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Petra Adolfsson

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by Petra Adolfsson

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Introduction

During recent decades, scholars have explored the process in which work, people, and technology meet. Studies on science and technology have shown that the social cannot be limited to understanding relations between people [e.g. Callon 1986]. Instead, we have to explore the multiple connections made in daily life between people and technology. These studies have often been based on theoretical and methodological discussions inspired by Actor Network Theory (ANT) and socio-material studies. The focus on connections has highlighted the importance of seeing power as a consequence, and not a cause, of collective action [Latour 1986]. In this process, various actors negotiate and translate the interests of others in order to create connections that can be black-boxed and thus presented as stable facts, at least for a moment. Studies have enhanced our understanding of how knowledge and power are produced during such negotiations in laboratories and political arenas. This performative turn in social sciences calls for an understanding of the role of non-humans in collective actions, as part of the social world. It opens up new horizons for studying organizational practices by taking a symmetrical approach to the material and the social as its point of departure, but also by arguing that taking a performative perspective on organizations also includes taking a performative perspective on materiality [Lindberg and Walter 2012].

The backdrop to the study presented here is the fact that Sweden's pharmacy market is being transformed, at least in part, as a consequence of anti-competition concerns raised in the European Union (EU) regarding, for instance, the Swedish and Italian pharmacy markets. Since 2009, other actors than the state-owned *Apoteket AB* are able to retail pharmaceuticals directly to Swedish consumers. The main argument for deregulating the pharmacy market was that this is expected to lead to the "*increased availability* of pharmaceuticals and to *prices being squeezed*" [Swedish Government Official Reports 2008, 4]. "Privatization," "corporatization," and "marketization" have been catchwords challenging the health care sector during recent decades [e.g. Braithwaith, Travaglia, and Corbett 2011], now they have also entered the Swedish pharmacy sector.

In this paper, we recognize global trends that turn patients into customers, and that former healthcare products are translated into new fields. We thus look into the retail sector for pharmaceuticals or, more specifically, non-prescription pharmaceuticals. Inspired by earlier ANT studies, we use a performative perspective when following what happens when products move from a healthcare practice to that of retail.

As pointed out by Callon [1998], situations can be both cold and hot and, in commercial relationships, they seem to appear one after the other. In other words, when a (hot) controversy is resolved, other cooler and slower negotiations may get started. In the study reported on here, we focus on what happens when established supermarkets start selling non-prescription pharmaceuticals. We will thus show the usefulness of an ANT approach in situations occurring in the wake of political controversy. We can call them situations of cooling down where actions are taken in order to handle new ideas that may not lead to huge debates at the workplace but still give rise to changes in local practice. These negotiations involve, and sometimes change, the complex relations between humans and non-humans. Here we want to empirically show how we can understand these cooling down situations as attempts to change or maintain these assemblages of humans and non-humans, or socio-technical agencements to use Callon's vocabulary [e.g. Çalışkan and Callon 2010]. The notion of assemblages, or agencements, highlight the importance of action and that action takes place in hybrid collectives [Latour 2005a]. A performative approach to markets shows us that it is a process of marketization, or economization, that not only puts focus on the design of markets but also on the implementation, management and maintenance [Çalışkan and Callon 2010]. Moreover, as pointed out by Millo [2007], the regulation of markets can be seen as performed, it is an organizational infrastructure where rules, practices and procedures evolve. As suggested here, it is important to see what happens in local assemblies and follow the (re)creation of markets also

after the initial (political and hot) controversies since interactions and procedures are not static but evolve.

In the case of the pharmacy market in Sweden, controversies regarding who is to be allowed to sell pharmaceuticals have been politically resolved by means of political investigations and the ensuing decision to de-regulate the market. Thus, what we now see is a market still in the making, where new actors are selling prescription pharmaceuticals and non-prescription pharmaceuticals. Deregulation has consisted of negotiations and drafting new laws and instructions regarding rights (of who is allowed to act), as well as how to act on a new market (procedures to follow). Therefore, in this study, it will be discussed what happens when controversies regarding the roles of different actors and procedures are cooling down, but have not yet been fully settled. These procedures are related to how to measure behaviour, in other words how the selling of non-prescription pharmaceuticals are to be managed in daily life practice, but they also relate back to the definition of actors and products.

