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# Cultural Regulation, Geographical Indication and the (re) Signification of an Artisanal Cheese

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## Abstract

Laws and norms can change the production processes of an organization, with repercussions for the tangible and symbolic composition of its products. Based on this assumption of Cultural Studies, we seek to understand how the practice of cultural regulation by a group of small producers is (re)signifying the rennet cheese produced artisanally in the Agreste region of the Brazilian state of Pernambuco. We use discourse analysis to analyze interviews and documents such as the decrees and regulations that deal with processing dairy products in Brazil, as well as those governing the process of Geographical Indication, and compare the cultural meanings that have emerged in two spheres of regulation: the public and the private. Findings reveal governmental characterization of artisanal rennet cheese has been justified by a discourse of “quality” at both the state and federal levels. However, the regulation put in place in the private sphere of the Producers Association makes use of different arguments to construct the discourse of quality with respect to the same food.

**Keywords:** cultural regulation; artisanal production; geographical indication.

## Introduction

Demand for artisanal cheese is on the rise because “[it] generates gustatory pleasure and social status for its consumers [. . .]” (Paxston, 2013, p. 4). Outstanding among the principal Brazilian artisanal cheeses, rennet cheese is demonstrably a part of regional culture (Menezes, 2011). A typical product of the Northeast of Brazil, this cheese is a recognized cultural artifact, integrated into the daily life of the people of this region, whose production process has been transmitted from generation to generation.

Originally rennet cheese was produced from raw milk. Over time, modifications to traditional methods of production have been introduced in response to food security requirements (Paquereau, Machado, & Carvalho, 2016), as this food often has not been able to meet minimum quality requirements for human consumption (Meneses et al., 2012). The principal factors that contribute to the classification of cheese as unfit for consumption include problems in the handling of animals before and during milking and of the product after milking (Pacheco, 2011), such as, lack of conformance to official standards (Sena, Cerqueira, Morais, Corrêa, & Souza, 2000), and the presence of pathogenic microorganisms due to hygienic and health care deficiencies of handlers and of the processing site (Meneses et al., 2012).

The health risks presented by consumption of food products of unknown origin and quality have been a principal argument for the establishment of regulatory mechanisms by the government to ensure food security and increased product information (Desmarchelier & Szabo, 2008; Paxston, 2013). In Brazil, it is the federal Ministry of Agriculture, Livestock and Supply (MAPA) that conducts the sanitary inspection of milk and dairy products of companies involved in interstate and international trade. For companies involved in intra-state trade, however, sanitary inspection is responsibility of the state government, and in the state of Pernambuco the organ that assumes this task is the Agency for Agricultural Defense and Inspection (ADAGRO).

Food security is also a concern of the producers who belong to the Association for Certification of Rennet Cheese of the Agreste Region of Pernambuco (CQP). This entity was created to facilitate the recognition of a Geographical Indication (GI) for the rennet cheese produced in the region as a way to ensure reputation and market differentiation (Paquereau et al., 2016).

Geographical Indication (GI) is a form of protection of intellectual property belonging to a collectivity. GI certification demands behavioral changes on the part of small rural producers aimed at improving their production process and makes it necessary for them to organize themselves collectively to create and maintain instruments that specify and standardize what constitutes the unique identity of the certified product (Silva et al. 2013; Niederle & Gerlain, 2013).

Among the prerequisites established by the National Institute of Industrial Property (INPI) for recognition and registration of Geographical Indication is the construction of Usage Regulations. These are rules defined and agreed upon by the producers in the area contemplated by the GI and that must be followed by those who wish to use the GI seal on their products. Producers seeking GI recognition tend to make adjustments and/or changes in their production processes to meet the standards and procedures established in the Usage Regulations (Kim, Song, & Yeo, 2016).

Regulatory practices, whether public or private, can induce changes in production processes and these are not limited only to the tangible aspects of the product. As Hall (2008) points out, changes in the material dimension of a product have repercussions for the symbolic dimension as

well, as the two aspects are inseparable. From the cultural studies perspective, regulation can be understood as a cultural practice, involving not only government policies and regulations but linked, as well, to the conduct and customs of a society. Regulation is a dynamic process and can be a contested one, since cultural meanings act upon the (re)definition of the rules and norms that govern society (Byrne, 2016; Paxston, 2013).

In this study we seek to understand how the regulatory practices being applied to the artisanal production of rennet cheese in the Agreste region of Pernambuco may transform how this food is perceived in ways that transcend its objective or physical attributes, posing the following research question: **how the practice of cultural regulation by a group of small producers (re)signifies the artisanal rennet cheese of this region?**

## Theoretical framework

The theoretical framework includes the constructs of regulation, as dealt with in both the dominant narratives and the culturalist approach. The dominant narratives are anchored in three aspects of regulation – economic, social, and administrative – that revolve around the public interest in ensuring order and compliance with legal obligations in a given sector, while the culturalist approach emphasizes understanding the regulation involved in the production of symbols.

