


SOCIOTECHNICAL MARKET ANALYSIS: A STUDY OF THE ALEMBIC CACHAÇA MARKET IN MINAS GERAIS

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ABSTRACT

This work sought to verify the applicability of the theoretical proposal of market analysis developed by Silva, Ribeiro and Santos (2024) in a real market. The market chosen was the Minas Gerais market for alembic cachaça. Therefore, the objective of this work was to study the formal market of alembic cachaça in Minas Gerais from the perspective of the categories of analysis of sociotechnical practices identified by Silva, Ribeiro and Santos (2024). To carry out the research, a qualitative approach was used with the use of thematic content analysis. 40 subjects were interviewed. The interview script was elaborated based on the six categories of analysis by Silva, Ribeiro and Santos (2024) and on the theoretical framework raised by the foundation of Latour's Sociology of Translation (1984, 1986, 1987, 2012). Secondary data were also used, which were chosen based on the reliability of the source, reliability of the information and common sense of the actors interviewed. In the end, it could be concluded that the categories of analysis of Silva, Ribeiro and Santos (2024) proved to be feasible and aligned with the thoughts of Kjellberg and Helgesson (2007) and Bruno Latour (1984, 1986, 1994, 2012).

Keywords: Sociotechnical Analysis. Sociology of Translation. Market Practices. Market Analysis. Cachaça Market.

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INTRODUCTION

In the *Observatorio de La Economia Latinoamericana Journal*, Silva, Ribeiro, and Santos (2024) published an article entitled "Proposal of analysis categories for research on market modeling practices". In this seminal article, the authors proposed a theoretical model composed of six categories of analysis to study markets from the perspective of socio-technical market practices.

Based on the trilogy of practices by Kjellberg and Helgesson (2007), the authors explained that, since markets are constituted and remodeled by continuous translation processes, it is possible to verify how a certain practice influences (or shapes) another practice within the same market. Thus, for each *interface* between Kjellberg's and Helgesson's practices, there is the possibility of understanding the market from a specific angle.

The categories pointed out by Silva, Ribeiro and Santos (2024), based on Kjellberg and Helgesson (2007), were: (i) Measures, which deals with the measures that are used in exchange practices that influence representative practices; (ii) Results, are the results observed in exchange practices due to representational practices (how representative practices affect exchange practices); (iii) Description, proposes the investigation of representative practices influencing normative practices; (iv) Measurements and Measurement Methods, are the measurements and measurement methods used by normative practices which influence representative practices; (v) Rules and Tools, seeks to identify laws and regulations that regulate a given exchange transaction; and (vi) Interest, are the exchange practices interfering with normative practices.

Using these categories of analysis, this work sought to verify the applicability of this proposal in a real market. The market chosen was the formal Minas Gerais market⁴ of alembic cachaça⁵ (artisanal). This cachaça market is a growing market (4.14% in the last year) and has the State of Minas Gerais as the largest producer of alembic cachaça in the country, with 60% of the total in this market, according to data from the Ministry of Agriculture, Livestock and Supply (MAPA, 2022). In view of the above, the objective of this work is to study the formal market of alembic cachaça in Minas Gerais from the perspective

⁴ Miner. Who is from Minas Gerais. Minas Gerais is one of the states that make up the Federative Republic of Brazil.

⁵ Cachaça. Alcoholic beverage produced by the method of distillation of fermented sugarcane juice.

of the categories of analysis of sociotechnical practices identified by Silva, Ribeiro and Santos (2024).

It is worth mentioning that the categories of analysis were based on the interrelations of the sociotechnical practices of Kjellberg and Helgesson (2007), and for this reason, it is necessary to theoretically rescue the endorsement of these interrelations, which was Bruno Latour's Sociology of Translation. Therefore, following this work, the essential concepts of the Sociology of Translation will be presented and then the analysis and discussions of the formal market of alembic cachaça in Minas Gerais.

LINKING PRACTICES THROUGH TRANSLATION

To explain the connection between the trilogy of practices (exchange, representative and normative), Kjellberg and Helgesson (2007) evoke the concept of Bruno Latour's Sociology of Translation. Braga and Suarez (2018) comment that in Latour's works, the author aligns himself with object-oriented ontologies, which are approaches that do not privilege human agency, but also give way to "things". In this way, he began to look at things from his relationship with the subject. The interest of his theoretical proposition lies in understanding this relationship between the human and the non-human. For Latour, things are more than simply tools or resources used by humans.

