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A Depasteurization of Italy?

Mediations of Consumption and the Enrollment of Consumers within the Raw-Milk Network

by Alvise Mattozzi *and* Tiziana Piccioni

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1. Introduction

I go back to the central aisle, from where to look at the intersecting ones, scoping on both sides inside the aisles, not just at their beginning – I did not think to take into consideration the signage system... But once there, I decide to pass right away to the exterior aisle, the one where checkout counters are. I walk through it with shelves on my right. Few steps and... here we are – finally: fresh milk.

All those milks packs arranged with such an order trouble me and, in a way, they prompt me to go away. And the cold I can feel... certainly is not an encouragement to stay here. I'm not able to zoom on anyone of them. An uninterruptable resonance among packs, to the extent that my brain is moving from one to the other and cannot see anything, except a light blue color. A lot of light blue without any writing. I do not see, and even less read, any writing.

There must be a reason for all that light blue, but here it is just bugging me. It hampers me to see the border between one object and the other. The white color is basically having the same effect. But white... I would take it for granted, as a background. I would not think about it, but about the light blue, yes, I would think about it. Half a minute later, I force myself to try to find some difference that could guide me in my choice and I start to notice that the shelf is divided in different areas, for whole and for half-skimmed fresh milk. Thus, I also notice that the milk area is delimited on the right by cream and on the left by butter. I would have thought by cream and yogurt, but instead there is butter on a side...

In any case, it seems to me that the milk packs are too many... and I would tend to choose for a local high quality... but... it is extremely cold close to this fridge... and actually customers who get close to the fridge counter do not linger, as I'm doing. They get right to the point. They grab their pack pointed at from distance and flee away. Maybe this behavior is also due to the cold: I mean, who the hell would start dialoguing with packaging in such conditions? I'm

even sweaty and very lightly dressed – outside the supermarket the temperature is completely different...

Yes, with a little more effort, I see a logo and some writings among the whole milk packs... it seems what I was looking for, I grab it and go away...

I leave the bicycle outside, without locking it: it shouldn't take me too much time and there is no much movement around – I know it, I live just a few blocks away. I get into the small hut-like building and I have to wait. There is a woman waiting for the nozzle to pour the last drops. Probably she knows I got in, but she is too busy checking the nozzle and the bottle to react to my presence. When finished, she wipes the neck of the bottle, even though wasn't probably necessary.

She gets her prepaid stick out of the panel and gets to the shelf, insert the bottle in the bag – one of those thermal bag you find in supermarkets for frozen food. She smiles at me. All that, taking her time. And the smile almost seems asking for comprehension, for doing everything without hurry or, better, for doing everything with the required time. I smile her back showing that I understand: I'm there for the same reason – even though I'm a bit more in hurry than she is, but that is really my concern...

She tells me something about how such a wait is worth because of the quality of the milk. I nod and greet her. We do not really know each other, but we know we live in the same village and we know we share few acquaintances.

I put my bag on the free shelf and I get to the interface. It has never been such a big deal but, since I'm used to it, it's very quick, even if the entire operation requires a bit of care. I come here quite often, despite that I do not have the prepaid stick: I never had the time to get to the farm – which actually is not far at all – or to come here when the farmer is in to refill the tank. So I have my change: the right amount, as the instructions every time remind me.

I put the bottle in the compartment. It sticks on the nozzle. There is a device with levers and springs that allows the bottle to stay in the right position and avoid the creation of foam and eventual spillovers. Not all vending machines have it, but this one does and I'm accustomed to such a comfort, even if I know that if the neck of the bottle is not of the right size, a bit of foam will arise anyway. Before learning it I had to wipe a bit of spilled milk from my bottle many times, indeed the neck of my bottle is not of the right size. Once I met a man that had the right bottle and explained it to me... in any case I feel quite attached to my glass bottle. I rather fill and wash it, than buying a plastic one that would have to be thrown away. I put the right amount of coins in, keep the door of the compartment open and hold the bottle in the right position and press start. Here comes the milk. I can feel its push through the bottle, I can see it growing inside it, whitening my bottle, with little waves and spurts and a bit of foam. It is nice to see it. Probably that is also why I keep the bottle with my hands instead of leaving it inside: the contact is much more engaging.

The machine stops pouring. I move the bottle in order to let the last drop fall. I get the bottle out and close the compartment door. While the machine silently hygienizes the compartment through ultraviolet rays – I know that because I have read it on the interface, otherwise it is not so perceivable – I close the bottle and I put it in my bag. It is not a thermal bag, but it can be completely closed. In any case I live few blocks away and in few minutes the milk will be safe in my fridge. Behind me a man is waiting with his bottle, I smile at him...

Buying milk. These two excerpts¹ tell us about such common daily task. The same task, and yet, very different: a different situation, a different “shopping experience” – as marketing experts would say.

Our paper intends to account for such difference. We will do that by looking at the artifacts that take part to the task. We are not designer, we are not architects, nor experts in retail design, we are sociologists. Hence we are interested in describing and comparing the articulations of the “social” or, better, the “collective” [Latour 1999a; Latour 1999b]. That is why we look at artifacts: following Actor-Network Theory (hereafter ANT), we consider the “collective” as composed by relations to which humans and non-humans (as it is common to say within ANT) take part [Latour 1992; Latour 1994].

Thus, in order to account for the mentioned difference we will have to account for the mediating role of certain artifacts.

We could have focused on other actors, such as customers or milk in itself, but we have preferred to focus on artifacts for various reasons related to our interests and, most of all, to the object of this research – without forgetting to consider also other actors, though.

The first reason why we decided to focus on artifacts is related to the relevance they have within the network that we intend to take into account. Indeed, the second excerpt talks about the purchase of raw milk in one of the many raw milk vending facilities that sprouted during the last ten years in many Italian regions. Within the raw milk network artifacts, and especially technical objects like refrigerated tanks and vending machine connected to these tanks, played a very relevant role [Piccioni 2008; Piccioni 2010]: they are the actual pivot element between producers and consumers.

The second reason why we decided to focus on artifacts is that our research has always had a methodological bent. Such a bent is related to one of the features of ANT, namely accounting for the mediating role of artifacts. We have always considered the emergence of the raw milk vending facilities network an interesting ground to put “traditional” ANT’s ways of describing artifacts [Akrich 1987; Akrich and Latour 1992; Latour 1992], as well as some revisions and enhancements of them, to test.

The third reason why we decided to focus on artifacts is that in this paper we will tackle the issue of consumption which, nowadays, is a quite classical object of

¹ They have been written for the sake of this introduction on the basis of Fieldnotes. They present a fictive situation which, nevertheless, is very plausible and corresponds to what was actually observed through many situations. This way of describing and presenting observed situations has been methodologically discussed in Marzano 2005. In essays that address exchange and consumption from a perspective similar to ours, Frank Cochoy [2002; Cochoy 2007] uses fictive excerpts to present observed situations. We limit the use of such fictive reconstruction to this introduction.

study for sociology and social sciences more in general [e.g. Miller 1998a; Sassatelli 2004a; Slater 1997]. On the other hand, it is not a common topic for ANT. Recently, economic relations have been deeply studied by ANT scholars [Callon 1998] and, in connection to these researches, consumption too has been an object of study for ANT's related researches [Cochoy 2002; Cochoy 2007; Cochoy 2009]. In such researches, coherently with the ANT's scholarship, artifacts play a relevant, if not central, role: they equip the rational choice, when it can be deployed, and allow economic exchanges to take place. Thus, following these researches we could not but focus on artifacts too.

What we present here is, then, the attempt to open our research on certain technologies, carried out during various years,² to new issues and, in particular, to the issue of consumption.

2. Behind the Refrigerator Wall: Some Information Regarding Raw Milk Direct Sale in Italy

In Italy, the direct sale of raw milk through vending machine started in July 2003. It started in Lombardy, a region featuring most of the Italian milk production.³ Such sale system has been initiated by a provincial branch of the breeders' association.⁴

² As mentioned, this article comes out of a collaboration which lasted a few years. Hence it has been reflected upon, discussed and planned by both authors together. Nevertheless it must be considered that it is based on a research carried out by Tiziana Piccioni [2008; Piccioni 2010] before our collaboration started. The latter started within a course of Semiotics of Industrial Design held at the Faculty of Design and Arts of the Iuav University of Venice during the Academic Year 2009/2010. The course, held by Alvisè Mattozzi, was focused on the raw milk vending facilities and Tiziana Piccioni not only gave few introductory lectures on the topic, but also took part to the entire course and exams, relevantly contributing to the discussion with students during revisions of their analyses. Part of the article is then also the outcome of the discussions we had with students. Hence we want to kindly thank them, also for the iconographic materials they provided us. We want to especially mention those students whose photos are used in this article: Roberta Abbiendi, Claudia Ambanelli, Angela Auletta, Rachele Barbisan, Niccolò Barea, Davide Baù, Francesca Bellemo, Federico Bonan, Sara Contessotto, Elisabetta Cuman, Lara Cusin, Matteo dal Ponte, Federica Dassi, Luca Fattore, Carolina Ferrari, Giorgia Galiazzo, Fabio Ghirardello, Diego Marcon, Carlo Maso, Claudia Monici, Elisa Moschetta, Leonardo Pertile, Nicolò Pizzolotto, Carolina Potente, Marta Rinaldi, Francesca Rizzato, Anastasia Santoro, Luca Sarri, Malvina Sefa, Tommaso Scarparo, Francesca Tonini, Fabio Vezzo, Alberto Zucchet. The photos of the supermarkets have been taken by Tiziana Piccioni. We warmly thank Giancarlo Di Febo for the last two photos. Regarding the actual writing, besides the fact that, as should be clear from what we previously said, the paper has been elaborated by both authors together, its draft has been carried out according to the following "division of labour": Tiziana Piccioni wrote sections 2.0., 3.2., 3.4., 4.1.1.; Alvisè Mattozzi wrote sections 3.1., 3.3., 4.2, 4.3, 5.; section 4.1.2. was written by Alvisè Mattozzi but on the basis of the observations carried out by Tiziana Piccioni [2008], and, partially, also by our students; sections 1. and 6. have been written by both of us.

³ Lombardy alone produces around the 40% of milk produced in Italy.

⁴ Associazione Provinciale Allevatori, part of the Associazione Italiana Allevatori.

Quite quickly it has become a complex socio-technical network that has caught on beyond the local area in which was inaugurated, albeit maintaining a small scale.

The direct sale of raw milk through vending machines has been devised as an answer to the zootechnical crisis. The latter is a recurring issue among actors taking part to milk production. What is especially underlined is the way it affects production carried out on the mountains and on the hills. Such crisis, indeed, resulted in a high number of shutdowns of these kinds of agricultural holding. One of the persons taking part to the raw milk network since the beginning⁵ and often considered the deviser of the novel sale system, has blamed more than once the difficulties of the agricultural economic system on the lowering of prices paid to producers, besides the constrains imposed by the European Community. He has often underlined the need to attribute a renewed relevance to aspects of the tradition by engaging consumption. In an interview,⁶ he told us about series of conferences and meetings among experts and milk producers held in order to discuss the situation with the aim of outlining possible solutions. During such meetings, a radical shortening of the production-distribution chain has been pointed at as a sound solution. The idea has hence been to aim at the direct sale of farm products from the most basic of them: milk.

Other interviewed professionals connected to the breeders association told us about expectations for a relevant growth of the direct sale system and of the related consumption. They also questioned the present configuration of the food production-distribution chain, with a specific reference to the historical process of milk commodification⁷. Sometimes these professionals made also references to a collateral, more or less symbolic, participation to consumers' movements, at least to the less radical ones, which are the most diffused in Italy [Codeluppi 2002]. These movements are often recalled within producers' and related professionals' discourses: they refer not only to mass media and Internet coverage, but also to more in-depth readings⁸.

⁵ At the time of this part of the research (2007-2008), he was the president of a provincial association that started the network.

⁶ Taken during the first part of the research carried out between 2007 and 2008 [Piccioni 2008].

⁷ For an ANT sympathetic overview of this process in Great Britain, see Nimmo 2010; for milk industry in France, see Vatin 1990.

⁸ For instance, the responsible of a Lombardy consortium of breeders after the interview told us about the book by Maurizio Pallante entitled *La decrescita felice* [The happy de-growth]. One of the experts working for the breeders' association of Padua has invited us to check Coldiretti's website (the small agricultural entrepreneurs association), where we found an official statement released for the *Buy nothing day* 2007 against rising prices. On the site it was possible to read: "[...] we invite consumers to shop in farms. This could be the occasion in order to get in touch with the agricultural holdings that do retail sale of their products, also to learn about the rise prices undergo from the field to the table. [...] From raw milk to meat, from fruits to wine, from vegetables to cheese, agricultural holdings of the Padua province cover all the range of the more requested seasonal products, ensuring origin and quality. Moreover citizens can directly test how prices increase from the origin to the

The initial idea that the deviser of the network told us was to sell milk as it was available after milking and storage in the refrigerating tank. The goal was to raise the share of the profit for the producer from 25% to 70-80% of what paid by the final consumer. In such a way, raw milk could reach the consumer with a price 20-30% lower than the usual price of fresh pasteurized milk.

Basically, all consumers met on the field talked about the cheap prices of this milk: together with the high quality of the product as it was perceived during consumption, prices seems to be a primary factor for them to start buying it. The following excerpt, extracted from a conversation between two users at a raw milk vending facility in the Veneto region, exemplifies all that:

- Cowshed's milk! Is it any good?
- Yes, sure and for one euro!
- Is it cheap, then?
- Don't you buy fresh milk, Madam?
- Yes, yes, but...
- It costs € 1,40!
- Not really, I pay for it 80 cents, even less, for one liter.
- But that's not the fresh one! It is the UHT one! You do not get it out from a fridge when you go to the supermarket, do you? That's another thing.
- And this one... is it better?
- You bet! Is like fresh one.
- And is cheaper...
- No doubt! It costs one euro. The fresh one is at least € 1,30-1,40.

[a dialogue among customers, Fieldnotes 1, 23]

The price issue is also a relevant point used in word-of-mouth to invite friends and acquaintances to try raw milk.

More in general, the attitude toward good price/quality ratio purchases – i.e., to be bargain oriented [Fabris 2003] – is one of the features of the contemporary consumer and the development of the raw milk direct sale through vending machines has, among its assumptions, also such awareness.

The only way to move in such direction was – the deviser of the network told us – the removal of transport, pasteurization, homogenization, packaging and distribution:

retailers' shelves, at an unbearable rate, due to the too many commercial passages" [Coldiretti Padova, Ufficio Stampa, Newsletter, 11/09/2007, our translation]. About the *Buy Nothing Day* as an event within the critical consumerism movement see Sassatelli 2006.

The point was: instead of running after consumers, let's have the consumers come to us – this was the idea... In other words [...] I seize the most important slice of value, which is the one that goes to the reseller. How? Not by rebuilding the chain, but by reverting the logic [interview with one of the people responsible for the network, member of the breeders' association, taken on the 07/20/2007]

The technical object available at the time was a common dispenser. It was produced by a multinational company and could be easily bought. It was usually used to mix different beverages in bars and alike. Once one of these was set within the agricultural holding's outlet, where dairy products were sold, it has been welcomed by customers. But sales would only be around 20 liters per day. This modest quantity, featured also by other places that were already selling raw milk directly from the tank, were due, according to our interviewee, to a double issue related, at once, to the producer and to the consumer. On one hand, the agricultural holding's outlet was thought as assigned to the purchase of cheese, so that milk would be just a secondary product among what was offered. On the other hand, the farmer point of view on the issue was clear:

I can't stay there waiting for customers to serve them milk! [...] If it must be me to serve, I would lose the profit. Hence:... self-service! [interview with one of the people responsible for the network, member of the breeders' association, taken on the 07/20/2007]

The stabilization of a working self-service system, which would answer to the different requirements that were raised, took various steps. Here⁹ we want just to underline that the vending machine arrived on the forefront as an enrolled actor [Callon 1986; Latour 1987] able to accomplish the general goal of rising the farmers income. Such enrollment resulted from a widening of the network and after various attempts and adjustments, which have comprised also a sequence of translations among different interpretation of the raw milk sale.

