

Chasing Seloken ZOC

Co-ordinating multiple perspectives in goods distribution.

Work-in-progress submitted to the 19th Annual IMP Conference

Actors engaged in economic interaction at times display highly diverging views concerning how a situation in which they act is constituted. That is, their definitions of actors, resources and activities differ markedly. Most applications of the ARA-framework, however, are made with the implicit assumption that a stable, outside (or at least agreed upon) perspective exists, from which the particular situation can be analysed. Given that exchange situations where immaterial aspects play a prominent role are likely to promote such diverging views, the growing import of the service sector underscores the need to address the problem. This paper explores the consequences of relaxing such an assumption, i.e. of allowing for diverging situational definitions, when it comes to our understanding of the co-ordination of economic activity.

We do this by carefully describing the distribution system under study as performed by the various actors recognised by each other as participants in the system. We then address two questions: In what ways do the actors' definitions of activities, resources and actors differ? What are the consequences of these differences on the co-ordination of the distribution process, and ultimately on the efficiency of the system under study? This working paper is the first output from an on-going comparative study of pharmaceutical distribution in the Nordic countries.¹

Introduction

The discrepancies between talk and action in organisational settings has been widely discussed in organisational theory (see, e.g., Brunsson 1989; Brunsson and Olsen 1993). In this paper we are not so much interested in the distinction between talk and action. Instead, we start from the observation that different actors may define, re-present and enact seemingly the same phenomenon, in very different ways. Rather than a single view of a certain event, e.g., a back-order situation, we observe a multitude of partially

¹ We gratefully acknowledge the financial support of the Swedish Pharmaceutical Benefits Board. The choice of national distribution systems to compare was made jointly by a project group consisting of people from the Pharmaceutical Benefits Board, Apoteket AB (the state-owned retail-monopolist) and our research group. The Nordic countries were chosen because these systems are similar enough to allow comparison, but different enough to allow for interesting findings that might be put to practical use.

overlapping views. The existence of such differences, we argue, is neither surprising nor necessarily bad. It simply reflects the fact that actors take part in different situations, which they must in some way make sense of (confer Goffman 1986).

The differences become important, however, when viewed in the light of a theorem originally put forward by W.I. Thomas and subsequently discussed by Merton (1996, p.183): “If men define situations as real, they are real in their consequences.” From the perspective of a framework such as the ARA-model (Håkansson 1987), the observed differences now become problematic. Applications of the ARA-model rests, in our view, on establishing a stable, outside (or at least agreed-upon) perspective on the network under study. This applies to activity analysis (cf Dubois 1994), business network analysis (cf Lundgren 1995), and resource analysis (cf Wedin 2001). Of course, other perspectives go even further, e.g. distribution management, a priori defining the relevant activities and actors (Stern and El-Ansary 1988). Given that an important function of the activities is suggested to be co-ordination, the observed lack of a uniform perspective deserves further attention. This is also underscored by the growth of the service-economy, where, due to its immaterial aspects, such diverging views are likely to be common (Axelsson and Wynstra 2002). How can we analyse business situations (actor-networks, activity-structures and resource-constellations) for which no single perspective can be established? Who defines what to include in such an analysis?

In this paper, we explore the consequences of diverging views within pharmaceutical goods distribution. We do this by carefully describing the distribution system under study as performed by the various actors recognised by each other as participants in the system (confer Latour 1987). We then address two questions: 1) How do the actors’ definitions of activities, resources and actors differ? 2) What are the consequences of these differences on the co-ordination of the distribution process, and ultimately on the efficiency of the system under study? We start off, however, with a brief story taken from the practical world of pharmaceutical distribution...

Chasing Seloken ZOC

-No Seloken ZOC today either, Pia says. They don’t know when they can deliver. We got some Finnish cases last week, but soon we’re out of them too...

It’s nine o’clock in the morning. Pia and Lil, two pharmacist’s assistants, are unpacking goods at a pharmacy in Stockholm. This particular day they are joined by a young

research assistant studying pharmaceutical goods distribution. It soon becomes evident that problem-cases such as the somewhat frantic search for Seloken ZOC, take more time than the actual unpacking. They explain that there have been delivery problems for some time and that there are constant backorders. Pia then opens a locked cabinet and takes out a red basket containing some fifteen cases of Seloken ZOC 50 mg.

