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# When an Idea Meets an Organization

## The Translation Process within the Health Care and Production Sectors

**Bachelor Thesis**

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## **Contributions**

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## **Abstract**

Background: Having studied and been inspired by the works of management theorists such as Kjell Arne Røvik, we have decided to examine the process of translation to attain a better understanding of the factors that shape the process during which an organizational idea is imported into a new context. For our study, we investigated lean production as an example of aforementioned organizational idea and did this within two companies from widely different sectors: Volvo Cars and Södra Älvsborg Hospital. These two companies were chosen due to their innate differences in terms of ownership and core competencies as well as the fact that they both employ lean production in some shape or form. We also examined Södra Älvsborg Hospital's parent company, Västra Götaland Regionen, to attain a more strategic perspective of lean use within the entire organization.

Method: Initially, we researched lean production to gain knowledge of the concept on which we would base our empirical investigations. Secondly, we established a theoretical framework consisting of different theories that would be used as “tools” in our revision of our empirical data. The empirical data itself was collected through three detailed interviews with key lean personnel at the respective companies on subject of corporate lean use and history.

Conclusion: We managed to identify, by applying our theoretical framework to our empirical findings, a series of organizational parameters that we believe to influence translation. These parameters are: organizational structure, internal legitimacy, culture, concept exposure, concept results and scope. To concretize these parameters, we have chosen to construct a biological metaphor, in accordance with traditional management literature, that we believe illustrate the translation process in our two focus organizations: “the ivy model”.

**Keywords:** translation, lean, health care, commodity manufacture.

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### **Abbreviations**

VC = Volvo Cars

SÄS = Södra Älvsborgs Hospital

TNC = Transnational Corporation

VGR = Västra Götaland Regionen

TPM = Total Productivity Maintenance

OEE = Overall Equipment Efficiency

JIPM = Japanese Institute for Plant Maintenance

VCMS = Volvo Cars Manufacturing System

FPS = Ford Production System

LIFT = Ledning I Förbättring och Tillämpning

# 1.0 Introduction

## 1.1 Background

Translation is described in contemporary academic literature as “the cases when ideas are taken out of certain organizations and contexts and placed in others” (Røvik, 2008: 211). As our exposure to translation has solely, up to this point in our studies, been theoretical in nature we decided it would be interesting to more closely examine the process from a practical perspective. For this dissertation, we have chosen to investigate lean production as our sample idea. We believe lean production to be interesting for two main reasons. Primarily, lean production is model that has continuously been referred to on numerous occasions during our graduate studies but has not really been explained in terms of actual usage. Secondly, lean production is an organizational idea that can be viewed as a manifestation of its original context: Japanese manufacturing.

Having had its industrial capabilities severely crippled during WWII, Japanese industry made a dramatic comeback during the latter half of the 20<sup>th</sup> century mainly due to efficient production processes. Of these production processes, lean production has attained the greatest level of prominence and has essentially transcended its original, industrial context to the point where the term is universally synonymous with efficiency. For example, lean production is today a major part of NPM or new public management. The central tenet of NPM is the transportation of the business practices of the private sector into public administered administrations in an effort to guarantee adequate competition, improve overall efficiency, and minimize wasteful spending (Røvik, 2008).

The two organizations that we’ve chosen for our case studies, Volvo Cars and Södra Älvsborg Hospital, were selected based on that they are similar organizationally while still being innately different in terms of production and ownership. Volvo Cars, for example, is an automobile manufacturer privately owned by Zhejiang Geely Holding Group (Nationalencyklopedin, 2012) while Södra Älvsborg Hospital is a publicly administered purveyor of health care services. Naturally, they were also chosen as they both employ lean production in some shape or form.

One study from which we have drawn inspiration regarding format is Mark Zbaracki's *The Rhetoric and Reality of Total Quality Management* (1998). In his dissertation, the author aims to illustrate how institutional forces can distort the rhetoric of TQM. The author motivates his study in the following manner; "I am interested in TQM as one such problem, especially how a well-defined and established technical intervention can become an ambiguous and dubious intervention" (Zbaracki, 1998: 603). In his study, Zbaracki concludes that institutional ideas such as TQM develop importance over time beyond their initial technical meaning due to the translation process through which the organizational members adopt the given idea. We will attempt to investigate lean production with a similar purpose and also emphasize additional parameters such as the organizational differences between our two focus organizations.

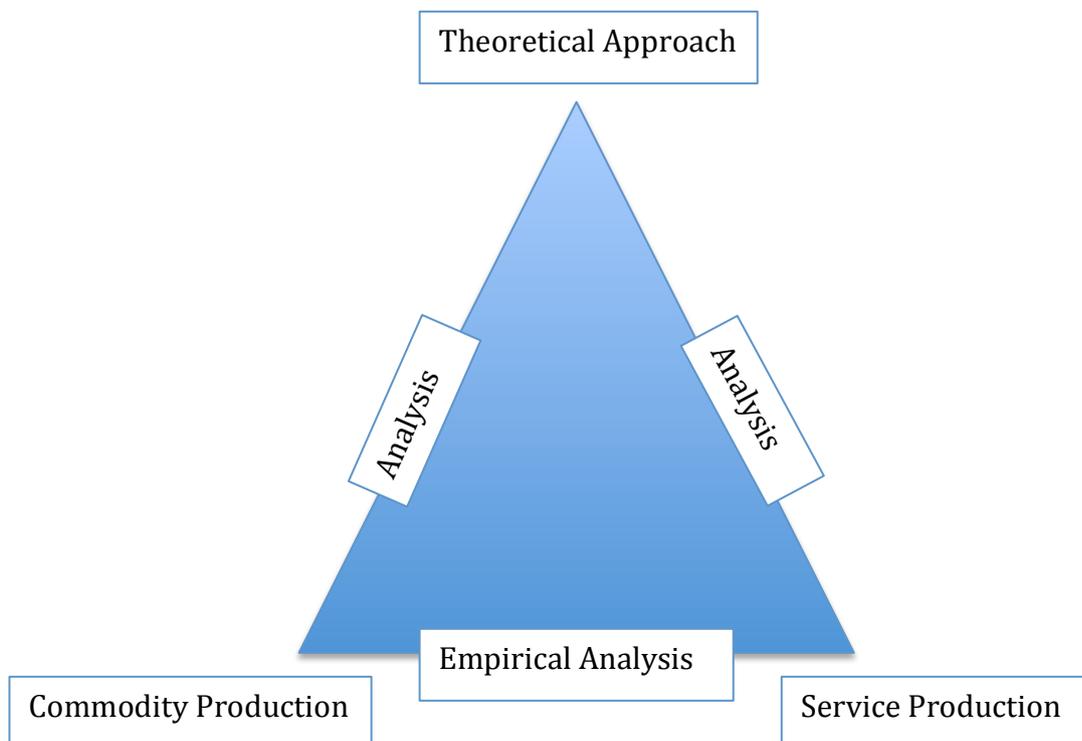
## **1.2 Purpose**

The purpose of this investigation is to examine the process during which an organizational idea, lean production, is translated into two companies that serve as representatives of the commodity production and health care sectors. This will lead to greater understanding of the factors that actively shape translation. The investigation will also shed light on the practical aspects of lean production itself. Translation, in our minds, is the meeting between an organizational idea and an organization and we have chosen to examine this process using additional elements from virus-theory (Røvik, 2008).

This subject was chosen as we believe there may be some discrepancies between the use of lean in our two focus occasions that derive from differing translation processes. Our skepticism arise partially from studied literature such as the writings of Kjell Arne Røvik, a Norwegian management theorist who describes the process through which organizational ideas are transported between separate organizations as a "virus". As with any virus, mutation sometimes occurs as organizational ideas are adapted to better suit the preexisting institutional conditions of the receiving company (Røvik, 2008). Another academic example of how the original construction of organizational ideas may be altered once they are applied is, as mentioned earlier, Mark Zbaracki's study of TQM (1998).

Our preliminary hypothesis is that Volvo Cars, being organizationally similar to lean's original context, employs lean production in a way that is reminiscent of original lean and consequently more comparable to the common perception of the concept. Södra Älvsborg Hospital (SÄS), on the other hand, we believe will employ a much more individualized model of lean production as the organization is a service purveyor as well as administered publicly.

In regards to method, we will ourselves define lean production based on a collection of academic writings of varied prominence and age. The material chosen for evaluation will range from James P. Womack's *The Machine that Changed the World: The Story of Lean Production* (1990) and *Lean Thinking* (2003), veritable bibles on the subject, to more recently published articles. This is to form a holistic view of the concept that will serve us better during our analysis. Secondly, we will collect necessary empirical data by conducting detailed interviews with key culture-bearers of our focus organizations. These interviews will be on the subject of how lean is employed within the two organizations and the methods through which it was implemented. Finally, we will compare our findings with our literary perception of lean theory and draw relevant conclusions.



### **1.3 Points of Comparison**

For our empirical data, we have chosen to emphasize two main parameters that will be employed to structure our primary data so that it may be compared and processed in a way that is beneficial to our analysis. Our two main parameters are: individual lean and organizational lean.

#### Individual Lean

Individual lean deals with the interviewees or the culture bearers themselves. Under this heading we will outline, for example, how the interviewees first came in contact with lean as well as their personal lean philosophy. The function of this section is to examine our culture bearers from a translator (Røvik, 2008) perspective. The focus naturally lies on the two organizations as a whole, but we believe it to be important to investigate the lean-culture on a more individual level. This has a dual purpose: firstly it allows us to sample the general lean-culture of the focus organizations, and secondly it allows us to investigate how our interviewees actively shape the lean usage of their respective organizations.

#### Organizational Lean

This heading will constitute the majority of our empirical analysis and it outlines lean theory in the context of our two focus organizations. This data will be derived from the responses provided to us by the interviewees and its validity depends partly on the assumption that our interviewees are adequate representatives of the organizations of which they are members. Primarily, we will investigate the processes during which the two organizations implemented lean. Questions we will ask at this point are the tradition why, when, how, who. Furthermore, we will attempt to illustrate the two companies' current lean strategies and philosophies. This entails, for example, what the respective companies view as waste and value. We will then shift our perspective somewhat and examine the practical elements of Volvo's and SÄS's lean approaches such as the tools and practices that are employed within the operational activities. Finally, we will examine the potential conflicts and results that arise from the observed lean methodology.

### **1.4 Limitations**

When reading and analysing this thesis it is important to consider that we have:

- Only studied one organization within each industry, commodity production or health care. We believe that these organizations are good examples but definitely not adequate representations for their respective sector as a whole.
- The gathered information about the focus organizations is derived entirely from interviews. It could have been interesting to make some observations ourselves, however, we don't have the experience to evaluate lean practically.
- Solely interviewed one respectively two persons from each organization. However we have carefully chosen which people to interview and found those with key knowledge within areas relevant to our purpose.
- Furthermore, we have chosen these "lean champions" due to their knowledge of the concept. The danger of this, naturally, is that our interviewees may portray a picture of lean that is at odds with the concept's actual employment at the more operational levels. This, however, is a calculated risk that warrants additional critique on our part and also a product of restraining factors such as problems accessing relevant interviewees within the operative cores of the two organizations.
- We also considered interviewing employees from the operative cores of our focus organizations. However, we were able to discern from our initial interviews that much of the lean concept may be integrated in these employees' work tasks to such an extent that it would be hard for them to recognize particular conceptual components. This, in combination with time constraints and lacking access to potential interviewees, led us to focus solely on corporate "lean champions" who possess a more strategic insight into the concept.

## **2.0 Methodology**

We will now illustrate how we have executed our thesis regarding choice of method, data collection and quality.