The points of sale have been devised in relation to a social, relational and active view of consumption and consumers. As for the latter, they were viewed, similarly to "a widespread tendency within consumer studies," as "active and creative subjects that de-commodify goods, de-coding the meanings conveyed by commercial culture" [Sassatelli 2006, 161].

Indeed, the people in charge for the design and management of raw milk network often mention statistical data about the present milk consumption trends, as well as those of agro-food consumption, more in general, and those of recreational consumption. Besides having acted on the base of an in-depth reflexive process and

⁹ For a more detailed account of the steps, see Piccioni 2008 and Piccioni 2010.

besides having had the need to address complex issues in order to build an effective network, in such a way the devisers of the network, showed that they were acting within a specific framework to which design, implementation and adjustment practices of the points of sale are related.

Thus the “designers’ *script*” [see § 3.] aimed at valorizing a direct relation between production and consumption following, in practice, a requirement that was also addressed within the scientific debate [Schot and de la Bruheze 2003], especially in the field of agro-food studies [Goodman and DuPuis 2002]. Moreover such *script*, besides addressing the trend related to the selective retrieval of the past through consumption [Fabris 2003], deployed the idea of a traditional production that, in the collective imaginary, is in inverse ratio to the degree of contamination with the market requirements as well as with its regulations [Grasseni 2007].

The people in charge of the design and the management of the raw milk network often talks about such relation with the regulative dimension as controversial, albeit they tend to raise explicit confrontational points of view only talking about the big milk industry.

In any case, regulations and norms have had a very relevant role in articulating the raw milk network. Institutional actors related to the network elucidated such point to us: from their point of view, farmers’ income issues are related to the high surplus of milk production with respect to the quota allowed by the European Community. The starting ground was, then, the high amount of “fines” that many had to pay because of a production which would overcome what allowed by the European Community. Indeed, we have to take into account, as breeders did, that they are allowed to transfer the surplus production from the resellers’ share to direct sales’ share. The latter is not very used if compared to the amount of surplus. Thus, breeders saw in raw milk direct sales to the final consumer a compensation to the limitations imposed by the European Community, as well as a possible solution that would go toward their goal of rising their own income.

The raw milk direct sale has, in any case, raised some doubts regarding the interpretation of the EC norms. The latter consider the direct sale of milk beside other dairy products [Regulation 1788/2003, art. 3, let. D], but did not took into consideration the sale through vending machines outside the agricultural holding area.

The regional civil servants’ interpretative uncertainties regarding such new selling system have been overcome on the ground that such form of sale does not address an intermediary economical subject, the so called “first purchaser.” Quite the contrary: the product reaches directly the final consumer since the vending machine “still belongs to the breeder,” who, then, practice the direct sale also when takes his/her milk outside the agricultural holding. The latter was the normative-organizational

innovation that such process allowed to emerge. Once it was clear that the vending machine had to belong to the breeders producing the milk sold through the very machine, regional institutions did not raise any other obstacle regarding the definition of the point of sale as part of the agricultural holding, even when its position could be quite distant from the official headquarter.

Institutional actors, by reasserting the norms regarding the direct sale and by deepening the interpretation, have dissolved controversies and, at the same time, set the ground for the work of the devisers of the raw milk network, attributing to them the necessary legitimation, albeit opening a new controversy with the milk industry.

Indeed, the representatives of the latter (Assolatte) kept calling, during an interview, raw milk as “raw material,”¹⁰ thus utilizing a typical concept of the processing industry. In this way, he was taking away any potential value for consumers from the not yet processed product. Thus, the representative of the milk industry took for granted that such milk has to be processed. Fresh milk packs sold in supermarkets or neighborhood drugstores do not feature, indeed, any reference to actual producers. The only visible – usually through writings and logos – actors of production are the processing (and sometimes distributing) industries [Fig. 5; § 4.1.1.]. On all the packs observed in the seven supermarkets that we visited for this research the other reference is sometimes, but more and more often, the place of origin of the milk, that could be generically Italy or, more often, one of its macro-region, such as Veneto-Friuli [figure 5; § 4.1.1.].

The disappearance of the precise place of origin offers a ground for certain theories related to the concealment of the breeders which were proposed by the interviewees from the breeders’ association:

[...] you go to Austria and you see cows grazing and then you say: “how nice! Mountain landscape, cows grazing, pastures, etc.” Here, if you put cows grazing on that meadows there, someone will complain [...] the agricultural holding far away from the village has also pushed away the producer from the consumer [...] Time after time, the producer has been actually removed from the view. Thus we have this kind of food supply chain: the producers, the first purchaser, often the first purchaser sells milk to the dairy, the dairy to the big distribution and the big distribution either to supermarkets or to small stores. It is a very long chain. And it turns to its advantage what we have mentioned before: the concealment of the producer from the eyes of the consumer [interview with one of the responsible of the network, member of the breeders’ association, taken on the 07/05/2007]

¹⁰ Here it must be noted that, contrary to the English version where an assonance between “raw milk” and “raw material” is established, in Italian the two expressions do not have any relation, since “raw milk” is said “*latte crudo*” (“crudo,” i.e. “not cooked”), whereas “raw material” is translated as “*materia prima*” (literally, “primary matter/ material”).

As we will see in our analysis, such concealment is thwarted by the presence of the raw milk vending facilities, when they are placed far away from the agricultural holding as well as when they are placed on the their outskirts.

3. Methodological and theoretical notes

As we mentioned in the introduction [§ 1.], this article collects and connects three phases of a collaborative research on raw milk vending facilities:

A) a sociological study of the role of vending machines within the process of emergence and stabilization of a new sale system for raw milk; this phase was carried out between 2007 and 2008 by Tiziana Piccioni, under the supervision of Federico Neresini, and resulted in a master thesis [Piccioni 2008] and in an article [Piccioni 2010];

B) a semiotic analysis of the raw milk vending facilities carried out by students attending the Semiotics of Industrial Design course held at the Iuav University of Venice in the academic year 2009/2010. The course was held by Alvisè Mattozzi, but the analyses carried out by the students were supervised by both Alvisè Mattozzi and Tiziana Piccioni;

C) a series of quick ethnographic observations of the fresh milk shelves within seven supermarkets, carried out during the month of June 2012 by Tiziana Piccioni and Alvisè Mattozzi.

The entire research was designed and accomplished within an ANT framework.

3.1. *Gathering Methodology and Descriptive Methodology*

Before relating the methods we used, we urge to make a distinction between “gathering methodology” and “descriptive methodology.” Within the social sciences, and especially within the qualitative social sciences, discussions and reflections about methods regard mainly methods to gather data: how to do interviews, how to do ethnography, etc., with all the ethical and practical issues connected to those practices. Even approaches more aware of descriptive issues like Discourse or Conversational Analysis do not set a clear-cut distinction between gathering and descriptive methodologies.

As we will show, differently from the latter mentioned approaches, we are not so much interested in extracting concepts and themes out of data or in detecting configurations related to conversational exchanges, texts or images, but in describing relations. As we will see [§ 5.3.], by describing relations we will be able to account for

themes, concepts, values as configurations resulting from the articulation of certain relations.

Since description is at the core of our approach, as it is for ANT, more in general, we also urge to give to the descriptive arm of methodology its deserved autonomy, not just from gathering methodology, but also from theory, with which it is often mistaken: such methodological branch is concerned with a reflection on how to describe data and what methods (tools, categories, models) to use. It mediates between data and theories, allowing keeping them together and verifying their reciprocal plausibility and adequacy. Thus, we will present our methodological notes following this distinction.

3.1.1. ANT as a Descriptive Methodology

The relevance of the previous distinction does not only concern our approach, but also the way we conceive ANT: for us it is not a theory – despite the final “T” – but mainly a methodology, and a descriptive one, for that.

ANT is not explicitly defined in this way by its most important scholars, but if we look at their writings and at the way they describe ANT [Latour 1998; Latour 2005] or at what they say they do [Akrich 1987; Callon 1986; Latour 1992; Mol and Law 1994] or ANT itself does, it should result quite clearly that ANT is more interested in describing than in theorizing or, better, is interested in theorizing what and how to describe, which, for us, means being a methodology. Nevertheless, it is not an absolute methodology that could be used to account for any data referring to any theory: it is an epistemologically and theoretically informed methodology. Indeed, on one hand, it is founded on a relational epistemology (or ontology) that states that relations precede and constitute elements – “attachment are first, actors are second” [Latour 2005, 217; on the issue see also Mattozzi 2006]. On the other it embeds a theory of the social as something circulating [Latour 2005] and acquiring different configurations [Mol and Law 1994].

3.2. *Gathering Issues*

3.2.1. The Sociological Study of Raw Milk Vending Machines

After a first contact and impressionistic acquaintance with the main, locally active, non-human actor of the raw milk vending network – the raw milk vending machines – the research has aimed at tracking the phenomenon of the renewed raw milk sale in Italy. In order to carry out such tracking the various human actors taking part

to the network have been also taken into account. These were mainly breeders and their associations as well as raw milk consumers. But also public institutions working on different levels were taken into account, together with producers of raw milk vending machines and personnel and associations from the milk processing industry. In any case, the main focus of the research has been set on the middle and mediating segment of assemblage constituted by milk producers-vending machine-consumers which outlines such new form of sale/purchase.

As for the geographical settings, the areas considered were Lombardy, where the phenomenon started, and Veneto, with a look to other regions only in relation to some features of the artifacts in use.

Here are the various steps used for the building of the empirical basis¹¹:

- a) data and bibliographical sources research and reading;
- b) pinpointing of the actors responsible for the launching of the new sale system in Lombardy, as well as in Veneto, in order to interview them, through semi structured interviews, and in order to collect further information and materials;
- c) ethnographic observation of two points of sale, one in an urban area and one on the outskirts of an agricultural holding;
- d) interviews with eighteen consumers, customers of the two observed vending facilities;
- e) tour and observation of fifteen points of sale on which other materials have been collected and which have been documented through photos.

3.2.2. The Semiotic Analysis of Raw Milk Vending Facilities

The first semiotic analysis of raw milk vending facilities has been carried out through the work of students of the Semiotic of Industrial Design course held at the Iuav University of Venice during the academic year 2009/10. We asked students, most of which were living in Veneto at the time and few of them in the nearby region of Friuli, to adopt a facility and work on it in order to think a possible redesign based on the semiotic analysis they would carry out. By revising their work, we started to do our own analysis, considering a variegated set of around thirty facilities coming mainly from Veneto and mainly from the provinces of Venice, Treviso, Vicenza and Padua. There were also few examples from the provinces of Rovigo and two from outside Veneto, from the province of Pordenone.

Of the initial thirty facilities we retrieved documentation of twenty of them to which we added the two facilities, from the province of Venice and Padua, where the

¹¹ We do not consider here more detailed issues related to the different phases of the research. For those, see Piccioni 2008.

ethnographic work was carried out [Piccioni 2008]. They constitute our *corpus* [see table 1]. We deem that it renders quite well the situation of raw milk vending facility in Veneto in 2010, where the internet site Milkmaps¹² maps around 190 facilities for the mentioned four Veneto provinces.¹³

3.2.3. The Ethnographic Observation of Supermarket Shelves

The general goal of this research phase was to observe eventual differences in the “shopping experience” between the experience provided by “traditional” kinds of milk sale/purchase and the one provided by the raw milk points of sale. According to the findings of the first part of the research – the sociological one [§ 3.2.1.] – we deemed that the kind of consumption most comparable with the one of raw milk was that of fresh milk sale/purchasing.

Constraints and possibilities lead us to carry out a “superficial observation” [Cochoy 2007] of the dairy department – but with a specific focus on the milk shelves – of seven supermarkets: two small supermarkets, three medium size ones and two hypermarkets, all set in the province of Venice, which was also one of provinces hosting part of our corpus of raw milk vending facilities.

Without a pre-structuration of our goals, what we have tried to gather from the field and to note in the Fieldnotes is related to the general goal of the research – observing milk sale facilities – and to our specific competences. We have especially took into account the articulation of spaces within which the dairy department is set: from the entry of the supermarket, to the setting in which the fridge counter is located, to the packs within the fridge counter. Thus we have also took into consideration the way in which milk shelves were not only positioned within the supermarkets, but also internally organized, in sectors and sub-sectors, up to the internal organization of the packs. All that has been first and foremost observed by pinpointing at contrasts, rhymes and their articulations. We have also taken many images of the observed settings as well as of the shelves and of milk packs, on which we have been reflecting upon ex-post, deepening the descriptive insight of our object of study.

¹² www.milkmaps.com is a site mapping raw milk vending facilities around Italy. It has been updated up to 2010, when we were working with the Iuav students. It is anyway still on line (visited on the August 25, 2012).

¹³ For personal reasons, we had also the chance to see what was the situation of raw milk vending machines in Abruzzo, in the province of Teramo. Moreover we have been introduced to the situation of the vending machine network in Lombardy, mainly in the province of Brescia, directly from the devisers of the network [Piccioni 2008].

3.3. *Descriptive issues – Taking into Account VS Accounting for Objects: The Role of the Script*

In the course of the last forty years artifacts have gradually become a relevant object of reflection and research for social sciences. Around twenty years ago, thanks to the extension of the principle of symmetry, ANT started to consider them full-fledged social actors [Latour 1992; Latour 1994] and to propose ways to account for their presence and role [Akrich 1987; Akrich and Latour 1992; Latour 1992]. Nevertheless, most sociological researches which do take into account objects, even researches directly related to ANT, often miss to account for them [Piccioni and Mattozzi 2011]: artifacts are indeed not directly tackled, but considered only through what humans do with them and what they say about them.

On the contrary, we think that, in order to produce an actual symmetrical description of social interactions¹⁴ we must describe the actual mediation carried out by artifacts, thus accounting for them and not just taking them into account [on the issue see also Verbeek 2011]. Thus, we are basically interested in following Bruno Latour [2005, 233] who says “when faced with an object, attend first to the associations out of which it is made and only later look at how it has renewed the repertoire of social ties.”

But, how to “attend first to the associations out of which an object is made”? Akrich [1987] and Latour [1992; Akrich and Latour 1992] proposed the concept of *script* in order to analyze what, inscribed in the objects, “renews the repertoire of social ties.” But even the concept of *script* has been used more to account for designers’ and engineers’ proposals and plans inscribed in artifacts – what we would call the “designer’s *script*” – than for what is the actual *script* of artifacts themselves – the “artifact’s *script*.”¹⁵

In order to *de-scribe* technical objects’ *scripts*, Akrich [1987] invited to do “back and forth” between “the designer’s user-project and the real user, between the world inscribed in the object and the world described by its displacement.” We followed Akrich’s invitation, by interviewing the devisers of the network as well as by observing and interviewing users [Piccioni 2008], but we also add a stop in between “designer’s user-project and the real user,” where artifacts are. Actually we started from there, from the middle, to go, from time to time, back and forth toward the ends.

¹⁴ It should be clear that such symmetrical description can also elicit asymmetries between actors.

¹⁵ For a similar critique, see Verbeek 2011; for a more articulated version of this argument, see Mattozzi 2012; for a general debate about *script* see Oudshoorn and Pinch 2003; for a renewal of the use of this concept see Van Oost 2002; Jelsma 2003; Jelsma 2006; Jelsma and Knut 2002; Mattozzi 2010.