The aim of the study is to describe and analyze how products are not to be seen as just objects. This is done by studying what happens when non-prescribed pharmaceuticals enter a new sector and are part of local translations in a supermarket. By following the actions taken, we can increase our knowledge of how products are created and used in daily life in the wake of political, or hot, controversies. Using an approach inspired by ANT, we can enhance our knowledge of negotiations taking place locally in a cooling down phase in which the role of actors and procedures are formulated but may not be fully settled. The (re)creation of products, an action not only performed in factories, is an ongoing process as the product is assembled into (new) practice as part of marketization, the ongoing (re)creation of markets. In understanding the practice in this context, a qualitative and ethnographically-inspired methodology has been used.

The paper is organized as follows: first, the points of departure for the study are presented; ANT and organizing. In the section that follows, we describe the course of action taken when collecting and analysing the field material. Next, we describe and discuss the actions taken when non-prescription pharmaceuticals go on sale at the supermarket. Finally, we discuss how entities are assembled in daily practices and thus how ANT can help us to reveal the complexity behind a simple (or singular) object on a shelf in a supermarket.

Actor Network Theory

A static view of organizations is, as pointed out by Kjellberg [2007], represented by more traditional network theories and ANT offers an alternative that highlights the study of constant change. Therefore, the introduction of Actor Network Theory into organizational studies has been useful to the part of the field that has come to view organizations as constructed in a continuous process of construction. Thus, organizations can be seen as rather stable results of such processes but never static or complete [Czarniawska and Hernes 2005]. In order to emphasize that connections are not only present between humans, ANT introduced the concept of the actant, an entity (someone or something) that acts or is acted upon [*ibidem*]. Actants become actors when they act successfully and manage to find and enact allies. This means that identity is created in action and in relation to others. Thus, ANT enables us to study how such networks, or macro-actors, are created through translations. As Callon [1986] says, in order to be connected, humans and non-humans need to perform certain activities: problematisation, interessement, enrolling and mobilisation. During this process actants accept other actants' definitions and pass what Callon describes as obligatory passage points (OPP) in order to join the network and those who pass the OPP are locked-in in relation to the rest of the network; it can thus also be costly to leave the network. However, as shown by Kjellberg [2007], an actor who wants to create or change a market, being a company or an agency, has a challenging mission to convince and to control all other actors and unexpected events may occur. In other words, rules are not static but performed in interactions between the regulator and the regulated [Millo 2007]. Thus, instead of social structure, such as organizations, we can talk about associations that last longer and extend wider. The social can be seen as a movement of re-association and reassembling, creating the collective. The process of translation shows us how these collectives, or networks, can arise and appear rather stable, and even be taken for granted in a certain time and space. This leads us to the notion of assembly and assemblages, where Latour [2005a] pointed out that sociology has produced two strong assemblies, or macro-actors; nature and society. Using ANT gives us the possibility to go beyond these two stereotypes and see how "heterogeneous elements might be assembled anew in some state of affairs" [*ibidem*, 5]. Such an assembly where entities are assembled, or disassembled, is the traditional political arena; i.e. parliament or city hall [Latour 2005b]. In other words, a place where various entities meet and negotiations can take place. But other places where discussions take place can also be seen as assemblies, e.g. the market place. In order to bring together the notion of markets and performativity Callon suggests the concept of marketization, or economization, [e.g Çalışkan and Callon 2010] and

thereby emphasizes the importance of seeing both humans and non-humans in market creation. Also, as mentioned in the introduction, marketization as a process, not the rather static Market, gives us the opportunity to see beyond the controversies that might be part of the initial phase of marketization when rules are negotiated and introduced. We can follow the actions taken, in various assemblages, in order to understand the continuous process of (cooler) negotiations that (re)create markets [Callon 1998]. An example of an assembly where these ongoing negotiations that (re)create markets are present is the shopping cart. Cochoy and Grandclément-Chaffy [2005] show how the shopping cart, on its way through the mall, becomes a place for the expression of choice or a speaking space between, for example, parent and child. But it is also a form of contract; when you grab the shopping cart at the entrance, you switch status from visitor to buyer. It also brings individuals together into a collective. In doing so, the (solitary) customer is transformed into a plural entity who has discussions and who collects, in public, products. These products are wrapped and give the customer the possibility of reading information about their properties, as suggested by the manufacturer. It shows how self-service, such as free access to products without direct human support, includes silent sellers in the form of packaging and advertisement that give not present actors the possibility to act at a distance [e.g. Barrey 2007]. Further on, this leads us to emphasize the fact that qualities of a product are the outcomes of several interactions sometimes including the product itself [Millo 2007]. These processes of qualification and valuation, that is, negotiations of actors with different views, have been shown to be important parts of the practices that are part of economization or marketization e.g. in the qualification of pharmaceuticals [Sjögren and Helgesson 2007].