### **2.1 Case study**

When deciding what method to use, three conditions must be investigated: what type of research question, control over actual behavioural events, and the perspective in terms of time (Yin, 2009). We have decided to use case study as research method with the motivation: "For the case study, this is when a "how" or "why" is being asked

about, a contemporary set of events over which the investigator has little or no control”. (Yin 2009, 13). Furthermore a case study is described as “an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident” (Yin 2009:18). This suits our purpose since it focuses both on *how* lean has been translated into the organizational context. Furthermore we are investigating *why* there are differences between Volvo Cars, Södra Älvsborgs Hospital and the original lean theory and the translation process that might cause such differences.

To investigate how the corporation and the hospital are using lean we decided to use a qualitative data collection. A qualitative data collection is well suited for thoroughly investigating a few numbers of interviewees (Holme, 1997). We wanted the interviewees to tell us about their usage of lean and not stray too far from our questions. Therefore, we decided to conduct face-to-face interviews (Holme, 1997).

## **2.2 Organization selection**

To be able to investigate our purpose we initially focused on finding organisations with an established lean usage.

It is common knowledge that Volvo has actively employed lean for quite an extended period of time, something that is evidenced by the fact that the company is frequently referenced in lean reports. Volvo Cars’ production is, not surprisingly, similar to Toyota’s production, the original organizational context of the lean concept. Therefore it would be interesting to see how lean has been translated into Volvo Cars.

Presently, lean is a rarity within the healthcare industry, making it slightly harder for us to find a second focus organization within the region. We contacted the chief health care logistician in Västra Götaland Regionen (VGR), an umbrella organization consisting of the public health care administrations within the West Gothland region. We scheduled an interview with him to get an overview of how lean is employed in VGR. He could also recommend Södra Älvsborgs Hospital (SÄS), located in Borås, which currently is executing a major implementation involving the concept. As the hospital is in the process of establishing lean as a part of daily operations, we

considered it an appropriate representative for health care sector lean. To clarify, we felt it was necessary to look at lean within health care at two levels due to the fragmented nature of VGR: one including a more strategic perspective and another that takes more operational adaptations into account.

### **2.3 Interviewee Selection**

Our main priority has been to find persons that have been involved with the lean implementation journey. This would make it possible for us to gain information of from where their knowledge of lean originates and what factors has formed their personal approaches to the concept. Naturally, it would be beneficial if these potential interviewees were also involved in the respective organization's current lean activities.

At Volvo Cars, we have interviewed the director of operational development. He has been working within the company for the last 19 years and was a key participant during their implementation. Due to his level of insight we considered it sufficient to only interview him from Volvo Cars. In the health care case, we have interviewed the chief logistician at VGR who administers lean at a management level. To gain a more operative perspective we have also interviewed an internal lean-coach at SÄS.

We do understand that the interviewees are representatives as well as members of their respective organizations and may consequently not be entirely objective in their retelling. For example, they may describe their lean processes as greatly efficient while the reality within their company may be something entirely different. However we still believe that their personal views of lean are still sufficient for our comparison. Problems with objectivity, though important to consider, are somewhat secondary as we choose to view our interviewees as examples of culture-bearers and consequently equate their views to a representation of organization lean philosophy.

### **2.4 Data Collection**

#### Primary data

All our primary data has been collected from the interviews which each lasted for approximately two hours. We will now present how we structured the interview process. The three different interview forms can found in appendix 1, 2 and 3.

**Before:** All the interviews were done at location. Most of the questions were applicable to both organizations with a few adaptations considering the differences in structure, production etc. A couple of days before the interviews we sent the questions to our interviewees to ensure more qualitative responses.

Regarding the interviewees, it is important to ensure that they will not be 'deceived, including protecting their privacy and confidentiality' (Yin, 2009). Therefore, none will be named within the report and instead referred to by title in accordance with their wishes.

**During:** Most of the interviews have been recorded. This made it possible for us to focus on making the interviewee more of a conversation as well as not have to take too many notes.

**Afterwards:** After each interview was finished we summarized our experience and input. A couple of days later, at the most, the recording was typed and summarized for the purpose of preserving the content. These summaries were also sent back to the interviewees for possible revision to ensure accurate answers and reduce possible misinterpretation.

### Secondary data

We have, in addition to the interviews, studied some of the two organizations internal documents regarding lean. These documents reflect both how the organization currently uses lean and how they educate their personnel on the subject.

When conducting research for the theoretical framework we have mainly focused on traditional and well-known books such as

- Managementsamhället, Røvik (2008)
- Structure In Fives, Mintzberg (1993)
- Lean Thinking, Womack & Jones (2003)
- Machine that changed the world, Womack, Jones & Roos (1990)
- Vad är lean? Niklas Modig & Pär Åhlström (2009)
- Lean hospitals, Mark Graban (2009)

Since the majority of lean literature is approximately 20 years old we have also complemented the theory with some contemporary literature. These have mainly been gathered from the databases Harvard Business Review and Emerald Insight. We have also found additional sources in the databases Science Direct and Web Of Knowledge. To find these articles we have used search words such as: *lean, lean production, lean manufacturing, lean service, lean healthcare and lean hospital.*

## **2.5 Validity & Reliability**

This part discusses how we aim to keep a high quality of the thesis and possible areas of improvement.

Validity measures how well our thesis actually investigates our stated purpose. We realise that it might not be sufficient to only investigate one organization if we want to look at the entire industry of commodity production or public health care. However we believe that the two chosen organizations are good examples from each industry. To further ensure accurate information about the organizational usage of lean we could have expanded our empirical data collection in two ways. Firstly, we could have interviewed more people at both organizations. However we believe that we found key personnel with necessary experience who could provide us with a holistic overview regarding implementation in particular. Secondly, we could have made observations ourselves. The problem is that we don't possess the technical knowledge or experience to allow us to investigate lean as it is employed in practice. Since all the interviewees are representatives for their organizations there is an additional risk that they might try to portray their organizations unjustly favourable. It is possible that they told us how their organizations *want to use* lean, and not how it is *actually used*. If that is the case it is still interesting to see how these organizations views might differ.

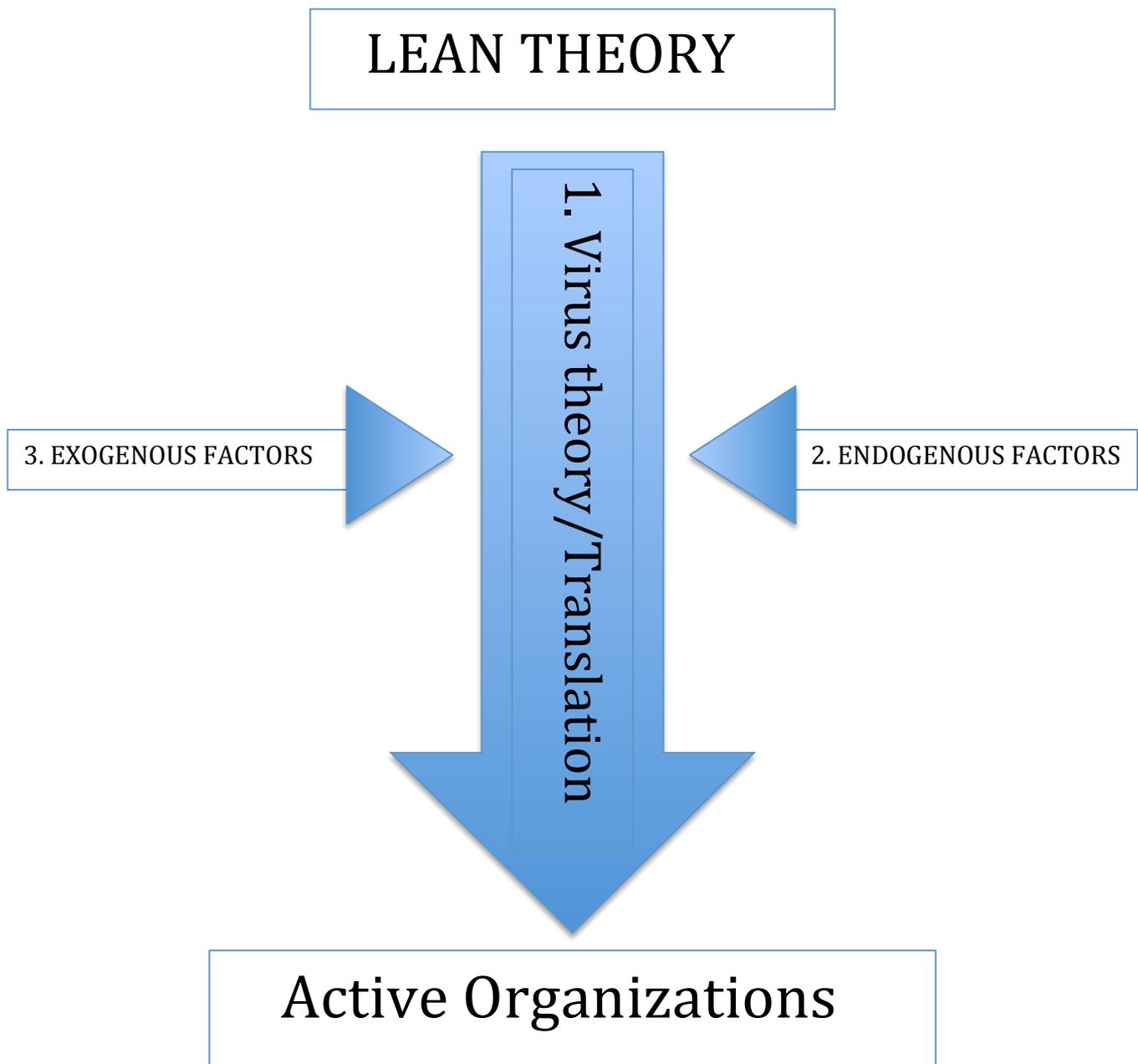
We will now investigate the reliability by discussing how easy it is to redo this thesis and get the same results. We have tried to facilitate this by:

- Using sources that are all accessible from our library at University Of Gothenburg, School Of Business, Economics and Law.
- Showing what search words we have used in search of data.

- Detailed description of how we performed our interviews.
- Mentioning the questions used in our interviews.

Despite these measures, problems concerning reliability may persist. There are always some difficulties when comparing qualitative interviews due to differences in structure (Holme, 1997). In addition to that the interviewees might, for some reason, not be focused or get disturbed, which could affect the results (Lekvall, 2009). For example, our idea was that the interviewees were to speak as freely as possible. If another person would conduct similar interviews with the same interviewees but using a different format, their findings may differ from ours. However we have tried to mitigate this risk by allowing the interviewees to revise their responses.