-I hid these a few days ago, she says. When the Finnish cases are sold we can use these. Then we can just hope they can deliver or maybe we can get some cases from another pharmacy.

Lil and Pia point out that they take pride in providing their customers with the correct treatment. Hence, having to tell a customer that they are out of a specific product doesn't feel very good. In the case of Seloken no one seems to know when it will be in stock again, or even why there are frequent backorders on it. Pia and Lil, though, work hard to find solutions:

-Pia, Pia, Lil exclaims. I found some cases at the Unicorn pharmacy! They'll send them to us later this afternoon. Pia looks at me and laughs. Then she says: And you know, Christoffer, tomorrow we'll have the same problem again...

Since Pia and Lil know that Seloken ZOC is manufactured in Södertälje, just 30 kilometres south of Stockholm, they think it is peculiar that AstraZeneca has problems delivering. And although they are quite eager to learn why, they don't have the time to investigate themselves. From their employer, Apoteket AB, they have heard nothing.

But then again, Seloken is not the only prescription drug that they are unable to provide. Today they are out of 203 products, some of which customers are waiting for. According to Pia, Lil and their manager Alice, the backorder situation is getting worse.

-Remember that the head office of Apoteket AB has done several investigations on the backorder situation, Calle says. We do not recognise the situation you describe, with people actually chasing cases and pills down there on the floor. As far as we're concerned the backorder situation is quite stable and isn't getting any worse. We have a system for dealing with these kinds of problems. No matter how streamlined and effective distribution system we have, there will always be flaws. The specific problems with Seloken ZOC, though, depends on a new indication, which makes the drug useful for treating another disease.

We have now left the pharmacy, and moved a few days forward in time and a few kilometres southeast, to the head office of Apoteket AB. During a meeting with a small group of people from the Pharmaceutical Benefits Board, Apoteket AB and the Stockholm School of Economics, I ask Calle, the representative from Apoteket AB, about the Seloken ZOC cases and the backorder situation.

Of course it is difficult to argue with his reply. No matter how good a system is, there will always be problems and difficulties which need to be dealt with. A few months later, when writing this abstract, I call Alice, the manager at the pharmacy.

-We still have the same problem with Seloken ZOC 50 mg, she says and laughs. There is a backorder and I don't have a clue why. We've had this situation for a very long time and we're really eager to know why. Yesterday we got some 30 cases from the Unicorn. Our main concern is that the customer gets the right thing, she emphasizes. The problem is that Seloken ZOC is just one example.

The situation is somewhat confusing. Centrally, Calle denies the backorder situation being as bad as Pia, Lil and Alice say it is. Still, they continue to chase Seloken ZOC and they have no idea why they're out of it. Perhaps the answer to the problem is to be found somewhere else than within Apoteket AB? I decide to call AstraZeneca.

-Hello, this is Margaret at AstraZeneca.

-Hi, my name is Christoffer, calling from the Stockholm School of Economics. I'm studying the distribution of prescription drugs. [...] My question though, is very simple. How come there is a backorder situation on Seloken ZOC?

-As far as I know we had some problems during late summer 2002, but we managed the situation very well in co-operation with Apoteket AB. Now there are no more problems with the deliveries.

-But as far as I know there are still problems in the local pharmacies, at least one which I talked to five minutes ago.

-Yes, there might be a delay on a few cases, but the co-operation with Apoteket AB has worked out very well. They have found creative solutions to the problem. We haven't been getting that many phone calls from patients, which we definitely would if they didn't get their prescribed treatment.

-What then, does the backorders depend on?

-Well, the product is quite technically difficult to produce and this has caused some problems.

-But I've heard that the substance was given a new indication. Is that correct?

-Oh, yes it's correct. In several countries Seloken ZOC may be used to treat cardiac insufficiency. Demand for the drug has increased dramatically and we've had difficulties adjusting the production line.