The initiative to introduce a new pharmacy market in Sweden gives us the opportunity to reveal the re-associations and reassembling as the boundaries between different actors, e.g. the regulator and the regulated, become uncertain and need to be negotiated and re-constructed. A new range of entities has to be taken into account. It is a situation where new associations have to be made and new assemblies will arise from new connections. The pharmacy market arises when actors start to reformulate former problematisation and when they start trying to tie other actors to this new view of how the market should be handled. But even when these moments of translation are starting to settle, the negotiations go on. As pointed out in the introduction, Callon [1998] argues that hot and cold negotiations seem to be important to understand when markets are created. In this study, some controversies have already been settled, or at least partly settled, by macro-actors, becoming materialized in various types of laws and instructions regarding how to sell non-prescription pharmaceuticals. This article focuses on what happens next, when these instructions are

used in practice, generating new associations and (re)assemblages. This takes place in (re)created assemblies as new actors, non-pharmacy organizations, enter the market. We show how the entities are connected at one assembly and, by tracing back the associations (in interviews and documents), we try to show what these entities consist of. In other words, we open up what has once been put together in order to understand the new assemblages on the Swedish pharmacy market. When doing so, we need to take both the non-humans and the humans into account and make no a priori distinction between them in order to understand what types of entities the assembly may be composed of. We will let non-prescription pharmaceuticals be our guide in our journey through the store. In the next section, we will describe how the field material has been collected.

Collecting Field Materials

The study reported on here has provided us with an opportunity to follow the translation of pharmaceutical products entering a new sector. Fieldwork began back in 2008, and ended in the spring of 2012. However, most of the field material presented and analyzed in this paper was collected during 2011. Different fieldwork techniques were used: i.e. interviews, shadowing, and document analysis. Initially, we followed the political debate concerning deregulation of the pharmacy market both in the media and via official documents. A four-day observation of work carried out at pharmacies was conducted as well as interviews with key persons from organizations actively taking part in the debate. This phase gave us an insight into the settings which pharmaceutical products have been a part of for many years: pharmacies. It also indicated that the question of selling non-prescription pharmaceuticals was relevant to the retail sector in Sweden. The retail sector also became included as an actor allowed to act, according to the new laws, on the market suggested for the non-prescription pharmaceuticals.

However, with an interest in marketization, the ongoing process of creating markets suggested by Callon [1998] we wanted to know how this new law was implemented and used locally. Also, as shown by Barrey [2007] and Kjellberg [2007] the importance of following what happens over time is important when studying who is in control of the devices and procedures that shape practice. As shown in a study of a supermarket [Cochoy 2007], studying closely the local actions can highlight the things, market-things such as flags and shelves, and can reveal hidden characteristics of products. Therefore, during the second phase of the study, we focused upon work at two supermarkets that had recently introduced non-prescription pharmaceuticals

as part of their range of products. The fieldwork for the supermarkets was organized as follows: the initial phase consisted of introductory interviews, a visit to the stores, and a collection of documents and written reports, while the second phase consisted of shadowing activities. The structuring of the interviews was informed by the experience and understanding that developed during the phase when studying the changes in the pharmacy market and observations of the work carried out at pharmacies. The introductory interviews were conducted with the two managers of the supermarkets, both belonging to the same major Swedish supermarket chain. One store manager had chosen to make the new pharmacy a separate part of the store building. At the second store, the manager had chosen not to include a pharmacy in the building. Instead, the range of in-store products was expanded with non-prescription pharmaceuticals. Moreover, two employees were interviewed at this second store in order to understand how this product group was managed on a day-to-day basis. Just over a year later, the store manager was contacted again and a follow-up phase was initiated. The author visited the store on two occasions when non-prescription pharmaceuticals were being delivered. Shadowing consisted of following, monitoring, and reporting on what happens when pharmaceutical products are delivered to a store in a routine situation. Shadowing the object, the product, on its way through the store has allowed us to stay focused on the actions taken at the assembly, the shop, and to highlight the connecting rather than the predetermined categories of who (humans and non-humans) is acting [Czarniawska 2007; Adolfsson 2005]. The interviews have further elaborated on the connections and associations made, while in shadowing, the researcher was able to take photos and thus to document parts of the physical layout of the store, and to ask the staff questions about the activities being observed. A follow-up interview with the manager was also conducted a few days after the shadowing. All in all, in the study of non-prescription pharmaceuticals in supermarkets, 5 semi-structured interviews were conducted besides the shadowing. The supermarket chain and the supermarket have been given an alias – Grocery-group and Big-store.