### 3.0 Theoretical Framework



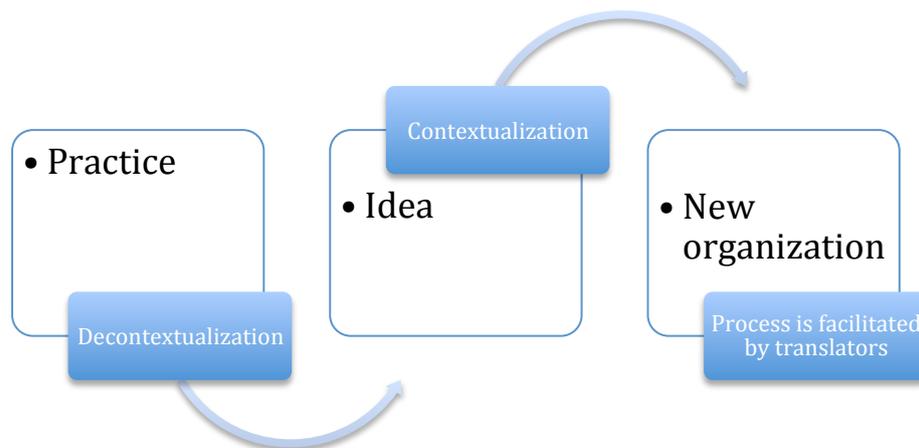
The main part of our theory will naturally be focused on translation with supporting theories such a virus theory highlighting adjacent processes. Translation, as mentioned earlier, is the meeting of an organizational idea and an organization. It differs from implementation, which is more of a strategic decision, as it shaped by a myriad of institutional factors that may fall outside the control of the organization in question. We have chosen to examine, in addition to the translation itself, endogenous and exogenous factors. Endogenous factors are intra-organizational, pre-existing

institutional conditions that shape the translation process. These include, for example, organizational culture or organizational structure. Exogenous factors are somewhat lesser in importance, and entail conditions that cannot be directly attributed to any given translation process but are apart of a larger, societal context. Examples of these are the need for legitimization according to Meyer & Rowan’s theories. It is important to note that we tend to employ the following theories as frameworks and tools that we use in the sense making of our empirical data.

### 3.1 Translation & Virus Theory

#### 3.11 Translation theory

Kjell Arne Røvik, a Norwegian management theorist, discusses translation theory in his book, *Managementsamhället*. He describes it as being the process by which organizations deal with management ideas. Translation occurs in two principal stages: decontextualization and contextualization (Røvik, 2008).



#### Decontextualization

Decontextualization is the process during which practice is translated into ideas and later exported out of the organizational context (Røvik, 2008). Røvik defines practice as “knowledge-based and routine execution of tasks” and later explains that the translation of practice reflects a general desire to imitate recipes for success. Translation-theory naturally concerns the theoretical displacement; the actual movement of practice is unpractical as it entails the highly unlikely move of personnel, competence and other equipment (Røvik, 2008). Røvik also outlines additional challenges of decontextualization, for example:

- Clarity – the degree to which practice can be translated depends greatly upon how clearly it is defined and expressed within the host organization. In other words, the communicability of the practice in question is a key element (Røvik, 2008).
- Complexity – by complexity Røvik refers to two aspects of practice. The first aspect indicates how visible the causal relationships are between perceived success and the practice that are to be imitated. The second aspect deals with the relationship between the technology and human resources that are necessary in the practical execution of practice. The chance of impaired decontextualization is related to the complexity of these two aspects (Røvik, 2008).
- Incorporation – the more a certain practice may be imbued in the host organization’s culture as well as dependent on other environmental factors, the harder the practice will be to translate (Røvik, 2008).

Decontextualization is conducted through two main strategies: pick-up or home delivery. Pick-up is when the translation’s main conduit comes from outside the organization. Pick-up can be systematic to varying degrees, but it has recently become more institutionalized along with the rise of “best practice industry” and business practices such as bench-marking (Røvik, 2008). Unlike pick-up, home delivery occurs when experienced personnel communicate certain practice to arenas outside the organization in which the practice was conceived. For a practice to be home delivered, Røvik states that it must possess favorable characteristics such as successful track record, the right age, social authorization, and it has to be susceptible to translation. The success of the delivery is also greatly correlated to the person performing it; for example organizational knowledge and specific know-how are important (Røvik, 2008).

### Contextualization

Contextualization occurs when practice (now in idea-form) is introduced into a new organizational context. Contextualization is performed according to four “rules”: copying, addition, subtraction, and conversion (Røvik, 2008). These four, in turn, can be grouped into three subcategories depending on the degree to which the original

practice is altered in each scenario. Copying falls in the reproductive mode, addition and subtraction belong to the modifying mode, and transformation constitutes the radical mode. Copying is when the introductory process is conducted with few or no changes to the original practice. Addition is when certain elements are added to the original practice and subtraction, in turn, occurs when elements are removed. Conversion involves a fundamental change of the practice to the extent that the practice that arises in the receiving organizational is more a local innovation than a representation of the original import (Røvik, 2008).

Morris (2006), another translation theorist, agrees with Røvik and states that management recipes' susceptibility to contextualization depends on a number of factors such as "renewal, efficiency and effectiveness" (Morris, 2006:225). He also emphasizes that the translation process of a new idea takes a long period of time (Morris, 2006).

Apart from the aforementioned rules, the translation process may also be shaped by the format in which evidences itself. Røvik describes two formats, among others, that a given translation process may assume: top-down oriented with a sequential chain and the mushroom model (Røvik, 2008). The top-down oriented translation chain starts from the formal hierarchal authorities and is then strategically spread throughout the organization. The hierarchal authority determines how the concept shall be formed to best benefit the organization as well as identifies key players and involves them in the translation process. After initiation, the concept is spread throughout the organization in a way that resembles a chain; the upper hierarchal levels stimulate the lower ones to translation and the process is then continued vertically downwards (Røvik, 2008).

The other format that we consider relevant to our analysis is the mushroom model. This translational process constitutes the opposite to the sequential chain and the name itself refers to how mushrooms tend to "pop up" at different places without there being any trace of interconnectivity between them. From a translational standpoint, the mushroom theory describes how organizational ideas sometimes manifest themselves independently within an organization's different components

without any form of centralized governance but rather as a result of similar external pressures (Røvik, 2008).

### Evaluating Translation

Røvik (2008) states that the success of a given translation process depends greatly on the competence of the translator. Mueller & Whittle (2011) agrees and states that “translation of management ideas relies upon the skilful use of language” on the subject of translator competence (Mueller et al, 2011: 204). Røvik states there exist four main archetypes of translators, each embodying a virtue needed to be a capable translator: the knowledgeable/multi-cultural translator, the brave/creative translator, the patient translator, and the strong translator (Røvik, 2008).

- The knowledgeable translator has knowledge of the contexts from which the practice is exported as well as of those that are to receive. Additionally, this translator understands the de- and contextualization processes and is culturally receptive.
- The brave/creative translator is key to adequate communication throughout the translation processes and makes informed decisions regarding an appropriate level of adaption (reproductive, modifying, or radical).
- The patient translator allows the idea to spread organically and assumes more the role of a facilitator in this process.
- The strong translator handles the potential conflicts of interest that may arise during a translation process, deals with doubts regarding compatibility, and demonstrates necessary authority (Røvik, 2008).

### **3.1.2 Virus theory**

Unlike translation theory, which discusses what organizations do with organizational ideas and practice, virus theory deals with how ideas affect organizations (Røvik, 2008). In accordance with more classical management theory, Røvik describes virus theory as a metaphorical approach to characterizing the transfer of management ideas. In the process of doing this, he highlights seven characteristics of a virus that can, when used metaphorically, be used to provide useful insights to the interpretation of the general translation process: form/content/origin, infection, immunity, incubation

period, the mechanisms that allow the infection to manifest itself as symptoms, mutation, and inactivation/activation (Røvik, 2008).

1. **Form/content/origin** – The main similarity between a virus and an organizational idea is simplicity. Viruses are extremely simple organisms and simplicity can be viewed as one of the key qualifications as to why a certain practice is translated. A second similarity is that organizational ideas, like a virus, are packaged as they have a core, outer shell etc. Viruses, like organizational ideas, are timeless; viruses were some of the first living organisms to inhabit the Earth and organizational ideas are sometimes present within organizational contexts for long periods of time without necessarily being identified as a distinct idea (Røvik, 2008).
2. **Infection**- Viruses, like organizational ideas, are transferred between hosts directly or via carriers through infection. Infection occurs mainly through interaction: viruses can sometimes assume pandemic proportions when populations are herded together, and organizational ideas are transferred within forums where people of different organizational backgrounds may interact. As mentioned, viruses can be sometimes transferred through carriers who themselves are not symptomatic. The same is true regarding organizational ideas as institutions such as management schools are main transmitters of ideas without themselves necessarily being infected (Røvik, 2008).
3. **Immunity** – During certain translation processes, there is resistance in terms of immunity to infection. There are two main types of immunity: innate immunity and acquired immunity. Due to the growing standardization of organizations in terms of institutional content, there is much debate regarding the existence organizations' innate immunity and some argue that this aspect constitutes the main difference between biological viruses and the transfer of management ideas. Organizations can acquire immunity to management ideas mainly as a result of negative experiences, for example: the organization was either unsuccessful in implementing a given organizational idea/practice, or experienced negative results once the practice was in place (Røvik, 2008).
4. **Incubation period** – As with a biological virus, there is a certain period of time between the initial infection and when the organizational idea manifests

itself through symptoms. “Symptoms”, in this case, are the visible implementation of new structures, routines, and activities (Røvik, 2008).

5. **From infection to symptoms** – Firstly, ideas normally enter organizations through a process known as adhesion during which the idea is initially rooted in abstract concepts such as labels, terms and arguments. After this early phase, absorption occurs. Absorption, as in biological viruses, is a collective term to describe the manner in which organizational ideas probe deeper into organizations and materialize. Absorption consists of three mechanisms: ideas as instructions, rules regarding consistency, as well as replication and institutionalization (Røvik, 2008).
6. **Mutation** – Organizational ideas, like viruses, may mutate once they’ve inhabited a new host organization. The most noticeable form of mutation is the renaming of certain practices/ideas within certain organizations in attempt to make the practice more distinguishable and individual. Additionally, the renaming of practices may serve other purposes: it may “fool” (circumvent criticism) the local immune system, it may fool the employees and the management, and it may fool external observers (Røvik, 2008).
7. **Inactivation and Reactivation** – Viruses may sometimes lie dormant in a host for long periods of time without necessarily displaying symptoms. The same pattern evidences itself in regards to organizational ideas; these may be present within organizational contexts for long time spans and during this time alternate between activation and reactivation (Røvik, 2008). Røvik also describes a collection of studies that mean to illustrate patterns in how ideas “behave” within organizations during an extended period of time. In these studies, three common patterns were observed: 1) the initial phase was characterized by an overwhelming enthusiasm and grandiose plans for implementation of the given practice. After some time, the situation matures and the practice in question enters hibernation but never disappears entirely. 2) Secondly, the ideas may become reactivated. The drivers behind these reactivation processes are usually other actors than those who were involved during the original implementation. 3) Lastly, it was observed during the aforementioned studies that throughout the reactivation stage, the ideas in question are usually modified or mutated to some extent. Some possible explanations for these patterns are that periods of activation and reactivation

may depend on shifting paradigms in the external environment or that these periods may be a result of a local rationality (Røvik, 2008).

## **3.2. Endogenous Factors**

### **3.2.1 Structure**

We have chosen to illustrate our two focus organizations' structural parameters using Mintzberg's theories. Out of his five archetypal organizational forms, the following will be relevant to our analysis: the machine bureaucracy, the professional bureaucracy and the divisionalized form.

#### The machine bureaucracy

The prime coordinating mechanism of the machine bureaucracy is the standardization of work processes and the key part of the organization are the technostructure, the units that facilitate operational activities by guaranteeing overall operational standardization. As standardization is the machine bureaucracy's key focus, control is essential and such organizations exhibit obsession with this to varying degrees.

Distinguishing traits of the machine bureaucracy are: behavior formalization, horizontal job specialization, large operating core, and limited vertical centralization (Mintzberg, 1993). Furthermore, the operating core is separated from the administrative units of the organization. These organizations tend to be large and old as well as operate in a simple, stable environment where the parameters for success are clearly defined. Examples of this structure are airlines, prisons, and automobile companies (Mintzberg, 1993).