Emphasizing the above, Jørgensen (2017, p. 315) states that Latour's theory is not a theory in the traditional sense. It does not deserve predictability and does not provide "a fixed way of approaching the world". The reason for this is that if it did, "it would be a little better than the reductionist models it sought to replace."

Evoking Latour himself (1994, p. 12), in his theoretical essay on symmetrical anthropology, he says that "scientific facts are constructed, but they cannot be reduced to the social, because it is populated by objects mobilized to construct it". In this sense, the author proposes a point of view that postulates the same *status* and attention for human agents (agents) and non-human agents (things). Thus, when studying the economy, and more specifically the constitution of markets, the look must go beyond the human agents or their agglomerations (groups of human agents), one must also look at the non-human agents that participate in the constitution of the market, such as the products to be traded, the formal rules established, the symbolism of objects, among others.

The most fundamental aspect of culture, according to Latour (1994, p. 109), is the fact that human beings live in societies that have manufactured objects as their social bond.

For the author, social scientists should be able to explain the epidemic of objects in the human collective, with all the manipulations and practices that these objects require. And also, that "the social bond cannot be sustained without objects".

Latour (2012, p. 98-99) explains that he does not want to confuse cause with effect, so he clarifies that society "constitutes the final result of a process and not a reservoir, a stock or a capital capable of automatically providing an explanation". In this sense, in society, domination and power need to be produced, made, composed. And the social, for the Sociology of Translation, "does not designate a domain of reality or a special item; it is rather the name of a movement, a displacement, a transformation, a translation, a record."

Therefore, the above argument can be summarized, according to Latour himself (1986, p. 276) in the following statement: "society is not what unites us, it is what unites us. Social scientists have confused the effect with the cause, the passive with the active, what is glued with the glue." Translation can be understood as a process of construction of the production of meaning and meaning, which involves the idea that entities are produced in relationships.

Latour's theory considers that reality is influenced by linguistic and discursive aspects as well as by material aspects. Hence his position in relation to the term social: "In social constructivism, the adjective social and the approach as a whole hide the non-social aspects. This causes a semiotic bias to disregard the non-human and non-linguistic side of these dynamics" (Tonelli, *et al.*, 2011).

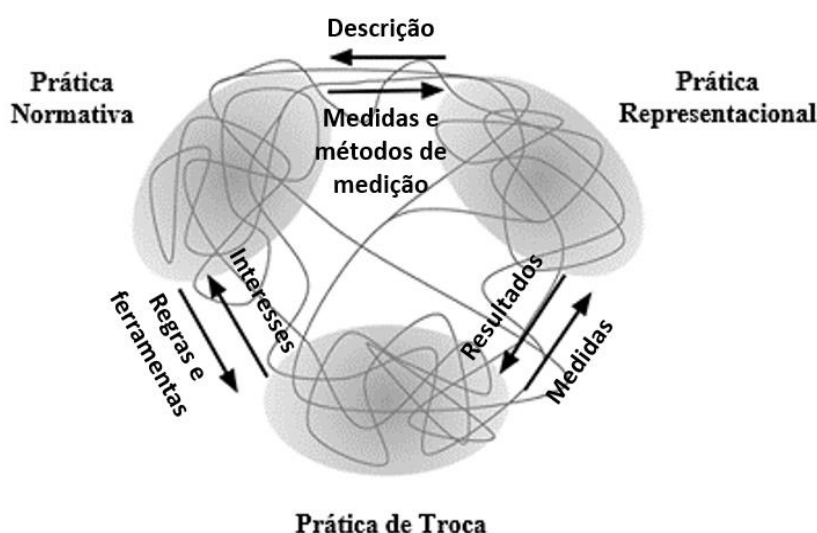
Jørgensen (2017) describes Latour's theory as a translation device, which provides means to move, make connections, and follow relationships between seemingly opposing positions or dualisms. This involves asking certain questions such as: how did certain technologies, practices, or frameworks come about; how they are possible; thanks to what and whom; and finally, what are the effects of these works. By asking these questions, the focus shifts from pure and stable identity, to more complex relationships, innovations, intervention, and (at least temporary) market stabilization.

By translation, Kjellberg and Helgesson (2007), supported by Latour (1986), denote that it is the basic social process through which something - an idea, a rule, a text, a product, a technology, a statement - spreads in time and space. In this way, the word "translation" takes on a "specialized" meaning:

[...] a relationship that does not carry causality, but induces two mediators to coexist. If some causality seems to be transported in a predictable and routine way, then it is proof that other mediators have been mobilized to make this displacement easy and predictable. (Latour, 2012, p. 160).

