Consumption as biopower: Governing bodies with loyalty cards

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Abstract

For more than a decade, many retail companies have been collecting large volumes of data on a daily basis through loyalty card programmes. These programmes gather, at point-of-purchase, the identity of the consumer, date and time of the transaction, and the list of products purchased. With the help of data mining techniques, companies can use this data to get a better knowledge of their customer and to address them personally with targeted advertisement. This "mass customization", which is at the core of the relationship marketing paradigm, has traditionally been viewed as a means of customizing services to meet the needs of an existing market. However, it appears also to be invested in actually customizing consumers to meet market needs. To investigate this aspect of relationship marketing, a study was conducted to examine the extent to which companies in Switzerland use data-mining technologies and strategies, their data collection and analysis practices, the privacy risks posed by such practices, and the modalities of power they create. As a result, and as it will be developed in this article, I finally theorized surveillance of consumption as being a much elaborated form of biopower, which strongly relies on the use of data mining to reveal patterns in consumption. This biopower is actually growing as data collected through loyalty programmes is now becoming a prime target for other purposes than pure marketing, such as helping the fight of health policies against obesity, or to control the consumer's intake of food additive. These new kind of practices bring major ethical issues that are also discussed in this article.

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Introduction

For more than a decade, many retail companies have been collecting large volumes of data on a daily basis through loyalty card (also known as rewards card, points card, savings card, club card or advantage card) programmes which gather, at point-of-purchase, the identity of the consumer, date and time of the transaction, and the list of products purchased. As an incentive, these programmes usually enable customers to collect points for each purchase which can be converted into rewards or give access to rebates only available to card owners.

It is generally assumed that loyalty programmes have been built to strengthen the relationship between companies and consumers,[1] which supposedly largely disappeared with the rise of supermarket chains in Europe and North America during the 1920s (Coll, 2012). In fact, this supposition is not totally accurate. Even before supermarkets became the main modality of grocery sales, grocers had their own loyalty programmes, using stamps or punch cards, and such practices continued even as supermarkets became dominant (Coll, 2010; Pridmore, 2008).

Since then, marketing practices have been constantly developing: first from an anonymous mass to segments, then from segments to individuals. In the 1980s, novel marketing strategies emerged, which were aimed at retaining customers who were becoming increasingly versatile and mobile (Barrey, 2004: 148). Moreover, new technologies allowed the merging of two approaches which used to be opposed: the management of an anonymous mass and the management of local and individualized customers. For example, corporations can now address their customers directly to suggest products that fit their digital profile, which is built with the help of data mining techniques, a set of computerized and statistical methods used to produce knowledge from databases (see Han and Kamber, 2006). They can also provide personalized services, for example, after a sale has been made. This 'mass customization' is also known in marketing literature as 'micro-marketing,' or 'one-to-one marketing'. Nevertheless, the more generic term of 'relationship marketing' tends to prevail in the specialized literature (Hetzel, 2004; Pridmore, 2008).

Mass customization has traditionally been viewed as a means of customizing services to meet the needs of an existing market. However, mass customization also appears to be invested in actually customizing consumers to meet market needs (Zwick and Denegri-Knott, 2009). To investigate this aspect of relationship marketing, I conducted a study designed to examine the extent to which companies in Switzerland use data-mining technologies and strategies, their data collection and analysis practices, the privacy risks posed by such practices, and the modalities of power they create. As a result, and as it will be developed in this article, I finally theorized surveillance of consumption as being a much elaborated form of biopower; that is, a power which directly aims at the body and intends to take control of it. I argue that this biopower strongly relies on the use of data mining to reveal patterns in consumption.

Field observations (more than 167 hours) were made in four major retail stores in Switzerland, for example observing behind the cashiers the way employees ask customers to show their loyalty cards, and how they try to convince them to get one; and discovering at the customer service point or points of purchase the type of access employees have to the database, and how they can use it to provide personalized services to the customers. Semi-directive interviews were also conducted with managers in charge of supervising the loyalty programme, the store, the marketing branding or the training of employees (14 interviews); with employees (nine large interviews and 57 short interviews made during the field observations, most of the time focused on interactions which just occurred) and with customers (108) of the four studied stores, card owners and non-owners. All empirical material was then coded and analyzed with the help of a qualitative data analysis software (on qualitative data software, see Fiedling and Crofts, 2008; Hesse-Biber and Crofts, 2008; Kelle, 2004) ATLAS.ti (http://www.atlasti.com), using the same codes for the three empirical levels (companies/interactions between employees and customers/ customers) and for each type of data (large interviews/short interviews/field observations).