The resulting field material has been analyzed in different stages. First, the actions taken and the regulations issued by the authorities were mapped chronologically. This first-order description [Van Maanen 1988] was an attempt to answer the initial query: What happens when it becomes permissible to sell (non-prescription) pharmaceuticals in new settings? From this first-order description, new queries emerged, which required follow-up interviews: How did they organize their work (in the shop)? What differences did they see vis-à-vis other items? The fieldwork was extended accordingly.

The next stage consisted of coding and categorizing the field material in a process similar to that recommended by grounded theory [Glaser and Strauss 1967],

especially as described by Martin and Turner [1986]. Based on the mapping of the actions taken, informed by the ANT and action-oriented theorists mentioned above, assemblages of objects and non-objects were noted in order to understand what happens when non-prescription pharmaceuticals enter the supermarket and become part of local practice.

Non-Prescription Pharmaceuticals Meet the Supermarket

Background: Pharmaceuticals in Retailing

One of the actors obtaining a key role on the Swedish pharmacy market is the previously-established Medical Products Agency (MPA). The MPA has been briefed with licensing pharmacies and disseminating regulations concerning pharmaceuticals. Since the pharmaceuticals market was deregulated, and the possibility of selling non-prescription medicines at other outlets than pharmacies came into force, the MPA has had the overarching supervisory responsibility for non-prescription medicines. It also provides retailers with information and guidance about the regulations (e.g. MPA regulation 2009, Act governing the sale of certain non-prescription medicinal products, Swedish Code of Statutes 2009, 730). Even when the pharmacy market was under scrutiny, and the Commission of Inquiry had not yet proposed any changes to the law, many Swedish retailers had started discussing how and when they could start selling pharmaceuticals and become part of that market. This was also the case at Big-store, where the owner had made a decision to start selling non-prescription pharmaceuticals as soon as possible. Big-store is a rather large supermarket with approx. 150 employees. It is in a suburb of one of Sweden's major cities and located close to a highway used by lots of commuters. Big-store is part of one of the biggest food retail chains in Sweden, known as the Grocery-group. The Grocery-group makes coordinated purchases, supports its retailers in issues concerning sales and efficiency improvements, and is responsible for logistics and joint marketing communications.

There was a demand for medical products from the local customers, something which played a key role in this retailer's decision to apply for a license to sell non-prescription pharmaceuticals. He describes his overall business strategy as "proactive and sensitive to what the customer asks for." When application forms became available on the MPA website, Big-store immediately submitted an application, and at the beginning of 2010 it sold the first pharmaceuticals. In the following description of what happened when non-prescription pharmaceuticals came to Big-store, cross-sections from the observations, like small scenes in a play, will be enhanced

with both information from the interviews and documents; in doing so, we develop an understanding of why the performed actions have taken place. It is now time to enter the assembly, the supermarket. We start at the point where the products arrive at the cargo bridge.

Entering the Assembly – the Shop

> *On the cargo bridge, the warehouse workers unload the delivery from the Grocery-group. The non-prescription pharmaceuticals from the Grocery–group are delivered together with other products, but are stored separately on the truck. They are also packaged separately in a brown box sealed using red bands (see figure 1). The products are loaded on to separate trolleys and the boxes are then sealed using red bands. A warehouse worker leaves the cargo bridge and warehouse area and brings the loaded trolley into the store. On arriving at the check-out area, in the front part of the store, the worker calls out "we're here now" and then returns to the warehouse area while another staff member takes the trolley and puts it in the front of the gondola with nothing but non-prescription pharmaceuticals on the shelves.*

Big-store orders its pharmaceuticals both from the Grocery-group and from the other wholesalers active on the Swedish market. They are all placed in a gondola specially arranged for non-prescription pharmaceuticals. When the products are delivered to Big-store, they are marked in a special way that makes the employees aware that they are "special items." As one of the employees puts it: "The red bands around the boxes are a signal that this product can't be left standing around, it has to be dealt with immediately."