#### The professional bureaucracy

The essence of this configuration is a large operating core with a standardized set of skills. Some of the professional bureaucracy's key traits include continuous training to maintain and develop the skill sets required within the operating core, horizontal job specialization, and vertical as well as horizontal decentralization (Mintzberg, 1993). The organization's technical support system shouldn't be too sophisticated. The knowledge base of the operating core, on the other hand, is sophisticated but the tools used to apply this knowledge practically are not. The professional bureaucracy is best suited for a complex, stable environment. Organizations that tend to be structured

in this fashion include hospitals, accounting companies, and law firms (Mintzberg, 1993).

#### The divisionalized form

The prime coordinating mechanism of the divisionalized form is the standardization of outputs, more precisely the clear definition of performance standards. This becomes important as the separate divisions within the organization may gain quasi-independence due to geographical positioning and structure (Mintzberg, 1993).

Within a divisionalized form the middle managers become more significant, as they have to adapt the overall strategic visions of the apex to the distinct conditions that affect their respective divisions (Mintzberg, 1993). The divisionalized form is best suited for an organization that is active in several, diversified markets (Mintzberg, 1993) where the need for market adaptation may diverge with the benefits of standardization (Hill, 2010). Organizations that are structured in this manner tend to be old and large, for example manufacturing companies within the automobile industry (Mintzberg, 1993).

### **3.2.2 Organizational Culture**

Charles Hill describes culture as a system of values and norms that are shared among a group of people and together constitute a design for living. Values, in turn, are ideas concerning what is good or right and norms are social rules or guidelines for appropriate behavior (Hill, 2010). As in society, culture is a key part of the workplace. According to Deal and Kennedy, workplace culture can be described as “the way things get done around here” and is often referred to as one of the more difficult workplace aspects to actively change (Schein, 2010). Schein’s theories illustrate three levels of organizational culture: the first level consists of visible organizational attributes such as slogans and mission statements, the second level includes the outspoken values of the organization’s members (for example, the members may openly express trust in their organization and its processes), and the third level comprises the organization’s “tacit assumptions” or unspoken rules. As there are three distinct levels of culture, it is entirely possible that an organization may behave paradoxically as they may project highly moral values at the first level while exhibiting contradicting traits at the third (Schein, 2010). Furthermore, Schein also describes how organizational cultures are shaped by external adaptation and internal integration. External adaptation occurs through isomorphic processes and may

transform an organization's culture into a source of competitive advantage. Internal adaptation, on the other hand, entails that an organization must develop adequate structures to support a certain a culture and this must be done in accordance with the organization's overall strategy (Schein, 2010).

#### Subculture in health care

The western health care system has history of a strong subculture. This subculture is characterized with own hierarchy, norms, social structures and system of rules. This becomes visual from the costumes, symbols and job assignments. Larsson (2007) describes is as an extreme medical hierarchy of competence and gender segregation between medical diagnostics, medical treatment and nursing care (Larsson, 2007).

### **3.3 Exogenous Factors**

#### **3.3.1 Need for external legitimization**

##### Meyer & Rowan – Formal Structure as Myth and Ceremony

In the article *Institutionalized Organizations: Formal Structure as Myth and Ceremony*, Mayer and Rowan discuss isomorphism as way for organizations to handle interdependencies. Isomorphism is achieved practically through the adoption of certain practices or institutionalized habits (Meyer & Rowan, 1977). This process, in turn, is a way for organizations to achieve external legitimacy and omission of aforementioned institutional habits such as Corporate Social Responsibility may lead to claims of irrationality. In totality, a collection of institutionalized habits constitutes the formal structure or ceremonial aspect of an organization (Meyer & Rowan, 1977).

However, there exist two main problems with the isomorphic process: firstly, the demands for technical efficiency create conflicts with ceremonial rules and formal structure. Secondly, the ceremonial rules may conflict with one another. The authors illustrate this using the example of an Ivy-league school hiring a Nobel laureate. In this case, the school's educational quality doesn't necessarily improve enough to justify the additional costs of a higher tier payroll. However, they do achieve external legitimacy as such staff members heighten the school's reputation and may lead to a higher ranking (Meyer & Rowan, 1977).

Resolving these problems that are innately connected to establishment of formal structure may be done in a number of ways. Organizations may resist formality and ceremony, sever external relations, acknowledge that there is no real connection between ceremony and technology, and finally promise reform (Meyer & Rowan, 1977). Apart from these alternatives, decoupling provides an additional solution. Decoupling is, essentially, the active separation of an organization's formal structure/ceremonial aspect from its technical components. Through decoupling, organizations may achieve external legitimacy through a process that doesn't interfere with the technical core and the attempted fulfillment of customer demands (Meyer & Rowan, 1977).

### **3.3.2 Carriers of organizational ideas**

*The Expansion of Management Knowledge* is a book compiled by Kerstin Sahlin-Andersson and Lars Engwall (2002) on the subject of how carriers of management knowledge are organized, how they react and act in relation to exogenous factors, and how they modify knowledge. Each chapter presents the findings of an individual theorist and aim to support the overall purpose of the book.

A carrier, according to Andersson and Engwall (2002), is “an actor who play significant roles in the framing, packaging, and circulating of management ideas”. Traditionally, carriers have been described in theoretical writings as a “mix of activity and passivity, of supporting, transporting, and transforming”. Regarding the “carrying” itself, it can be viewed as either an activity or an action. When it is pursued through a conscious effort, carrying is an action while it can be considered an activity when it is incorporated into an organizational context. In highly institutionalized environments, for example, the carrying (which sometimes transforms institutions) is embedded within the institutions themselves. Max Weber spoke of primary and secondary carriers. Secondary carriers transmit the knowledge developed by primary carriers. The book discusses four main types of primary carriers: practice, business schools, the management consultant industry, and the media. Gradually, the lines between the four types have begun to blur through a process facilitated by improved information technology and communications. Furthermore, these four carrier-types create management knowledge through three principal activities: the collection, processing, and distribution of information. These three activities, in turn, are characterized by three variables. The collection of information is characterized by

control and rigor, processing necessitates interaction, and distribution is connected to the size of the receiving audience (Andersson & Engwall, 2002).

## **4.0 Lean Background**

### **4.1 Lean Theory**

Finally, we have chosen to include an overview of lean theory as we believe this to be beneficial to the reader's understanding of the concept. This theory was the background that we employed to formulate our interview questions and the platform from which we will be conducting our comparisons regarding translation.

Lean originally comes from the Toyota Production System, developed by Taiichi Ohno and used by the Japanese automobile producer. John Krafcik first used the term "lean" in 1988. He was a researcher at the International Motor Vehicle Program at MIT (Womack et al, 1990). He coined the term lean as the process "uses less of everything compared with mass production – half the human effort in the factory, half the manufacturing space, half the investment in tools, half the engineering hours to develop a new product in half the time" (Womack et al, 1990: 13).

Krafcik's research of lean productions was later continued and summarized in book "The Machine That Changed The World" (1990) by Womack, Jones & Roos. Womack & Jones furthermore wrote "Lean Thinking" (2003), which together with The Machine That Changed The World has frequently been used for future research.

#### **4.1.1 Lean Principles**

Lean has been used in many combinations such as lean production, lean service, lean health care, lean enterprise, lean accounting and more. However all combinations have something in common, the lean thinking (Womack et al, 2003). Lean thinking describes lean without specifying whether it is used in production or health care. The lean thinking can be summarized into five principles: specify value, identify the value stream, make value flow, let the customer pull and pursue perfection (Womack et al, 2003).

The first principle is to *specify value*. To be able to specify value the producer needs to know what the customer wants. In any business the activities that is not actively

adding customer value to the product is considered to be *muda*, which is Japanese for waste. In other words, value is differentiated from everything that is not considered to be waste (Womack et al, 2003).

The second principle is to *identify the value stream*. The value stream is divided into three major management tasks. The first is the stream of creating a concept and designing to production launch. Secondly, the information management task, including taking orders to scheduling delivery to customer. The third task is the physical production that starts with raw materials and concludes with the finished product. The entire value stream, including suppliers, must be identified for each product. For this to be possible the entire value stream must collaborate and be entirely transparent so that all parties' activities are clearly visible (Womack et al, 2003).

The third principle is creating *flow*. The flow of the manufacturing should be adapted to the products, and not the equipment. The equipment should be able to change the manufacturing to better suit the products and intended speed. If needed, the production should be able to change the manufacturing pace if demand for a certain product suddenly increases. As a result, the manufacturing can move away from batch/queue system and assume a more flow-like form with less waiting- and changeover time (Womack et al, 2003). The creation of flow can be transformed both through *kaikaku* and *kaizen* (Japanese for radical- and continuous improvement) (Womack et al, 1996)

The fourth principle is *pull*. The idea is to let the customer pull the products instead of pushing the products through the manufacturing system. Since the value streams are shorter and the flow better, the producer is able to wait for the customers' order and later start production in accordance with demand. Furthermore there is no need for inventories of unwanted products that may cause additional bound costs (Womack et al, 2003).

The last principle is to *pursue perfection*. The process of lean is not over when the previous four steps have been implemented. It can be done over and over again, and each time reducing wastes and pursuing perfection. However it is critical that all the

steps are transparent and complemented with constant feedback (Womack et al, 2003).

#### **4.1.2 Wastes/Muda**

There are seven main types of wastes originally developed by Taiichi Ohno:

- *Overproduction* – producing more products than demanded
- *Waiting* – for the previous or following step in production
- *Transport* – of materials that is unnecessary
- *Over processing* – by using poor tools
- *Inventories* – more than necessary
- *Movement* – by employees during their work
- *Defective parts* – in production (Womack et al, 2003)

#### **4.1.3 Tools**

There are many different recipes of what tools are needed for success with Lean implementation. Shah & Ward (2007) thought that the literature about lean production was confusing and decided to investigate it from a more practical perspective. After investigating what lean tools large organizations practically employ, they have identified 48 varieties. These were summarized to a few more common tools that characterize lean production:

- *Supplier feedback and development*- regular communication with suppliers to be able to give feedback for incremental improvements for involving them in production process.
- *JIT delivery by suppliers* - collaboration should result in deliveries with correct quantity at the right place and time.
- *Customer involvement* - communication with customers to satisfy their needs.
- *Kanban*: a billboard system that shows how many, when and what product to be produced.
- *Set up time reduction / Single minute exchange of dies* - measures the waste of time in changeover on machines.
- *Total productive/preventive maintenance (TPM)*: continuous maintenance to enable machines and equipment to maximize availability.
- *Statistical process control* – measure amount of defects/ defect free in

processes.

- *Employee involvement* – to enable problem solving at all levels in the organization. (Shah et al, 2007).

In another case study the authors suggest, in addition to what Shah & Ward stated, that a company needs to implement the majority of the following tools to guarantee successful lean processes:

- *Cellular manufacturing* – to group manufacturing to reduce transport, waiting and process time.
- *Five S* – system to reduce clutter and inefficiency in all types of sections, including production and offices.
- *Process mapping* – creation of detailed map over process to be able to find bottlenecks and room for improvements etc. (Bhasin et al, 2006).

A third case study, which have mentioned some of the tools above, also present:

- *Visual control* – devices should be used to make control systems easy to identify.
- *Total product cycle time* – measures total production time for one single product (Motwani, 2003)

#### **4.1.4 Lean: Philosophical or Practical?**

Shah & Ward says that there are two typical views of lean production. They say that Womack & Jones present a more philosophical perspective of lean and that they themselves present a more practical perspective of the concept (Shah et al, 2007).

Most authors acknowledge that both practical tools and specific lean culture are needed for successful practice but they tend to place emphasis on one of the two in their respective writings.