### *What is regulation? The dominant narratives*

Since the late 20<sup>th</sup> century there has been intense debate on the subject of regulation, not only in the economic and political sphere but also in the cultural one. While in the 1980s regulation was seen as a temporary phenomenon that could function as a substitute for market forces, Lodge and Wegrich (2006) argue recent experience suggests regulation be viewed as an element inherent to the market and integral to it.

Regulatory activity has been shown to be critical to market functioning, especially where asymmetries in information are large, as is the case in the area of health and food safety (Desmarchelier & Szabo, 2008). Lodge and Wegrich (2006) argue the discourse on deregulation is misdirected, since the key issue in this debate is not the existence or amount of regulation but rather its quality and nature, which are undergoing change.

The Organization for Economic Cooperation and Development (OECD) identifies three categories of regulation: economic, social and administrative. Economic regulation refers to government intervention to assure adequate competitive conditions, dealing mainly with issues of pricing and market entry. Social regulation has to do with government intervention for the protection of relevant public interests such as health, safety, and the environment. Administrative regulation has to do with internal norms used to guarantee compliance with organizational procedures (Viscusi, 1997).

Lodge and Wegrich (2006) suggest the question ‘what is regulation’ can be answered in terms of type, purpose or content. Their typology of regulation makes a distinction between government-operated systems and those operated by private actors, and between systems that rely on traditional tools of ‘command and control’ that combine a clear mandate with warning and sanctions, and those

that employ alternatives to these traditional tools. The four types of regulation resulting from this combination of elements can be seen in Table 1.

Table 1

**Typification of regulatory regimes**

		Who regulates?	
		Government	Private sector
How to regulate?	Command and control	I – State regulation involving commands backed by sanctions	II – Private (self) regulation
	Alternatives	III – Use of market incentives, self-control and other approaches based on audit and management	IV – Markets and societal norms

Source: Lodge and Wegrich (2006, p. 21).

The second way of understanding regulation discussed by Lodge and Wegrich (2006) is according to its purpose. They suggest regulation has at least four different purposes. One is as technocratic instruments of control for reducing uncertainty, unwanted variation, and the use of discretionary power by capricious politicians. A second purpose is the development of professional standards and self-regulation that encourage self-responsibility. The third purpose is to guarantee the functioning of market economies using as few rules as possible. Finally, a fourth purpose is the reduction of systemic risk, although recognizing that efforts to intervene in social processes will likely be subjected to attempts to undermine or subvert them.

The third approach to understand regulation, according to Lodge and Wegrich (2006), is to look at its content. Regulatory systems, the authors argue, are made up of three distinct, interacting and interdependent components: standard-setting; collection of information; and behavior modification. Regulation presupposes the existence of a standard of what the desired state(s) of the world should be and a system able to set this standard. The collection of information is essential for monitoring the conditions related to the desired state; and behavior modification, involves verifying if conformity to the standard is achieved and the existence of instruments (rewards and/or sanctions) for assuring the desired compliance.

Government regulation can thus be seen as a major instrument for promoting the social and economic well-being of citizens, as suggested by Albuquerque (2006):

Regulation is a contemporary form of state action and refers, in a general sense, to the set of legal and regulatory instruments (laws, decrees, regulations, and other rules) available to the government for establishing obligations that must be met by the private sector, by citizens and by the government itself. (p. 83)

### *Regulation cultural: the cultural studies's perspective of regulation*

The Circuit of Culture (Du Gay et al., 2013) provides a conceptual model of the “moments” in which cultural products circulate between production and consumption. The authors argue that discourses permeate cultural products, underpinning and articulating the circulation of cultural forms in society. The Circuit of Culture is a theoretical-methodological model useful for understanding the participation of multiple actors in the process of signification of a product, as it examines the meanings of a cultural artifact from five interrelated angles: identity, production, consumption, regulation and representation.

The focus of our research interest is the model’s “moment” of regulation, as it permits comprehension of how the control mechanisms (public and private) related to rennet cheese production can modify the symbolic interpretation of artisanal cheese.

Regulation viewed from the perspective of Cultural Studies (CS) points to the existence of wider issues than those related to government action alone. Thompson (1997) distances himself from the assumption that cultural regulation is directly determined by economic forces. He argues that economic pressures and power structures can affect regulation, but the results of this process depend on the context and the creative action of individuals and groups. The concept of regulation thus can vary. In certain situations, it may be applied to specific government policies and regulations and, in others, to the operating rules of social and moral conduct. For this reason, Thompson (1997) suggests that studies on cultural regulation investigate both the policy and the politics involved in the struggle to establish meanings, values, forms of subjectivity, and identification.