Pia, Lil and Alice work and act in their reality, Calle works and acts in his, and Margaret in hers. Fine, But when these realities meet through the exchange of goods and services, problems occur. Pia, Lil and Alice do not get the information they would like concerning the back-order situation. Centrally, their experience concerning Seloken ZOC is not held to be representative of the situation for Apoteket AB. Margaret at AstraZeneca doesn't seem to recognise that there is a problem with Seloken ZOC at all. She talks about creative solutions, but does not have a clue as to what Pia and Lil are doing. Neither do the people at Apoteket AB, since they do not recognise the problem.

Diverging views on the distribution process

How can we characterise the distribution of prescription pharmaceuticals through retail pharmacies? To provide a starting point for our discussion, we have used a technique for mapping industrial activities suggested by Dubois (Dubois 1994). Based on information from spokespersons representing a national sales subsidiary, a major distributor, the head quarter of a nationwide retailer and a national trade organisation within the pharmaceutical sector, we have compiled an image of the activities involved in distributing pharmaceuticals from the producer to the end-user (see Figure 1, below).

The image largely reflects the way in which these actors have described the distribution process to us. No single actor has however described the process exactly as depicted in Figure 1. For instance, details concerning the handling of prescriptions at the pharmacy were not described by the producer representative, whereas the retail representative was rather vague as to the activities involved in the exchange between the distributors and the producers, etc.

These differences in the images conveyed by the actors came as no surprise. To some extent we expected the actors' views to become somewhat blurry as the "distance" from their own undertakings grew. Still, some of the differences that we noted made us curious as to the effects that diverging views might have on the co-ordination of goods distribution, or on the co-ordination of economic activities in general.

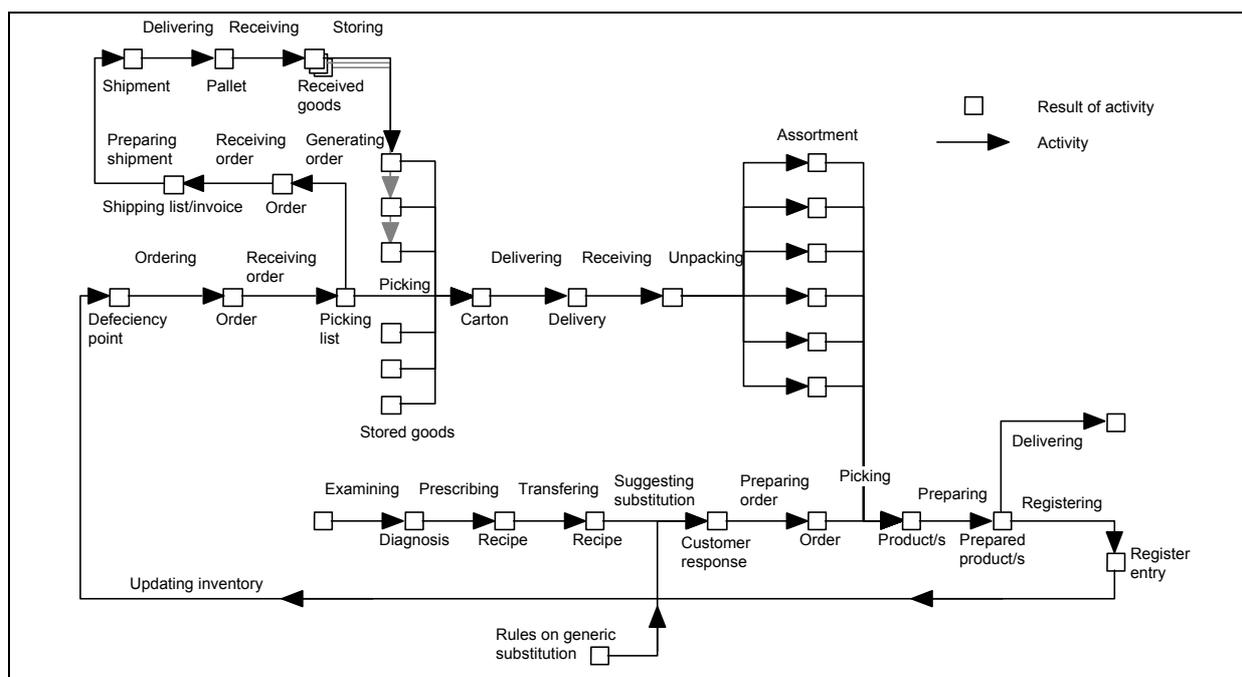


Figure 1. A schematic activity description for the distribution of prescription pharmaceuticals through retail pharmacies in one Nordic country. Sources: interviews.