After a short introduction to relational marketing and the basis of data mining, this paper explores to what extent studied companies make use of the data they collect and explains why they may not use the most elaborate data mining techniques. Then, the future of loyalty cards is discussed, taking into account the general absence of reluctance evinced by users to use loyalty cards despite privacy discourses supposed to heighten their awareness of the dangers related to data mining. Two concrete examples will be given: 1) a loyalty programme which suggests healthier behaviours to customers through personalized analysis of their consumption profile, and 2) a pilot study run by the biggest corporate retail store in Switzerland, which estimates the consumption of a food additive by its customers. These examples will be used to support the main thesis of this article: surveillance of consumption acts as a biopower. Finally, this paper concludes with a discussion of ethical concerns raised by such forms of biopower, as well as a reflection on the limitations of extant privacy protection regimes for addressing these emergent modalities of power.

Relationship marketing and data mining

The goal of using data collected through loyalty programmes is concretely to build a long term relationship with customers,[2] increase sales, and more specifically to send personalized offers for products with a better margin. Techniques allowing the adoption of these strategies, like targeted marketing, can have different levels of complexity. The simplest techniques address basic requests, such as building a list of customers who frequently buy cat litter but no food for example, with the purpose of sending them targeted mail. The most complex techniques, generally referred to as 'data mining' or 'knowledge discovery in databases' (KDD),[3] are able to bring out knowledge without any prior hypotheses or specific questions

(Fayyad et al., 1996; Frawley et al., 1992. See also the website of reference among data mining specialists: http://www.kdnuggets.com). For example, *clustering* can assemble groups of similar consumers in their buying habits without the need of predefined parameters; *decision tree induction* can classify the type of consumers eager to buy a certain type of product; and *association rule discovery* find non-obvious ties between products, such as between nappies and beer, or nails and tomatoes (for a detailed description of these techniques, see Berry and Linoff, 2004; Han and Kamber, 2006). There is no need for managers to understand these ties, as far as they can increase the size of the customer basket, as explained by the manager of the online store of the biggest retail chain of Switzerland: 'We can see that products are related, without any kind of obvious link, unlike a Walkman and batteries for example. Let's say, bananas and nails. Just before the customer confirms the order, we suggest these products, and it works!'

However, according to relationship marketing specialists, neither of these techniques should be considered as 'magic bullets,' in spite of the sometimes high expectations of corporations (Kale, 2004: 44). They require comprehensive human intervention and expertise to ensure that results are not meaningless or useless (Baritchi, 2004: 36; Fayyad et al., 1996: 27). Indeed, as we will see, the adoption of these techniques within companies cannot be taken for granted (Rygielski et al., 2002).

The retail store market in Switzerland: Contrasted practices and limited use of data

The retail market in Switzerland is unique, and usually described as duopolistic. The two biggest retailers, W and Poke,[4] dominate the market. W is known to sell almost exclusively private label products, whereas Poke, on the contrary, sells mostly branded products. They are both cooperatives, so they do not have shareholders to satisfy and, according to their respective policies, they must reinvest all of the benefits on the behalf of, and for the benefit of, the consumers. As a consequence, their position in the market is overwhelming. In the history of the retail market in Switzerland, no competitor with large-scale ambitions has yet been able to survive long against these corporations.[5] So far, newcomers have always eventually been bought by one or the other or simply bankrupted. Two smaller companies have been studied in this research: Parc, a family-owned retail store, which can be considered as the third actor on the market (although 10 times smaller in terms of turnover), and FFF, an international retail store selling electronics and cultural goods.

Countering the initial assumptions of the research, these companies do not make intensive use of the data collected through their loyalty programmes, in spite of their financial capacity. In most cases, they limit their practices to simple extractions or requests addressed to databases. In the course of my research with informants from Poke, no mention was made of any sort of data mining; unlike other Swiss retailers, until 2012, they were not recording the content of their customer's

basket. No deeper use is made by FFF, whose loyalty programme manager thinks that data mining technology and specialists are far too expensive compared to their questionable profitability. Only Parc utilizes data mining in a state of the art of fashion, for example to evaluate the success of new concepts or new products, or to build sets of customers with similar characteristics (*clustering*).

> We recently studied the profile of 100,000 consumers and produced clusters. We can see who are the big customers, who buys an expensive TV, who frequently goes to the supermarket, who are the most frequent customers, etc. [. . .] We have a lot of addresses, we must use them. We would like to sell insurances or mobile phone services, as W and Poke do, or develop a branch of travel agency

In sum, observed companies are making largely superficial use of data, which is not really what specialists call 'data mining'. Poke sometimes establishes a list of customers living in the vicinity of a store it wants to promote by sending coupons, but never sends targeted mail. However, W sends targeted and personalized mail to its customers related to their profile on a regular basis. FFF does not utilize personalized mailing. The most it does is to stop sending the store magazine to customers who have been inactive for too long. Parc, while never sending personalized mailing to promote itself, actually sells this service to its partners, for example to a car insurance company which wants to target low risk customers.