Regulation is treated by Thompson as a “moment” within the Circuit of Culture; and he makes it clear regulation does not necessarily reproduce the *status quo*. Cultural meanings, constructed by different social groups, contribute to defining the rules, norms and conventions that regulate and organize our social conduct. Similar to Byrne (2016), he sees cultural regulation as a dynamic and possibly contested process, in which struggles can take place over the construction of meanings and their interpretation.

With respect to the [re]articulation of the cultural meaning of rennet cheese, the moment of regulation comprises two aspects highlighted by Hall (1997): (a) that it is culture – conceived as a set of shared meanings – that regulates behavior, actions and practices and how one acts in the institutional and social context; and (b) the importance of understanding what lies behind the meanings that control social behavior in the Circuit of Culture’s moments of production and consumption. As noted by Paxston (2013, p. 13) “the value of such actions [e.g., regulation] is equally material and symbolic.” It is the juncture of the economic, moral, and social/cultural dimensions of regulation that result in the development of a material artifact that conjugates the values of the artisanal producer and those of the consumers and appreciators of their cheese in the context of a market society.

## **Methods and procedures**

This study is anchored in a qualitative, interpretative approach, using discourse analysis as the investigative procedure (Maingueneau, 2015). The choice of discourse analysis follows the orientations of Hall (2008) and Johnson (2014), who point out what circulates in society should be

seen as a set of meanings and discourses that can imbue capitalist goods with attributes beyond their material or objective characteristics. We use discourse analysis given the fact that the symbolic construction of rennet cheese is a collective and decentralized action that is built on and by language. In this process, the voices and sayings of the multiple actors involved in this process sustain and/or fracture their identities together with those with whom they interact. Discourse analysis permits working from the perspective of the subjects who are operating among possibilities and contradictions that (dis)articulate their meanings on the basis of their own codes and social narratives (Signorini, 1998).

The linguistic *corpus* was designed to encompass a broad range of meanings with regard to the regulatory aspects of the production of rennet cheese. The discourse of the public actors was analyzed using state and federal laws, decrees, and regulations dealing with milk and cheese production and the Brazilian legislation on Geographical Indication. The discourse of the private actors was analyzed using the interviews carried out with directors of the CQP and the regulations produced by members of the Association for their own use.

Analysis was guided by the studies of Du Gay et al. (2013) and Johnson (2014) in the establishment of analytical categories that include both the subjective and objective dimensions of the “moment” of the symbolic production of cultural artifacts. Table 2 presents the definition of each of the categories of analysis.

Table 2

### Dimensions of cultural meaning

Dimension	Categories	Settings
Subjective (Abstract)	Meanings and ideas referenced	Subjective, socio-cultural and political aspects responsible for the construction of meanings shared by the regulatory institutions.
	Lived cultures	Contextual aspects that facilitate the creation and establishment of standards and regulations that impact on production.
Objective (Concrete)	Organization of work	Manner in which groups organize themselves and articulate the creation of regulatory mechanisms.
	Technical infrastructure	Material conditions related to the regulation of cultural artifacts.
	Social relationships of regulation	Regulatory agents that interact with the artisanal producers of symbolic goods.

Source: Elaborated by the authors.

The categories included in these two dimensions are related to the need of understanding the actions of the regulatory agents by means of a conceptual framework that contemplates their actions not only in operational or purely mercantile terms, but also as involving the creation of

structures of meaning that become discernible as these actions are interpreted and experienced by other actors.

Data treatment was as follows. Four semi-structured interviews were transcribed and prepared for analysis, in accordance with the categories that oriented this study and that are detailed in Table 2. We then analyzed this transcribed material and the documents selected. During the reading of these texts, we excerpted passages of text that corresponded to these categories and then analyzed them in terms of the discursive elements present in the speech of those interviewed and the characteristics of the documents orienting producer activity. Following this, we arranged the respective excerpts to provide a panorama of the cultural resignification of rennet cheese furthered by the producers who participated in the study. These excerpts aided in the elaboration of Table 4, which presents the meanings that emerged from the analysis.

During data analysis, the subjectivity and intuition of the researcher play a fundamental role, always, of course, in the context of the conceptual framework (Du Gay et al., 2013; Johnson, 2014) within which the study is carried out (Tonkiss, 2012). The last step, therefore, was the elaboration of a summary table of the various meanings that emerged during the interpretation of the texts, in order to develop a diagram capable of displaying the multiple meanings generated with respect to rennet cheese.