In order to extract the *script* directly from artifacts, we relied on semiotics and, more specifically on Greimassian semiotics, which is also the source of categories constituting Latour's infra-language [Akrich and Latour 1992; Latour 1984; Latour 1992; Latour 2005; Latour and Fabbri 1977].¹⁶

By delving on semiotics, we think we can expand and revise the concept of *script*. Too often, indeed, such concept has been limited to the description of "allowances" and "prescriptions" [Akrich and Latour 1992], i.e. what an artifacts allows or forces humans to do.¹⁷

Instead, we think that the mediating role of artifacts is much more complex than just "forcing" or "allowing." Thus, if we actually want to account for it, we have to take also in consideration other features and dimensions disposed by artifacts, such as roles.¹⁸

This means that, by considering roles, our *de-description* will account for "enrollment" [Callon 1986; Latour 1987] or, better, for the tension between "interessement" and "enrollment," thus integrating two relevant ANT's concepts – *script* and "enrollment." Within the process of translation outlined by Michel Callon [1986], the step called "enrollment" is the one in which "a set of interrelated roles is defined and attributed to actors who accept them," whereas the preceding step, "interessement," is successful when achieves "enrollment."

Here roles will be considered as virtualities to be actualized [Latour 2005, quoting Gilles Deleuze] and not as potentials to be realized – the latter being the way in which roles are considered by functionalist approaches.¹⁹

¹⁶ Our actual source is the semiotics of objects. For an overview, see Mangano 2009. For the specific approach at the base of our research, see Mattozzi 2010.

¹⁷ For a renewal of the concept of *script* that focuses on these features, see Jelsma 2003; Jelsma 2006; Jelsma and Knut 2002. For a similar approach to the issue of non-human agency, see Pickering 1995.

¹⁸ In our opinion this issue has been for the first time tackled in terms of "position" in Akrich 1990, a text that is unfortunately not very known and which was developing, in a promising way, the concept of *script* as outlined in Akrich 1987. Denis and Pontille 2010 is one of the rare cases delving on Akrich 1990.

¹⁹ Michel Callon [1986] is very keen in warning that, with "role," he is not "resorting to a functionalist or culturalist sociology which defines society as an entity made up of roles and holders of roles." We, as well, use role with a specific semiotic meaning far from the complex theorization of the concept within sociology [Macioti 1993]. Notwithstanding that, we deem that the way in which Erving Goffman [1959] talks about roles as the outcome of the relations among (1) "functions" (actual or feigned), (2) "information possessed and (3) region of access" is not so dissimilar from the way in which we will talk about roles as the outcome, among other things, of the relation among, Program of Actions – comparable to "functions" –, Values – comparable to "information" – and regions – comparable to the spaces created by the artifacts we took into consideration. The main differences with the Goffman's approach regard, on the one hand, the fact that we will take into consideration artifacts, thus carrying on the rematerialization of the Goffman's approach that Latour [1994] inaugurated through the revision of the concept of "frame;" on the other hand, the fact

Thus, roles, like the other relations outlined by a *script*, are considered as dispositions and the *script* as a set of dispositions²⁰ inscribed in the artifact. Such set of dispositions can be deployed or not, totally or partially, by user or customers, who will, then, translate it and, by translating it, creating another configuration, which will have its own virtualities, its own *script*, which will be, in turn, deployed too, and so on, thus weaving the social as network of translations, as a succession of dispositions and deployments.

3.4. *A Few Theoretical References*

Artifacts which are not directly purchasable goods and their mediating role within consumption have also been tackled by the sociology of consumption, the field in which we position this research. The role of non-purchasable artifacts within the setting of consumption, has often been assumed in the terms of “allowances” and “prescriptions.” For instance, Daniel Miller [1998b, 186] states that “the very materiality and scale of place constrains the possibilities for individuals and creates normativity – what we think of as typical responses – as an outcome of its presence.” With a more critical stance, George Ritzer [1999, 4] states that the “means of consumption,” namely the settings in which and through which consumption as purchase occurs, “allow and encourage (and sometimes compel) us” to consume.

In order to devise an approach that will take into consideration the issue of “allowances” and “prescriptions” without reducing everything to it, we will refer instead to those researches that have started to address consumption from an ANT point of view by taking into account artifacts – inevitably present on the market, and in the supermarkets – as mediators that equip action [Cochoy 2002; Cochoy 2007].

What we will add to this approach is, as it should be now clear, the concept of *script*, which we think will allow us to actually account for the mediations of artifacts and not only to ostensibly show them. In doing that we will also rely on the semiotics of retail spaces [Cervelli and Torrini 2006; Floch 1995; Marsciani 2007; Pozzato 2002].²¹ In this way we should be able to bypass the past and present sociology’s of

that “roles,” as also reminded by Callon, do not belong to a fixed structure, but emerge within the situation. Thus, we agree with Minervini [2010, 71] who, summarizing ANT’s approach calls a paragraph “Symmetrical relations versus social roles” [our translation], albeit we think that “roles” are relevant and they are grounded on symmetrical relations, but they are not “social” or, at least, already social, already a product of a social structure, but, rather, a way to assemble the social, as we will try to show for raw milk vending facilities and the fridge counters.

²⁰ That is also why we will not use the term “configuring” [Woolgar 1991], which sounds too strong, even if we see our essay tackling the same issues Steve Woolgar did in his famous essay.

²¹ These essays are part of the “classic” field of the semiotics of advertisement and marketing [for

consumption's "uncertainties and [...] weaknesses in acknowledging the autonomy of material culture in contributing to shape social experience" [Magaudda 2012, our transl.].

As for the concept of consumption we want to clarify that we will mainly talk about purchasing and exchange situations. Indeed, consumption is quite an ambiguous word: it can be used to point just to purchasing, as well as to all that happens after the purchase. We basically agree with Alfred Gell [1986, 114] that considers consumption as "incorporation of the consumed item into the personal and social identity of the consumer." Consumption is thus considered something different from the moment of purchase which is part of the exchange situation. As such, exchange is an autonomous situation in respect to consumption as well as to production, and all three are considered phases of the cyclical process of social reproduction [*ibidem*, 115].

Our ANT informed view differs from Gell's one for the fact that we stress that each moment of this cyclical process can gain a certain degree of autonomy if there are artifacts that grant such autonomy. More specifically, exchange is an autonomous phase if a market, with certain features, is built through certain devices that encompass displaying facilities as well as laws as well as measuring systems and standards as well as goods' definitions as well as stabilized goods, as we will see.

4. Milk Consumption and its Mediations

As stated at the beginning, we intend to account for the difference between the mediating role of fridge counters and that of raw milk vending facilities. In order to do that we will first take counters and facilities into account separately [§ 4.1.] and, then, we will account for them comparatively [§ 4.2.].

4.1. Describing Artifacts, Taking Them Into Account

4.1.1. A Description of Supermarket Fridge Counters

Shelf after shelf, the space of the supermarket is segmented and circumscribed by shelves. A row parallel to the other, parallel to another, parallel to another and so

an overview see Marrone 2008]. Strangely enough this field, classically delved in France [the main reference is obviously Barthes 1957; but see Floch 1990; Floch 1995], is not taken into consideration by Cochoy [2002], but for few critical comments. Nevertheless, since long time, semiotics of marketing has often been doing what he proposes, namely focusing more on artifacts (ads, packaging, retail spaces) than on consumers' themselves.

on. In between rows, aisles, parallel one another too. Often rows are interrupted to give way to perpendicular aisles in between lined-up shelves. Shelves and aisles trace a matrix of crossed possible paths, which only way out is through the line of checkout counters.²²

Most of the shelves are just shelves and can be singled out only from the products or, better, the packs [Cochoy 2002; Cochoy 2007] they hold. Others are different: some just hold boxes of loose products, some have glass shells and doors, some are not shelves at all, but pools. The latter two types stand out from the others also because they shine in their own light, having neon-lighting inside.

Also the fridge counter, where milk and other dairy products are stored, stands out not so much because of the products it holds, but because internally lighted [figure 1] and also because internally cooled. Its shape too, is a little different: it features a small roof on top and a tank-like protruding first shelf on the bottom [figure 2]. These elements circumscribe a space by keeping light and cold within. Such space contains between four and six shelves where dairy products are stored.

Regular shelves address the area in front of them, exterior to them: indeed they comprise protruding elements through which products are displayed and offered to customer. Shelves for frozen products, instead, keep everything within an enclosed space which has to be opened and penetrated by customers, even though, thanks to glass walls and doors, everything is also displayed, shown and made available to the customer.²³ The fridge counter stands in between these two kinds of shelves as a pivot of a tension between inside and outside. Such tension emerges as the intersection among two different tasks the fridge counter has to accomplish. These, almost contradicting one another, are “keeping the products” and, at the same time, “making them available.”

Indeed, the fridge counter outlines a circumscribed space – a specific habitat with its own microclimate – which, nevertheless, is open for a continuous exchange with the outside. The latter, indeed, not only is reached by some of the light lighting the inside, not differently from frozen products shelves, but also by some of the cold cooling it. Thus circumscribed, yet open, it can be easily reached by customers.

²² Such articulation differs from the more constrictive articulation of other supermarkets where the path is only one as, as for Italy, in *autogrills* (gas station supermarkets along the highway). The first supermarket presented just one way [Lisa Tolbert, “The Aristocracy of the Market Basket. Self-service Food Shopping in the New South,” cited in Grandclement 2011]. Cochoy [2007] notices that nowadays big supermarkets offer also other kinds of spaces for specific products.

²³ For glass as a promise of possible actions, see Hammad 1988.



a.

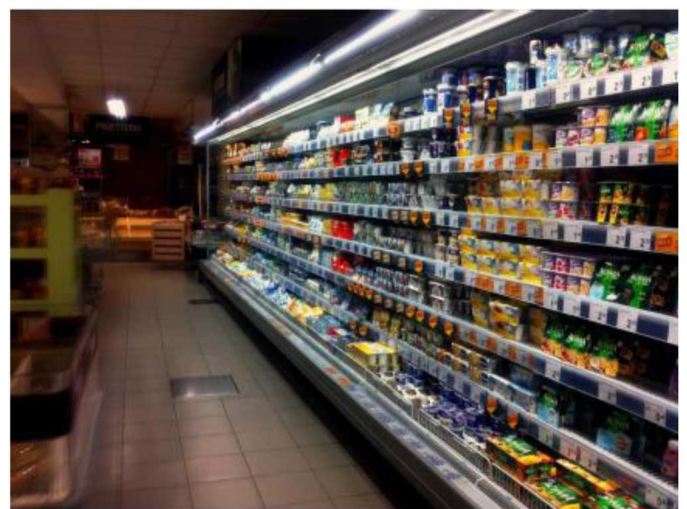


b.

FIG. 1. Fridge counter lighting.



a.



b.

FIG. 2. Fridge counter shape: roof and tank.

Thus, the fridge counter not only holds products and displays them – like all other shelves – but also maintain them in the right conditions – fresh – and makes them visible. Obviously, no shelf hides products, but for most of them the visibility is just an issue of displaying them in collaboration with the general lighting of the super-

market.²⁴ The fridge counter, instead, not only has an internal lighting system, as we have already said, but also a tank-like first shelf which, by protruding, make the space within it, and thus what is contained, visible, preventing possible shadows to decrease visibility and preventing the need for the customer to bend in order to see products.

What the fridge counter displays and makes available to customers are various dairy products among which there is milk. The quantity of products stored can vary and so does the length of the counter: from very long ones holding various products, various kinds of a product, various brands, in great quantity [figure 2a], to short ones dedicated mainly to milk [figure 3].

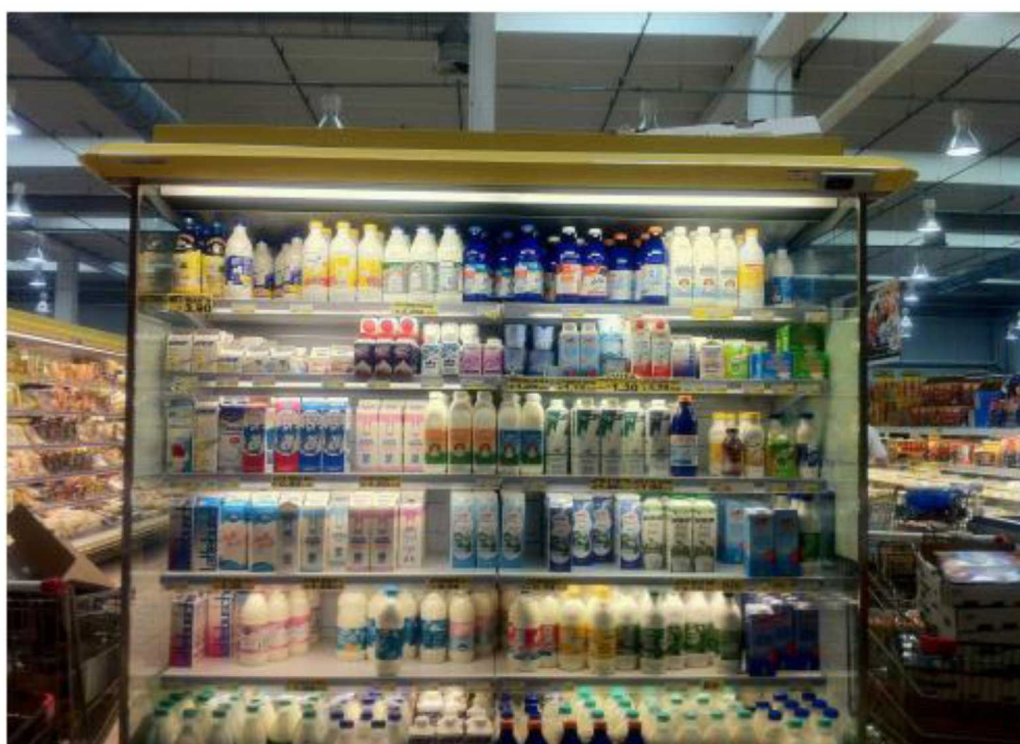


FIG. 3. Short fridge counter.

As Cochoy [2002; Cochoy 2007] underlies, what are displayed and made available are not so much products themselves, but packs. Thus what is displayed and made available at first is a range of shades of light blue and white, sometimes freaked with other colors spots (yellow, green, red). Indeed, during the last years the offer of fresh milk has changed from a simple binary one (whole or skimmed) to a much

²⁴ The predominant visual dimension of supermarket products which we, today, take for granted is the outcome of the spatial, organizational and economic rearticulation produced by supermarkets [Grandclement 2011]. While doing our quick ethnography of supermarkets fridge counters we became quite sensible to the different ways in which supermarkets are lighted.

complex one: high quality, micro-filtered, enriched, highly digestible, extended duration, fermented, bio, etc., for most of which the binary choice between whole and skimmed still holds. Many of the colors besides light blue and white are indeed introduced in order to single out some of these new kinds of milk (green, for instance, for the bio one) [figures 4a-b], other times it is a way to single out a certain specific brand or offer related to the specific supermarket chain (yellow, for instance) [figure 4c]. These new kinds of milk are often offered through a different packaging than the parallelepiped tetrapack that was common up to few years ago: the transparent plastic bottle through which the product is visible.



FIG. 4. Other colors besides blue and white.

Other times, the packaging of these kinds of milk – as well as of specific offers – displays figurative-iconic inscriptions [figures 4, 5c, d] not so much present in more traditional kinds of packs, on which stylization and abstraction was more common²⁵

²⁵ This is an impression we have had by looking at packs to which we have been used through the years compared to some that we saw only recently. In order to confirm such hypothesis a specific diachronic research about milk packaging should be carried out.

[figures 5a-c]. On the first kind of packs what is shown are cows, mountainous landscapes and milk itself often while being poured, thus showing all its dynamicity – an image which differ quite a lot from the static milk that can be seen through the transparent plastic bottle. In few cases there are also smiling people drinking [figure 5d, e]. Basically the figures we have are: the source of milk without any trace of humans; the product, the milk in itself, often related to a glass, still without any human presence; the target of the product, the only situation where humans appear, usually drinking from a glass; some hybrid situation where elements of the landscape are associated to a glass of milk.²⁶ More “classical,”²⁷ stylized, packs have similar figures but are less evident, so that the most important figures are those verbally inscribed, which are often related to the geographical origin of the distributors (Soligo, Trevenlat, Busche, etc.) [figures 5a-c].