The general view offered in Figure 1 is coarse. A lot of details are missing. But this applies to Figures 2 and 3 as well. Representations that approach 1:1 are not very practical. Still, there is a conflict between the need to generate simplified images indicating preferred directions of change, and the need to have working images of the operations to be used for evaluating these directions of change.

By leaving out details, the import of activities that contribute considerably to system performance, specifically, activities that are performed to solve problems that crop up may never be appreciated. Lumped together in an anonymous "miscellaneous" category, these activities will often become the indirect target of rationalisation efforts. Efforts that are highly likely to have negative consequences for system effectiveness.

Who is the customer? Diverging actor definitions

There are also differences in the way involved actors describe and enact the actor-dimension of the ARA-model. One such example concerns who the actors regard as "the customer." Due to the many regulations that circumscribe the sale of prescription pharmaceuticals, there is no simple answer to this question. Figure 4 is an attempt to illustrate how the involved actors attribute agency to each other.

First of all, the physicians are attributed considerable agency when it comes to deciding what pharmaceutical to prescribe to a patient. Second, the physician also has to follow the recommendations issued by the Medical Products Agency concerning the effectiveness of pharmaceutical for treating a specific condition.

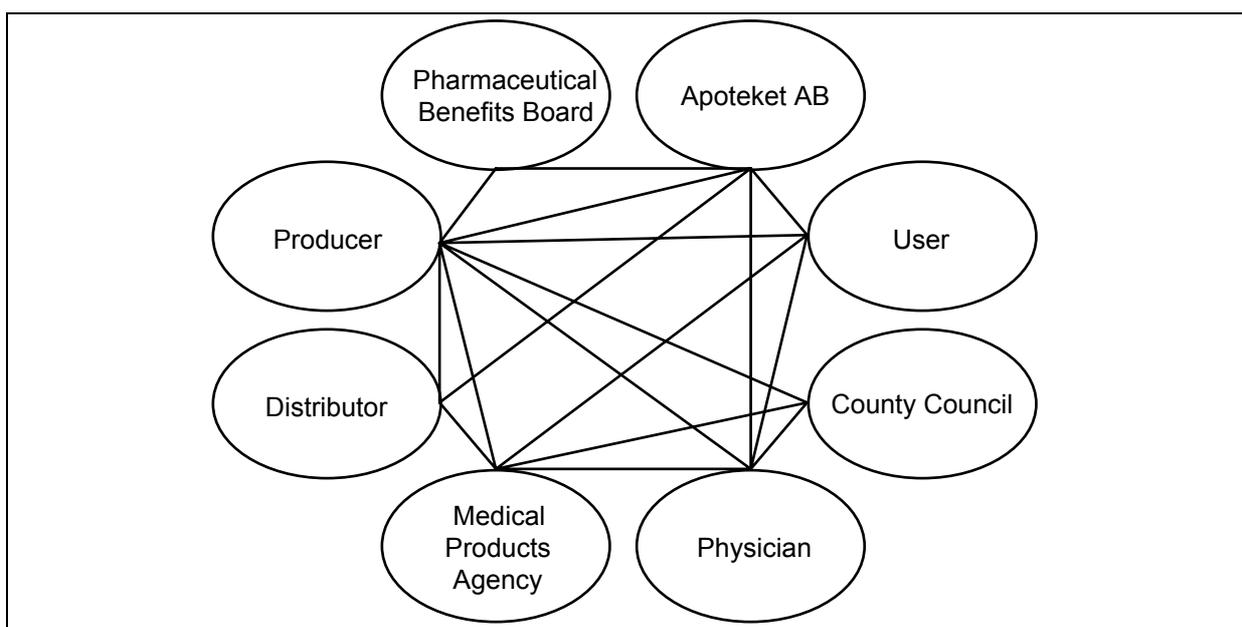


Figure 4. The interdefined actors in the distribution of prescription pharmaceuticals.