Indicators for data validity and reliability used are those described in the study of Paiva Júnior, Leão and Mello (2012): triangulation and rich description. Triangulation of the interview data was carried out, that of the official documents analyzed, and that from the debate on interpretation of these data among the authors of this study. The rich description reflects the continuous effort of interpreting the data keeping in mind the importance of providing a context to help possible readers understand the internal dynamics of the social group being studied.

## Background to the problem

Although rennet cheese has been produced for over 150 years in several states of the Brazilian Northeast, much of the product that is manufactured by hand is likely to be contaminated by the use of raw materials from doubtful sources, the lack of personal and environmental hygiene in processing, and inadequate conditions of storage and transportation (Almeida, Paiva Jr., Costa, & Guerra, 2016).

The discourse of food safety has been used to emphasize the importance of milk pasteurization in the manufacture of dairy products, since raw milk can harbor pathogenic microorganisms that present risks to consumers' health (Meneses et al., 2012; Paxston, 2013). In the specific case of rennet cheese, the understanding that food safety depends on the pasteurization of milk was institutionalized by the Brazilian federal government through the Technical Regulations on the Identity and Quality of Rennet Cheese (RTIQ), approved by Normative Instruction No. 30 of June 26, 2001 of the Ministry of Agriculture Livestock and Supply (MAPA).

Nonetheless, the idea that all derivatives of unpasteurized milk are a health risk is not consensual. In France, a country with a long tradition of cheese manufacture, 100 of the 360 types of cheese produced, including the world-famous *Roquefort*, use raw milk as a basic ingredient. In the United States there is a growing movement in favor of artisanal cheeses involving a struggle with

the government agency responsible for food safety for the right to consume non-pasteurized products. Those who defend artisanal cheese production argue tracking the flock or herd and observance of water quality and hygiene standards during processing eliminate the risk of contamination of milk at the source, with no necessity for pasteurization (Poulain, 2014; Paxston, 2013).

Even though regulation and inspection of the dairy industry in Pernambuco have increased since 2004, due to the creation of ADAGRO, problems in the production and marketing of rennet cheese persist. In addition to the possible lack of hygiene in the production of this cheese, product falsification and clandestine sales contribute to the poor image associated with the production process and the majority of producers, provoking distrust among the population.

Aware of these problems, a group of producers located in the Agreste region of the state of Pernambuco have been working since 2004 in partnership with the Brazilian Service of Support for Micro and Small Enterprises (Sebrae) and the Pernambuco Institute of Technology (ITEP) to ensure the origin and the quality of rennet cheese by means of Geographical Indication (GI), an instrument for protection of intellectual property (Paquereau et al., 2016).

In Brazil, Geographical Indication (GI) status is regulated by the Industrial Property Law (Law no. 9279 of May 14, 1996). This legislation does not define the term Geographical Indication itself, rather stating what constitutes the term. According to art. 176 of that Law, "Geographical Indication consists of an Indication of Provenance or a Statement of Origin" (Brasil, 1996). The definitions of these two types of protection for agricultural products and services are found, respectively, in articles 177 and 178 of that same law:

(a) Indication of Provenance (IP) is "the geographical name of the country, city, region, or locality of its territory that has become known as a center for extraction, production, or fabrication of a given product or the provision of a given service" (Brasil, 1996);

(b) Statement of Origin (DO) is "the geographical name of the country, city, region, or locality of its territory which identifies the product or service whose qualities or characteristics are owed exclusively or essentially to the geographical environment, including natural and human factors" (Brasil, 1996).

GIs are considered to be a collective right. This means unlike trademarks or patents that award exclusive rights to a single actor, protection via IG is granted to a collectivity (Brasil, 1996; Kim et al., 2016; Niederle & Gelain, 2013). Therefore, the creation of the Association for Certification of Rennet Cheese from the Agreste Region of Pernambuco (CQP) was an indispensable step for requesting the Brazilian National Institute for Intellectual Property (INPI) for GI registration (Paquereau et al., 2016).

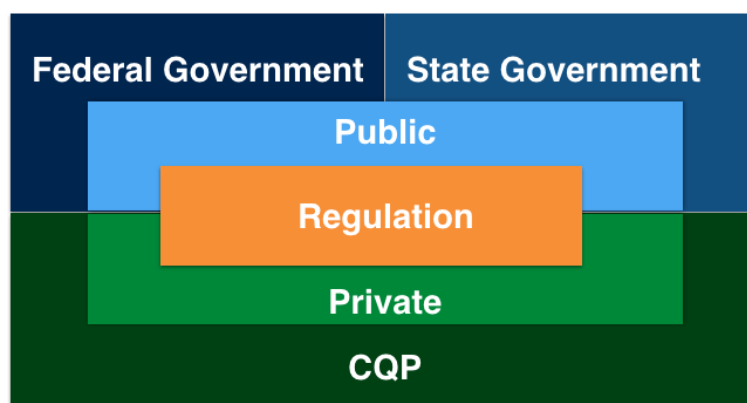
In addition, INPI requirements for granting the GI seal have led CQP members to institute their own regulatory system for assuring the quality of the rennet cheese produced by members of the organization. This involves compliance with the Usage Regulations document that spells out the quality standards that must be met for GI certification (Brasil, 2010).