Although allowing access to data at every level of a company is described by marketing scholars as necessary to fully develop relationship marketing (Kale, 2004: 46; Pridmore, 2008: 48), only FFF does it, granting employees full access to customers' data. In this way, for example, a sales assistant can suggest to a customer a device which is compatible with a previous purchase. Or the same sales assistant can distinguish 'good' consumers from 'bad' consumers, a common practice in bank marketing (Cusin, 2004), basing her judgment on the total amount of expenses:

> If a customer wants to return an item which is not in good shape, we will check his total expenses. I recently had a customer who wanted to return a reflex camera not sellable at the same price. But I fully refunded him, because it was a big customer. The lost money on this item will be rapidly covered with forthcoming purchases.

W and Poke decided to not allow any access to consumer data in the stores in order to publicly promote their strict protection of privacy and to appease critics. In Parc, only employees of the customer service desk have access to the data, in order to be able to address common problems related to the management of the cards. Still, they can provide additional services which were not planned, such as printing a previous receipt or getting information on a previous purchase.

In conclusion, although the four companies studied in this research have variable degrees of adoption of relationship marketing, they share a certain reluctance to make significant use of data, especially when it is elaborated as data mining. This was actually unexpected, considering the technological potential and the financial

Table 1. How companies make use of loyalty cards data.

	Data analysis	Access to data in stores	Data integration	Targeted marketing
W	Global statistics, simple requests for targeted marketing	No access. Only newly collected points are printed on the customer receipt	No	Regularly. Also sells this service to partners
Poke	Global statistics and requests for targeted market-ing (limited: no details on products)	Same as W, but with total points on the customer account	No. But customers can independ-ently access their account through a terminal situated in stores	Occasionally
Parc	The most devel-oped of the study. Future developing projects	Unlimited access, but only at the customer service desk	Limited: access to data only at customer service desk and call centre	Only with partners
FFF	Only global statistics	Unlimited at customer service desk and point of purchase	Yes	No

power of these companies. So little use of data is even more surprising when it comes to comparing these practices to loyalty programmes in Canada, in the US or in the UK, where data processing is done at a far more advanced level (Humby et al., 2004; Lace, 2005; Pridmore, 2008).

The reasons for doing so little data processing

The first reason given by managers of loyalty programmes to explain why so little data processing is made concerns the cost, mainly the hiring of highly specialized experts. The particular context of competition in Switzerland is also sometimes mentioned. It is considered relatively calm and peaceful because of the duopoly of the two biggest retail stores dominating the market. Another factor of slowing development of these marketing strategies is internal resistance between actors inside companies. People in charge of developing relationship marketing inside companies are having a hard time convincing senior managers. These executives have been using old fashioned but established marketing strategies, sometimes for

20–30 years, so they are reluctant to change their habits and their conception of the market. As the manager of the loyalty programme of W explains:

> They don't consider the resources [of relationship marketing] as a source of interest yet [. . .]. They still look at the global turnover. The 'Life Time Value' of a customer is not yet a concept they work with. Well, they recently started using the turnover per customer [. . .]. This is something they couldn't see before.
>
> Q: So they are somehow happy to have access to this information?
>
> A: Yes, but in my opinion they should use it more than they currently do. I'm afraid it is going to take long! We have a tool, for example, to enable them to see if a promotion is successful or not, in terms of gaining new customers. If by putting a product in promotion we cannot grab new customers, it's a waste of money. This is the way we try to build new habits of management [. . .]. We hope that these tools will become usual for them in the future.

Indeed, the relationship marketing paradigm involves a major mutation in the way of approaching the market. It aims to take advantage of data that would otherwise be considered useless (Kale, 2004: 349–381; Pridmore, 2008: 48). The young expert in data mining recently hired by Parc seems to agree with this idea. For him, the company must change its 'mentality':

> If you don't have the structure to take advantage of it, the information is obtained for nothing. Until now, reporting has been enough. But the possibilities are much greater with data mining. [. . .] In fact, it is really important to change the mentality of the company.