Third, the individual patient has over the past decade or so been attributed a growing amount of agency in the decision process. However, the producers are at the moment legally prohibited to directly market their products to patients. A fourth actor with import on the distribution of pharmaceuticals is the county council that administers the healthcare sector and pays for the public subsidies on prescription drugs and consequently wants to influence the distribution process in various ways, e.g. the choice of assortment. A fifth actor is the Pharmaceutical Benefits Board, which sets the resale price on all prescription pharmaceuticals sold by the state-owned retail-monopolist, Apoteket AB, as well as the price paid by them. Apoteket AB is a sixth actor which is attributed a quite substantial amount of agency: first, it negotiates with the producers about delivery conditions, etc; second, there are since long well-established relations between individuals working at Apoteket AB and the Pharmaceutical Benefits Board, third, Apoteket AB plays a crucial role in terms of their contact with the users. A seventh actor is the distributor, or wholesaler, which is contracted by the producer to distribute the pharmaceuticals to the individual pharmacies. Eighth and finally, the producers, are attributed considerable agency by all the other actors involved in pharmaceutical distribution.

As of October 1, 2002, a new regulation concerning generic substitution came into force. This regulation stipulates that a pharmacy serving a customer based on a prescription should substitute a more expensive product for a cheaper one, if the active substance is the same. This provided that the customer does not want to pay the extra amount to get the product originally prescribed to her.

Some firms have obviously regarded the regulation as an opportunity to become recognised as suppliers by others involved in pharmaceutical distribution as the number of companies making applications for registering new products is growing. These new entrants, suppliers of generic drugs, have however also tended to attribute agency in a somewhat different fashion than the incumbent suppliers (see Figure 5, below).

First, these companies have generally not attributed agency to physicians and users. That is, they do not regard these as important for the sale of their products. Besides the other actors recognised by the incumbents, generic suppliers have instead directed most efforts directly to individual pharmacies. Hence leaving the contacts with prescribers, i.e. physicians, to the manufacturer of the original product. Whether this has been successful or not, we cannot say. What we can say is that these efforts have been made assuming a certain discretion on behalf of the pharmacy. This assumed discretion

derives in part from the new regulation which stipulates that every pharmacy should offer a *cheaper* (not the *cheapest*) alternative when available, and in part from the non-existence of a central assortment policy for prescription drugs within Apoteket AB.