## Results and discussion

As we have argued, there is more to analyze about regulation than merely presenting the formal laws and regulations that establish standards for the product and its production process. It also requires consideration of the different narratives and representations associated with the product and production technology that mold behavior during both the production and the consumption of the product.

Understanding a set of meanings attributed to artisanal rennet cheese on the basis of regulatory practices makes greater sense when these are considered in conjunction with those from other meaning systems. We therefore make a distinction between public and private regulation, analyzing the repertoire of meanings generated by different institutions to communicate about artisanal rennet cheese and to regulate the behavior both of the people who produce it and those who consume it. Figure 1 permits visualization of the regulators of rennet cheese discussed in this section.



**Figure 1.** Agents regulating artisanal Rennet Cheese

Source: Elaborated by the authors.

### *Cultural meanings constructed by the public agencies that regulate agribusiness*

The state and federal governments participate in the process of signification of rennet cheese through the development and implementation of regulatory policies. In this section we discuss the principal laws, decrees and regulations that govern the production of this cheese in order to reveal the various meanings generated by public regulatory agencies and understand how they direct the culture of its production and consumption.

### **Meanings originated from federal regulation**

MAPA is the federal agency responsible for regulating the rennet cheese-makers that produce for interstate and international commerce. Before receiving legal authorization for selling outside a given state, the product undergoes several stages of supervision and inspection. The sanitary quality of rennet cheese is certified for establishments that comply with existing legislation

and is communicated to the consumer by means of a Federal Inspection Service (SIF) stamp on the package (Figure 2).



**Figure 2.** Model 3 Federal Inspection Stamp

Source: Brasil (1950).

Although the Federal Inspection Service has existed in Brazil since 1915 (Brasil, 2015), it was only in 1950, with the approval of Law 1,283/50, that the Brazilian federal government instituted a more systematic state intervention with respect to animal products. This law contains general rules and makes no specific mention of rennet cheese, although it includes milk and dairy products on the list of products subject to inspection under that law. Two years later, however, specific rules for animal products were introduced in the Regulations for Industrial and Sanitary Inspection of Animal Products (RIISPOA), approved by Decree No. 30,691 of 29 March, 1952. An entire chapter of the RIISPOA is dedicated to cheeses; but the only reference to rennet cheese is in the section on “General and Transitory Provisions,” where it is defined as a variety of “Cured Minas Cheese.” This can be understood in the light of the political and economic context of that time. During the 1950s, government policies in Brazil were directed to the modernization and development of the country. Small producers of food products like the artisans who produced rennet cheese were viewed as an obstacle to development in view of limitations related to deficiencies in infrastructure, hygienic-sanitary conditions and management and appear to have been relegated to the background during the elaboration of Decree No. 30,691 (Menezes, 2011).

These policy orientations persisted until the 1990s, when the opening of the Brazilian market and the establishment of MERCOSUR on March 26, 1991, with the signing of the Treaty of Asuncion, prominent events in that period gave rise to the modernization of Brazilian sanitary legislation with the Technical Regulations of Identity and Quality (RTIQs).

The RTIQ for rennet cheese was approved by Normative Instruction No. 30 of 26 June, 2001, ten years after the creation of Mercosur. With its publication, the production of rennet cheese began to answer to its own rules, distinct from those for Minas cheese. This regulation, however, established pasteurization as one of the requirements for determining the quality of the product, effectively characterizing artisanal rennet cheese, which uses raw milk, as lacking in quality.

In 2017, with the publication of Decree 9,013, the RIISPOA was revised and updated. In this new version, after 65 long years, rennet cheese ceased to be an afterthought relegated to the “General and Transitory Provisions” and was allowed its own space in the chapter dedicated to cheeses. In this chapter, the lengthy list of 29 cheeses that appeared in the original version, and

included European varieties, was replaced by eight representative varieties of Brazilian cheese. This omission of foreign varieties of cheese from the present version of RIISPOA occurs in a political and social context where culture is perceived as an increasingly powerful resource in the global marketplace (Yúdice, 2003).

Even though national cheeses, including rennet cheese, have achieved prominence in the new RIISPOA, legal and symbolic barriers to artisanal products continue to exist. Decree 9,013/2017 does not alter IN No. 30 and, therefore, pasteurization of the milk used in cheese production continues to be a requirement for all cheeses but matured ones.