These red bands indicate the presence of other entities. The MPA has the overarching responsibility for supervising non-prescription medicines, i.e. to ensure that the law and the ordinances that govern them are observed. A retailer who wants to sell non-prescription pharmaceuticals needs to register with the MPA. In other words, the macro-actor MPA has created an obligatory passage point that Big-store needs to pass in order to start selling these products, in legal terms. Those applying for permission to sell medicines must show that their suppliers, the wholesalers, have permission (known as a wholesaler license, which is also issued by the MPA) to sell medicines in order to counteract the risk of counterfeit medicines entering the legal distribution chain.

Therefore, the assemblage (brown box, product, red band) arriving from the Grocery-group is put in a specific place on the truck and separated from other goods. This separation is maintained by the warehouse worker who puts the box with the red bands on a trolley on its own. The warehouse worker then becomes part of the assemblage when moving the trolley through the store from the back to the check-outs

at the front of the store (see figure 1). Here, the assemblage changes. The warehouse worker gives voice to the assemblage by saying "we're here" and then disconnects himself and leaves space for another entity; the check-out staff become part of the assemblage.

FIG. 1. Empty brown box.

Delete the Red Band and Handling Check Lists

The trolley is placed beside the gondola made for non-prescription pharmaceuticals. Signs saying "Non-prescription Pharmaceuticals" are located above the shelves and a label on each shelf indicates what kinds of products are kept there e.g. pain killers. The check-out staff opens up all the cupboards below the shelves; they also remove the red bands, open the brown box, and pick up a piece of paper, a list. When taking an item out of the box, the check-out staff has a close look at that item and makes a mark on the list. The items are bundled together in packages using a band or plastic film. The band is torn off and the products are put in the cupboard if the shelf is full. If the shelf is half empty, the items in the cupboard will be put on the shelf and the newly-delivered items will be put in the cupboard. No plastic films or bands are visible on the shelves.

The Grocery-group has provided Big-store, as well as other stores in the chain, with a selection of products. The range of medicines primarily focuses on symptoms such as pain and fever. Even though the retailer found this selection to be good, it was not good enough to meet his customers' demands, so he decided to expand the range of pharmaceuticals provided by the other wholesalers on the pharmaceuticals market. However, not all non-prescription pharmaceuticals are allowed to be sold at other outlets than pharmacies. The MPA decides on and publishes a list of products that might be sold at other outlets than pharmacies.

Upon opening the box, the staff finds a list of products, a packing slip. All products that are removed from the box are checked off against this list. When delivered, the products must be checked for any obvious defects. According to the MPA, the products must be offered for sale in the original packaging. If packs have been opened, they must be removed and must not be sold. They are not, in other words, categorized as saleable non-prescription pharmaceuticals.

According to the regulations issued by the MPA, pharmaceuticals have to be stored separately from other products. Big-store, have them on the shelves or in lockable cupboards underneath the shelves in the store. In other words, non-prescription pharmaceuticals are not only labelled with bands in order to indicate that they are special, they are also placed differently than other products (see figure 2).

However, according to the retailer, customers in a retail setting are used to being able to touch the product and to read the instructions regarding use and content. If non-prescription pharmaceuticals are located behind the check-outs, then customers will have to ask the staff for permission to hold them, something which will encroach upon customer privacy. It is in the interests of the retailer to make the purchasing situation as easy and convenient as possible for the customer, while at the same time complying with legal requirements which entails keeping these products under the supervision of staff or under lock and key so no one is able to damage them. This

results in the retailer having staff close by the products at all times and locating the gondola near the check-outs. Being aware of the safety issues, the retailer still sees the pharmaceuticals more or less as an everyday product that his customers want to pick and choose for themselves.

FIG. 2. Shelves and cupboards.

The retailer says that one year after he started selling non-prescription pharmaceuticals, Big-store was audited. The local municipality did not inform Big-store about this beforehand. A representative of the municipality did an audit for tobacco, alcoholic beverages, and non-prescription pharmaceuticals all at the same time. The audit was carried out as per usual, i.e. the representative walked around the store and asked for documentation. This is another obligatory passage point and it can be seen as a recurrent form of the first one as, in both cases, it is all about checking whether or not the retailer's actions are to be considered to be in accordance with the MPA instructions. The retailer was informed that the municipality would ask the MPA about how to interpret the regulations regarding supervision. In other words, if the products would be considered as being under staff supervision when placed adjacent to, but not behind, the check-out. As a consequence, the retailer was asked to send in his self-auditing program to the MPA in order to show how the store might be able to ensure that packages had not been opened etc. The retailer documented the situ-

ation, for instance, by taking photos of the area in question and sending them to both the MPA and the municipality. The response the retailer received following the audit was a letter from the MPA stating that the agency would not be taking any further action in the matter, at least not for the moment. However, following the audit, the retailer decided to develop the self-auditing program and to give non-prescription pharmaceuticals a special program which all employees working at the check-outs had to undergo and sign. In signing that document, the employee accepts that it is part of his or her job to supervise non-prescription pharmaceuticals. The program was designed in accordance with suggestions made by Svensk Handel (Employer's organization in trade and industry).