Despite these antagonisms between the new technology enthusiasts and senior marketing executives, companies keep collecting massive amounts of data coming from consumers. Most managers situated somewhere between the regular and high-level management seem to be divided between two tendencies: that of fully embracing relationship marketing, or thinking that the investment is not worth it. These hesitations might in fact reveal a deep shift which is currently happening within the spheres of retail marketing management. Retailers have started taking into consideration in their marketing strategy that consumers make purchases in other stores. Consequently, 'loyalty' tends to be increasingly understood in terms of consumer loyalty to a category of products rather than that to a retailer. Thus, the goal of one retailer will be to maximize the size of the shopping cart of their consumers. If, for example, W sees that a customer is used to buying cat litter on a regular basis but no cat food, it can conclude that cat food is bought somewhere else. It might want, then, to promote its products by sending cat food coupons. Collection and use of data will not cease to play a growing role in this new economy of competition, as it will be increasingly necessary to know precisely who buys what, and furthermore to anticipate unfulfilled needs.

Creating power from data: Privacy is not the point

Since data are massively collected and processed by data mining algorithms, the question of privacy protection inevitably arises in the literature (Lyon, 2001; Tavani, 1999). Data mining is able to produce new sets of data which make more sense than raw data, such as psychological profiles, from data produced by users surfing on the Web, asking for credit, or swiping their loyalty card at the point of purchase (Millar, 2009). In this way, consumers can be potentially deceived. Although the majority of them know that their data are kept by companies (84% – 68 of 81 consumers being asked about this awareness), they do not realize that precise and sensitive knowledge can be derived from it.

> I heard that we are monitored; they know what we eat, where we go... I have friends which don't have the card because of that. But me, I don't care. That I'm going to eat beans tonight, who can be possibly interested by that?

In this example mentioned by a consumer, it is true that buying beans might not be in itself a particularly sensible information, unlike buying medicine against cancer or accessories for a personal weapon. However, when put into context, i.e. seeing that this person has purchased nothing but canned beans for dinner this week, it would mean that she does not seem to be eating a healthy diet. The conclusion inferred from data can also be not that obvious when powered by much elaborated data mining techniques (see above) like association rules discovery, clustering or decision tree induction. For example, the association of organic products, highly priced wine, and family sized washing powder packs, along with the absence of nappies, could suggest a high probability that the customers are a wealthy couple with no kids, a category usually seen as highly profitable by marketers. A customer who never buys either alcohol or meat but seasoning for barbecue could possibly be categorized as Muslim, and as a prime target for a new range of halal products. Also, 'when someone suddenly starts buying lots of scent-free soap and extra-big bags of cotton balls, in addition to hand sanitizers and washcloths, it signals they could be getting close to their delivery date' (Duhigg, 2012). These combinations of data, although inferred from data felt initially as innocuous, can actually indicate the health, the fact of having or not having kids, the pregnancy or the religion of customers. As long as this sensitive personal information stays guarded within the retailer company, the danger of these data being used for outside marketing purposes seems to be limited. Still, these examples show that data should never be considered as trivial. So, customers that put their minds at ease because they think that the data they give to the companies are innocuous by nature are mistaken.

Complicating matters is the fact that, for those customers who do become aware of privacy-related issues, it is often not data-mining practices but rather practices mandated by privacy protection laws that trigger concern (Coll, 2010). The Poke call centre observations repeatedly showed this revealing paradox. For example, in

order to protect customers' data against fraud, operators are required to identify callers following a precise protocol. Customers must then indicate their card number, their home address, their telephone, as well as answer two additional 'control questions': how many points they think they have on their account, the last store they went to, or the last reward they ordered. It is precisely these questions, although meant to protect their data, which produce a feeling of invasion of privacy:

> The operator: What was your last order?
>
> The customer: Uh…is this an investigation or what?
>
> A customer: Why are you asking me all of this? You're not a bank!
>
> An operator commenting: Some customers get angry and ask 'do you also want my size, my date of birth?' or they hang up directly.

In a sense, companies seem to be willing to protect customers' privacy to the point of causing customer resentment. This paradox is underlined by Helen Nissenbaum (2009: 104–108) at a more general level than in the context of call centres: on the one hand, in surveys, people claim that they feel concern about their privacy (94% of the population in the US, see Louis Harris & Associates and Westin, 1998); on the other hand, they in fact keep behaving in the opposite way. This is most probably because, first, as mentioned above, the potential of data mining to create sensitive data from ordinary data is not known; second, because such use of data has sociological effects which cannot be reduced to the individual level (Gandy, 2009; Gilliom, 2011).

This discussion about the relevance of privacy shows that the relationship between knowledge (collecting, analyzing and producing sense from it) and power (what kind of power does this knowledge give to companies) must be studied beyond the individual level, beyond individual instances of privacy intrusion. This is what the second part of this article aims to do, introducing the concept of biopower as particularly appropriate to analyze the forms of power emerging from consumer surveillance practices, even in the Swiss context where companies show little use of data mining for marketing purposes.