The system of meanings adopted by the federal government to represent what constitutes a quality cheese sets the boundaries for what is an appropriate or inappropriate, clean or dirty, good or bad production process. When the practices adopted by artisanal producers are classified as unacceptable, consumer behavior toward this producer also tends to be one of distrust. The following account demonstrates how the position of the Federal Government with respect to artisanal cheese can become a meaningful point of reference for consumers:

You know that this (artisanal) cheese cannot be sold outside of Pernambuco, in other markets, don't you? There is some protection involved. But all this stems from distrust, right? How this cheese is being produced, how it is made and also negative experiences in relation to this cheese. The law. . . I do think that it is a function of government to ensure, establish standards. . . It (the government) is working on the effect and not the cause. In fact the government instead of being increasingly concerned with restriction should have a program to fix it. For the production of rennet cheese. . . cheese is a product that has a consumption, is a product that has an acceptance. (Interviewee#1, 2016)

The current federal legislation on the dairy industry has restricted the movement of artisanal goods by use of both cultural and physical means. In the case of rennet cheese made with raw milk, consumption has been regulated not only through the seizure of "irregular" merchandise, but also by instilling in the public a sense of insecurity with respect to artisanal products. The current view of the Brazilian federal government on cheese production serves to reinforce the lobby of the large dairy companies while weakening the competitiveness of artisanal producers in the domestic and international market.

### **Meanings originated from state regulation of Rennet Cheese production**

With the reform of the State initiated in the 1990s, public services underwent decentralization. Extinctions, privatizations, mergers and acquisitions occurred in various government agencies as a result of the pursuit of administrative rationality and reduction of expenditures. The public agricultural sector in the state of Pernambuco was not immune to this decentralization process, as reflected by the establishment of the Pernambuco Agency for Agricultural Defense and Inspection (ADAGRO) by Law No. 12,506, of December 16, 2003 (Silva, Vital, & Cabral, 2009).

Previously, state agricultural inspection and supervision in Pernambuco was the responsibility of the state's Secretariat of Agriculture, through its Department of Agricultural Inspection and Monitoring (DEFIS), whose activities were governed by State Law No. 10,692 of December 27, 1991 and regulation of this law, approved on June 15, 1992 by decree No. 15,839 (Silva et al., 2009).

Law No. 12,506 and its regulations do not provide specific guidelines for the production of rennet cheese. They serve as a general guide not only for the functioning of the variety of different establishments dealing with animal products that operate in the state of Pernambuco (physical facilities, hygiene requirements, obligations of the company), but also for the conditions that must be met with regard to the finished product (packaging, testing, and handling).

Specifically, with respect to rennet cheese, Resolution No. 02 of April 19, 1999 of the state's Secretariat for Rural Production and Agrarian Reform (SPRRA) was adopted to standardize rennet cheese production process by providing objective guidelines for its manufacture. Unlike federal law, this resolution contemplates artisanal production, but classifies cheese made with raw milk as "type B," while cheese made with pasteurized milk is called "type A." This categorization implies a hierarchy between the industrialized and artisanal products in which the first is represented as being superior to the second.

State law No. 13,376 governing the production process for artisanal cheese production process was approved on 20 December, 2007 and modified by Law No. 15,695 of 21 December, 2015. At present, cheese manufacturers are allowed to produce rennet cheese using raw milk, as long as the quality of the food and its appropriateness for consumption are guaranteed by the manner in which milk from a healthy animal is processed. Sales of the product, however, remain restricted to the state of Pernambuco due to the prohibitions established by federal regulation.

The transition from informal to formal production demands the producers of artisanal cheese undertake to adjust their production processes in order to comply with the legal requirements for cheese production and commercialization (Desmarchelier & Szabo, 2008). In spite of the difficulties experienced in receiving adequate orientation from state regulatory agencies, these cheese-makers recognize the changes instigated by the formalization of their business have had a positive impact on their production process due to the acquisition of new equipment and improvements in physical structure.

### **CQP regulation of Rennet Cheese production**

In their quest for the GI seal, members of the CQP are developing a production culture that differs from that of other artisanal producers from the same region. To earn this seal, a hybrid mode of work organization has been created in an attempt to meet seemingly opposing demands: on one hand, pressures to change, aimed at improving product quality; and on the other, pressures to stay the same, in order to preserve traditions.

This hybrid model arises from melding government regulations with the standards established by the CQP in their Usage Regulations for Geographical Indication. Government regulations, determined by SIE, establish the quality standards for sales within the state of Pernambuco. In addition, in order to seek the GI seal, which requires establishment of Usage

Regulations, members of the CQP are setting their own specific standards for the production of rennet cheese.