The general concept of translation provides a conceptual tool to address in detail how market practices can be entangled. If individual activities are linked through chains of translations, the three types of market practices (normative, representational, and exchange) are at best relatively denser areas of activity rather than distinct classes of practices. The important question, then, for the authors, is how various instances of market practice are linked to each other through translation chains (or Sociology of Translation).

Figure 2 – Translation network in market practice



Source: Kjellberg e Helgesson (2007, p. 151)

The authors do this by discussing how translation processes can connect the three types of practices to each other, the reason for this being that these links are central to the process through which various practices constitute markets. In all, the authors analyzed six types of calls (Figure 2). They began by elaborating how normative and representational practices can influence the practice of exchange. Second, they discussed how exchange and representational practices can affect standardization efforts. And finally, they observed how the practices of exchange and standardization can affect the representational practice. And to exemplify how these translations take place, the formal market of alembic cachaça was chosen in Minas Gerais.

METHODOLOGY

This work is a qualitative research using thematic content analysis. Content analysis is an extremely useful data analysis technique, especially in qualitative research, as it emphasizes the need for systematization of procedures (Dellagnelo and Silva, 2005).

As presented by Campos (2020, p. 57), qualitative research does not determine a specific number of subjects, so the number of selected subjects is not pre-defined, but the response to the objectives outlined in the research is recommended. Therefore, in order to verify the feasibility of the proposed categories of analysis, the following question-problem was raised: How was the alembic cachaça market in Minas Gerais constituted and remodeled throughout its history?

To answer this question, 135 contacts were made with agents participating in the market, such as: state agencies, producers, associations and cooperatives, research and development agencies, distributors and suppliers of the production chain. Of these 135 initial contacts, 28 interviews were obtained with primary data and 12 with secondary data. Therefore, a total of 40 subjects were available for research.

The systematization of the analysis in this research took place by following the categories of analysis presented by Silva, Ribeiro and Santos (2024, p. 12 – *emphasis added*). The categories pointed out by the authors are:

- Category 1 – measures, which deals with measures that are used in exchange practices that influence representative practices;
- Category 2 – outcomes, which are the outcomes observed in exchange practices due to representational practices (how representational practices affect exchange practices);
- Category 3 – description, which proposes the investigation of representational practices influencing normative practices;
- Category 4 – measures and methods of measurement, are the measures and methods of measurement used by normative practices which influence representational practices;
- Category 5 – rules and tools, seeks to identify laws and norms that regulate a given exchange transaction; and
- Category 6 – interest, are the exchange practices interfering with normative practices.

The interview script was elaborated based on these six categories of analysis and on the theoretical framework raised by the foundation of the Sociology of Translation. Thus, the script consisted of questions that could encompass exchange practices, normative practices, representational practices and the interrelation of these practices (translation).

Secondary data was also used. The choice of these secondary data was due to the reliability of the source (official and historical sources), the reliability of the information (cited by researchers) and the common sense of the actors in this market (repetition in different databases).

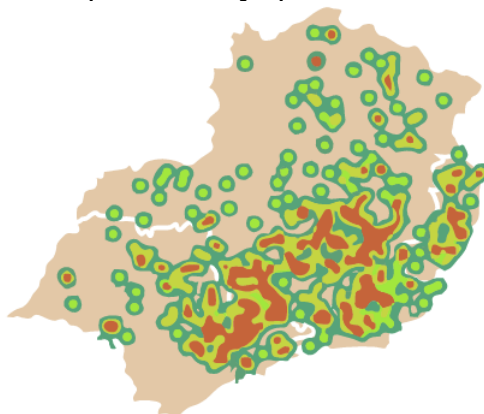
And yet, for this familiarization of the cachaça market and knowledge of its history, historical books, legislation, and academic works from the Brazilian Digital Library of Theses and Dissertations were also consulted. The consultation of these secondary data collaborates to bring reliability to the information collected by the primary data.