Bashin & Burcher (2006) state that organizations often have sufficient knowledge of what tools are necessary to implement. However, they emphasize that: “Essentially, lean needs to be seen as a mind-set that governs how one looks at the business or processes” (Bashin et al, 2006:64) Furthermore they state the importance of involving and making decisions with suppliers and at the lowest hierarchal level of the

organization. The organization should provide training for leaders and at all levels in order to spread lean philosophy and incorporate it into the corporate culture. They conclude that lean should be viewed long term, as a culture that encourages people at all levels to think in terms of continuous improvement (Bashin et al, 2006).

#### **4.1.5 Lean Healthcare**

Lean health care is, in comparison to lean manufacturing, a relatively new phenomenon. However, according to Womack et al (2003), lean thinking is applicable to all industries, including health care (Ballé et al, 2007; Graban, 2009; Jones, 2006; Kollberg et al, 2006; Young et al, 2009). All organizations' operations, including those within the health care sector, consist of processes and lean is essentially a method of streamlining aforementioned processes (Modig et al, 2011).

Despite lean's compatibility with other industries, it remains a critical challenge to implement it in organizational contexts outside the automobile industry. Lean must be viewed not simply as a toolbox, but as a system, and that the personnel working in the organization must construct such a holistic system in which the tools are interconnected. These tools are all a part of the same whole and one tool by itself is seldom effective (Ballé, 2007). The key behind systematic implementation is education of the staff, both at the management and operator level (Aherne, 2007). In short, the implementation of lean is about putting a system in place that may deal with problems that are organizationally unique (Graban, 2009).

The difference between manufacturing and health care is that the product is the customer/patient and as such is present during most of the processing time (Jones, 2006). This means that the healthcare process is divided into two parts: the patient experience and the actual treatment. The focus within healthcare has traditionally been lacking in the sense that there has been a natural focus on the interaction between doctor and patient. A result of such an attitude is that the improvement of work processes may be neglected and waiting periods may consequently be unnecessarily long (Jones, 2006).

A common misperception is that the patients arriving at the clinics are often extremely varied in terms of care demand. However experiments shows that the desires of the patient are often quite predictable. It is therefore possible to define

flows, or in lean language: *value stream* for the common problems. The flow makes processes more standardized and manageable for the personnel, as well as relocates time towards more demanding problems (Jones, 2006).

#### **4.1.6 Healthcare wastes**

The 7 wastes stated by Womack are used in Healthcare as well. Here are some examples for the healthcare industry:

- *Overproduction* – too much time on diagnostic when not needed
- *Waiting* – patients who has to wait, surgeons waiting for lab results before surgery
- *Transport* – long distance between departments for patients
- *Over processing* – writing by hand instead of typing on computer right away
- *Inventories* – too large inventories might result in expired medication, uses space needed for other things
- *Movement* – Lab employees has to walk very far to leave information to surgeon
- *Defective parts* – giving wrong prescriptions or wrong dosing to patients (Aherne, 2007; Graban, 2009).

## **5.0 Empirical Data**

The empirical data serves to provide an overview regarding the current lean situations of our focus organizations as well as the journey they have undertaken to reach their present state. Naturally, the interviewees will provide us more with a portrayal of the implementation, or the strategic decision to organizationally embrace lean. However, we will ourselves interpret their respective lean histories as well as usage and attempt to detect key elements that constitute translational aspects or influenced translation directly.

### **5.1 Introduction Volvo Cars**

Volvo Cars was founded in 1927 as a passenger vehicle producer. Volvo Cars was originally a part of the Volvo Group and located in Torslanda, just outside of Gothenburg, where the HQ and a substantial part of productions are still located. In addition to passenger vehicles, the Volvo Group also produces trucks, buses, heavy construction equipment, as well as marine and aerospace components. In 1999 Volvo Cars was sold to American Ford Motor Company causing the trademark “Volvo” to be shared by the separate Volvo Group and Volvo Cars. In 2010 Volvo Cars was sold to new Chinese owner Geely Holding Group (Nationalencyklopedin, 2012).

Volvo Cars’ ten largest markets in order of size are the US, Sweden, China, Germany, UK, Belgium, Russia, Italy, Netherlands and France. The main production facilities are placed in Torslanda, Sweden and Gent, Belgium (Volvo Car Corporation Global Newsroom, 2012a). Volvo Cars’ production volumes has been growing during the years but had a dip during the financial crisis of 2008. In 2010 their sales were 373 525 cars but had since then risen to 449 255 cars a year later (Volvo Car Corporation Global Newsroom, 2012b).

### **5.2 Introduction Södra Älvsborgs Hospital**

Södra Älvsborgs Hospital is a part of the public sector organization VGR and is, as local administration, controlled and directed by the regional politicians and health care committee. Södra Älvsborgs Hospital has operations both in Skene and Borås, Borås being the main location and also where we have placed our focus. Borås has 450 beds and a total of 4000 employees of which 81% are women. Each year the hospital receives approximately 425 000 patients (lean coach SÄS, 7/5-2012). As

mentioned earlier, VGR is an umbrella organization based in Gothenburg that manages all public administrations throughout the region, including public hospitals and others of the health care variety.

### **5.3. Individual lean**

#### **5.3.1 Interviewee background**

##### Volvo Cars: Director Operational Development

After having completed his higher education at Chalmers Technical University, the director of operational development started working at Volvo Cars within production technology in 1993. At the Skövde plant, his first posting within Volvo, the director investigated key ratios such as OEE and found these to be lacking. In an attempt to improve efficiency, the director turned to TPM and travelled to Japan during the first half of the 90's to study at the JIPM. In 94/95, the director brought JIPM representatives to Skövde who assisted in the total implementation of lean at the plant. The director later was promoted to head of maintenance at body manufacturing where he continued working with efficiency improvement. In 1997, he wrote a book on the subject of TPM. At the time Volvo started implementing a more pronounced lean concept during the early 2000's, the director was a key part of the process.

##### VGR: Chief Logistician, SÄS: Lean coach

The VGR chief logistician was originally an engineer specializing in production flows. Before coming to VGR, he previously worked at SKF and Samhall for a combined 30 years and held a variety of positions such as production manager, factory manager and chief logistician. He started working actively with lean in 2004 at Samhall when the company turned to the concept partly due to demands from customers such as Volvo. As a part of this process, the chief logistician received training from Revere, a consulting firm. In 2008, he was recruited to SÄS in order to aid in the lean implementation process but has been on loan to CVU (Center for operations development, a department within VGR) for the past four years. The lean coach at SÄS started working within health care as a nurse in 1988. She has, for the past nine years, been working more within health care administration. In 2009, she completed a course in lean methodology (on the initiative of the aforementioned chief logistician among others) provided by Revere consulting firm and became thusly a

certified coach, a position she holds today along with being responsible for patient well-being.

### Empirical Analysis

The Volvo director of operational development received his lean education directly from the source as he travelled to Japan and studied at the JIPM. Volvo, due to the nature of the company's production, is in this facet very similar to Toyota (the origin of lean) and was thusly institutionally well suited for translation. His decision to turn to lean was a combination of internal and external pressures as the Skövde unit was in competition with external suppliers as well as part of a company group in which there was constant drive for increased efficiency.

The VGR logistician comes from a background within industrial production at SKF and Samhall and was initially exposed to lean through customer pressures mainly from Volvo. Samhall later received assistance from Volvo to adapt their processes but the logistician received the bulk of his lean education from a consulting firm. He also states that he gained a great deal of practical knowledge regarding lean service production as Samhall transitioned from commodity production towards being more service-oriented.

The lean coach received her initial training in lean from a course provided by a consulting firm and continues to gain knowledge through various courses as well as self-education. Overall, one can state that all the interviewees are reactive to exogenous factors in their decision to embrace lean.

### **5.3.2 Lean Philosophy**

#### Volvo

The director of operational development states that lean at Volvo is a mindset, culture centered on the tenet of improvement. He says that the company maintains a continuous focus on value creation. He emphasizes this in the context that all commercial companies must deliver goods with quality while maintaining adequate profit margins in order to survive. Improving efficiency through the minimization of waste does this most effectively.

#### VGR, SÄS

Both the logistician and lean coach state that lean is a culture that requires fundamentally instilled corporate values for proper implementation and use. The

logistician stresses that lean health care is about creating value for the patients. This is done by removing non-value creating time and channeling as much time as possible towards more value creating activities. The lean coach states that the principal focus of lean is on operative flows and that, in lean health care, the patient should partake in his/her own care process and always receive qualitative as well as safe care. Furthermore, the lean coach emphasizes that every employee within an organization should be conscious and passionate about continuous improvement for a lean concept to be fully functional.

### Empirical Analysis

All the interviewees seem to share the same opinion and all describe lean as more of a corporate cultural phenomena as opposed to solely being a question of production processes and tools. They all stress the importance that all employees must be involved as well as passionate about the concept in order to achieve maximum effect. Naturally, value creation occurs in accordance with the respective organization's core competencies: for Volvo it's about minimizing waste in production processes, and within health care the concept is centered on maximizing time spent creating value for patients.

## **5.4 Organizational Lean**

### **5.4.1. Implementation (What, when, how, why)**

#### Volvo

Within Volvo, the director described that all production facilities were initially individual companies that essentially competed with one another as well as with external suppliers. Each facility had consequently its own efficiency concept: for example, Torslanda employed VU (operations development) while Skövde used TPM. As Volvo was incorporated into the Ford group in 1999, new management started demanding a common, organization-wide efficiency concept. Consequently, VCMS (Volvo Cars Manufacturing System) was conceived from a combination of the previously existing efficiency concepts along with influences from Ford own system, FPS (Ford Production System). Our interviewee, the director of operational development, was active during the implementation phase and continues to be one of the corporate champions of lean and of VCMS.

## VGR, SÄS

The chief logistician explained that VGR doesn't have the mandate to spread lean throughout the entirety of the organization as implementation occurs separately within the different administrations if it occurs at all. However, it was around 2008 that VGR started explicitly using the word lean for describing its desired efficiency concepts. Currently, the administrations that employ lean or lean-like concepts draw expertise from a variety of sources such as local colleges, consulting firms, Verksamhetslyftet (a national lean initiative amongst public administrations), and technical universities such as Chalmers. Consequently, the lean employed within VGR's overall organization is ideologically fragmented. Furthermore, it has been a slow process to initiate lean concepts, as the hospitals are organizationally complex with distinct, sometimes resistant cultures. VGR essentially has to covertly incorporate lean theory into more practical tools with hopes of emphasizing the idea of continuous improvement. Finally, VGR naturally provides support when a hospital makes the decision to use the concept.

Before lean became the concept of choice, SÄS used a concept called LIFT (implemented in 2002) that employed many of the same conceptual aspects. LIFT included, for example: cross-professional teams, 'do right from the start' mentality, coaching leadership, continuous improvements and the view of the employees as a creative resource. Lean, in its traditional form, started appearing in 2009 when VGR sent logisticians to aid in the implementation process. SÄS is yet to actively implement the concept throughout the entire organization. However, there are a couple of successful pilot departments that are rather advanced in their lean use.

## Empirical Analysis

Volvo's lean concept is essentially a reflection of the organization itself. As Volvo previously consisted of somewhat autonomous units, there were several concepts that resembled lean to varying extents. Later, Volvo's lean approach was altered as a result of the incorporation into the Ford Group. Essentially, Volvo's lean concept has evolved parallel to the organization and both are products of a dynamic environment in which organizational restructuring as well as external pressures are main forces of change. As with Volvo, VGR's myriad of lean concepts reflects the fragmented nature of the organization. Within VGR, each administration makes decisions

regarding strategy and is heavily influenced by local political policy-makers. Furthermore, the lean-like concepts that can be identified are derived from widely different sources. SÄS, being one of the administrations within VGR, initially turned to LIFT and later lean due to an inherent need for efficiency. This need may be the result of external pressures such as criticism directed towards the public health care sector concerning unnecessarily long waiting periods.