The Usage Regulations are a document required by Resolution no. 075/2000 of INPI for the registration of GIs. In this specific case, this means the standards for obtaining and maintaining the desired quality for the artisanal rennet cheese produced in the Agreste region of Pernambuco are to be established based on discussion and collective assessment among residents of the region and members of the association of producers concerned. Once prepared, the regulation must be approved and officially recognized by the federal government, following INPI's procedures for GI registration INPI (Brasil, 2010).

Compliance with general legislation does not constitute a marketing differential, but the adoption of GI Usage Regulations does. These Usage Regulations complement government regulations, guiding the producers as to the steps and elements that ensure maintenance of the specific characteristics of rennet cheese from the Agreste region of Pernambuco, as observed in the following statement:

In the Regulation [of Usage] it is being established that animals in the summer must consume 40% of forage cactus and in winter, at least, if I'm not mistaken, 10 or 20%, or if not, consume natural pasture. So, the customary feeding patterns for the animals are to be maintained. The feed used will have an impact on the milk and the milk on the final product. The breed of the animals was specified. All procedures for animal health have also been established and those for the level of milk quality are stricter than the rules existing today in Brazil. Much stricter. The standards set are European standards for manufacturing products from raw milk (Interviewee#2, 2016).

The Usage Regulation does not exempt artisanal producers from complying with the minimum standards required by government agencies. Therefore, members of the CQP do not need to repeat the legislative requirements in this regulation, as it is understood, given their mandatory nature, they will automatically be taken in consideration (Brasil, 2010). Table 3 shows the principal differences between the two types of regulation imposed on producers interested in obtaining the Geographical Indication "Agreste of Pernambuco" for the region's rennet cheese.

Table 3

**Comparison of public (government) and private (CQP) regulation for the production of artisanal rennet cheese**

	<b>Government regulation</b>	<b>CQP usage regulation</b>
Origin of standards	State and federal governments	Group of producers that make up the association
Mandatory for whom	Required for all artisanal cheese producers registered in ADAGRO	Mandatory for producers of milk and cheese that are members of CQP
Standards to be met	Health legislation Labor laws Environmental laws Production standards	Usage Regulation established by CQP producers and registered with the INPI
Responsibility for Control	Government agencies	Internal control (CQP Regulatory Council) and / or external certifying agency
Consumer Information	S.I.E stamp	GI Seal

Source: Elaborated by the authors based on Brasil (2010, p. 164).

Members of the CQP developed their Usage Regulation with the help of a French engineer. The participation of a foreign technician in the process of obtaining the GI has served as an inspiration to and cultural reference for these cheese-makers from Pernambuco, as the quality parameters set by the Association are comparable to European standards, described as being more stringent than those required by Brazilian law.

The analogy drawn with French production culture has helped CQP producers create references for meaning not limited to those of the government for regulating the production and consumption of artisanal rennet cheese. The relationship established between the milk produced by CQP members and practices derived from the country considered “the cradle of gastronomy” can be used as a resource to obtain regulatory approval for manufacture and sale of an artisanal product historically represented by the federal government as inappropriate for human consumption.

At the same time, their proximity to European production reality allows rennet cheese-makers belonging to CQP to mark out an identity that differentiates them from the other producers of the region, whether artisanal or industrial.

Table 4 displays the different meanings attributed to artisanal rennet cheese and identifies the abstract and concrete aspects that structure the signification process resulting from the standards imposed, respectively, by the federal government (MAPA), the state government (ADAGRO), and the CQP.

