. 490) was cited: "the transfer of tacit knowledge requires close interaction and the buildup of shared understanding and trust among them." Besides tacit knowledge, three other notions are interesting in her remark: "shared understanding", "trust", and "close interaction". These notions can hardly be separated from one another. The distribution of tacit knowledge is enhanced by close interaction, which means proximity, i.e., the amount of trust and the degree of having the same basic ideas of how things can be understood and recognized by the other actors, as shown in Figure 4.3. As Fukuyama (1995, p. 26) states: "most effective organizations are based on communities of shared ethical values." These different notions also influence one another. Trust enhances tacit knowledge and tacit knowledge enhances trust; and then proximity helps to develop trust and is a condition to create this 'knowing how things should be done without explicit explanation.'

This brings us to the mechanism that operates in networks and is a vital aspect in management, the element of physical proximity, or, the economy of touch (Geerlings, 1997). Geerlings introduces this concept while discussing strategic alliances in which trust is of the greatest importance. In that sense, he mentions Fukuyama (1995) with his belief systems, who "assumes that the success of various countries in the world can be explained by looking at the way people associate with each other" (Geerlings, 1997, p. 97). Fukuyama (2001, p. 480) also speaks of an "actual

relationship among two or more people that promotes cooperation between them" when defining social capital as one of the origins of trust. He is clearly emphasizing the physical presence of these actors. As an element of social proximity, physical presence is important for enhancing economic performance: "If business relations (within an organization) are more socially embedded, the possibility of a better innovative performance is available" (Vas, 2009, p. 166). One can elaborate on that by stating that this is not confined to organizations, but also refers to larger entities like clusters.

4.5.2 Tangible and intangible proximities

Proximity is a concept that has long been interpreted in a geographical sense: the nearness of locations. This geographical interpretation has been nuanced by the developments in information and communication technologies. Proximity itself is the basis of clustering: it is one of the reasons for firms to stick together. A firm wants to be near its suppliers, its market, the available infrastructure, capital, supporting industries (Porter, 1990a). Clusters, centers of proximity of related industries, enhance competition, influence increasing returns, facilitate knowledge transfer, stimulate the development of a labor pool, create technological spillovers, and reduce transaction costs (Marshall, 1920; Krugman, 1991). These factors were discussed in Chapter 2 where the cluster aspect of the research model was discussed.

These factors often need a physical presence, although within some industries there is a growing tendency to be footloose, as Vas (2009) showed in her research on the software industry in the Hungarian cluster of Szeged; and even the concept of geographical nearness itself is questioned (Lublinski, 2003). Vas (2009, p. 166) attributes a large role to information and communication technologies by stating that geographical proximity is not necessary per se and that it is not sufficient in interactions and cooperation. One can agree with her that technology has provided possibilities that make communication faster and easier, but there is the risk of too easily underestimating the role of personal contacts, building trust, and getting to know one another. This section shows that there are differences between market economies based on valuing different proximities. The literature shows that different kinds of proximities exist besides geographical: institutional, cognitive, social, organizational (Knoben & Oerlemans, 2006; Velenturf & Jensen, 2015; Torre & Gilly, 2000). Boschma (2005) pleads for geographical proximity to be studied in its relations to other dimensions of proximity and takes the proximity perspective as a solution to the problem of coordination. Like Lublinsky (2003), he sees the facilitating role of proximity for the transfer of knowledge, but also relates this to the possibility of getting locked in, which does not favor a positive development of

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a cluster (Chapman, 2005; Frenken et al., 2007; Menzel & Fornahl, 2009). Vas (2009) makes a basic distinction between geographical and organized proximities, as in the latter the other types of proximity are grouped together. Geographical proximity is a rather tangible manifestation of proximity. It can be measured and even observed, as one looks for instance at the difference in spatial appearance between the ports of Hamburg, Rotterdam, and Antwerp. More intangible, but still measurable, are the organized proximities. This has four categories:

a. Cognitive proximity (Nooteboom, 2000);
b. Organizational proximity (Boschma, 2005);
c. Institutional proximity (Boschma, 2005);
d. Social proximity (Boschma, 2005).

For this thesis, the last two are interesting. Social proximity is defined as ".... socially embedded relations between agents at the micro level. Relations between actors are socially embedded when they involve trust, based on friendship, kinship and experience (Boschma, 2005, p. 66). Boschma does not include the sharing of the same set of values. He categorizes this under cultural proximity, which relates to institutional proximity and is on the macro level. Here, institutional proximity is tangible in formal institutions like rules and laws and informal institutions like cultural norms and habits "…that influence the extent and the way actors or organizations coordinate their actions" (p. 68). Social proximity is articulated by the physical presence of actors: this can be seen as personal proximity. This brings us back to Fukuyama's (2001) actual relationship. This is the true economy of touch (Geerlings, 1997).

In summary, economy of touch can be studied through:

1. Social proximity:
   a. Socially embedded relations,
   b. Physical presence/contacts;
2. Institutional (or cultural) proximity:
   a. Formal institutions: rules and laws,
   b. Informal institutions: cultural norms and habits.

The three ports under study might not only differ in their geographical proximities, but also in their personal micro- level and institutional macro-level proximities. These are seen as features of social networks. The differences between these social networks in the three port-port city clusters are articulations of differences in the social political contexts that shape shared values. Chapter 5 will be dealing with this.

4.6 CONCLUSION

This chapter has been presenting theoretical insights concerning the body of knowledge on Institutional Arrangements. Using Keizer's model as a framework (Keizer 2008), different levels of articulation of institutional arrangements were surveyed. From culture to the individual behavior these arrangements are manifested. And there is an interaction between these levels. For this study these different levels are important. For that reason, the literature reviewed can be brought back to the two sensitizing concepts tacit knowledge (section 4.4), and economy of touch (section 4.5). Besides these two concepts, the formalization of power as an expression of economy of touch can be used as a sensitizing concept (in perspective of port devolution developments) and social networks, as depicted in Figure 4.4. The more aggregated level of culture will be seen as a context which is the subject of Chapter 5.
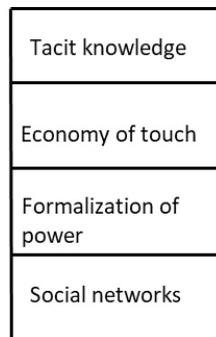
Tacit knowledge
Economy of touch
Formalization of power
Social networks

Figure 4.4 Sensitizing concepts from the Body of Knowledge Institutional Arrangements