#### **5.4.2. Corporate lean philosophy**

##### Volvo

The director of operational development describes value as being created during directly operational moments of production. In other words, lean value is only created when an action is performed that creates real value for the customer. For example, value is created when a screw is put on a module and not when the employee goes to fetch that same screw off a shelf. Furthermore, Volvo has adapted the traditional 7 view of waste as described by Womack, and added an 8<sup>th</sup>: Peoples skills. Furthermore they have incorporated the 16 losses of TPM in their description of waste. These sixteen losses can be categorized in the following manner: nine OEE-related, four time-related, and three others (energy, material, storage). Finally, Volvo's lean philosophy is present throughout the entirety of the organization but is most evident within the production units.

##### VGR, SÄS

The logistician states that lean theory is directly applicable to health care. Once one moves away from the concept's industrial connotations, it becomes clear that it is very beneficial to think in terms of flows and resource efficiency. The resource that has to be optimized within health care is time. The logistician expresses that the key method in doing so includes reducing variation in work processes through standardization. This, however, has to be done in a way that does not downplay human variation. Unlike that of commodity producing organizations, one distinctive characteristic of lean health care is that the customer is also viewed as the product and the definition of value creation is consequently more complex. The logistician states that there are two major forms of value creation within lean health care: indirect and direct value creation. Indirect value creation includes, for example, general care and dialogue with the patient. Direct value creation resembles industrial value creation more closely and occurs, for example, when a patient is operated upon or the instant a

needle is inserted during a blood test. The logistician maintains a view of waste similar to that of Volvo's director of operational development. The lean coach states that value derives from ensuring the patient's rapid recovery while guaranteeing safe and friendly treatment. Waste results, according to the lean coach, results mainly from flow interruption and usually manifests itself as prolonged waiting periods for the patients. She claims that, in accordance with the VGR logistician, that standardization of work processes is a key priority within lean health care.

### Empirical Analysis

As mentioned earlier, all three interviewees maintain that lean is cultural aspect that has to be accepted and embraced amongst the entire staff for it to be fully functional. Concerning value creation, the nature of the respective organizations cause differences in how they chose to handle the value creating process and how they conceptually view value creation. For example, Volvo emphasizes fast, qualitative production with ideally a small amount or no waste. Within lean health care, the definition of value creation is not as clear-cut and sometimes elements that may be considered wasteful within industrial production are necessary to ensure a positive patient experience. This is something we briefly mentioned earlier while discussing direct versus indirect value creation. The VGR logistician drew on a hypothetical example to illustrate this aspect: a woman is diagnosed with breast cancer. In lean health care, the patient is also the product and had more industrial principles applied then the focus would've been on processing/operating her as fast as possible to ensure continuous, fast flows. However, lean health care also has to account for more human elements and a woman recently diagnosed with cancer may need time for reflection and preparation. Consequently, the focus within lean health care, as mentioned by our interviewees, falls on the standardization of work processes and the maximizing the time spent creating value for patients. This value creating time, in turn, is allowed to vary beyond direct value creation in accordance with patient wishes and needs.

### **5.4.3 Lean tools, use and practice**

#### Volvo

According to the director of operations development, Volvo uses QCDSIME as its principal model. QCDSIME stands for quality, cost, delivery, improvement, safety, moral, and environment. Quality, cost and delivery constitute the core focus and the

rest are enablers. Some of the methods for quality assurance include templates, check lists, and continuous improvements. Their goal, as expressed by the director, is to be best in class. Volvo is currently using a great number of different tools, which are all different in terms of function yet constitute parts of the same overall system. To practically work with the entire value stream they involve their suppliers in the lean process who they encourage to and aid in implementing lean and quality assurance. In this process, the director stated that Volvo representatives serve as consultants to the suppliers in question.

The overall practical strategy is *standardization* and *improvement*. To systematically work with continuous improvements, the director of operational development stated that Volvo has constructed a matrix organization consisting of nine development groups. Each development group consists of representatives from all departments within Volvo Cars. The representative from each department has been chosen to promote the staff's improvement ideas, regardless from where in the organizational hierarchy these originate. Consequently when an employee proposes a point of improvement, the representative transmits the idea to his lean-team. The lean-team can then investigate the suggestion and initiate systematic application. This system allows two-way communication: strategic directives can be transmitted top-down from the management levels while improvements are promoted bottom-up from the more operational units.

### VGR, SÄS

In terms of lean tools, VGR acts more in the manner of educators regarding lean while SÄS employs the concept practically. The most emphasized ones are flow-charting, lean-cases, spaghetti charting, 5S and waste minimizing. Both the chief logistician and the lean coach expressed that these tools are used to encourage employees to reflect on their work processes in an effort to identify areas of improvement. In terms of usage, SÄS is still in the process of educating management and personnel in order to spread the lean concept.

SÄS, according to the lean coach, has weekly improvement meetings with their cross-function lean-teams. In addition to that they have bigger Kaizen events and conferences a couple times a year.

### Empirical Analysis

Volvo Cars use of the lean tools is more systemized and constitutes a more innate part of the organization's structure and strategy. One reason for this is that Volvo Cars concept is more mature in terms of age and degree of adaptation. This has resulted in that the employees have a greater understanding of lean and themselves champion improvements, which has created a customized model for Volvo's manufacturing.

VGR and SÄS's tools, due to the two organizations' relative inexperience and early stage of implementation, are shallower in their use. At this point, the organizations' lean champions are still striving for awareness and acceptance amongst the employees. The tools and systems might become continuously more customized to SÄS's operations in time.

#### **5.4.4 Lean Resistance**

##### Volvo

According to the director of operational development there is no resistance within Volvo Cars' organization against implementing or using lean. There is a shared opinion that a lean production is necessary for survival within the car industry.

##### VGR, SÄS

However in the health care sector in VGR there is more resistance to lean, as stated by both the chief logistician and lean coach. A few years ago the term lean was almost forbidden or at least greatly frowned upon. The chief logistician and the lean coach say that within hospitals, mainly doctors but also nursing staff to some extent often think that lean is an industrial tool for rationalization, and cannot be used within industries such as health care where focus is on the individual. The logistician and coach consider it absolutely critical to emphasize that the point of lean is not to cut down on personnel, but to increase treatment pace and shorten waiting time for patients. Since the term lean sometimes get such resistance logisticians tries to spread tools and content without explicitly labelling them as "lean".

The chief logistician explains that nurses in general are one group that seems to be the most acceptant of lean. Their work is directly affected by lean and consequently they

are also among the first to take note of the concept's benefits. Doctors, according to the chief logistician and the coach alike, tend to be most conservative and are often resistant to change in work patterns and administrative processes. In short, the rigidly hierarchal structure of health care professions tends to slow down organizational changes. This is a problem since a well-working lean culture requires communication and coordination throughout all levels of the organization hierarchy.

A common argument against lean from the doctors is that they do not have time for improvement work; they maintain their sole task and focus is to treat patients, says the chief logistician. At Södra Älvsborgs Hospital the improvement work forms a part of the internships for future doctors, something that is meant to highlight the potential benefits of such concepts at earlier stages in their careers. This has been met with great optimism and the lean coach say that the resistance to lean currently exhibited in medicinal professions may simply be a question of generation.

Apart from the obvious cultural conflicts, there is also some structural resistance within SÄS. The lean coach states that key to more thorough implementation depends greatly on the hospital managing levels and board of directors. She states that implementation could be greatly accelerated if lean was promoted from the strategic apex in addition to the administrative units. The best way to promote such a concept, according to the lean coach, is to inform the employees of its potential benefits.

### Empirical Analysis

The implementation of lean within the health care industry, unlike Volvo Cars, seems to encounter resistance due to factors such as the lack of information and prejudices regarding the concept. For example, there will naturally be resistance if the health care professionals believe the concept's aim is to reduce the number of staff instead of improving patient care.

There are also some structural difficulties. For lean to be successful, the concept must be integrated systematically throughout the entirety of the organization. Since strategic decision-making is decentralized within VGR, the health care administrations decide for themselves regarding implementation of concepts such as lean and implementation depends consequently on the individual administrations'

decision-makers. Although there are some champions of lean such as the lean coach at SÄS, they have little say in terms of the overall organizational context. Even within their own administrations, promoters such as the lean coach must engage the strategic management to ensure the use of lean tools throughout the treatment process, something that has proved difficult.

#### **5.4.5 Lean Results**

##### Volvo

The director of operational development, who has been present during the entire Volvo Cars' lean implementation process, states that there have been remarkable improvements in performance since the introduction. A concrete example of this is the measurement *First Time Through*. It measures how many cars out of a 1000 that go through the entire production process without a single error. In 2007 it was 38%, and in 2012 it is anticipated to be 70%.

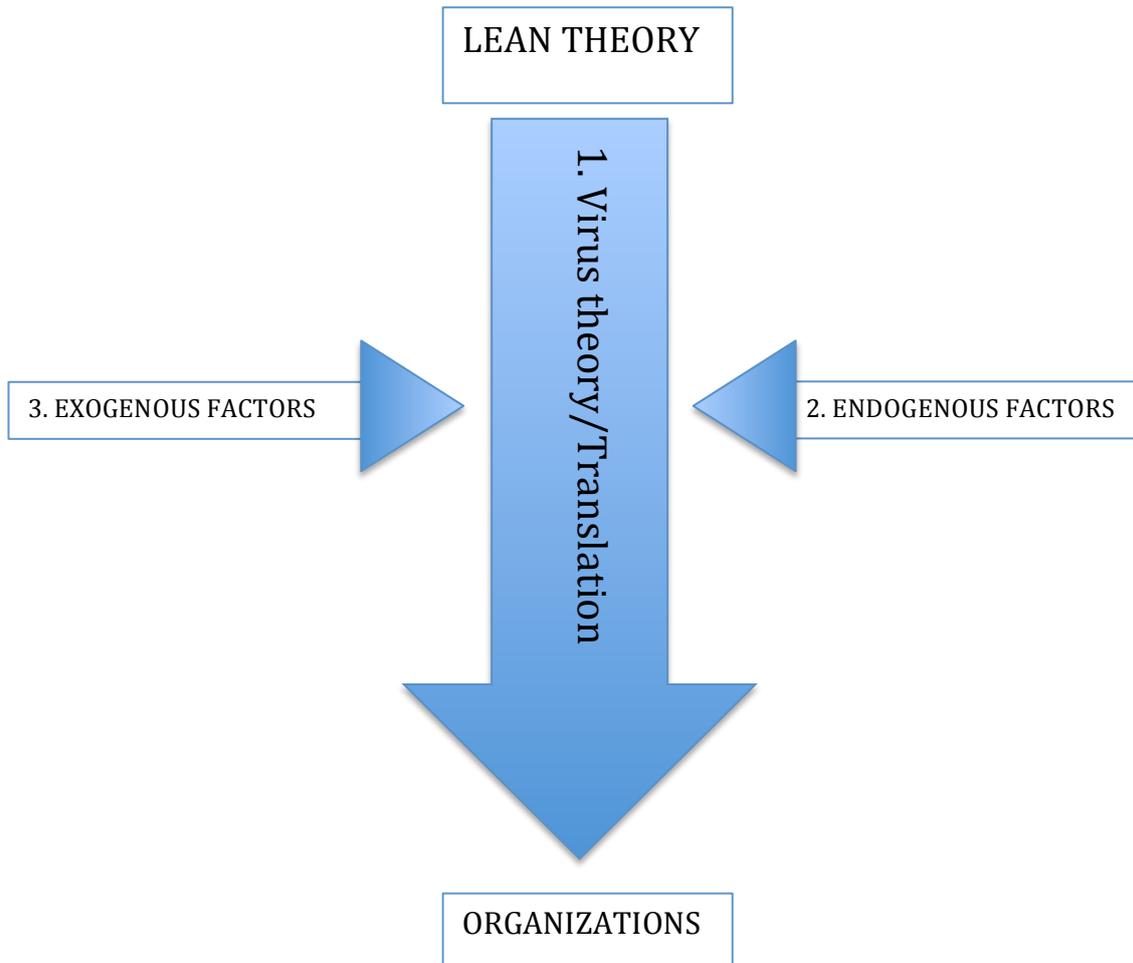
##### VGR, SÄS

For Södra Älvsborgs Hospital it is not as easy to mark the improvements. Both the chief logistician and the lean coach say that it will take time to see organization-wide results as SÄS is still in early stages of implementation. Most of the currently lean-using departments within SÄS have had great results, thusly constituting good examples to inspire future implementers. The departments that haven't enjoyed similar success contribute this to two main factors: failure in involving the staff sufficient and other exogenous factors such as usually high demand.