Besides few exceptions [figures 4c], all packs show their front to the exterior of the fridge counter and are grouped in brands and types according to the features they have in common following a classification where usually the first category is whole/skimmed [figure 2a]. Such order is set when the counter is filled before the supermarket is opened, but it is also continuously maintained by the intervention of operators who refill the shelves with eventual sold-out products and restore the order if some pack is outside its group.²⁸

Thus the fridge counter, like other shelves, through the juxtaposition of all these groups of products, becomes a synoptic display of the kinds and brands of milk. And, as any synoptic display [Latour 1990], it allows comparisons. Through such comparison a choice can be made by the customer.²⁹

²⁶ As we can see there are no producers, farmers, breeders, work practices, etc., nor technologies, except for the glass. It is an actual mythology of milk, in the Barthesian sense [Barthes 1957]. Here we can see a feature that will become more relevant later on: the invisibility of breeders and milk producers, which corroborates what the breeders think of the way in which the industry conceal them [§ 2]. There is only one slight interesting exception: Coop uses black and white images of passed times rural situation for the high quality pack, thus connecting a certain milk with the past and with the past situations of production. The same association has been proposed by users of the raw milk vending facilities in relation to raw milk [Piccioni 2008; Piccioni 2010].

²⁷ See note 25.

²⁸ While Cochoy [2007] gives relevance to the work of operators before the opening, he is less keen in taking into account the work of continuous maintenance of the shelves which somehow break the quite rigid division between the two cycles he singles out.

²⁹ On the relation between vision, synopticality and choice see also Grandclement 2011, 161.



FIG. 5. Comparison among packs.

But, like other shelves, the fridge counter displays other artifacts: tags with inscriptions. The most present are prices: every group has its own price tag. These are further synoptically displayed elements that allow a comparison. But there are other tags too: some of them highlight certain features in order to ease the comparison – quite interesting are those underlining the origin of the products – “sapori del Veneto” [Veneto flavors] at Coop and “tradizioni locali” [local traditions] at Billa [figure 6]; others are there to ease the always hesitant choice, like those which suggest that the related product is part of a particular selection already made by the supermarket [Cochoy 2002; Cochoy 2007].

In such a way, the fridge counter, like other supermarket shelves, allows eventual customers standing in front of it to compare packs, to make a selection among them and to grab one. Or, in other words, supermarket shelves, as well as the supermarket

in its entirety, allow to make a choice and thus they – shelves and supermarkets – dispose the eventual customer to assume the role of the “purchaser,” as outlined by the classical economic theory, in which s/he is someone who possess the freedom of choice [Slater 1997, 33-62].³⁰



FIG. 6. Other artifacts: tags.

³⁰ Needless to say that such a freedom is not absolute, but depends on – i.e. is in relation to – what can be compared, selected and grabbed on the shelves. Thus freedom is specifically framed [Latour 1994] by the supermarket itself which outlines a space for freedom [Pozzato 2002]. At the same time, whereas a customer is free in making a choice, s/he is somewhat required to choose – and in the first supermarket s/he was even obliged to buy (Lisa Tolbert, “The Aristocracy of the Market Basket. Self-service Food Shopping in the New South,” cited in Grandclement [2011]). This is a classical critique proposed by critical social scientists [see, among others, Ritzer 1999] who basically remarks that the customer is not actually free. We are not so much interested in such classical critical stand, since it often assumes, not so differently from the acritical one, that freedom or other features, like rationality, are something absolute, aprioristically possessed by the actors. As we have shown for the supermarket, and as many ANT researches have done before us for other situations [among others, Latour 1988; Callon 1998], these are not absolute features of the actors, but are situationally shared and constituted; they can also be inscribed in artifacts in order to be present beyond the constituting situation [Latour 1990; 1994].

4.1.2. A Description of Raw Milk Vending Facilities

A typology

Since raw milk vending facilities are less known than supermarket shelves, we deem convenient to provide a general introduction. According to our observations [Piccioni 2008] as well as to the documentation provided by our students,³¹ between 2007 and 2010 within the Veneto region it was possible to find seven kinds of raw milk vending facilities. The raw milk vending facilities of our *corpus* feature one of the six models of vending machine you can see in figure 7.

Each facility differs for the extent of integration of the vending machine into the producers' farm as well as for the kind of shell they enjoy: they can be integrated within the farm, and in such case there is no need for a shell; they can be on the outskirts of the farm, and usually have a chalet-like shell which creates and characterizes the facility; they can be far from the farm, usually in the nearby urban center and display five different kinds of shell: chalet-like, bus-stop-like, they are placed within a trailer or they can be integrated to a store, at the window or wall (like an ATM), or within the store [table 1].

As we can see from table 1, the majority of the facilities constituting our *corpus*³² are those which enjoy a certain autonomy from other facilities and which, because of that, need a shell. Many of those shells are chalet-like. Such a situation corroborates the "designer's *script*." Indeed the project was to make these facilities and the sale network outlined by these facilities as visible as possible. This is indeed what one of the persons in charge of the network from the Lombardy's breeders' association, who is also one of the deviser of the raw milk network, told us [Piccioni 2008]:

The idea was that one... first, it must be recognizable, so by placing it in the middle of the square it stands out from normal stores, because we saw that placing in windows within stores, with a part of the store-window taken by the vending machine... because another aspect is that it must be recognizable, as a device, as a selling system which has to set it apart from stores, because... if you put it in a window is less visible [interview with one of the responsible of the network, member of the breeders' association, taken on the 07/20/2007]

We will mainly consider these autonomous vending machines together with the facilities they are accommodated in.

³¹ See note 2 and § 3.2.2..

³² See note 2 and § 3.2.2..










e.



f.

FIG. 7. Vending machine models within our *corpus*.

		<i>Distance from other facilities (farm or store)</i>					<i>Quantity in our corpus</i>
		<i>Integrated into farm</i>	<i>On the outskirts of farm</i>	<i>Not in physical relation to farm or store</i>	<i>In between the store and the street</i>	<i>Integrated into store</i>	
<i>Kind of shell</i>	-	 1				 1	2
	<i>Chalet-like</i>		 6	 6			12
	<i>Bus-stop-like</i>			 3			4
	<i>Trailer</i>			 2			2
	<i>Shop window /wall</i>				 2		2
	<i>Quantity in our corpus</i>	1	6	12	2	1	22

TAB. 1. A typology of raw milk vending facilities.

The need for a shell results in a quite complex articulation of the facilities: they are semi-concentrically organized around the refrigerator tank containing the milk. We have singled out four *milieux* which constitute such articulation. Each one of them disposes its specific mediations, which are in relation to the preceding and following ones, so that, *milieu* after *milieu* the general mediation of each facility is deployed.

These four *milieux* are constituted by:

- a) the relation between the facility and the setting within which it is placed;
- b) the relation between the shell (in wood, metal or other material) and the wall of the refrigerator through which a space is articulated;
- c) the relation between the refrigerator wall and what is inside, which is articulated through the interface of the vending machine;
- d) the inside of the refrigerator which is usually not visible to customers.

First Milieu

The chalet-like facility performs differently if placed in certain settings rather than if placed in others, as we can see from figure 8 and figure 9. In one case [figure 9] those chalet-like facilities stand in stark contrast with the surroundings: the shape, the size, the colors and the materials radically differ from those of other buildings. In the others [figure 8], it is quite well integrated within the setting³³.

The more contrast, the more visibility. As we have mentioned, visibility was one of the concerns of the devisers of these facilities from the breeders' association. At the same time, they were also interested in a certain integration within certain specific settings. For instance, while interviewed [Piccioni 2008], they showed us the facility of figure 10. It is placed within a urban center in the Brescia province, but on the outskirts of a well groomed and well attended park. They underlined that it was positioned beside a bar built according to bio-architecture requirements and that its configuration has been thought to create a continuity with the basic features of the surrounding – the park, – starting with the colors of the materials. But, as we can see [figure 10], from the decorations on the refrigerator wall, there are other elements that create a contrast – a chromatic one, at first, – and, in this way, they give visibility to the facility.

³³ Fig. 8 shows that quite well: if it was not for the cow standing in front of the hut and staring at us, we would probably mistake the hut for one of the houses on the back. In that picture such effect emerges also thanks to a perspective trickery related to the point of view from which the picture was taken, which, in any case, is the point of view of the passer-by and of the eventual customer going to that specific facility before actually arriving on its ground.



FIG. 8. Chalet-like facility on the outskirts of the farm.



a.



b.



c.

FIG. 9. Chalet-like facilities far from the farm.



FIG. 10. Chalet-like facility on the outskirts of a park in a town in the Brescia province.³⁴

Hence, when the facility is integrated within the setting, usually there are other elements that make it visible: billboards [figure 11] and life-size plastic cows [figures 8 and 11], or, as we have just seen [figure 10], certain inscriptions on the facility itself. They are used, but at a lesser extent, also for chalet-like facilities which already display a strong contrast with the surroundings. Other contrasting elements are used also with bus-like facilities which in certain settings can be mistaken for actual bus stop: they display inscriptions, sometimes even that recall cows skin patterns, which are unusual for bus stops, besides having billboards on the sides, which are, in turn, common to actual bus stops.

In such a way, by standing out from the surrounding space, raw milk vending facilities mark a site and also open up a place – fully developed by the next *milieu*, – thus letting emerge a possible destination. Such a destination is usually always reachable and available – twenty-four hours a day, as it is often advertised on billboards [figures 11 and 12].

But it is not just a generic place, a generic destination the one that is outlined. It displays certain features provided by colors, shapes and deployed figures (cows, grass, meadows, chalets, open skies, open spaces, sometimes mountains). Through such figuration, raw milk vending facilities present a kind of landscape – a sort of *locus amoenus* – contrasting with the urban one.

³⁴ Not part of our *corpus*.



FIG. 11. Billboard and life-size plastic cow on a chalet-like facility on the outskirts of a farm.



FIG. 12. Bus stop-like facilities.

But there is another always present – in words as in picture – figure, which we purposely overlooked: milk. Milk or, better, “*latte fresco*” (fresh milk) or “*latte appena munto*” (just milked milk) [figures 11 and 12] is what these facilities offer.

Latte fresco (fresh milk) is indeed often used rather than *latte crudo* (raw milk) and tended too be used even more often, at least in non-formal notices and advertisements. It is often associated to attributes like “digestible,” “wholesome,” “just milked” [figure 13a]. It is often depicted as already milked and usually poured in glasses – transparent glasses, where usually cold milk is drunk – ready to be drunk

by... no, not by humans... by cows or calves [figures 13a-c]! Indeed, except for the fact that cows and calves often look toward the observer – supposedly human – addressing her/him, there are no humans in the pictures: usually it is they – cows and calves – which hold the glass, drink from it, often through a straw [figures 13a-c].



a.



b.



c.

FIG. 13. Cows and calves drinking their own milk.

Humans are present, though, somewhat more discretely on billboards or shells: indeed usually each facility is named after the producing farm which in turn is named after its owner with the last name before the first as the officially registered name [figures 12 and 13b]. This is the first trace of the presence of the breeder, the producer of the “raw milk,” responsible for the facility.

Second Milieu

Once in front of a facility, a delimited space usually³⁵ opens up [figures 9b, 9c, 11 and 14] creating an actual place. It can be a sort of veranda in front of chalet-like facilities [figures 9b, 9c and 14a] or in front of bus-stop-like ones [figure 14d] or it can be a room within the hut of chalet-like facilities [figures 14a and 14b].



FIG. 14. Delimited spaces of the facilities.

As for chalet-like facilities, such a space emerges from the contrasting relation between the brownish enveloping wooden shell and the white metallic wall of the fridge containing the vending machine. In other cases, where an actual room opens

³⁵ It happens at a much lesser extent for trailers and those vending machines positioned on shop walls and windows. As for those integrated within a farm or a store the space is clearly that of the store or that of the farm.

up and there is not a refrigerator wall but just the vending machine [figures 14a and 14b], the space is articulated in between the enveloping hut and the vending machine placed against a wall, usually the opposite one to the entrance. As for bus-stop-like facilities, contrasts between the shell and the refrigerator wall are less evident. Because of that often the refrigerator wall display elements such as decorations recalling cows' skin patterns, rural or mountainous landscapes [figure 10],³⁶ which clearly contrast with the overall regular polished surfaces of the facilities. Other times on the refrigerator wall pictures of the farm and of the milking [figure 14d] are displayed. In this way, figures related to the farm and to milk's origin are introduced within the place where milk is acquired.

As for chalets, in the case of the veranda-like, the latter is often marked by green colored carpets [figures 9b, 9c, 10 and 11], whereas the room is sometimes decorated with few furniture elements – tables, chairs, windows, etc. [figure 14a]. Also bus-stop-like facilities often have a veranda-like spaces in front of the vending wall, delimited with green carpets or other vegetable-like elements [figure 14d]. In both cases – veranda or room – the facilities create a welcoming place cut-off from the surroundings where the action of the acquisition of milk – what is offered by these facilities, as seen in the first *milieu* – can be accomplished.

The veranda-like space runs more on the horizontal axis along the vending wall with a reduced width; such a space is then delimited but open, strictly in relation with the vending machine. In the second case – the room – the space is developed in length as much as in width within three or four walls that create a secluded space, sometime even provided with a door [figures 14a and 14b]. As noticed through ethnographic observation [Piccioni 2008], interactions tend to be different within the two spaces. In the first case the interaction among users are strictly connected to the request of information about the use of the device or of the product, referred to the peculiarity of the product itself and to eventual precautions to be taken, mainly asked by novel users; besides such information, not even greetings are exchanged. In the second case, instead, users tend to have more frequent verbal exchanges, not necessarily referred to the acquisition of milk. This happens in relation to the width – or narrowness – of the secluded or semi-secluded space and to the possibility for different users to accomplish actions within such space at the same time. Indeed, within this kind of space the various actions can take place in different areas of the “room”: while a user is pouring milk, another one can wipe the filled bottle, while a third one positions her/his bag.³⁷ Thus, this second arrangement outlines a sort of

³⁶ Both not present in our *corpus*.

³⁷ If there is no space bags are usually put on the ground.

production workshop, where the goal – i.e., take and pack a certain quantity of milk, – which will be thoroughly accomplished only in the third *milieu*, can be achieved through the distribution of a set of sequential practices among different users and spaces. In such a way, this shared workspace dispose a different sociality³⁸ from that disposed by the horizontal one, where less activities can be performed at once and the other users have mainly to wait in line.

What these spaces have also in common are leaflets, documents, pictures, writings inscribed in, attached on or hanging from the wall: many different elements from logos to advices, to instructions, to official notices, to pictures of farms, to other community messages [figure 15].

As we can see from the various pictures, they are placed without any apparent order and they do not feature any specific style: different sizes, colors, materials, fonts, sometimes written with hand writing other time printed at home [figures 15d, 15e, 15f and 15g]. Advices and extra-instructions are basically placed over or close to the elements needing extra information or clarification. It is, then, a non-designed arrangement, in the sense that there is no preordered disposition or style that would create a sort of general coherence. Each element answers to a very specific situation, without an overall organization. In such a way the presence of the breeder, who is also responsible for the facility, emerges through the traces s/he³⁹ leaves from time to time and not through a definite configuration given once for all. Thus it is an iterative presence, always renewing itself.

A slightly different placement and layout is usually reserved for official health institutions certificates and reports. These kinds of notices are often placed together in a dedicated space, such as a closed showcase and updated regularly [figure 15g]. By such regular updating, again, the presence of the breeder is iteratively marked. Such notices also provide a ground for the breeder legitimacy, as the latter results guaranteed by an institution.

Sometimes, among the various messages and advices there are also other notices left by and for the community of people using it [figures 15a and 15e]. In certain cases even actual pinboards are hanged in order to reserve a space for communication among users, rather than through or with the producer [figure 15e].