Other Entities Than Red Band

> *While a member of staff is unpacking the brown box, customers are approaching the shelf. One customer asks about a product and the member of staff says where to find it on the shelf. Another customer comes along and stands next to the first customer. They start to talk about what product to buy and the member of staff does not interrupt their conversation. On the shelves, various signs inform customers about the age limit and that advice about these products can be obtained by calling an expert at the MPA.*

There are other requirements, regulated by the MPA, which the retailer needs to comply with. The agency is connected to the assemblage by means of notes on the shelf (see figure 3) telling customers that the purchase of non-prescription pharmaceuticals has an age limit, entailing that nobody under 18 is allowed to buy them. In doing so, the product is categorized as special, just like some other products in the store, e.g. tobacco and alcohol. In other words, the assemblage becomes connected with regulations and agencies. Also, staff is not allowed to provide advice or information about pharmaceuticals. However, this is not seen as a problem as the customer understands that the staff has not been properly trained to do that. Instead, in accordance with the regulations, they recommend that customers e.g. call a national helpline for advice regarding the pharmaceuticals administered by the MPA. For example, Big-store, similar to other stores, puts a leaflet on the shelf with a phone number to call for information. This means that the staff, as an entity, in this regard, is partly disconnected from the assemblage, and not allowed to give it voice. Instead, the customer must act and connect the assemblage with other entities which are not present in the store but which are linked by signs on the shelf containing telephone numbers to approved providers of information (pharmacists). Or, as described above, the customer connects with other entities, other customers, at the assembly.

However, while on the shelf, the assemblage (including the boxes of pills) also differs from other places in the store, e.g. in comparison with other items on sale in the store, there are no sales drives like "buy one get one free."

FIG. 3. Signs.

Products Leaving the Store but Also Leaving Traces

> *After unpacking new deliveries, the staff leave the brown box on the trolley. The trolley is put to one side leaving the gondola fully visible. Additionally, the packing slip is placed in a binder stored in a cabinet behind the staffed check-out. An item that has been opened is automatically considered defective and is therefore put aside while the staff start up the computer and place a new order based on what was missing from the shelves. The staff show the researcher the cash register and the age check dialog box that appears on the computer screen when a non-prescription pharmaceutical is registered.*

In placing the packing slip in the binder, the store has drawn up a procedure in order to meet the legal requirements concerning the traceability of all pharmaceuticals, even after a customer has bought an item and left the store with it. But being on the list in the binder is not the only trace that non-prescription pharmaceuticals leave behind. Additionally, the staff are obligated to check the age of the customer. This is done at the cash desk where the computerized cash register system flags products which staff have to make checks on. This procedure is similar to checks on other products, e.g. tobacco and alcoholic beverages. Previous experience and established technological support systems connected with these products make it rather easy for Big-store to handle age checks.

Discussion

This study reveals a process whereby, in a Swedish setting, the retailing of non-prescription pharmaceuticals enters a new sector; supermarkets. A deregulated pharmacy market gives rise to a situation where many, both old and new, actors take part in the distribution and sale of pharmaceuticals. Former categories are called into question regarding point of sale (the store as an assembly) as well as which products match each of these places (products as parts of local assemblages). In this making of the market, macro-actors were (re)created in a process whereby (hot) negotiations [Callon 1998] dealt with whom to include as well as what market rules would be appropriate. Here the MPA, a government agency traditionally concerned with the safety of medicines, becomes a macro-actor that issues regulations and formulates instructions for other actors, e.g. retailers, to follow. In the problematisation the professional traditions, based on both bureaucracy and medical science, are part of the agenda. When these traditions are translated into instructions regarding the handling of non-prescription pharmaceuticals, they become inscribed into documents, and thus materialized and possible to move to other fields of practice.