The future of loyalty cards: Biopower and consumption

Biopower, biopolitics and consumption

Michel Foucault (2003: 241) argues that the death penalty disappeared by reference to the mutation of power which diminished the exercise of its 'right to take life or let live' and started developing points of contact on life:

> The setting up, in the course of the classical age, of this great bipolar technology—anatomic and biological, individualizing and specifying, directed toward the performances of the body, with attention to the processes of life—characterized a

power whose highest function was perhaps no longer to kill, but to invest life through and through. The old power of death that symbolized sovereign power was now carefully supplanted by the administration of bodies and the calculated management of life (Foucault, 1978: 139–140).

This new technology of power, which was first called in his work 'biopolitics' and secondly 'biopower' (Andrieu, 2004: 3), can be defined as the governance and the regulation of the individuals, then the population, through practices related to the body, which becomes a political space (Wright, 2009: 1, 7).

Both the government of oneself (Foucault used to talk about a 'practice of the self'– see Foucault, 1985) and the power exercised by government over the population can be defined as biopower as soon as it aims at the body and life parameters. This power targets the vital characteristics of subjects and invites them to develop a consciousness and a care of themselves (the 'care of the self' theorized by Foucault, 1986), whether it concerns health, aesthetics, or some other aspects of embodied subjectivity. Biopolitics goes hand-in-hand with biopower, and describes the governance of bodies by one or several institutions, for example through birth control or health policies (Andrieu, 2004: 4). Biopolitics are not only exercised by the state, but also by diverse institutions in different fields, whether public or private: through human actors, like a physician in a private consulting-room, an instructor in a fitness centre, or a dietician in a health spa; or through material, like the guidelines mentioning a threshold for cholesterol, a poster describing the appropriate motions for lifting weights, or a flyer with the healthy eating pyramid. In the context of sexuality, for instance, biopower is as much exercised by a State calculating the national birth rate and sounding the alarm when it becomes too low to replenish the population, as by the physicians prescribing birth control pills and the pharmaceutical companies manufacturing them. When observing the exercise of such biopower, distinguishing governmental institutions from private institutions is no longer relevant. The objectives followed by actors 'do not (necessarily) have the State as their origin or point of reference' (Rabinow and Rose, 2006: 200).

Although the theoretical framework of biopower was first elaborated by Foucault through sexuality, it can easily be extended to other domains, since sexuality is a technology of power among others (Rabinow and Rose, 2006: 196). Consumption, for example, is situated in the continuity of the development of biopower, especially when it concerns vital goods such as food. Foucault (1978: 143–144) indeed mentions 'the proliferation of political technologies [. . .] investing the body, health, modes of subsistence and habitation, living conditions, the whole space of existence'. Biopolitics and biopower, although they emerged with the development of sexuality (*dispositif de sexualité*), were indeed extended to other domains, as far as the body and its government are involved.

A good example of the development of biopower through consumption would be that which could result from the transmission of supermarket consumer profiles to insurance companies. So far, there is no such collaboration between loyalty

programmes and insurances companies in Switzerland. However, many consumers might be favourably disposed toward such practices which would, however, put the protection of privacy at stake. Sophia, a 22-year-old student, is one of them:

> Q: For example, if your data were transmitted to a health insurance company, they could reject your request of affiliation based on an unhealthy behaviour. Do you think it would be unfair?
>
> A: No. We have to look after ourselves and adapt to the norms of society. If we don't agree with that, we just have to get out of here [...] Personally, I have nothing to blame myself for. Perhaps the obese would have something to be blamed for, but not me.

Obviously, not everybody would share this point of view. However, such a project could be achieved, especially if it were to give the customers the choice to join, incentivizing them to do so by offering a substantial rebate on insurance fees. Of course, only those with what would be considered as a healthy behaviour will be offered a rebate.

This direct link between consumption and health would allow a particularly acute government of the bodies, without offending the consumers much, insofar as they think that the objectives are legitimate. Indeed, in terms of consumers' subjective perception of the invasion of privacy, the acceptance or rejection of the processing of data are related to the representation of the objective pursued. Joan, a 65-year-old retired woman, thinks that because the objective of loyalty programmes is only to increase benefits for the company, 'it sucks,' even if she owns cards and uses them in order to 'get back some of what they stole from us'. However, if the objective were to fight against obesity, for example, or more generally to 're-educate people,' she thinks it would be positive:

> People are stupid! Those who get drunk every weekend are just idiots. If I am obese, I am also stupid. There is no self-discipline or respect any longer. We must re-educate people. If a market study allowed it, then I would be in favour of it, as far as it would improve the human condition [...] If I could get something smart from W [...], like 'you have too much cholesterol,' then good for me! [...] It's a pity, with all these data; they could do something very useful and positive [...] If it is to check if I had sex with a 25-year-old, no. If it's about my cholesterol rate or to help me to quit smoking, it would be great!