³⁸ On sociality disposed by the arrangement of space, see Deni 2002.

³⁹ “Official” breeders are usually men in the sense that all official names of facilities we found but one [Fig. 13b] are male names. As we already said these are usually the registered names of agricultural holdings, which in turn bear the name of the person responsible for the production – and for the facility as well. Nevertheless women – usually wives or other family figures – do play a role in the management and care of the facilities, as emerged from interviews:



FIG. 15. Inscriptions within the facilities.

Third Milieu

Once inside the space of the facility, among all the images, leaflets, notices, advices, what emerge are the elements that compose the interface – our third *milieu* – which allow to get inside the wall, behind which milk is kept and maintained fresh within the last *milieu* – inaccessible, either visually or pragmatically, by customers.

Among all the elements constituting the interface the largest is a little door – usually closed –, sometimes transparent [figures 7a and 7b], sometimes not [figures 7c, 7d, 7e and 7f]. The door protects the compartment where the tap nozzle is: the most intimate – here intended in its etymological sense as a superlative of “inside” – place on this side of the wall, which is actually already inside the wall. Beside the door, at its right, one of the six possible interface panels with its buttons (start-stop), coin and prepaid stick slots and instructions [figure 7]. And then, other elements, not so standardized as the previously mentioned ones: a paper towel dispenser, a bin for used paper towel, a shelf or a small table, usually present in all facilities [figure 16].



FIG. 16. Other elements of the “interface.”

All these elements presuppose certain actions, sequences of actions, related to the contact with milk, up to now only mentioned, promised, advertised.

Part of these actions are not just disposed by these elements but also presented as instructions [figure 7f] – quite visible a quite redundant, printed on the device, but then also recalled through various *ad-hoc* messages [figures 15b and 15d]. And, obviously, they are also actually performed. We did observe and tracked these sequences of gestures and we took into consideration how the elements we described took part

to these actions by disposing them [Piccioni 2008]. In any case we have also to notice that this third milieu is not used only to actually interact with it, but also to just look at it, in order to understand how it works and get information about it, especially by passersby, partially reproposing some of the interactions that are most usually set in the second *milieu*.

It is not our intention to account here for all the gestures disposed by the interface and their actual variability,⁴⁰ which are not dissimilar from those of other vending machines. Rather, we prefer to focus on those elements which are peculiar to these vending machines.

First of all, we have to notice that these machines do not give change. Probably this choice is intended to avoid leaving money inside the machine that could be target for looters. And, indeed, the machine also disposes the use of a pre-paid stick that would completely avoid the transfer of money within the facility. In any case, as we can see from figure 15f, the absence of change is often over advertised, and such advertising contributes to create the complex articulation of messages characterizing the second *milieu*. According to some comments users have made when interviewed [*ibidem*], the request to have the right amount of money in coins is seen as a lack of the device. In order to overcome such a lack, some vending machines deliver a receipt with the difference between what inserted and what poured written on the receipt. Such money can be claimed directly from the producer when a certain amount is reached. What is interesting in this system is that a lack of the machine is translated in a chance to get in contact with the producer either to acquire and recharge the pre-paid stick or to reclaim the change.

A second feature of these interfaces is the pouring compartment [figure 17], where the tap nozzle is positioned and the bottle must be accommodated in order to collect the pouring milk. As we already mentioned, such compartment is not directly accessible since it is always closed by a door. Differently from coffee machines where a similar compartment is in a lower position, usually not actually visible, here such a compartment is, most often than not [figure 7], at the same height of the control panel. When the door is opaque, not allowing to see within the compartment, pouring takes place with the opened door: the user must keep, at once, the door open and the bottle around the nozzle which is fixed and quite high positioned [figure 17a]. Such continuous holding is requested to keep the bottle tilted in order to prevent the formation of foam. Hence, the user can and has to continuously watch the pouring milk and control its flux. When the compartment door is transparent, in glass or plastic, the bottle can be left in the compartment and the door can be closed while

⁴⁰ For a detailed description see Piccioni 2008.

pouring [figure 17b]. Often the nozzle is equipped with springs which allow the very nozzle to be fitted in almost any bottle, in order to prevent the formation of foam. Hence, in this second case, the user is still able, and required, to watch milk being poured, but the actions required are different, as well as the engagement of the user her- or himself within the action through her/his senses. In both cases, anyway, users show to feel to be pleasantly active, so that more practical or quick devices are not necessarily seen as an improvement, also for environmental reasons, as stated by one of them:

There is no doubt about the convenience of it [the vending machine]. The first time I tried it I did not know how to do it, I let the person before me teaching it to me, I never found myself in trouble... but... all things considered for me it is ok. [Once a more automatic device would be installed] then if someone needs to fill a tank I do not know if the automatic model will allow to do that. Now I'm going to get the prepaid stick and so... I get rid of coins [...] if they make everything more automatic there will be a new bottle every time and then you must throw them away... [dialogue with customer, Fieldnotes 2, 117]



a.



b.

FIG. 17. Sequence of gestures.

Through the interaction disposed by the interface the user gets in contact with milk, but also with its freshness and vitality. Indeed milk is, on one hand, moving, dropping in the bottle, splashing and foaming, on the other is “alive,” and its vitality has to be controlled.

The latter issue is quite important and attested also by interviews with users who considers raw milk “alive, whereas, in the supermarket one, all the good and healthy substances have been destroyed, through the way it is processed” [Fieldnotes 1, 19]. Customers consider such feature not only beneficial, but also better tasting: “that’s why’s good! It has more taste, it is healthier because it is alive!” [*ibidem*, 83]. Producers too consider raw milk alive. A breeder met in 2007 at a conference about farm products of Franciacorta, an area in the Brescia province [*ibidem*, 122], told us that those who work with milk have always known what raw milk contains and how much is different from the boiled or pasteurized one: “it is an alive milk, the other one instead is dead. You understand it by cheese, with the raw one and rennet you can do it and you do anything, with the pasteurized one (and rennet) you do not do anything if you do not add something else.”⁴¹

Because of its “vitality,” milk requires a certain care, in order for it not to get transformed.⁴² The last features of the interface – intended in a broad sense [figure 16] – have to do with this issue. Indeed, as mentioned at the beginning of this paragraph, we have paper towel dispensers used to wipe out spillovers on the bottle, on the ground or on the surroundings of the compartment, whereas the compartment is usually automatically cleaned and hygienized – a process needed because of the very “vitality” of milk. And we also have shelves or tables where to place bags⁴³ used to store and transport the filled bottles without compromising milk’s freshness – often thermic bags are used, but they are not required. As we can see the acquisition of raw milk thus presupposes two other artifacts: bags and bottles. Both can be brought from home, but generally aside the raw milk vending machines there are also bottle vending machines [figures 14c and 14d]. Because of the vitality of milk and the impregnating properties of plastic, it is almost impossible to actually clean a plastic bottle from all milk’s fat and the microbes it contains. Thus, unless one does not care to throw away a plastic bottle each time s/he has consumed milk, people tend to have their own

⁴¹ We suppose that there has been a transfer of certain ideas and knowledge about milk as “alive” from producers to consumers that has taken place because of the contact between the two, made possible by raw milk vending facilities.

⁴² Obviously the amount of care may vary. One lady we met during our ethnography was very keen in preventing any air to get in contact with milk, thus closing swiftly the bottle after filling. Others are more relaxed. Nevertheless all customers know raw milk needs more care than pasteurized milk.

⁴³ The use of bags is very diffused so that if the table or the shelf, which is not very large, is already taken, user tend to put bags on the ground.

glass bottle. This occurs especially with frequent customers, who have also to care about the glass bottle: it requires care related to cleaning, as well as to movements, being more fragile than a plastic bottle.

Fourth milieu

Behind the refrigerator wall lies the refrigerated tank where milk is stored and maintained fresh – the forth milieu. As we have said, this place is inaccessible for customers and it is the actual playground of the milk producer that each day goes there to fill the tank with just milked milk. From what we have seen, such inaccessibility is always broken, at least visually, by users that visit the facility when they know it will be refilled, in order to watch the operations and to exchange some chat with the producer.

Again, as we have seen for the money change issue in the previous paragraph, a proscription for the consumers becomes an occasion to meet the producers. In this way not only the visibility of producers and of their work is enhanced – as they wished – but also a mutual trust as well as a sense of community can be established.

4.2. *De-scribing Artifacts, Accounting for Them*

As we said in the introduction [§ 1.], either at the supermarket or at the raw milk vending facility, the task, the Program of Action (PA) [Akrich and Latour 1992; Latour 1992; Latour 1999a] we are talking about, is the same: “buying milk.” And yet, as we have seen through the previous descriptions, it is enacted in two very different ways. Thus, only superficially it is the same – and, as we will see, here “superficially” is intended in very literal terms.

But it is not just “buying” that is not the same, also “milk” is not the same. The purchase of milk at the supermarket as well as the purchase of milk at the raw milk vending facility are the last steps of two different processes where milk is enacted in radically different ways. Customers know that – at least the customers of the raw milk vending facilities – as well as breeders, managers of the milk distribution, managers of the big distribution chains, civil servants, MPs, etc. And yet, all of them consider that milk sold through a raw milk vending machine is comparable to milk sold in supermarkets, so that one can be considered the substitute for the other. Here we are in one of the many everyday situations where multiple objects arise: they are multiple, more than one – more than one milk, – and yet they “tend to hang together, somehow” [Mol 2002, 5]. We are more interested in the differences that individualize them, than in what allows them to “hang together.”

Having described these differences [§ 4.1.], we want now to account for them and, through such accounting for, laying the basis to account, more generally, for the two “shopping experiences” narrated at the beginning. Indeed, as you should know by now, we do not intend to account for the differences globally, but in a limited way: limited to the mediating role of certain artifacts related to the purchase of milk. Thus, what we are going to do is to account for their mediation and the way in which, through the latter, certain roles addressed to customers are disposed.

4.2.1. What Fridge Counters and Raw Milk Facilities Do and Make Do

Fridge counters and raw milk facilities both offer goods. They make them available and acquirable. But, as we have just noticed, they do not do that in the same way: fridge counters offer many goods and, thanks to the arrangement they make available, they allow to choose among them; whereas, raw milk vending facilities offer one good. But they both do not just do that. They do not just offer a good, a certain object, they also contribute to characterize it. This is more evident for raw milk vending facilities which contribute to characterize the good they offer in different ways from *milieu* to *milieu*. But also fridge counters, like other supermarket shelves, characterize what they offer as varied and able to be chosen – other, more specific, characterizations are provided by each pack.

Thus, counters and facilities offer one or more objects and certain values related to those objects. But again, they do not just do that. They also, on one hand, contribute to make those objects desirable, on the other they provide part of the competences to acquire those objects: fridge counters provide an arrangement that allows to compare them, light them so that they are visible, position them so that they are reachable; raw milk vending facilities, on their part, allow not just to pour milk and to bottle it, but also to comfortably arrange a bag for the bottle as well as to clean it.

Through all that, fridge counters and raw milk vending facilities take part to action and, more specifically, they do and make do. Hence they are actants [Akrich and Latour 1992; Greimas and Courtes 1979; Latour 1984; Latour 1987]. But they are not generic “actants.” An actant that provides a task, that points an object related to the task, also attributing to such object a certain value – thus making it desirable – and that provides part of the competences needed to carry out the task and reach the object “does,” but mainly “makes do:” dispose another actant to carry out the proposed task in order to reach the object related to the task. An actant that mainly “makes do” is a “sender-actant.” Indeed, Greimassian narrative semiotics [Greimas and Courtes 1979], from where Latour extracted most of his “infra-language” [Latour 2005], considers not just generic actants but “actantial roles.” The “sender-ac-

tant” is one of them. Other two are the “subject-actant,” the actant which does, which acts in order to accomplish the task – or, better, the Program of Action [Akrich and Latour 1992; Latour 1992] – and, thus, acquire the object, the “object-actant,” which is the actant sought for.

4.2.2. What Fridge Counters and Raw Milk Facilities Make Do: Programs of Action.

And, then, which is the task, the Program of Action (PA) that the two artifacts, as “sender-actant,” assign to the eventual customer, who would play the actantial role of a “subject-actant?” Both artifacts assign the same PA: “buying milk.” And yet, this is so only at a superficial level. Indeed, if we look at figure 18 we can see that the articulation of the two PAs – the PA disposed by the fridge counter [figure 18a] or by the raw milk vending facility [figure 18b] – is quite different.

The two schemes, derived by Latour’s ones [Latour 1999a], first of all show us that the raw milk vending facility’s one is deeper and more complex – if we just consider the one related to milk. Moreover, they show that the fridge counter’s one is a subprogram of a more general “doing groceries”’s PA. Thus “buying milk” at the supermarket is just one PA within a series of similar ones. On the contrary, the raw milk vending facilities’ one, is specific and even if it can also be included in a more general one related too to “doing groceries,” it will hardly result similar to another eventual PA, related to the acquisition of another good. Such autonomy and specificity makes the PA relevant in itself as a customer told us:

[The vending facility] is comfortable, you pass in front of it for better or for worse and you are not required to turn around supermarket aisles, nor to do the line at the checkout counter and to wait for the receipt and the rest... Here you come and if you see that there are no people you can just stop by and get it, you have your coin and you don’t have to interact with a cashier that could even give you a dirty look if you bought just one thing. And so you can get it every day, fresh, even without buying other things [dialogue with a customer, Fieldnotes 2, 19].

He concluded underlining that once you get used to buy fresh milk it becomes a necessity, even more than bread, “because you can even put [the latter] in the refrigerator,” but you cannot do that with milk.

But let us look at the PAs more closely. As for the fridge counter, it disposes three specific actions: comparison, selection – both of which make up what we can consider the choice – and grabbing. Other actions, as we can see from the pointed lines in Fig. 18a are disposed by the general setting of the supermarket. As for the raw milk vending facility, the actions disposed are many more and related to all the three

milieux. As we can see [figure 18b], raw milk vending facilities dispose also certain actions that in the other scheme are considered disposed by the general setting of the supermarket.

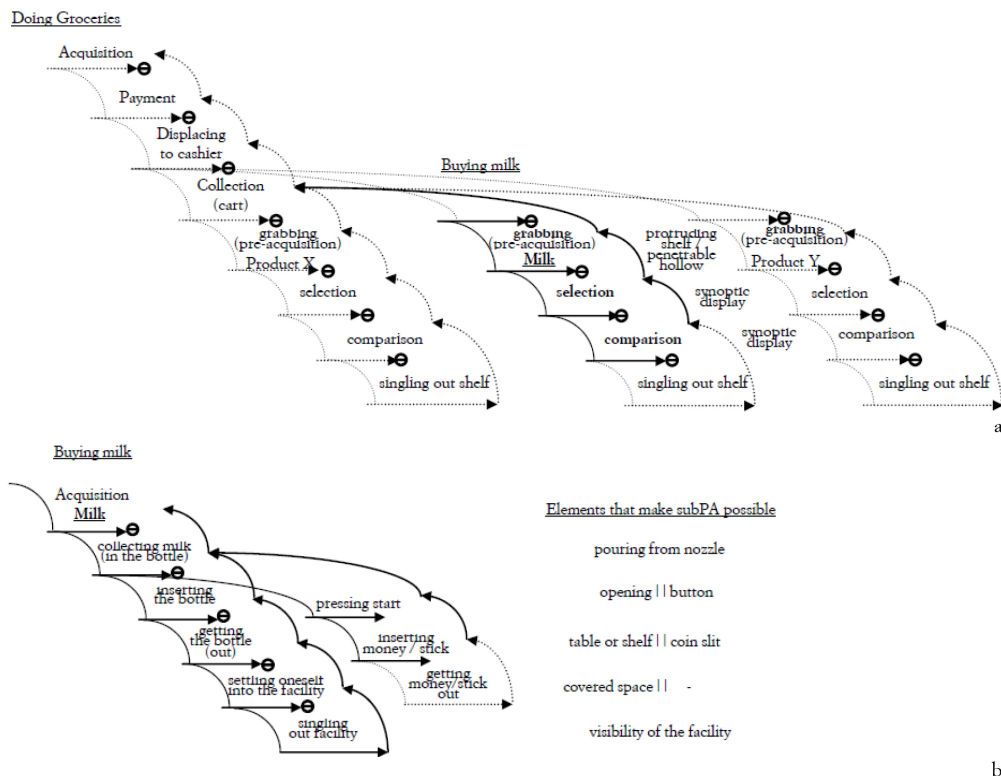


FIG. 18. Programs of action.