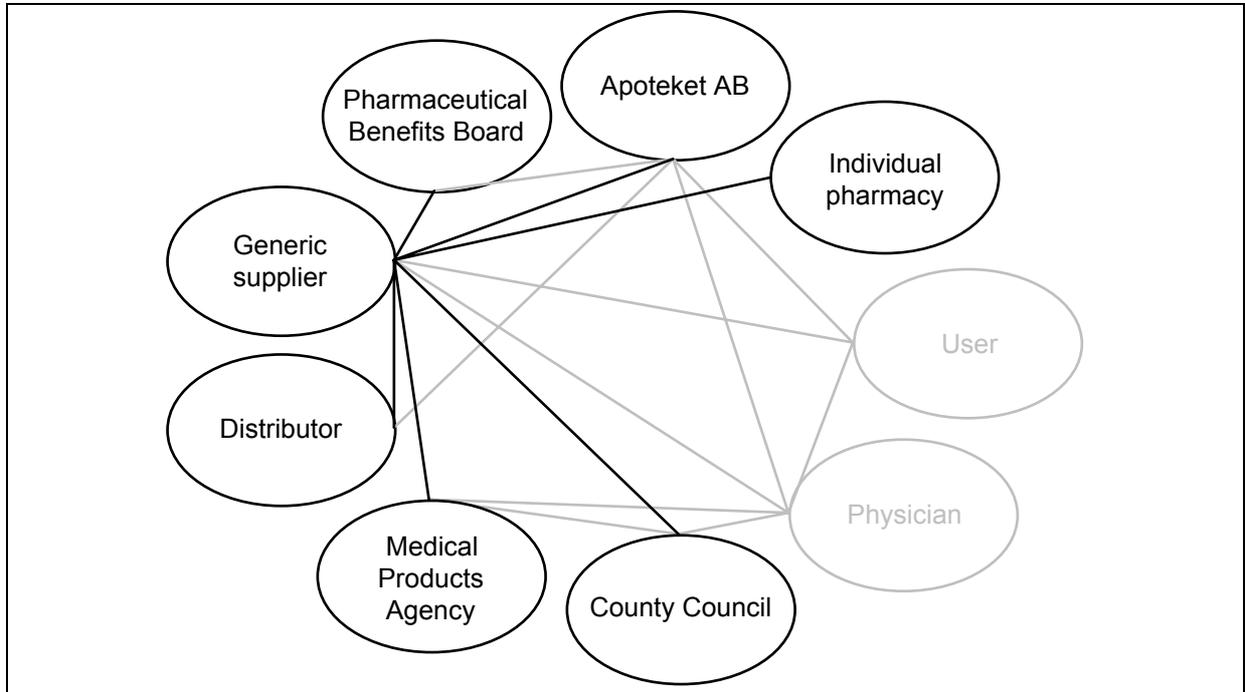


Figure 5. The generic suppliers' attribution of agency to others involved in pharmaceutical distribution. Shaded parts are attributions not made by the generic suppliers, but by others involved in the process.

One problem for these actors has been to live up to the agency required from them by Apoteket AB. If these suppliers are unable to supply all pharmacies with the product in question, Apoteket AB is less interested in dealing with them. The reason being that a limited supply of a product creates allocation problems, i.e., which pharmacies are to receive the products? Making very limited sales efforts directed to a few selected pharmacies, might then be a way of overcoming these problems, but is not acknowledged by Apoteket AB or the wholesaler as a legitimate practice.

This alternative attribution of agency affects the distribution process. First, it directly generates new activities at the individual pharmacies, e.g. interacting with suppliers. Second, it might have indirect consequences as other actors become aware of it. For instance, suppliers of branded products may already have, or consider launching, generic versions of these to capture some of the sales generated by the new regulations. These may find it difficult *not* to address the individual pharmacies to ensure sales.

Is pharmaceutical competence a valuable resource in the distribution process?

In terms of the third dimension of the ARA-model, resources, we will concentrate on the views taken by the involved actors concerning pharmaceutical competence.

Apoteket AB, the retail monopolist, often presents this as one of their crucial resources, and argues that it is central to the production of customer value at the pharmacies.

During our interviews, we have however encountered actors that do not share this view. A producer-representative remarked that "We don't care how our products reach the users, as long as they do. We can sell them through mail-order, the Internet, or through pharmacies." This suggests that some producers are interested in establishing activity chains that do not draw as heavily on pharmaceutical competence as does the present one. The emergence of producer-sponsored websites offering pharmaceutical advice is another indication of an alternative view of where the pharmaceutical competence could be located. The websites encourage people to talk to their physician about a specific problem. This is not to say that the producers find the present system to be altogether bad. Rather, they find it quite stable and see no reason for changing it. Some aspects are even highly appreciated, such as the reliability of receiving payments.

There are also diverging views concerning competence as a resource between central functions within Apoteket AB and the individual pharmacies. The personnel at the pharmacies regard competence as a resource that they employ locally, in interaction with customers/users. To them, pharmaceutical competence becomes a resource in relation to a specific activity. Apoteket AB, on the other hand, presents the resource as a stock, using various measures to generate representations of how much of it the organisation controls, e.g. how many of the employees are pharmacists, how many information leaflets have been produced, etc. Possibly, this *representation* of pharmaceutical competence actually is a resource for Apoteket AB in *their* interaction with actors on the political arena linked to pharmaceutical distribution.

This difference in the definition of competence as a resource has consequences for how the resource is maintained. According to pharmacy-personnel, there are few activities directed towards maintaining and furthering their pharmaceutical competence.

Discussion (under development!)

What lessons can be learned from the observed divergence in views as far as the co-ordination and efficiency of business processes are concerned?