We can see in the interviews above that consumers are more concerned about the purposes of a collection and processing of data than the 'sacrosanct' protection of privacy. If data are processed for a purpose which appears positive and appropriate to them (a *rational–legal* legitimation, Max Weber (1968) would say), they will not feel that an invasion of their privacy is potentially happening. This absence of reluctance gives biopower plenty of room to develop.

The 'Foodflex' programme: Buy healthier products

The now discontinued American Foodflex programme has been a very concrete example of an emergent biopower, which was made possible with the collection of data on purchased consumer goods. According to Joan's interview (quoted above), some people would probably value this kind of programme if it were available in Switzerland. Concretely, the Foodflex programme used to suggest to its members products supposedly better for their health, basing these recommendations on the analysis of the data collected through the loyalty cards of several grocery stores. Members were able to connect to the Foodflex website and to see many charts representing the evolution of their consumption of fat, iron, fibre, etc.

> Sodium. Iron. Fiber. With FoodFlex® you get more than nutrients on a food label. You get a nutritional snapshot of your family's food purchases along with healthy tips and helpful tools that make choosing healthier foods easier. Foodflex® sign up now, it's free! (Trailer of the programme, available at https://foodflex.safeway.com/default.aspx)

This is unquestionably, to use Michel Foucault's terminology, a 'political technology' invested in 'the body, health, [and] modes of subsistence' (1978: 143–144). What is more, Foodflex was planning to offer to its employees (and then perhaps later customers) a reduction on health insurance fees for those purchasing healthy products (Birchall, 2008). In Switzerland, even if it has been so far rejecting the idea of a close collaboration with insurance companies, W is currently following the Foodflex example. It launched in early April 2012, with the slogan 'W supports families,' a new value-added service for families. On a dedicated website, it suggests products supposedly interesting for families, besides the list of purchased products that was previously available for many years. However, it does not personally suggest specific products based on the profile of consumption at this time, even though families, for example, can find recommendations made by a nutritionist under the category 'Eat & Drink: Experts' recommendations': 'How to smoothly be fit again,' 'Is my child too fat?' or 'Breakfast for teenagers.'[6]

Safeway, the private retail company which built the Foodflex programme, used to base its recommendations on the USDA (United States Department of Agriculture) dietary guidelines,[7] a public institution. As in many contemporary examples of the exercise of biopower, there is no absolute division between public and private. To fight against obesity, which became one of the major concerns for public health policies, a government would greatly improve its efficiency by taking advantage of this kind of programme. In this case, authorities are willing to intervene on food habits, encouraging the adoption of new 'styles of life' that will ostensibly reduce obesity (Jacolin-Nackaerts and Clément, 2008: 47). Such policies are in historical continuity with long-standing public health efforts to normalize social practices (Fassin, 1996). These biopolitics are trying to make use of private resources, namely the huge amount of data owned by retail companies on

their customers. For technical, cost-related and legislative reasons, such exhaustive data are impossible to get with such a level of detail from governmental institutions, even though the goal appears legitimate both to public institutions and consumers. However, the biopower using data gathered by companies through loyalty programmes does not necessarily target better public health, as will be shown in another example below.

The 'sunset yellow' food additive: Buy good-looking products

The European Union demands that the consumption of food additives be monitored frequently by governments and companies. It has to be ensured that additives, such as food colouring or sweeteners, can be safely consumed over the lifespan of an individual, without provoking cancer or other diseases. To fulfil this requirement, companies must conduct expansive risk-based studies for every food additive with an 'appropriate frequency' (Sardi et al., 2010: 1508) and report the results to the European Food Safety Authority (EFSA).[8]

With the goal not to have to hire a third party to conduct these costly studies, while still complying with the demands of authorities, W recently conducted a pilot study using the data collected from its loyalty cards. The data were used to make an estimation of how much of a new additive, the sunset yellow food colouring (classified as E110), would be taken by consumers if it were put in selected products (McNamara et al., 2011; Sardi et al., 2010). Depending on the results, the decision can be made whether to put the additive in the selected products or not. This strategy is relevant only because W, as mentioned above, sells almost exclusively own-brand products. Although the study focused on one particular additive, it actually suggests the possibility of real-time monitoring of the intake of any food additives by consumers. Like in the Foodflex programme, this example also involves both private and public actors. Companies are working with the local authorities in charge of protecting people's health, for example the European Food Safety Authority (EFSA) or the American Food and Drugs Administration (FDA). Public institutions can be expected to find these measurements more accurate and able to build the basis of a better protection of consumers.