##### Empirical Analysis

The differences in results are probably due to the maturity of the implementation, which has been discussed above.

## 6.0 Analysis



### 6.1 Translation

Within Volvo, different efficiency concepts developed separately at the different production locales. Examples of this are, as outlined by the director of operations development, the Skövde plant's employment of TPM or Torslanda's use of VU. From a translation perspective, this corresponds to something Røvik refers to as "mushroom model". This model describes the part of the translation process during which an organizational idea manifests itself within different parts of the same organization without it being any evident connection between these separate occurrences. This process is meant to resemble the way mushrooms "pop up" on the forest floor (Røvik, 2008) and may manifest itself as a result of the external factors that affect different organizational parts in similar ways. As Volvo was being incorporated into the Ford group, these aforementioned efficiency concepts were

assembled into a common concept in accordance with the new owners' wishes. Consequently the translation of lean-like concepts within Volvo became more top-down oriented (Røvik, 2008) as central management increased their involvement in the process and assumed a coordinating role. At this point, VCMS was developed and gradually spread throughout the organization as a response to the internal pressures for coordination. VCMS, as an object of translation, evidences elements of both *copying* and *mutation* (Røvik, 2008). The concept can be considered copied as it employs many elements that may be attributed to original lean theory such as general philosophical disposition, tool usage, and overall systematic implementation. VCMS also evidences mutation (Røvik, 2008) as the concept has been adapted to suit the pre-existing organizational conditions of Volvo. For example, matrix structures were adapted to facilitate coordination within Volvo's somewhat divisionalized organization and the name was changed to the more individualized Volvo Cars Manufacturing System.

At SÄS, lean has begun to "pop up" (Røvik, 2008) within the different operational units in accordance with Røvik's mushroom model. The same pattern can be seen at a more aggregated level within VGR where separate administrations (including, for example, SÄS) turn to lean or lean-like concepts in an effort to increase efficiency. However, as lean is promoted from administrative units within the organization, one can also argue that this translation process also exhibits traits of a "sequential chain" (Røvik, 2008) as these aforementioned units attempt to stimulate the organizational components to adaption. This chain translation, on the other hand, can be viewed more as a description of desired translation while the mushroom model presents a more accurate picture of what is actually happening at the hospital. Looking at the translation of lean within SÄS, the concept has been greatly simplified in the sense that the administrative unit only promotes a few of lean-tools that they believe to be compatible and beneficial to the hospital's operations. Looking at this specific translation process, it is clearly an example of subtraction as elements and tools have been removed from the original concept (Røvik, 2008).

The key difference between our focus organizations is that Volvo has institutional backing in the sense that the translation of lean is facilitated by management involvement. This allows Volvo's lean translation to move beyond the "mushroom

stage” (Røvik, 2008) in terms of organization-wide coordination. This does not necessarily constitute an advantage, but it contributes to a more uniform employment of lean and may lead to organizational synergies. Within SÄS and VGR, on the other hand, the translation process continues to act according to Røvik’s mushroom model despite the efforts of the administrative units to coordinate the conceptual translation.

### **6.1.1 Translators**

The translation process depends greatly on the competence of the translator, in other words, it can be performed more qualitatively if a translator possesses favorable characteristics.

As mentioned in our empirical findings the director of operational development at Volvo gained his knowledge of lean from the primary source, JIPM. As an institute dedicated to industrial efficiency, JIPM mainly promotes lean production. Having been conceived within industrial contexts, lean production is well suited for organizations such as Volvo where the core competency lies within the production of technologically advanced commodities. The chief logistician at VGR and SÄS’s lean coach alike achieved translator status mainly through education in the concept, primarily conducted by consulting firms or other secondary sources. Examining this, one can conclude that Volvo’s translation process, in terms of proximity to the source context, was more direct than our health care organizations’ processes. Also, this closeness to the source shaped the translator role of the director of operations development.

The translators can be placed in different theoretical frameworks as a result of their experiences. The director of operational development at Volvo Cars, for example, exhibits traits of what Røvik would call a knowledgeable translator. This is a result of a combination of his extensive knowledge of the concept itself and of the organizational contexts deriving from his long professional experience at Volvo Cars. The chief logistician can be considered a patient translator, as he has no formal mandate concerning implementation he is forced to allow the concept to spread organically throughout the organization. The lean coach on the other hand is definitely more of a strong translator. This is caused by the culture in which she operates that is naturally more resistant to such ideas and prone to consequent conflicts. Furthermore, one can state that she has become more of a strong translator

as natural product of the fact that she is concerned more with the operational implementation of the concept.

The health care representatives have, unwillingly, been placed in specific translator roles as they react to the organizational environment. We will later discuss organizational environment more in depth as we look at organization structure and corporate culture.

The different sources of knowledge and given translator roles have affected the different modes of contextualization employed by our focus organizations. Volvo Cars, which has collected knowledge from the primary source within the same industry, has been able to *copy* the original concept. SÄS and VGR, on the contrary, have gained knowledge from secondary sources and have had difficulties with some aspects of their translation processes. This has resulted in the removal of some parts of lean and the health care translation is therefore more characterized by *subtraction* in the sense the concept has been trimmed to better suit the organizational requisites. In a way, lean production has shaped Volvo's organization structurally while SÄS has more shaped lean.

## **6.2 Endogenous Factors**

### **6.2.1 Organizational structure**

Both Volvo and VGR in particular exhibit traits that would be characteristic of a divisional structure in accordance with Mintzberg's theories. These are two large, complex organizations that have consisted of rather autonomous units. Within in Volvo, these units are organized depending on productive capabilities (one unit makes engines, another produces body works etc) while VGR's organization is structured more on the basis of its different administrations.

The key differences between the two organizations in terms of structure is that Volvo, more in accordance with a machine bureaucracy, has control mechanisms that allow standardization of processes. These control mechanisms can be attributed to the extensive technostructure. An example of this system of control is the matrix structure that Volvo employs to facilitate continuous improvement and strategic directives.

VGR, unlike Volvo, lack similar coordinating mechanisms as a result of the institutional nature of the organization itself. Within VGR, each administration has its own, separate strategic apex (Mintzberg, 1993) that adheres to the directives of local municipal councils and other political policymakers. Consequently, it is very difficult for the core units of VGR to create institutionally beneficial environments for translation at organization-wide basis. This was clearly stated by the chief logistician who lamented the fact that CVU has little mandate regarding active implementation of lean within the different administrations.

SÄS, being an administration within VGR, serves as perfect example to further illustrate this situational dilemma. SÄS, apart from being one of the components of the VGR divisionalized structure, can also be characterized as professional bureaucracy (Mintzberg, 1993) due to the composition of its staff and the nature of the daily operations. A defining trait of a professional bureaucracy is that the majority of the organizational competence lies within the operating core (Mintzberg, 1993). As in SÄS's case, its operating core is mainly comprised of medical professionals who have in the past been opposed to lean theory or other concepts with traditionally industrial applications. It can consequently be stated that, within SÄS, there have been conflicts between the operating core and the administrative units that seek to translate lean health care into the organization. Naturally, such resistance to lean can also be attributed to organizational culture.

### **6.2.2 Organizational Culture**

Examining Volvo Cars through Schein's 3-step framework, it becomes evident that Volvo's cultural context facilitates the translation of lean.

1<sup>st</sup> step – The lean production is an outspoken part of Volvo's production process and this is something that the organization actively projects to the external environment. Volvo employs lean production to remain competitive and permit a focus on qualitative production without some of the cost-related drawbacks that this normally entails. In short, lean production is a key component of Volvo's focus on quality and cost-efficiency.

2<sup>nd</sup> step – Lean production is actively incorporated into the values of the employees and essentially expected to be a part of every organizational member's daily work process. This is enforced practically as it is incorporated into the evaluation process of individual employees. During such an evaluation, the director of operational

development stated rather than commending the employee in question on his or her suggestions regarding improvement, they are asked if they can do more to further improve work processes in the future.

3<sup>rd</sup> step – Lean production or concepts of similar nature steps have been present within Volvo for an extended period of time and the organization has been successful in implementing a supporting culture. Consequently, lean production has become a “natural part of the job”.

### Health Care

Unlike Volvo, a 3-step analysis of our health care organizations highlights a situation that may obstruct translation of concepts such as lean that are not a natural parts of the health care industry

1<sup>st</sup> step – Both VGR and SÄS are outspoken with their use of lean. Both organizations promote lean health care on their websites and outline the patient benefits in using such a system.

2<sup>nd</sup> step- The lean coach and chief logistician both explained that there has been some initial resistance to the concept amongst the organizational members. This resistance, however, was somewhat amended as the employees were given the opportunity to practically apply lean tools to their own work process. For example, there were reportedly a few “eureka moments” during flow-charting exercises.

3<sup>rd</sup> step – The unspoken rules of the Swedish health care profession may cause direct opposition to lean health care. Tore Larsson describes the health care subculture as “pre-industrial” as it is very hierarchical and includes elements of segregation on the basis of gender. This is a direct result of the societal status of the professionals therein (doctors) and the fact that they deal with the attempted control of death as part of the daily operations. Consequently, a concept such as lean that can be perceived as shifting the organizational balance of power (Mintzberg, 1993) may encounter direct as it promotes a great deal of self-criticism and questions established work patterns.

### Cultural Immunity

In terms of Røvik’s virus theory, the resistance evidenced within the health care subculture can be characterized as immunity. More specifically, innate immunity, something that was further emphasized by the lean coach and chief logistician. The innate immunity towards lean is caused by the tacit assumptions of the carriers of the

health care culture as mentioned earlier. Røvik argues that the very existence of innate immunity can be debated as organizations gradually converge in terms of format due to increased globalizing forces etc. However, we make the case that this is an example of innate cultural immunity and we believe this to be more deeply rooted than for example structural incompatibility. Culture is the hardest part of an organization to change and this is further strengthened by the somewhat archaic health care subculture's resistance to changes, particularly those that may result in redistribution of authority amongst the different groups of professionals. Looking beyond cultural immunity due to hierarchy, could the resistance we observed simply be a question of cultural immunity towards the concept itself? For example, lean theory may not be as applicable to an industry where the product is also the customer and where wastes must be allowed to a certain extent. The problem remains that no matter from where the conceptual immunity towards lean theory lies within health care, translators such as the lean coach have to be more active and adapt the concept in such ways so that it may circumvent resistance (Røvik, 2008).