Table 4

**Meanings of artisanal Rennet Cheese at the moment of regulation**

Dimension	Category	Public		Private
		Federal Regulation	State Regulation	CQP Regulation
Subjective (Abstract)	Meanings and ideas referenced (Micro perspective)	<ul style="list-style-type: none"> <li>Artisanal rennet cheeses made with raw milk considered unfit for human consumption</li> <li>Rennet cheese made from pasteurized milk as synonym for product quality</li> <li>Rennet cheese recognized as equal in quality to other varieties of national cheeses</li> </ul>	<ul style="list-style-type: none"> <li>Artisanal rennet cheeses fit for human consumption in the state market when certified by ADAGRO</li> <li>Artisanal rennet cheese classified as inferior in quality due to the nomenclature "type B"</li> </ul>	<ul style="list-style-type: none"> <li>Artisanal rennet cheeses fit for human consumption in the state market when certified by ADAGRO</li> <li>Artisanal rennet cheese as superior in quality when from a CQP producer</li> </ul>
	Lived Cultures (Macro perspective)	<ul style="list-style-type: none"> <li>Artisanal product associated with irregular merchandise</li> <li>Attribution of greater value to national than to foreign culture</li> </ul>	<ul style="list-style-type: none"> <li>Product quality guaranteed by the presence of SIE</li> <li>Cheese made with raw milk recognized solely in the market of Pernambuco state</li> </ul>	<ul style="list-style-type: none"> <li>Product with quality guaranteed by the recognition of Geographical Indication</li> <li>Cheese made with raw milk recognized by the international market since it has the GI seal</li> </ul>
Objective (Concrete)	Organization of work	<ul style="list-style-type: none"> <li>Artisanal production understood as illegitimate</li> </ul>	<ul style="list-style-type: none"> <li>Artisanal production understood as legitimate when formally established as a business firm</li> </ul>	<ul style="list-style-type: none"> <li>Artisanal production understood as legitimate and differentiated when carried out in accordance with the Usage Regulation of the CQP</li> </ul>
	Technical infrastructure	<ul style="list-style-type: none"> <li>Deficient and dangerous to consumer health</li> </ul>	<ul style="list-style-type: none"> <li>Appropriate when aligned with state regulations</li> </ul>	<ul style="list-style-type: none"> <li>Appropriate when aligned with state regulations and the CQP Usage Regulation registered with the INPI.</li> </ul>
	Social relationships of regulation	<ul style="list-style-type: none"> <li>Artisanal product unacceptable to the government</li> <li>Distrust between the government and artisanal producers</li> </ul>	<ul style="list-style-type: none"> <li>External regulation adapted to the reality of artisanal producers</li> <li>Distrust of informal producers</li> </ul>	<ul style="list-style-type: none"> <li>Increased dialogue with public agents</li> <li>Greater capability of artisanal producers to negotiate with the government</li> <li>Internal regulation established between CQP and artisanal producers that want the GI label</li> </ul>

Source: Elaborated by the authors.

## Final considerations

The aspects that emerged from data analysis bring us back to the main question of this study: how is regulation by a group of small producers (re)signifying the artisanal rennet cheese of the Agreste region of Pernambuco? Findings from the discourse analysis undertaken reveal that the government's view of artisanal rennet cheese has been justified by a discourse of "quality" at both the federal and the state levels. What is understood by quality, however, differs in these respective contexts and depends on economic, political and social considerations. When the state government recognizes the production of rennet cheese from raw milk, it is presenting an interpretation different from that of the federal government.

The different positions on rennet cheese at the two levels of government show how the concept of quality can be used to either restrict or stimulate artisanal production of that food. Why can this type of cheese be legally sold in Pernambuco, but not elsewhere in Brazil? This question suggests the relevance of investigating the power relations between large industrial producers and small artisanal producers, not only in the economic sphere with respect to innovation and technology, but in the political-cultural context, as well.

Faced with a public regulatory scenario that – in spite of the recent changes in RIISPOA is still unfavorable to artisanal production – collective entrepreneurship emerges as a political alternative for securing legal recognition of the production of rennet cheese using raw milk.

After all, the Usage Regulation created collectively by the members of CQP, in addition to being a requirement for GI registration, in fostering the forging of a collective identity and shaping their choices about production serves politically as plausible strategy for these artisanal producers to overcome the cultural and economic barriers imposed by the State to their traditional production methods. The legitimation of artisanal production of rennet cheese by INPI's granting of Geographic Indication status to the product of CQP members would represent recognition that the production practices of members of that association differ from those of other artisanal producers and industrial producers alike. This double differentiation would signal the momentum of artisanal cheese-makers in overcoming the stigmas to which they have been subjected by the federal government. In addition, their collective entrepreneurship would serve economically to form the basis for their product's exchange value.

The discussions with respect to GI have contributed to the resignification of artisanal production outside of the producer organizations themselves. The beginning of this process of changing meanings in a way favorable to artisanal production can already be seen in how MAPA currently has organized to develop this kind of activities. The establishment of an Office for Coordination of Support for Geographical Indications in 2005, as part of the introduction of the new organizational structure of MAPA, demonstrates a process of cultural change in a regulator that has historically been positioned unfavorably toward small agricultural producers.

The changes occurring with respect to the regulation of artisanal production of rennet cheese have resulted from articulation of the institutions of the agricultural sector that seek to strengthen and value the artisanal production of the Agreste region. Establishing institutional partnerships and the capability for network management can thus be seen as essential competencies for the CQP entrepreneurs engaged in promoting political changes favorable to the development of their businesses.



The evidence suggests a process of resignification is taking place by means of the meanings attributed to artisanal rennet cheese as it circulates in society – from production to consumption, passing through regulation – in function of the entrepreneurial actions adopted by the cheese-makers involved in the project to obtain GI certification. In this sense, the possibility of bringing about lasting change with regard to the regulation of this cheese depends on the continuing political articulation of the producers who belong to the CQP with other artisanal producers who do not belong to the Association) and with the regulatory agencies operating in the sector.

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