In other words, thanks to its loyalty programme, a company is able to control the amount of a product consumed by its customers. This is also an exercise of biopower as the target is the body, even though the goal is not, unlike the Foodflex programme, to 'educate' and encourage customers to adopt better food habits. Instead, the purpose is to please them, then increase benefits, by improving the aspects of products while ensuring that they are not harmful, according to the FDA or the EFSA guidelines. Thus, loyalty programmes become a part of the rationalization of enchantment built by companies to improve the attractiveness of the products they sell (see Campbell, 1989; Ritzer, 1999). Ironically, they also allow companies to control the intake of potentially poisonous substances.[9] By extension,

this opens the way to a lowering of the quality of products, so as to make higher profits, while not taking the risk of poisoning customers. In this case, biopower is at the service of private profit.

This example shows that biopower not only targets the rationality of the subjects (be healthier, reduce the probability of getting obesity-related illnesses, etc.) but also their emotional sphere (buy this good-looking product; adopt a better style of life, etc.). It reminds us that governing bodies also involve emotions; that is, the irrationality of the subjects, and, of course, as Foucault often mentioned in his work on the history of sexuality (1978, 1985), *pleasure*, which remains the prime target for marketers.

Establishing biopower: A social class-related dynamic

Another prime target for marketers is social class. Dangling upward social improvement, or at least promoting the symbolic value of merchandise, is one of the main strategies of marketing to sell products. Biopower, too, has to be understood as being closely involved in class relationships.

Historically, according to Foucault (1978), sexuality as a moral issue first appeared in upper classes before becoming a public health concern. Biopower emerged because the bourgeoisie afterwards wanted to spread good manners in sexuality amongst working classes to implicitly establish control over them, through the evocation of (most probably sincere) philanthropic reasons. The higher class seeks to educate a lower class. It builds knowledge (*savoir*) on sexuality, mainly of a medical nature, and diffuses moral standards and social norms, driven by a distinction between normal and pathological behaviours. As such, the establishment of biopower is related to the relationships between social classes. Another example is the way upper-class values were recently imposed on working-class parents concerning the education of their children. Any physical punishment is now subject to be reported to authorities as it will be seen as child abuse (Schultheis et al., 2007).

Biopower related to the consumption of food also involves class relationships. In the Foodflex example, it is again bourgeois norms and values (healthy and balanced diet, self-discipline of the body, self-discipline of oneself in general) which are diffusing through working classes. For example, obesity is undoubtedly a class-related issue, because it predominantly concerns disadvantaged classes (Burry, 1999; Leclerc et al., 2000).

The Foodflex programme accounts for this class-related dynamic since the retail stores involved – all of them owned by Safeway – target American working classes. This programme, by suggesting the adoption of better food consumption habits in order to get better health, is a good example of political technologies using biopower, which some scholars recently began to call a 'biopedagogy' (Harwood, 2009; Wright, 2009). In the example of the 'sunset yellow' food additive, even if the link is less direct, biopower is also related to class relationships. Many works in the fields of sociology of tastes (Bourdieu, 1987), sociology of fashion (Goblot, 1967; Simmel,

1957; Veblen, 2008) and sociology of consumption (Baudrillard, 1998; Zukin, 2004) remind us that any consumption product has a distinctive value. Thus, trying to improve the aspect of a product has indisputably something to do with lifestyle. When inviting friends for dinner, for example, serving a bright good-looking dish (with 'sunset yellow') has a better effect compared to a more pallid dish (without 'sunset yellow'). More generally, the aspect of products one consumes in one's everyday life is a part of the lifestyle one wants to adopt. The will of companies to improve the aspect of the products they sell is related to this social dynamic.

Conclusion

The companies studied in this research do not make a very substantial use of the data collected and there is consequently no 'manufacture of [ready-to-wear] customers'[10] yet, unlike in other countries and/or types of markets (see Zwick and Denegri-Knott, 2009). So far, in the current economical context of Switzerland, global retail companies seem not to think that it is worth investing in expensive technologies and experts, even if some of them do, either spontaneously or on a regular basis, limited targeted marketing. Whatever the level of adoption of the relationship marketing and techniques by companies, the objective is no longer to reinforce an exclusive loyalty to their store and brands by preventing customers from going to another store, but rather to increase the size of their shopping cart (Barrey, 2004; Pridmore, 2008). Indeed, competition no longer takes place between stores as a whole but happens on every single category of product. To embrace this new form of competition, the emergence of which is explained by the increasing mobility and freedom of the customers, companies will need more and more data as a precise knowledge of every single customer must be built.