It is probably necessary to remind that here we are not proposing a task analysis of the purchase of milk in two different settings. Though the diagrams we propose are very similar to task analysis' ones, we are not considering the actions of an actual or ideal customer or the actions actually accomplished by the vending machine as, for instance, pouring, but a *script*, namely the actions or, better, the PAs, disposed by the two settings and, more specifically, by the two artifacts, shelves and facilities – that is why we indicated the parts or aspects of the artifacts disposing each subPA beside the two diagrams [figure 18].

If we think at the description we gave of the two artifacts [§ 4.2.], we can also see that the two *scripts* considered in all their facets differ also for another feature. The subPAs that we listed [figure 18] – related to the “buying milk” PA – completely render the fridge counter’s *script*, whereas the raw milk facility’s *script* exceeds the “buying milk” PA. Indeed, raw milk vending facilities usually have a more complex articulation that dispose other PAs – such as “cleaning” and “storing the bottle of milk (in the bag)” which are not directly connected with the acquisition of milk, but

with a second PA, that comes into play when milk has been acquired: “taking care of milk” [figure 19].

Besides providing some clues regarding the different articulation of the two disposed PAs, the interest of the two diagrams does not reside in the diagram themselves, but in how they are related to other features of the *script*, thus contributing to a more complex description of it.

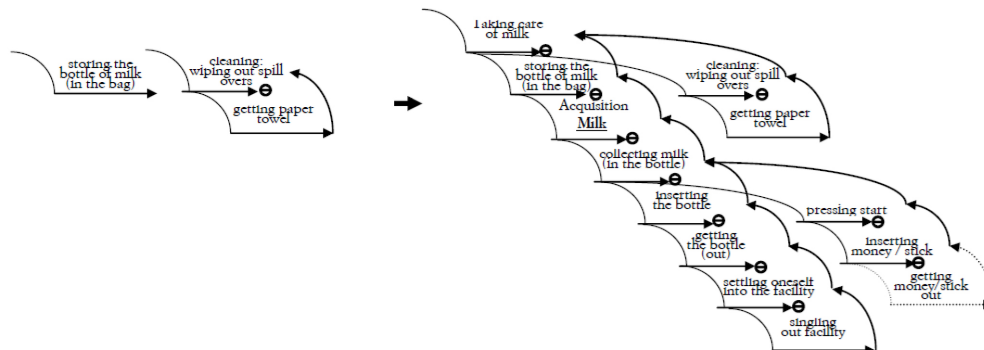


FIG. 19. A second PA for the raw milk vending facility.

4.2.3. What Fridge Counters and Raw Milk Facilities Make Do: Actants

Once an artifact disposes a certain PA, that PA is disposed for an “actant” which is presupposed to carry it out. As we have previously seen, semiotics distinguishes among various kinds of “actants” or “actantial roles.” As we said a PA is proposed to a “subject-actant” which can accept it or not. Thus, both customers, once starting to deploy, fully or partially, what the fridge counter or the raw milk vending facility dispose, would play the “actantial role” of the “subject-actant.”

As for actants, the two artifacts seem to address the same ones. And yet, if we look more closely we can see that not always a subPA is performed by a “subject-actant.” The subPA “comparison” indeed requires a specific performance which is not so much related to doing something, but rather to judge the performance of some other actants. Indeed, the customer is invited to consider which product and which producer or production process behind the product better responds to certain criteria or values. In a way, the actantial role is more similar to that of the “sender-actant,” which takes into account the actions of other actants. Nevertheless, in this case, the “sender-actant” does not take into account those actions in order “to make do” by allowing, inviting or forcing some other actant, but in order to consider what the latter has done. Semiotics indeed distinguishes between a “manipulator sender-actant,” which allows, invites, forces to do something, and a “judging sender-actant” that evaluates what has been done: did the “subject-actant” acquire the “object-actant”?

Has the PA been fully accomplished? Has been accomplished according to the values inscribed in the “object-actant”?

Thus, the first actant addressed by the fridge counter disposed PA is a “judging sender-actant.” And this makes a big difference with the raw milk vending facility disposed PAs where, as for the PA “buying milk,” all actants are just “subject-actants.”

This does not mean that the complex articulation of the raw milk vending facilities PAs does not dispose or presuppose any “judging sender-actant” – and even less that specific actors⁴⁴, specific customers, would not play such actantial role in one occasion or another. It just means that, as for the main sequence of subPAs related to “buying milk” there is not a “judging sender-actant” disposed. But we find it on other levels. For instance, actions related to “taking care” do presuppose the presence also of a “judging sender-actant” which would control the state of the milk, the state of the bottle – “is it well locked?” – the state of the general temperature, and the way the flow goes: “is the milk flow creating a foam? will it spill over? do I need to wipe the bottleneck?.” Thus, the actantial role of “judging sender-actant” is disposed by the way in which the vending machine allows to check the flow: by forcing to keep a hand on the bottle while keeping the door of tap nozzle compartment open, or by allowing to see through the transparent door. But this control of the flow – which in the second case is not even compulsory – is just part of a sub-subPA related to the PA of “collecting milk (in the bottle).”

Despite the fact that control is not one of the sub-PAs of the main PA related to “buying milk” disposed by the raw milk vending facility, all the customers we observed complied with it. The issue of control is also dwelled upon at another level, related to the direct contact that can be established with the producers, as one customer told us in an interview: “You can know from where [milk] is from and, in case, you can go and have a look [...] or kick [the producer’s] ass, if it comes out that there is something wrong.”

On the contrary, many customers we observed in the supermarket do not linger comparing milk brands and types: they just go and fetch one. That does not mean that they did not do the comparison before, but in any case such subPA, even if disposed by the synoptic arrangement of products, is not required: you can always select and grab one pack by hazard.

These features related to the kinds of actants outlined by the two disposed PAs and their sub- and sub-subPAs are relevant also to let emerge few more differences between the two *scripts* and the eventual practices they dispose.

⁴⁴ Within such framework “actors” are roles [§ 4.2.7.] played by specific figures [Greimas and Courtès 1979].

First of all, what we see is that the fridge counter's *script* and supermarket shelves' ones, more in general, addresses, at first, a "judging sender-actant," which once performed, is not needed anymore since from that moment on is just an issues of acting as a "subject-actant." On the contrary the various articulations of the raw milk vending facility's *script* address a "judging sender-actant" continuously, during the whole process, and this become the basis for the "taking care" PA.

Secondly, as we said, the actantial role of the "judging sender-actant" does not presuppose a direct engagement into the action and it is, thus, performed from a detached position. But, whereas for the raw milk vending facilities such detachment is usually inserted as a sub-subPA within a broader process, for the fridge counter and for supermarket shelves, more in general, such detachment is the beginning of the process.⁴⁵

4.2.4. What Fridge Counters and Raw Milk Facilities Make Do: Motives and Competences

Latour and Akrich's "semiotics of human and non-human assemblies" stresses on how artifacts allow redistributing competences and how they dispose "prescriptions, proscriptions, affordances and allowances," i.e. "what devices allows or forbid from the actors [...]" which is related to "the morality of the setting both negative (what it prescribes) and positive (what it permits)" [Latour and Akrich 1992, 261].

As we said [§ 3.3.], our attempt is to enhance the concept of *script* by including other categories besides these ones which are the most commonly considered [Jelsma 2003; Jelsma 2006; Jelsma and Knut 2002]. But we are also interested in delving on them, by going back to the original semiotic categories, which are, nevertheless, Latour's source [Latour and Fabbri 1977]. They were elaborated by Greimas, in order to schematically outline the preconditions for action: "wanting (to do)" and "having (to do)" – what we here call "motives" –, as well as "being able (to do)" and "knowing what/how (to do)" – what we here call "competences."⁴⁶ A *script* can, thus, provide some of these competences and motives or presuppose them in the user.

The fridge counter and, more in general, the spatial configuration of the supermarket provides the "subject-actant" with a series of "being able to dos" – first of all, "being able to choose" ("to look," "to compare," "to select"), but also with "being able to grab," "to wonder around." At the same time it provides the "subject-actant"

⁴⁵ All that can be read in terms of "planned" VS "situated actions." But our analysis should also make clear that a planning or situating attitude is not a property of humans, but of assemblages. We are situated, no doubt about it. Despite that, a certain arrangement of situated elements can dispose planning.

⁴⁶ The original French sounds much better: *vouloir faire*, *devoir faire*, *pouvoir faire* and *savoir faire*.

with a “being able not to dos”: “Being able not to choose,” “being able not to grab,” “being able not to buy,” “being able not to wonder around.” The freedom granted within the wall of the supermarket [Pozzato 2002], which is first and foremost a freedom to choose, is the combined result of these two provided competences.⁴⁷

The raw milk vending facilities provide a bigger array of competences: certainly the “subject-actant” is provided with a series of “being able to dos” – “being able to spot the site of the facility,” “being able to access it whenever it wants,” “being able to acquire the milk,” “being able to control the flow” – but once the PA “buying milk” at the raw milk vending facility is undertaken, there are not many “being able not to dos” available. Rather the “subject-actant” is provided with many “being not able not to dos” – “being not able not to choose another path,” “being not able not to insert the right amount of money,” “being not able not to get the milk without a bottle or other containers,” etc. All these “being not able not to dos” can become actual “have tos,” like the one about having the right change.

Such articulation of competences results in a “subject-actant,” outlined by the *script* of the raw milk vending facility, which is much more competent than the one disposed by the fridge counter. The “subject-actant” disposed by the raw milk vending facility must indeed be more competent in terms of the competences provided, as well as in terms of the competences presupposed, which have to be acquired outside the facility.

Here we are mainly considering the facility, but it is clear that also “raw milk” presupposes certain competences and provides other ones, most of which are related with “being not able not to do.” Thus the “subject-actant” disposed by raw milk vending facilities is much less free than the one disposed by the fridge counter which freedom is mainly outlined by “being able to dos” coupled with “being able not to dos.” As we will see [§ 4.3.], the lack of freedom that characterizes the “subject-actant” disposed by the raw milk vending facility’s *script* is related to the issue of care.

4.2.5. What Fridge Counters and Raw Milk Facilities Do and Make Do: Spaces and Visibility

The relations among PAs, actants, motives and competences, before becoming translated in a specific role or even in a specific actor⁴⁸, are translated in relations among bodies. The *script* outlines certain relations between the body of the artifact

⁴⁷ It is also true that, if one wants to buy, s/he is forced to choose [Cochoy 2002] – “has to choose,” since s/he is “not able not to choose” – or at least “not able not to select” [§ 4.2.2.], but still one can stroll within a supermarket without buying anything – even if it was not always so [Grandclement 2010].

⁴⁸ See note 44.

and the body of the user [Mattozzi 2010]. Here we will address these issues by talking about the spaces disposed and the visibility granted by the two artifacts.

The fridge counter, though hollow, since it is filled with packs of milk, stands as a more or less long wall. It stands and disposes another body to stand in front of it. It cannot be penetrated but partially, with an arm, in order to grab the selected product. If it cannot be penetrated, by standing in front of it, it can be scoured. Indeed, it is not a homogeneous surface, but a matrix of different packs which, juxtaposed, constitute a synoptic display that allow comparison.

On the contrary, the space disposed by the raw milk vending facilities is penetrable and actually envelops the body of the customer. Even when the facility does not have a fully developed shell creating an actual veranda or even a room, it is never just a wall standing in front of another body: thanks to the roof, to a carpet and to other artifacts, a space is disposed, at once penetrable and enveloping. Moreover, even when a body has, standing in front of him, but the refrigerator wall, flat and homogeneous, there is the compartment where the tap nozzle is located, which is still penetrable and enveloping.

Thus, the relation between bodies is very different in the two settings: in one case the body of the customer cannot but be detached from the fridge counter, looking at it from a distance; in the other the body of the customer is engaged, enveloped, in the space disposed by the raw milk vending facility [table 2].

Talking about spaces, we must also consider that the fridge counter is placed within the space of the supermarket. The latter, as we said [§ 4.1.1.], is a matrix of crossed possible paths. Thus, like the fridge counter it is a matrix too, but disposing a different point of view and kind of engagement: bodies cross the various paths in a linear way, following the aisles, but without a specific direction. Each shelf can be an eventual, momentary, stop within a linear but not unidirectional path.

The space of the raw milk vending facilities, as we have already seen, is articulated in a completely different way, being a series of semi-concentric *milieux*, centered around the tap nozzle compartment. It thus disposes a clear finishing line which directs the path that, not necessarily linear, is directional.

Thus the spaces of two setting dispose very different movements: in the case of the supermarket a punctuated flux [Cochoy 2009; Grandclement 2011],⁴⁹ whereas, in the case of the raw milk vending facility, a targeted incursion [table 2].

The arrangement of spaces and what they dispose has already let emerge the relation with visibility. Usually supermarket shelves must grant maximum visibility

⁴⁹ Whence the relevance of the shopping cart that allows the actualization of such flux, as Cochoy [2009] noted. As for the shopping cart, see also Grandclement [2008].

to the products or, better, packs they bear, up to disappearing behind them and all the tags related to prices and to other information. They actually work as an infrastructure [Bowker and Star 2000] or as a *dispositif enonciationel*, in semiotic terms. Fridge counters are a bit more visible than usual supermarket shelves, because of their specific configuration [§ 4.1.1.]. Such determines indeed also the need for an internal lighting, which can accomplish the task of making all the bore packs visible. Nevertheless, milk itself is visible only through few transparent bottles.

Raw milk vending facilities, carry out an opposite articulation of visibility: they are first and foremost very visible themselves [§ 4.1.2.] and hide the product. Yet, the latter, at the end of the walk-through through the *milieux*, is fully disclosed, to sight, but also to other senses.

4.2.6. What Fridge Counters and Raw Milk Facilities Do: Figurativity and Values

As we have already seen through the issue of visibility, fridge counters and raw milk vending facilities do act on the objects they offer. They act by making these objects more or less visible. But that is not the only way through which they act. They also characterize these objects.

To be more precise this action pertains more to raw milk vending facilities, rather than to fridge counters. And here we have another relevant difference between the two artifacts, which re-proposes a feature related to the visibility issue. Indeed, fridge counters, like other supermarket shelves, tend not to characterize products, besides giving them visibility and reachability, but by assigning them a price and some eventual other sign, as a help for the choice [Cochoy 2002; Cochoy 2007]. The rest of the characterization and valorization is provided by each pack. Thus, we can say that the fridge counters, like other supermarket shelves, by giving even visibility to all products, valorize not products themselves, but their variety and, hence, choice.

The way in which raw milk vending facilities assign a value to what they offer – to the “object of value” – is very different. Indeed, they deploy many figures through which they valorize what they offer.

The figurative repertoire first characterizes facilities themselves, as we have seen, by very iconic figures such as cows, milk, meadows, mountains, open landscapes and skies. All these figures can be deployed through inscriptions such as photos or drawings, but also through tangible artifacts as the chalet-like shell, the life-size plastic cows or the green carpets of the verandas [figures 8, 9, 11, 12 and 14]. All these figures refer coherently to a rural-mountainous environment which is the stereotypical cows’ environment, where they are supposed to be left free, grazing on the meadows.