When it comes to the issue of efficiency, a suitable starting point is the costs necessarily connected to performing activities. The construction and maintenance of an ideal representation of the distribution process, such as the one in Figure 1, itself requires a number of activities. Such activities include the construction of measures, the collection of data, the compilation of re-presentations and the dissemination of these. Since rival re-presentations exist, the ideal must be actively maintained and further developed in the light of changes that take place within the system. This implies that there is a cost associated with the existence of the ideal system.

A first issue is thus to relate these costs to the value of maintaining the representation. An ideal representation of the distribution process, may allow change agents to identify preferred directions of change, and as such provide a useful backdrop for strategic action. Probably the ideal image also helps actors such as Pia and Lil to develop their own views, assisting them in performing their tasks in a way that approaches the ideal image. These consequences may justify the cost of maintaining the ideal image. However, any observed negative consequences for the involved actors must be taken into account, e.g. the risk of negatively affecting system effectiveness. The same applies to the examples of actors and resources.

If there was no ideal system, then it wouldn't be possible to find alternative ways around it, e.g. by changing the marketing focus from physicians to pharmacists like producers of generic drugs do. At the same time the alternative ways help changing and develop the ideal system further, e.g. by manufacturers of branded products starting to produce generic products. This makes them change, or at least add a new, marketing focus to the pharmacists.

Finally, we would like to pinpoint what seems to be the most serious problem with ideal representations. As long as they are taken to be just ideals, they may contribute considerably to the development of business processes. If, however, the ideal system is taken for the real system and important changes are based on it, the consequences may be serious. This happened a few years ago when the retail monopolist and the National Social Insurance Board tried to develop an activity based compensation scheme. The calculated activities were based on the ideal system. Activities of the kind that Pia and Lil were busy performing, i.e. solving more or less unspecified problems did not fit into this model properly. There was simply no calculated activity based on what they really did, but instead chasing Seloken ZOC would be classified as "divergences in delivery." Devising an efficient compensation

scheme for the retail monopolist based on activities, would then run the risk of removing the distribution process even further from an efficient solution.

In terms of the ARA-model, our observations suggest that researchers need to become much more attentive to the multitude of activity-definitions, actor-attributions and resource-characterisations that may exist in concrete business situations.

As far as future research is concerned, the observed differences in views pose interesting questions concerning actor-strategies. For instance, how such differences can be overcome by an actor seeking to realise a preferred structure?

References

- Axelsson, Björn, and Finn Wynstra. 2002. *Buying Business Services*. Chichester: Wiley.
- Brunsson, Nils. 1989. *The organization of hypocrisy : talk, decisions, and actions in organizations*. Translated by N. Adler. Chichester: Wiley.
- Brunsson, Nils, and Johan P. Olsen. 1993. *The Reforming organization : making sense of administrative change*. London: Routledge.
- Dubois, Anna. 1994. Organising Industrial Activities – An Analytical Framework. PhD, Chalmers University of Technology, Gothenburg.
- Goffman, Erving. 1986. *Frame Analysis*. Boston, Mass.: Northeastern University Press. Original edition, 1974.
- Håkansson, Håkan, ed. 1987. *Industrial Technological Development: A Network Approach*. Kent: Croom Helm.
- Latour, Bruno. 1987. *Science in Action: How to Follow Scientists and Engineers Through Society*. Cambridge: Harvard University Press.
- Lundgren, Anders. 1995. *Technological Innovation and Network Evolution*. London: Routledge.
- Merton, Robert K. 1996. *On Social Structure and Science*. Edited by D. N. Levine, *The Heritage of Sociology*. Chicago: University of Chicago Press.
- Stern, Louis W. , and Adel El-Ansary. 1988. *Marketing Channels*. 3 ed. Englewood Cliffs, N.J.: Prentice-Hall International.
- Wedin, Torkel. 2001. Networks and Demand: The Use of Electricity in an Industrial Process. PhD thesis, Department of Business Studies, Uppsala University, Uppsala.

Observations at two retail pharmacies in Stockholm, Sweden 021030-021031.

Interview with Senior Pharmacist at two retail pharmacies in Stockholm, Sweden 02103-021031.

Interview with Senior Pharmacy Manager in Stockholm, Sweden 021010.

Interview with Senior executive at a major pharmaceutical company, 030130.