Volvo Cars, on the other hand, seems not to have experienced similar resistance. This may be a result of the organizational similarities between Volvo and the concept's origins, Toyota. Furthermore, Volvo may have encountered little resistance as the concept was a proven winner within the automobile industry and thusly achieved legitimacy.

### **6.3 Exogenous Factors**

#### **6.3.1 Formal Structure**

Organizations sometimes employ concepts in a manner consistent with Meyer & Rowan's decoupling theories. In such a process, an organizational idea is limited to the formal structure of the organization in order to avoid potential conflicts with the operational activities. The same is true regarding lean and we believe that organizations may sometimes openly convey lean practices in an effort to project an awareness regarding increasing efficiency towards their external environments and consequently pacify stakeholders. For the purpose of our analysis, we have chosen to treat Meyer & Rowan's strategies as external factors that shape translation, a process that can essentially be viewed as a way to incorporate concepts and achieve external

legitimation. We will now examine our focus organizations' translation processes using a perspective derived from decoupling theory.

In the case of Volvo Cars, lean has, according to the director of operations development, been translated into the organization to such an extent that it is systematically integrated. It's not just a strategy coming from the strategic apex but the concept has somewhat moved beyond external legitimization purposes and become a natural aspect of the operations. This is possible because of the entire organization has a common idea that lean is important for competitive reasons. The quality focus and customer satisfaction, additionally, are evidently deeply rooted within the culture.

Up to this point SÄS has engaged a few lean tools, but this process proceeds slowly due to resistance from the operating core elements. SÄS and VGR states on their websites how they work with lean and flow-optimization to show patients and other stakeholders they aim to improve overall efficiency. The goal of SÄS is also to be able to translate lean in such a way that it becomes a natural part of the operating core, resulting in a culture driven by continuous improvements. Presently, however, lean within SÄS and VGR serves mainly a ceremonial purpose: they are open about their lean use when in reality this is a process only evident within a few organizational units and is used sparingly within these units.

## 7.0 Conclusions

Translation, in our view, is essentially the meeting between an organizational idea and an organization. This is a fairly organic process and cannot be directly steered in any given direction, only influenced to assume desired forms by institutional conditions and activities alike. We conclude that in order for an organizational idea to resurface within a new context in a manner so that it retains its original effectiveness and form, it must be compatible with the receiving organization. We have attempted to identify parameters that may affect such compatibility and have found the following: structure, legitimacy, culture, concept exposure, results, and scope. If an organization is found to be incompatible with a concept in terms of translation and necessary actions are not taken, the risk remains that the concept may lose its intended impact and become more of a ceremonial decoration.

Eventual similarities between the receiving organization and the concept's original context facilitate translation. This is quite a natural conclusion. If the contexts happen to differ (such as SÄS and Toyota), immunities may arise and the concept consequently has to be actively mutated to accommodate compatibility. One part of the aforementioned similarities is that there has to be a favorable pre-existing organizational environment. For example, the introduction of a concept has to be supported by appropriate structural conditions and promoted by central management in a way that creates legitimacy. Without structural support, the concept may lose its original impact through rampant translation.

Another aspect of compatibility that ties into organizational environment is culture. The culture is key as it influences employee attitudes, either directly or indirectly, towards a given translation process. Translation can occur uniformly throughout the entirety of an organization if there is wide acceptance amongst the organizational components, meaning the employees. For example, Volvo's culture is somewhat homogeneous as all its employees are technically oriented while SÄS's employees are part of distinct subcultures. Consequently, the translation process of lean within Volvo can be uniformly applied while it requires more careful contextualization at SÄS. At SÄS, another aspect of the lack of cultural uniformity is that there are discrepancies between the management culture and that of the operational core, something that further complicates translation as differences in attitude towards the

concept may cause conflicts. Also, such cultural differences obstruct the management's efforts to spread the concept throughout the entirety of the organization.

We cannot ignore that the differences in translation within our focus organizations may simply be a question of maturity. Volvo has been exposed to lean for a longer period of time and has consequently observed its long-term benefits. This reduces resistance to translation. If a concept is successful, it also makes it easier for organizations to "swallow it whole" providing aforementioned structural similarities.

Scope is a parameter that may be somewhat specific to lean theory, as it normally requires a culture or a system and not just tool usage. Consequently, scope is important as translation depends on the extent to which the concept is embraced. For example, if elements within a receiving organization exert themselves to implant a supporting culture, the translation process will naturally develop in way that maintains the concept's original strengths.

The role of the translator is also something that has to be taken into consideration. As stated earlier, a favorable organizational culture facilitates the translation process so this does not have to be actively steered in order for the concept to maintain its original effectiveness. In cases where steering is necessary, however, the responsibility falls on the involved translators as enablers of the entire translation process.

Examining our interviewees, it is evident that the conflicting organizational climate of SÄS necessitates greater participation on part of the translators. For example, the lean tools have to be actively tailored in a way so they avoid rejection and make sense in the context of the daily operations. The work of Volvo's translators, on the other hand, can be considered somewhat less intricate as the nature of their organization allows for a more direct import of the lean concept.

In general, our findings coincide with our preliminary hypothesis; Volvo's lean use is evidently more truthful to the original concept. SÄS, however, does not such much employ an individualized method of lean as they are currently in the earlier stages of translation. A result of this is that the health care translators have to adapt the concept

in such a way so that it may be universally accepted and integrated into the operational aspects of the organization.

Staying true to Røvik's biological metaphors, we have visualized one that we believe summarizes the translation process as we have observed it within our focus organizations. We view the organizational idea as a seed and translation as the process through which the seed is given nourishment and allowed to grow into an ivy-plant. This plant, as it grows, can be shaped to suit one's desires but also grows independently if no such constraints are imposed. Regarding the soil, or the pre-existing organizational conditions in which the seed is planted, growth occurs naturally if the soil is rich. If the soil is lacking, however, focus falls on the translator to tend the concept and thusly enable growth.

### **7.1 Practical Applications**

As our study is more theoretically oriented in its nature, its practical applications may not be evident at first glance. However, we argue that it is beneficial to managers as an understanding of the translation may encourage consideration regarding the factors that influence the process. In a pre-translation stage, for example, a manager with a keen understanding of translation may pay additional attention to a particular concept's compatibility with the receiving organization. Furthermore, an understanding of translation allows managers to create a favorable organizational environment and processes, thereby facilitating reception of desired organizational ideas in a way that retains original form and effectiveness.

### **7.2 Suggestions for Further Studies**

Naturally, it would be interesting to conduct a similar study on a larger scale using a greater amount of organizations as well as additional interviewees. This would lead to greater understanding of the translation process and allow us to identify more universally applicable parameters that shape the process. Additionally, to conduct the study during an extended period of time would allow us to identify how the duration of conceptual exposure affects, for example, translational parameters such as organizational resistance and internal legitimacy. Finally, the study could be conducted using different examples of organizational ideas apart from lean production.

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## 9.0 Appendices

### Appendix 1:

#### **Intervju – Director of operational development, Volvo Cars**

1. Vad har du för bakgrund och hur länge har du arbetet med Lean?
2. Varifrån kommer din kunskap angående Lean?
3. Berätta om Volvo PV som organisation.
4. När började Volvo använda sig av Lean?
5. Vilka är/var mest involverade i implementeringen av Lean?
6. Hur används Lean här?
7. Till vilken utsträckning används Lean inom er organisation? (alla arbetsmoment eller enbart vissa linjer inom t.ex. produktionen)
8. Vad innebär Lean Produktion för dig?
9. Vid användning av Lean ska man identifiera värde (Specify Value), hur görs det?
10. Vad anser Volvo vara "waste" när det gäller era produktionsförfarande?
11. Vilka verktyg/system ingår i ert Leantänk?
12. Hur involveras era leverantörer i Lean?
13. Hur involveras medarbetarna i Lean-arbetet? Tips på förbättringar från produktionen?
14. Vilka delar av organisationen har påverkats/förändrats mest i samband med tillämpning av Lean?

15. Används Lean mer än andra effektivitetskoncept?
16. Finns det någon konflikt i användning av Lean, tex mer effektivitet skapar mindre efterfrågan på arbetskraft?
17. Tror du att svaren till dessa frågor hade varit annorlunda om vi frågat en mellanchefer?
18. Vad har användningen av Lean gett för resultat? Bättre? Sämre?

## Appendix 2.

### **Intervju –Leancoach - Södra Älvsborgs Sjukhus**

1. Vad har du för bakgrund och hur länge har du arbetet med Lean?
2. Varifrån kommer din kunskap angående Lean?
3. Berätta om Södra Älvsborgs Sjukhus som organisation.
4. När började Södra Älvsborgs Sjukhus använda sig av Lean?
5. Vilka är/var mest involverade i implementeringen av Lean?
6. Till vilken utsträckning används Lean inom er organisation? (alla arbetsmoment eller enbart delar?)
7. Vad innebär Lean Healthcare för dig?
8. Vid användning av Lean ska man identifiera värde (Specify Value), hur görs det?
9. Vad anser ni vara ”waste” när det gäller er verksamhet?
10. Vilka verktyg/system ingår i ert Leantänk?
11. Hur involveras medarbetarna i Lean-arbetet? Tips på förbättringar från vardagliga arbetet?
12. Hur skiljer sig Lean Healthcare från Lean production?
13. Används Lean mer än andra effektivitetskoncept?
14. Vad har användningen av Lean Healthcare gett för resultat? Bättre? Sämre?

15. Finns det många läkare/sjuksköterskor som tycker att Lean ”bara tar tid från att behandla personer”? Och skiljer sig synen mellan läkare och sjuksköterskor?
16. Även om det ger positiva långsiktiga effekter, är det extra svårt inom sjukvården att implementera t ex Lean, då det tar mycket tid i det korta perspektivet?
17. Har det varit mer doktor-patient fokus och inte hela processen från ankomst till hemgång för patienten innan Lean införts? Alt, Hur har användningen av Lean påverkat hela resan?

### Appendix 3.

#### **Intervju – Chefslogistiker på CVU – Centrum för Verksamhetsutveckling**

1. Vad har du för bakgrund och hur länge har du arbetet med Lean?
2. Varifrån kommer din kunskap angående Lean?
3. När började man i Västra Götaland regionen implementera Lean?
4. Vad innebär Lean Healthcare för dig?
5. Hur skiljer sig Lean Healthcare från Lean Production?
6. Vilka verktyg/system ingår i ert Leantänk?
7. Vilka delar av organisationen har påverkats/förändrats mest i samband med tillämpning av Lean?
8. Hur arbetar ni på Centrum för Verksamhetsutveckling med att sprida Lean Healthcare till de olika enheterna?
9. Finns det några planer på att sprida Lean på en nationell nivå?
10. Hur ger ni stöd till sjukhusen vid en implementering?
11. Används Lean mer än andra effektivitetskoncept?
12. Finns det någon konflikt i användning av Lean, tex mer effektivitet skapar mindre efterfrågan på arbetskraft?
13. Vad har användningen av Lean Healthcare gett för resultat? Bättre? Sämre?
14. Finns det många motståndare till Lean? Som menar att Lean ”bara tar tid från att behandla personer”?

15. Även om det ger positiva långsiktiga effekter, är det extra svårt inom sjukvården att implementera t ex Lean, då det tar mycket tid i det korta perspektivet?
  
16. Har det varit mer doktor-patient fokus och inte hela processen från ankomst till hemgång för patienten innan Lean införts? Alt, Hur har användningen av Lean påverkat hela resan?