In short, even if companies still do not make much use of the data they collect, they will most probably be led to do so in a near future. We could see that in the Swiss case, even though they do not take the most advantage of it, companies are not going to cease the systematic collection of a huge amount of data. Loyalty programmes work as much through appeals to the 'non-rational' as they do by appealing to consumer rationality. They target desires and pleasures, with the idea that it is possible to know what consumers are thinking before they themselves (rationally) know it. Governing pleasure and desires is one of the characteristics of biopower, which needs transparent subjects, eager to deliver personal information.

Consequently, loyalty programmes also have to be understood as fulfilling their duty of transforming opaque consumers to transparent consumers, enabling biopower to get control of consumers' bodies. Indeed, the *transparency of the subjects* is one of the requirements of biopower (Foucault, 1978). Simply said, without transparency of the subject, there is no possible emergence of biopower. Indeed, this mode of power relies on knowledge in the very first place.

As Foucault (2003: 252) wrote, 'Medicine is a power-knowledge that can be applied to both the body and the population, both the organism and biological processes, and it will therefore have both disciplinary effects and regulatory effects'.

Indeed, consumption is also a 'power-knowledge' targeting the same object and having the same regulating effects. Whether the goal is to raise benefits or improve public health, in all cases analyzed in this paper (public health policies fighting against obesity, the Foodflex programme allegedly 'helping' its customers by encouraging them to adopt better food habits, or the 'sunset yellow' pilot study improving the aspect of food while not poisoning consumers), consumption, body and health are intimately connected.

As demonstrated in this article and in accordance with Foucault's theory, bio-power is particularly efficient since it circulates through both private and public sectors, tearing down walls that can be perceived as 'annoying' for companies or administrations wanting to take advantage of the most elaborated technologies to govern bodies, whether to promote public health or increase private profits. The massive collection of data on the consumption habits of citizens in such detail as that gained by loyalty programmes is not affordable for a government, especially during the current global crisis. Such harvesting might also have to face a general outcry, as any governmental interference in the private sphere is likely to be less tolerated by citizens than one coming from private companies, as personalized data is given on a 'voluntary' basis (Proulx and Kwok Choon, 2011).

But since these data are potentially available, it becomes possible to make use of them, for example to promote public health policies such as fighting against obesity. Why not, one might say? Yet the problem is that the growing porosity between the private and public sector allows power to make shortcuts without always being submitted to democratic control and related accountability, which companies can more easily evade (Orlie, 2002: 398). This is a major ethical issue which reaches beyond the sole question of protection of privacy, although the latter undoubtedly still needs to be defended. The concept of biopower appears to be relevant to address such major ethical issues, as it sheds new light on the complex link between data collection and the creation of new modalities of power in the information era. However, it has to be recognized as being heuristically effective as well outside the sole context of sexuality. Although Michel Foucault elaborated it in this context, he repeatedly invites readers to expand it to other contexts. Hopefully this article is one convincing attempt to do so, demonstrating that consumption can be, in many ways, considered as biopower.

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Notes

1. When in fact, as Daniel Miller (1998: 13) argues, the typical relationship subjectively involved in the act of shopping is rather with the members of the family. When making a purchase, a customer has her husband, her children, a friend or any member of the family in mind, rather than the company.

2. The length of this relationship is the subject of measurements, such as the 'Customer Life Time Value' (CLTV) measure, the goal of which is to quantify the value of a consumer for the company in the long term (see Gupta and Lehmann, 2003; Hwang et al., 2004).
3. Some specialized marketing scholars use the term 'Knowledge Discovering in Databases' (KDD), considering 'data mining' only as a part of it (Baritchi, 2004; Rygielski et al., 2002). Still, both terms usually refer to 'data mining' in critical and most marketing literature.
4. Names of corporations have been anonymized.
5. A German 'hard-discounter' supermarket just arrived in the Swiss market and seems to be doing well so far, but it is too soon to say if it will be the first one to resist the W and Poke duopoly in the long term.
6. Information taken from the anonymized supermarket's website.
7. http://www.cnpp.usda.gov/dietaryguidelines.htm
8. See: http://www.efsa.europa.eu/
9. Amongst other side effects, 'Sunset Yellow' has been suspected to be correlated to children hyperactivity (McCann et al., 2007).
10. 'Ready-to-wear' was added by myself.

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