In this case, we have followed what happens when ideas regarding how to handle non-prescription pharmaceuticals are picked up and used by a retailer interested in providing non-prescription pharmaceuticals to his customers. Informed by previous experiences gained in ANT studies, this study aims to explore the possibility of going beyond situations characterized by controversy. However, this does not mean that this retail case is not affected by different interests and ideas. Rather, it can be seen as an example of *cooling down* negotiations performed during day-to-day work and thereby become part of the (re)creation of the market in the wake of political (hot) negotiations. The negotiations about who is allowed to act as a pharmacy, or include non-pharmaceuticals in product ranges, are now cooling down. This has resulted in, for the moment, rather stable legal instructions about how these products must be managed in order to achieve medical safety and be accepted as non-prescribed pharmaceuticals. Thus, this study indicates that it is possible to continue negotiations when development occurs rather slowly but is still important when it comes to understanding the (re)creation of markets.

However, some of the instructions are easily adapted as they correspond to already-established routines connected with other goods. For example, age checks constitute one of these requirements which can be translated into the existing administrative procedures used for alcoholic beverages and tobacco, and which are inscribed into the computerized check-out system. A system like this can be seen as a way of translating the bureaucratic expectations of other actors into a standardized solution for retailing. The instructions regarding how to handle non-prescription pharmaceuticals are translated into existing technological devices that are the results of previous translations of procedures and market devices regarding other product groups. In doing so, the retailers have already found ways of simplifying compliance with such bureaucratic requirements in ways that do not interfere with retail routines. In other words, the non-prescription pharmaceuticals that come into the store are connected with other already existing entities and, by means of being merged with these, the non-prescription pharmaceuticals become parts of assemblages which, to some extent, can be seen as familiar and which become a part of the established practices.

Moreover, from the study of the supermarket conducted by Cochoy and Grandclément-Chaffy [2005], we learn that customers are not to be seen as solitaries but as plural entities. A similar result concerning products, as well as customers and retailers, can be identified in this study of non-prescription pharmaceuticals. In the store the customer encounters signs about how to obtain information about the products and the age limit, and staff that is not allowed to give advice about the product. Other entities are (re)connected into a heterogeneous assemblage including

other customers and wrapped product packages with information from the manufacturer. The assembly thus allows customers to identify themselves as ill. However, in order to leave the store with the remedy a certain age is required. Thus, the procedures (e.g. age check) (re)frame the customer to a certain level but also disentangles the product from the seller [Callon 1998].

However, as mentioned above, not all issues seem to be easy to handle. When the non-prescription pharmaceuticals are introduced into the supermarket, other entities attached to the product by the macro-actor are questioned by the seller, as the seller finds the product insufficiently detached from these entities in order to be possible to sell and cool negotiations take place, leading to (re)framing processes. For example, the red band is cut and thus disconnected from the product (as a plural entity belonging to a heterogeneous assemblage), leaving the scope for the product to become merchandise. Nevertheless, place rather than price becomes an issue. As discussions occurring in the wake of the audit show, negotiations do not stop entirely, translations continue in day-to-day practice. The procedure of how to assess supervision becomes one of the activities that continue to be negotiated during the (re)creation of the market. For the retailer, the supervision of non-prescription pharmaceuticals is tightly connected with profit and customer satisfaction [Kjellberg 2007]. If the customer is not allowed to inspect and touch the product in the store (self-service), it will be disconnected from money; it will most likely remain unsold. In other words, resources (profits) in the marketplace will be distributed in a disadvantageous way for the retailer since the customers will prefer other retailers, e.g. pharmacies, where self-service is allowed. When confronted with the MPA's instructions, the retailer finds it important to retain his own practices and good relations with his customers. Thus, the instructions are translated in order to match the established routines of local retail practice. A new gondola is bought and, once in place, it is attached with artifacts, or entities, which signify that the MPA instructions are being taken into consideration, letting MPA act at a distance [Barrey 2007]. However, the authorities question this translation as it can be seen as an act of disconnecting the product too much from all the entities that it is attached to in order for it to be defined as a non-prescription pharmaceutical. If disconnected, it is not to be considered a proper non-prescription pharmaceutical that fits into the new assembly, the retail store, and the customer will not be able to bring the product home.

In other words, the gondola as part of the assemblage challenges the MPA as a calculating agency regarding how to include place into the quality of the product [Millo 2007; Sjögren and Helgesson 2007]. Introducing the gondola enables the encounter of products and customers. The new product group gives rise to assemblages

that over time are changed as results of these cold negotiations. By introducing the gondola the retailer try to (re)frame the product by questioning the translation of place and thereby being able to keep his identity as a retailer and that non-prescription pharmaceutical are seen as everyday products as well. At the same time the assemblage is changed in order to be accepted by the agency (e.g. updated self-auditing program) and to stay included on the MPA's point-of-sale list. Thus, the retailer has translated the instructions regarding the pharmaceuticals by adding or (re)connecting entities to the store (the assembly). Signs, specific gondola, cupboards, trolley, warehouse workers, education and check-out staff are all part of an assemblage that had to pass the obligatory passage point (of the audit) in order to be accepted as non-prescription pharmaceuticals.