Far from the urban environment, with which these figures clash, they tend to qualify milk as coming directly from cows not contaminated by humans, nor by technologies. In this way milk is qualified as genuine, that is, “really proceeding from its reputed source.”⁵⁰ Thus, they show an uncontaminated origin of milk.

As we noticed, one of the most original figure through which raw milk is valorized is the cow or the calf drinking its own milk, usually from a transparent glass, often with a straw [Fig. 13].

Such a figure, by closing the network of raw milk on itself, tells us something about genuineness again, but also about locality. On the one hand, the milk is so genuine that it is just like the one that comes out from the udders and that is usually drank by calves. Nevertheless, it has be separated from the udders, so that it could get also into other networks. On the other hand, it is a milk that stays local, within the same place of production – just a straw away. In this way milk is valorized as genuine and local.

But the figurative repertoire deployed by raw milk vending facilities requires some more words in order to account not just for the values expressed, but also for the discourse through which these values emerge. The various figure used are very iconic but also very stereotypical,⁵¹ thus supposed to be patent. Some of them are also very cartoonish – that also means stereotypical, since cartoons often refer to a stereotypical repertoire. All in all, the single figures used, not necessarily their articulation, can look very naïve – and someone more prone to esthetic judgments could even say they are examples of “trash.” This is quite typical of “popular” imagery where such naïveté should grant patency and obviousness. What is at play here is, then, what we can call a “rhetoric of patency.” Such a rhetoric, from a certain point of view, could even be considered no rhetoric at all. But this is one of the results of this rhetoric which is a typical rhetoric of local belonging – the “*parla come mangi*” kind of rhetoric. This kind of rhetoric, that feeds itself with the most common images found around, at hand, is also related to genuineness, since it is the denial of any sophistication. The latter would introduce other figures or elements not pertaining to the local environment or not already domesticized within it.⁵² This kind of rhetoric is supposed to be a direct – even an immediate – way to express something: it connects directly what one is to the community s/he belongs to. Thus, it is the most apt to express the close connection

⁵⁰ Online Etymology Dictionary: www.etymonline.com.

⁵¹ Even though the image of cows or calves drinking their own milk through a glass is not so stereotypical in itself – actually we would say that is a quite original and innovative. Nevertheless, it is made out of stereotypical figures: cows, transparent glasses, etc.

⁵² The Disney cartoonish style of certain cows [figure 13b] is certainly not local but, very likely, it has been well assimilated.

between the product and the place and the way of production on which the value of genuineness is based: there is not any sophistication – nor any design: it is just “as we are” and “as we do things.”⁵³

It is in the second milieu that locality emerges clearly as an autonomous value. In the space created by the facility the connection with the surrounding is enacted. This happens mainly thanks to the delegated presence of the breeder, of the producer, but also of the larger – but still small – local community, which is often present through announcements and leaflets, besides the fact that certain of its member do attend the facility. As we have seen, the presence of the breeder is signaled by the iteration of traces left by him or her. Also here we see a “rhetoric of patency” at work. Many of the notices, writings, advices are handwritten and positioned where they are needed, without any general and previously conceived design: it is a day by day sedimentation through which the producers make their continuously renovated presence visible.

In the third milieu, milk is valorized for its vitality. Such a value is not so much expressed through figures, but enacted through the articulation of the interface.

Thus milk – the “object of value” – set as goal for the PA “buying milk,” is valorized in three different ways – genuine, local, alive – and the values are gradually added as the “subject-actant” passes from one milieu to the other.

This configuration creates a narrative articulation which is very similar to those of quite classical narrations, where the hero, through various steps that transform her or him – that *enroll* her or him in a certain universe of values – reaches her or his goal.

4.2.7. What Fridge Counters and Raw Milk Facilities Make Do: Roles

Through *scripts*, artifacts do not dispose just PAs, actantial roles, motives and competences, corporal relations for their customers, but also roles – more figurative roles than the actantial ones.⁵⁴ Following semiotics, we deem that roles are the result of all the previous dispositions, all together related in turn to the value of the “object-actant” [table 2].

As for the fridge counter, but also for most of the supermarket shelves, the role disposed for the user is, what we could call, “the purchaser.” From what we said it can be considered as someone or something that has the freedom to choose, i.e.

⁵³ Not by chance “naïve” derives from “native” – i.e. “belonging to a certain place by birth” (Merriam-Webster On-line Dictionary) – and “ingenuous” contains the root “*genus*” – “birth, descent, origin” – which is also contained in “genuine”.

⁵⁴ In Greimassian semiotics [Greimas and Courtés 1979] they would be called “thematic roles,” thus connecting them to a specific theme, usually related, in turn, to the value of the “object of value”. They are, then, different from the “actantial roles” which are related only to the kind of action an actant performs.

within a PA related to the acquisition of a good, it is a “subject-actant” provided with “being able to dos” and a “being able not to dos,” which in the first of its subPA performs as a “judging sender-actant” by standing in front of the shelf, looking at it from a certain distance and enjoying the choice offered.


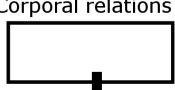



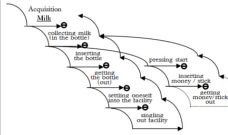
As for the raw milk vending facilities, since a role is related to the value attributed to the “actant-object” and since, as we have seen, there are at least three values attributed to milk, then there are three roles, each one of them in relation with one of the *milieux* we have singled out. All of them share certain features: within a PA related to the acquisition of a good, they are all “subject-actant,” even if in many sub-subPA they can perform as “judging sender-actants” – especially within the last *milieu*. They are provided with “being able to dos,” but also with “being not able not to dos.” They gradually penetrate the body of the facility which, in turn, envelops them in order to reach and enjoy a certain value: genuineness, locality, vitality.

Thus we can call these disposed roles: “genuinee” (lacking of a better, more common, term), “localite,” and “carer,” knowing that, as we have seen, the entrance on the scene of “alive” milk changes partially the PA from just “buying” to “taking care of” milk. Summing up all these three roles we could conclude by saying that the general role disposed by raw milk vending facilities is what we could call “the dweller,” intended in its multifarious meaning of one which “live as a resident,” but also “one that keep attention directed upon something,” namely one which cares, and not just for milk, but for all the surroundings, the community, from where that milk comes.

4.3. *Comparing Consumption*

As often noted [Cochoy 2007; Gell 1986; Polanyi 1944; Simmel 2011], the market, as a place of exchange, is the place where production and consumption meet, but it is also designed to keep producers and consumers, considered as social actors, apart: the “purchasers [...] never appear in the actual field of vision of the producers” [Simmel 1997, 327]. That is why products, in order to be exchanged, need to be at first deindividualized [Kopytoff 1986] and then “incorporated” in the personal and social identity of the consumer [Gell 1986; see also Hirsch 1994].

The supermarket is the place designed to enact such deindividualized-deincorporated exchange [Cochoy 2007] which, as we have shown, is founded on choice. Borrowing a category from Annemarie Mol [2008] we could say that the supermarket disposes a “logic of choice” on which the sovereignty of the consumer is based [Slater 1997, 33-62].

	Fridge counter		Raw Milk Vending Facility	
	What it disposes (What makes do) <i>Script</i>	What it does	What it disposes (What makes do) <i>Script</i>	What it does
Roles	Purchaser		Dweller Carer Localite Genuinee	
Values		Choice		Vitality Locality Genuineness
Corporal-Spatial Relations	Path:  Corporal relations: 	Visibility of - itself: NO - what is offered: YES - product: (usually) NO	Path:  Corporal relations: 	Visibility of - itself: YES - what is offered-product: NO but, at last, YES
Competences	Being able to do Being able not to do		Being able to do Being not able not to do	
Actantial Roles	Subject-Actant Judging Sender-Actant		Subject-Actant (Judging Sender-Actant)	
Programs of Action	Buying milk 		Buying milk 	

TAB. 2. Roles summarizing the other dispositions in relation to certain values.

Vending machines could even be considered an intensification of supermarkets, through which such logic becomes pervasive, actualized in many places of our everyday life [Cochoy 2002]. With vending machines human to human interaction is even less relevant than in supermarkets and one has only to choose between packs, pay and grab within an efficient sequence of gestures, which is a sort of materialization of the “impersonal networks of functions” Roberta Sassatelli [2000, 208] talks about, by making reference to Simmel’s reflection about market.

But vending machines can also be something else. Vending machines can become places for social interaction [Breviglieri 1997] and even more than that. As for the case we are examining, they have been framed in such a way that they become not just places for human interactions, but a place that disposes the meeting of producers

and purchasers. Moreover, and because of that, raw milk vending facilities, albeit places for exchange, anticipate the “incorporation” [Gell 1986] phase: milk is already “incorporated” in social identities proposed by the facilities. As we have seen, these identities are characterized by values related to locality, genuineness and vitality.

Hence, still borrowing from Mol, we can hypothesize that through these vending facilities another logic is disposed: “a logic of care.”⁵⁵ Producers as well as consumers are disposed to take part to such logic. Each group with its own features, but both by being disposed to belong and also by being disposed to build the same community, by being disposed to take care of it – dwellers, indeed⁵⁶.

For Mol [2008, 34], the “logic of care” is “a matter of attending to the balances inside, and the flows between, a fragile body and its intricate surroundings” and “starts out from the fleshiness and fragility of life” [ibidem, 11], whereas the “logic of choice,” be it deployed on the market or in politics, always presupposes a strong subject fully competent who is, then, “able to do.”

Within the raw milk network such fragile body is first and foremost milk and its microbes and enzymes. It is their balance between inside and the surroundings that has to be attended to by the producer as well as by the customer.

But for the breeders also their work and their families, as well as their communities, are fragile bodies.

Within such framework we can then conclude by our last hypothesis. It is by offering a product which needs care that the ultimate enrollment is disposed: customer will become concerned not only with the “health” of the milk, but also with the “health” of the breeders, their families and their communities, which, more often than not become also the communities of the customers.

The raw milk network, then, allows translating such fragility from farms to villages and towns. It thus works in a very different way from the pasteurization. The latter by heating and then cooling milk – by killing the microbes and then by

⁵⁵ Albeit we know Mol’s researches, when we started our research as well as this article, we had not yet read the book *The Logic of Care*, nor we knew too much about this part of Mol’s work. When we arrived at the end of our *de-scription*, by focusing on the relations to which milk takes part, we noticed that those were relations of care. It is only then that we started to retrieve from our memory the title of Mol’s book and we started to read it, in order to see if it could help us in thinking about our findings and expanding them. Once we started reading it, we realized that she was opposing to the “logic of care” a “logic of choice” that we, not too surprisingly, already saw disposed by the supermarket, even if we did not call it in that way. We, then, understood that we could use Mol’s book to frame our own comparison which elicited the same opposition.

⁵⁶ Here we mainly referred to consumers, but as pointed out in note 39, those responsible for the facilities do care about their condition and take care of them – as dwellers would do. As resulted from our fieldwork, such care was perceived and appreciated by customers.

preventing their resurgence – makes milk less alive, but also stronger, less fragile, and more stable. Thus, pasteurization disposes it to become a good that can enter the market [Vatin 1990] under a “logic of choice,” disentangled from the relations of production as well as those of consumption, “isolated from [its] surroundings” [Mol 2008, 103].

5. Discussion

5.1. *Actors in Translation: New Members of Our Collective*

In 2010, when we ended up the second part of our research [§ 3.], raw milk (with all its microbes and enzymes) and raw milk vending facilities were all full-fledged members of our collective [Latour 1999b], at least for the collectives of certain Italian regions. While retrieving all our data and notes to write this article we have had the impression that their presence within our collective is not so stable anymore [figure 20.]. We suppose that probably, the law requiring facilities to post notices regarding the necessity to boil raw milk before consumption could have affected their presence. But this will be the matter for another research. In any case, as for 2010, raw milk and raw milk vending facilities were full-fledged members of our collective.

As Piccioni [2008, 2010] has shown, this has happened mainly thanks to the ability of building a specific heterogeneous network. Such network is able to maintain the cold chain that allows milk to remain unaltered in its fragility while moving it outside the farm. And such network has also been able to translate the sale of raw milk outside the farm, while maintaining it a direct sale, even if it is not performed by the farmer on the place of production [§ 2.].

Thus, the delegation to the machine [Piccioni 2010], to the refrigerator-vending machine, allowed a double displacement: raw milk can exist, as a member of our collective, far, in time and space, from the place of production, while being still raw milk sold directly. Such a mediation resulted in a rearticulation of our collective that not only allowed these displacements, but extended the very availability of milk, now available, in most cases, twenty-four hours a day.

But such a network would not have existed if it would not have enrolled consumers [Callon 1986; Latour 1989]. And here we accounted for the contribution of raw milk vending facilities to such enrollment⁵⁷: how it has been disposed by the vending facilities.

⁵⁷ For the others feature see Piccioni [2008] and Piccioni [2010].

If the network got stabilized for a period, then the enrollment must have succeeded,⁵⁸ even if it does not mean that all customers complied with all proposed roles and values. A further research would be needed to describe the various ways in which the disposed enrollment has been actually deployed.⁵⁹

We can, in any case, hypothesize that the enrollment succeeded because it proposed roles and values, such as locality and genuineness, already diffused in the communities addressed by the vending facilities:⁶⁰ eventual customers were already disposed to be “interested”, so that the translation between roles and actual practices occurred smoothly.

In order to fully account for the successful enrollment (but also for its eventual deterioration)⁶¹ we should also expand our research to other actors that we mentioned, but which we did not focus on. Certainly milk itself and price are among those actors that could be taken into account.

5.1.1. Milk

The question is easy: would have a similar network be possible if, instead of milk, there would have been another actor proposed as “object of value”? Would have all this network be possible if, instead of milk, there would have been wine? Potatoes? Eggs? Meat? Shoes?

If we assume that the last disposed role is related to the vitality of milk (with all its microbes and enzymes) and, hence – as we learned from the customer we observed [Piccioni 2008] and from Mol [2008] – to its fragility, then we can say that another

⁵⁸ If we compare the success of the raw milk network with the failure a similar network related to the technical development of *lievito madre* (natural yeast) as described by Alessandro Mongili [2010] we can point to two features that characterize our case and that are not present in the one presented by Mongili: first of all, here the delegation to technology [Piccioni 2010] is the outcome of process internal to the same community which is affected by the change. Secondly, such process is able to generate a caring attitude, whereas the bakers tentatively enrolled for the technical production of *lievito madre* (natural yeast) did not really care for a process that, traditionally, requires care.

⁵⁹ Some descriptions can already be found in Piccioni [2008], which in any case do not show resistance toward this kind of enrollment.

⁶⁰ So diffused that, indeed, we find the same or similar values also fostered by milk packs and shelves’ tags in supermarkets [figures 4-6].

⁶¹ The raw milk network, even if it clearly succeeded for a certain time, is not a strong network and probably such feature is related to the fragility of it offers. As one of the deviser of the network told us: “The critical point of the entire discourse has been already singled out. It has been managed but not completely. [it is] the point of contact of the product with the consumer, right there in those two square centimeters there is the critical point, namely the tap nozzle ... that is the contact point between product and consumer, the point of contact that make us loose some of the customers [...] a part of tem does not buy it because of that because someone can think that the tap nozzle can get contaminated [...]” [interview with one of the responsible of the network, member of the breeders’ association, 07/05/2007].

product, with a different fragility, not disposing the same amount of care, could have not probably worked in the same way – and indeed the network did not actually multiply or differentiate products.⁶²

And also, as we just did with values and roles already diffused among customers, we can hypothesize that customer were already disposed to take care of milk because, traditionally, milk, in our society, is already strictly connected to caring practices. Again, then, an enrollment seems to be possible because it is disposed by some actors – milk, in this case – that address already deployed practices that concern that very actor – care and milk, still, in this case.