In sum, the ANT-inspired approach has revealed that, in order to retail non-prescription pharmaceuticals, the retailer needs to connect a lot of entities in order to maintain a lasting assembly, a store that provides non-prescription pharmaceuticals in a profitable way. He needs to connect, among other things, wholesalers, warehouse workers, trolleys, boxes with red bands, lists, a technology system for age checks, cupboards, shelves with labels, signs, educated and silent staff, audits, instructions, profit, and customer satisfaction. This is done in the store, the assembly, where all these new and old entities are (re)connected. Thus the retailer manages to include both medical safety, as presented by the MPA, and profit, as part of the (cooler) negotiations regarding the continuous (re)framing of actors, products and procedures.

Conclusion

To conclude, the methods used in this study have focused on actions taken when a product group, non-prescription pharmaceuticals, enters a new sector, moving from pharmacies, embodied by pharmacists, to food retail outlets. It has enabled us to follow the object and to understand how, in practice, products are part of assemblages [Latour 2005b] of humans and objects which change along their way through the store and in the end become deliverable non-prescribed pharmaceuticals. It is claimed that products, in this case non-prescription pharmaceuticals, may not simply be seen as boxes of pills on a shelf, but as more or less stable *plural entities* [Cochoy and Grandclément-Chaffy 2005] forming part of assemblages of entities which, in the assembly, are (trans)formed by means of (re)connections, (re)associations, and (re)labelling.

This study has shown empirically that it can be advantageous to use ANT when studying situations that are not necessarily characterized by controversies or hot situ-

ations [Callon 1998]. In this case local actors in retailing are struggling in the wake of political controversies that are settled, more or less, by regulators. The analysis shows that the situation can be seen as a cooling down phase where hybrid assemblages are changed and maintained in local practice. In other words, the supermarket can be seen as an assembly where cooling down negotiations take place. These negotiations enable further (re)construction of the market.

In other words, when (hot) controversy is resolved, other (cooler) negotiations may get started, and the (re)creation of the market may continue. Even though laws and instructions include definitions of what a product is and who the actors on the market are etc., there will still be room for negotiations. The (re)framing of the product, the seller, and the buyer is not fully settled yet. In the study presented here, the regulation makes it difficult for the seller to fully disentangle the product and transform it into merchandise that can easily be exchanged. Therefore, the seller, when entering an obligatory passage point, has to negotiate the qualities of the product in order to make it an everyday product also accepted by the regulator. As a result, the seller can continue being an active part in the (re)construction of the market.

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Just a Box of Pills? When Pharmaceuticals Came to the Supermarket

Abstract: Actor Network Theory (ANT) has taken on a central role in social sciences, highlighting the importance of actions in shaping relations and organizations. Studies inspired by ANT have enhanced our understanding of how knowledge and power are produced in laboratories, political arenas, and knowledge- and technology-intensive organizations. However, so far, ANT-inspired studies have not paid similar attention to situations that lack obvious controversies, but can still have a huge influence on ordinary life. We thus want to contribute to the ANT literature by showing how ANT can be useful in situations that are not necessarily characterized by controversies and heated debates, but rather by (cooler) negotiations. In this case it is the negotiations between the regulator and the regulated that succeed (hot) situations. Regulations are formulated then enacted in (new) local practice. The performative perspective, prevalent in ANT, makes it possible to study processes that can otherwise easily pass unnoticed, as they are rather silent. It also helps us to understand how changes can be comprehended as the transformation of assemblies in practice and how the taken-for-granted products in our daily lives are part of (de)stabilized assemblies. In the study reported on here, we examine the process of introducing non-prescription pharmaceuticals into the Swedish retail sector, how this affects the day-to-day work of supermarkets, and thus also how these products may not be seen simply as boxes of pills on a shelf, but as plural entities that are (trans)formed in practice by (re)assembling, (re)connecting, and (re)labelling.

Keywords: ANT, retail sector, practice, translation, pharmaceuticals.

Petra Adolfsson, Ph.D, is a lecturer at the School of Business, Economics and Law, University of Gothenburg. Her research interests concern organizing, especially organizational change in relation to work practice, profession and technology.