5.1.2. Price

By reading some newspaper articles that appeared when raw milk vending machines were growing in terms of numbers and visibility – around 2007-2008⁶³ – it seems that the critical factor for the success of raw milk was price. In two articles appeared on the two Italian leading newspapers, *Corriere della Sera* [Ligammari 2007] and *la Repubblica* [Giuliano 2007], the news about the existence of raw milk and raw milk vending machines is announced within a frame related to savings and the reduction of the high cost of living. In the *la Repubblica's* article, for instance, it is stated that the

boom of the milk from the barrel is a multi-casual phenomenon. Some state that it has more taste, since is richer in non-homogenized fat. Others, instead, explain it making reference to the reasons of ecology, helped by cutting off the bottling steps. But, the most important reason seems to be the economic one. Buying raw milk from one of the more than 750 facilities distributed all over Italy costs one euro per liter [...], beyond the 30% less of the price [...] marked in supermarkets [Giugliano 2008, our translation].

Instead, in our account we gave very little relevance to price. Certainly this is in part because our research started as a research on the stabilization of a certain technological network. But, also when we moved our focus on consumption, we did not take price into account. This happened mainly for two reasons, one related to the production side and the second to the consumer side of the network.

The price is clearly displayed and advertised on billboards or on the facilities but, most importantly, is never used to actually advertise and valorize milk as inexpensive and cheap. Yes, price (and income) is part of the entire discourse made around raw milk by milk producers and their associations, but it is always connected

⁶² Very few facilities were also selling yogurt or cheese.

⁶³ When this research has started [§ 3.2.1].

to the cut in the production chain and to the relevance of locality. Thus, from the breeders point of view the cut in price is a consequence of the locality of the product, which justifies such a cut, and it is not then a marketing ploy. What producers say [§ 2.], show and advertise is not that they are entering in the market through a price cut, but through a distribution cut: the price cut is a consequence of the first cut, which is valorized through the valorization of locality and proximity, as we saw [§ 4.].

As for consumers, clearly price has a relevance in their discourse, as we have shown [§ 2.]. But it seems to us that it cannot be accounted as one of the main actors of the stabilization of the network, rather it is an important actor for making people acquainted with the network. Indeed its amount represents a low barrier to get into the network for the first time. the price is used as an incentive in the discourse from consumers to consumers to invite those that are not yet part of the network to become part of it: “C’mon try it! After all..., what will you lose?”⁶⁴ Hence, the price becomes an element of “interessement” used by those who are already enrolled, but not an element of actual enrollment. Indeed, it seems to us that the network does not actually propose any role related to saving money, such as “the economizer,” even though it can be enacted by certain customers and even though there are offers for better bargains [figure 15d]

Also in this case it seems to us that what stabilized the network is a good and smooth translations between the values and roles proposed by the vending facilities and the values assumed and performed by consumers and producers, where price is a byproduct of locality.

5.2. *Critical Consumerism and the Raw Milk Network*

Buying milk through the raw milk network is an alternative way of consuming milk. As we tried to show, it is disposed by the vending machine facilities as an alternative way to purchase a good in respect to ordinary consumption which, being part of the market dynamics, follows a “logic of choice.” But, does buying milk through the raw milk network falls under the set of practices usually referred to as critical, alternative, ethical, responsible or political consumerism (from now on just “critical consumerism”)?

The raw milk network shares many features of the critical consumerism networks,⁶⁵ especially those related to farmers’ markets and “km 0,” among which, the

⁶⁴ We are not reporting an actual dialogue, but something we made up on the basis of what we heard.

⁶⁵ For researches about those networks in Italy see Bovone and Mora [2007], Leonini and Sassatelli

most relevant, is probably the establishment of an alternative distribution network characterized by “the traceability of the production chain and in a fiduciary relation with the producer [...]” [Bovone and Mora 2007, xv]. Moreover the raw milk network could easily comply with the three models of responsibility critical consumerism refers to: the self; others or the community; nature or the environment [Bovone and Mora 2007, xiii; Sassatelli 2004b, 186]. Despite that, and despite the fact that some of the persons and associations behind the raw milk network showed an interest in connecting it to more general concerns related to those of the critical consumerism networks⁶⁶, nor the facilities nor producers and consumers made explicit references to critical consumerism. Just two of the facilities among those composing our *corpus* were explicitly related to two GAS (*Gruppo di acquisto solidale* – Solidarity based Purchase Group), but except for one poster advertising activities related to alternative forms of economy, there was not any other reference to such networks and membership to the GAS was not required to purchase milk.

From our analysis we can presuppose that the connection between the raw milk network and the critical consumerism one did not get strongly established because the former does not dispose the same “logic” [Mol 2008; § 4.3.] of the latter. The critical consumerism network, by equating consumers with citizens and by equating shopping with voting [Sassatelli 2006; Sassatelli 2008] and by “its emphasis on *choice* as a political and ethical process” [Sassatelli 2004b, 188] lies completely within the “logic of choice.” Indeed, Mol [2008] clearly shows that the “logic of choice” underlies consumption and liberal economy as well as citizenship and liberal politics.⁶⁷

[2008], and Rebughini and Sassatelli [2008]. These essays are all the outcome of a national research project on critical consumerism started in 2004 and ended around 2007. At that time, the raw milk network, which started in July 2003, was spreading and getting known, so that it did not have the visibility and relevance it acquired in 2007-2008 [§ 2.]. That is probably why it is not considered by the mentioned research. But, as we will show, it was probably not considered also because it does not actually fit within the framework of critical consumerism.

⁶⁶ See note 8.

⁶⁷ Thus, in Mol’s view the starkest contrast is not between consumption and citizenship, as it is often assumed, but between a “logic of choice” comprising both consumption and citizenship – which are not considered in any case equal – and a “logic of care”. Up to now, critical consumerism has been analyzed mainly in terms of citizenship, politics and voting procedures introduced into the market. There is no doubt that such a choice has been made on solid grounds, since many organizations and individuals practicing and promoting critical consumption do make reference to citizenship, politics and voting procedures [Sassatelli 2004b; Sassatelli 2006; Sassatelli 2008; and more in general the essays cited in note 65; see also the useful map in Sedda 2006]. For instance, the arrival of fair trade products into the Italian supermarkets, albeit much criticized, has also been positively welcomed as a way to give more choice to consumers, not just in quantitative terms, but also in qualitative ones, since it results in the assignment of a “more intense meaning” [Ceccarini 2008, 157] – i.e. a moral or political one – to the purchasing choice. Nevertheless, it would be interesting to frame (or reframe) critical consumerism also taking into account the “logic of care”. On the one hand, it seems

5.3. *Describing, Comparing, Accounting for VS Explaining*

We did not explain anything. We just described.

And, by describing, we accounted for a difference. A difference related to two situations regarding the purchase of milk. Or, a difference related to two milks which deploy two purchase situations. But actually we did not tackle the situation, nor milk directly. We focused on certain artifacts which are related to milks and which contribute to the constitution of those situations. And we accounted for their mediating role.

Thus, we did not *just* describe. Indeed, besides describing the artifacts themselves [§ 4.1.], we described the relations articulating those artifacts and articulated by them [§ 4.2.].

And, we did not just describe because we also compared. Often comparison is negatively seen, since it is taxed with reducing two different phenomena to a common denominator or to one another, thus missing to take into account the specificity of each of them. We do not think that our comparison undermined differences and specificities. Rather, we think that through our comparison we were able to deploy the specific differences of the two situations, together with their specific multiplicities.

We think that we have been able to go beyond description through description because of, and thanks to, the infra-language we used. It provided us with categories, models and hierarchies among categories. All of them allowed us to trace relations and compare them.

Like Latour's jargon, to which our is inspired and with which shares the same origin, such infra-language is "empty," mainly negative, or, better not substantive: it is a set of tools that allows description, without saying nothing about what to describe. Indeed, Latour [2005, 174] notices that ANT's or, better, that the terms or categories constituting its infra-language,

don't designate what is being mapped, but how it is possible to map anything from such a territory. They are part of the equipment lying on the geographer's desk to allow him to project shapes on a sheet of paper. This is why the terms I am going to review won't say anything substantive about the social realm; they simply allow ANT scholars to render the social fluid collectable again in the same way entomologists

to us that many references made by critical consumers to "the community," to "the others" or "the environment" as well as the relevance of "responsibility" can be better understood if framed within a "logic of care," rather than a "logic of choice". On the other it could help to better integrate the forms of critical consumerism related to the "care of the self," even though Mol [2008, 106] is very keen in underling that the "logic of care" is related to others and not to the self. More in general it seems to us that care in relation to consumption can also help to account for love as conceptualized in Miller [1998].

learn how to build little bridges so that, without interfering with the ants' travels, they can count them one by one.

As ours, also Latour's infra-language is semiotics founded – "*autrement dit, l'infralangage de la sémiotique protège contre les tentations du métalangage de la sociologie*" [Latour 2005, French transl. 79].⁶⁸ But differently from Latour [1984; Latour 2005] and other ANT's scholars [Akrich 1990; Akrich 1992] we did not limit the contribution of semiotics, but we tried to take full advantage of it⁶⁹ – even if we did not propose a complete semiotic analysis.

More specifically, we assumed that such infra-language is not "substantial" since it refers to relations and not to elements or, when it refers to elements, it is always possible to retrace the relations constituting these elements, which can still be described through the same set of categories. And here lies the biggest difference between our semiotic driven approach and the most "traditional" ANT's ones: ANT, when uses semiotics as a methodology or, better, as a source of descriptive categories, extracts few of them from a complex system of interrelated categories and models which is semiotics – especially Greimassian semiotics. Differently we tried to recover such interrelatedness by showing how roles are the outcome of the stratification of other categories like actants, competences, body relations, values, etc.

As we have been repeating through all this paper, thanks to this infra-language we were able to "account for." We did not use these words so often fortuitously or as the outcome of a strange compulsion. For us they have a specific meaning. Through them we want to make explicit and fully develop what we deem already present in Latour [2005], from whom they are nevertheless taken: ANT eludes the debate between explication and description. By "accounting for," namely by describing relations, their articulations in certain more or less stabilized configurations and their translations in other configurations, we are able to trace the emergence of a certain phenomenon. Thus we do not need to address causes and consequences, and, at the same time, we do not need to be stuck in the contemplation of the phenomena we describe. We can compare our description to other descriptions and through comparison between the various described configuration, we can account for the weaving of relations that assemble the social. For instance, through our description we can account for the (temporary) stabilization of raw milk network by tracing and describing the way in which the configuration disposed by the raw milk vending facilities got translated in certain practices. The raw milk vending facilities, indeed, did not cause

⁶⁸ This is a sentence which is not present in the English original version of Latour [2005]. It would have appeared on page 55 of that version.

⁶⁹ Francois Cooren [1999] and Annalisa Pelizza [2010] are carrying out a similar projects.

anything. They disposed certain practices, which, when actually deployed, translated those dispositions, transforming them, but also, in many cases, making them more stable.

6. Conclusions

Did the raw milk vending machine network result in a depasteurization of Italy?

No, at least not yet or not quite. But the answer depends also on the way we consider “pasteurization.”

If pasteurization is seen in literal terms as a process through which milk is heated and then cooled in order to kill microbes that could be dangerous for humans, then raw milk vending facilities did actually attempt a depasteurization, which right now seem to have come to an arrest [figure 20].

But if pasteurization is seen in more Latourian terms as the displacement of the laboratory from scientific institutions to farms in relations to the acknowledgement that microbes are part of our collective, then the raw milk vending facilities network is just part of the pasteurization movement. Indeed, it is only because certain sanitary standards have been extended to farms from labs and are maintained through the cold chain ending with the vending machines that the raw milk sale is possible and trustworthy.

But there is also a third meaning that we can give to pasteurization in relation to the birth of the distribution chain for dairy products. Pasteurization, by making milk (together with all its microbes and enzymes) less fragile, but also less alive, has allowed the birth of the market for dairy products and especially for milk, previously rarely sold far from farms [Nimmo 2010; Vatin 1990]. Pasteurization thus, allowed to isolate, stabilize and give more fixed borders to a fluid actor [Mol and Law 1994; de Laet and Mol 2000]. Pasteurization, then, set the ground for the establishment of a “logic of choice” for an actor that before could not completely stand such logic.

As we have seen, the raw milk vending facilities network, by recovering the instability and the fragility of milk, reintroduces another logic, a “logic of care,” far from the farms, where it had been mainly relegated. The reintroduction of such different logic, for milk itself and for the network outlined by milk production and consumption, also undermines the reasons for pasteurization – in the technical meaning – thus radically contributing to an eventual depasteurization.

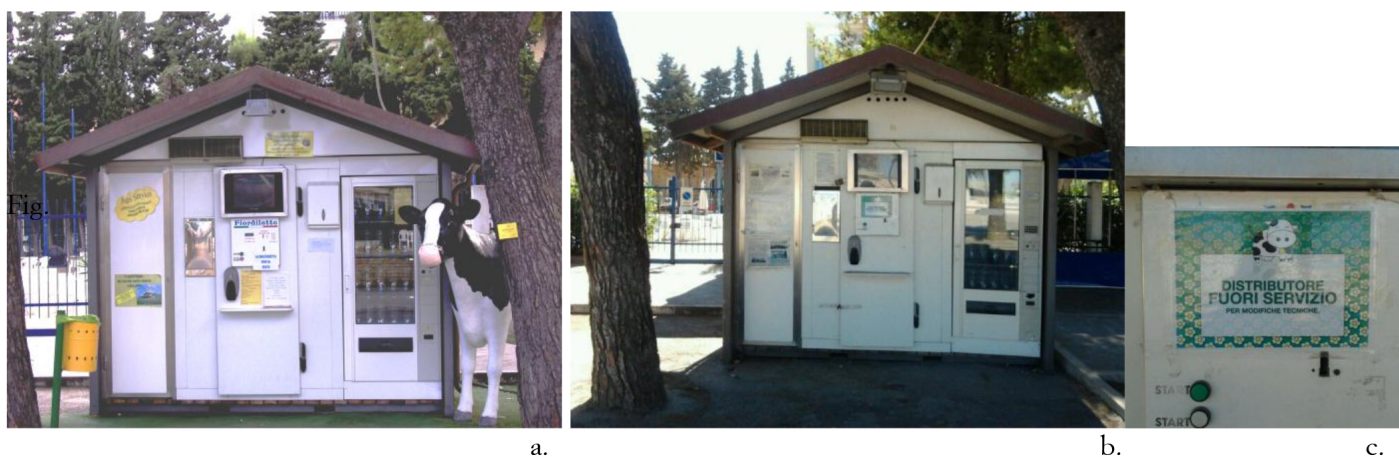


FIG. 20. A raw milk vending facility near Teramo in 2007 (a) and in 2011 (b and c).

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A Depasteurization of Italy?

Mediations of Consumption and the Enrollment of Consumers within the Raw-Milk Network

Abstract: What difference does it make to buy milk raw? During the last ten years a network of vending machines selling raw milk has sprouted in Italy. Such milk is sold directly by breeders but, thanks to refrigerated tanks and vending machines, it can be bought far from the premises of the farms where it is produced. Thus, the raw milk vending machine network has established a way of purchasing milk which is alternative to the traditional one, connected to the milk pasteurizing industrial chain, usually ending up in supermarkets. Our article, by further developing the Actor-Network Theory approach to consumption, aims at accounting for the mediating role of the facilities where raw milk vending machines are usually installed and for the resulting enrollment of consumers within the network. In order to better account for the specificities of such enrollment, we have compared the raw milk facilities' mediation with the one carried out by supermarket fridge counters. Our analysis is based on resorting to the concept of *script*, elaborated by Madeleine Akrich and Bruno Latour, in enhancing it by delving into its semiotic foundations and in integrating it with the concept of role and enrollment as elaborated by Michel Callon. What emerges from our *de-scription* is that raw milk vending facilities dispose for consumers a role complying with the "logic of care," as recently outlined by Annemarie Mol.

Keywords: Actor-network theory, logic of care, consumption, milk, enrollment, semiotics, script.

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