ANALYSIS AND DISCUSSIONS

CATEGORY 1 – MEASURES (EXCHANGE PRACTICE AFFECTING REPRESENTATIONAL PRACTICE)

As pointed out by Kjellberg and Helgesson (2007) and Silva, Ribeiro and Santos (2024), no representational practice is modeled without any calculation or estimation of market size, market share and the like, which are based on exchange practices. It is due to the practices of exchange that the images, diagrams, and texts of representational practices are created. As an example, the heat map of cachaça producers in the Brazilian Southeast Region, prepared by MAPA (Ministry of Agriculture, Livestock and Supply) published in the 2021 Cachaça Yearbook, is cited:

Figure 2 – Heat map of cachaça producers in the Southeast



Source: MAPA (2022)

Based on the number of registrations of establishments for the production of cachaça, it was possible to prepare this heat map that identifies the locations with the largest number of registered producers. From this representation, it is possible to affirm that Minas Gerais is the largest state in the Southeast Region in terms of concentration of formal producers. And it can also be inferred that, although the North of Minas is the region of the state where the national capital of cachaça is located (municipality of Salinas), it is not the region of the state with the highest concentration of registered producers, losing to the South and Zona da Mata (southeast of Minas).

Still, when dealing with representational practice, it is also about the exchange practices that lead to the symbolic-representational practices of this market. That is, practices that bring meaning and that are constantly validated (or resignified) by the market. In other words, when a consumer decides to pay more for a still cachaça, to the detriment of an industrial one, he validates and strengthens the symbolism and meanings that artisanal production has. It is a way of recognizing the values added to the final product. As an example, compare the prices of two cachaças sold by the Rex Supermarket Chain, one being an industrial cachaça and the other of alembic cachaça (artisanal):

Figure 3 – Comparison of the price of cachaça 51 and Seleta
Cachaça Pirassununga 51 965ml Cachaça Seleta 600ml



Cast Iron: Rex (2022)

The Cachaça Pirassununga 51 (industrial) of 965 ml is sold by Rede Rex for R\$12.90, while the Cachaça Seleta (alembic Considering the prices and volumes of the bottles, we have that Cachaça 51 costs the consumer R\$1.34 per 100 ml. Cachaça Seleta costs the consumer R\$5.32 per 100 ml. When the consumer acquires Cachaça Seleta instead of Cachaça 51, he is monetizing the symbolic values of Cachaça artesanal Seleta

and, externalizing it to the market, which not only perceives this added value of alembic cachaça, but is also willing to bear the costs of this perceived value.

When it comes to the exchange practices affecting the symbolic-representational practices of this cachaça market, it is possible to associate the consumption of alembic cachaça (artisanal) with Brazilian sociocultural values. When you consume a cachaça in a Brazilian restaurant in New York, you indirectly consume soccer, food, carnival and the Brazilian spirit and joy. Regardless of whether the client is Brazilian or not, this experience is linked to a contact with Brazilianness.

See, for example, some customer reviews of the Berimbau do Brasil restaurant in the *West Village* in New York (Foursquare, 2022):

- ✓ "Strawberry Cachaça simply the best";
- ✓ "Love this Brazilian neighborhood gem!! Pao de queijo slider and picanha are soooo delicious!! They use premium Leblon cachaca for their heavenly caipirinhas :)";
- ✓ "Caipirinha and pão de queijo slider, simply AMAZING!!";
- ✓ "Nothing better to kill the nostalgia and feel at home";
- ✓ "Delicious food, to the Brazilian sound... Nothing better to kill the nostalgia and feel at home. #recomendopudim #strogonoff of meat".

This contact with Brazilianness (Brazilian culture) through food, cachaça, music, cordiality does not only take place abroad. These "explosions" of sensations caused by a positive and remarkable experience also occur in bars and restaurants in Minas Gerais throughout the state. As in the case of the Adegas da Cachaça in Belo Horizonte. Follow some comments (Restaurant Guru, 2022):

- ✓ "An excellent place to consume the best cachaças in Minas, cold beer and well-made tastes. Grade 10 for the place, service and cordiality of Lima";
- ✓ "If it's not the best place to buy cachaça, close Brazil. Mr. Lima, who was affectionate, tried to get me drunk with the cachaça tasting, he wanted to take them all";
- ✓ "Excellent cachaças, very cold beer and a first-rate taste. The owner Mr. Lima is extremely polite and does everything";
- ✓ "Nice and quiet place for a good chat. Clean environment and very nice ambient music".

As in the Berimbau in New York, you can notice the appreciation for the cordiality, food, music and, of course, for the good cachaça and Brazilianness.

CATEGORY 2 – RESULTS (REPRESENTATIONAL PRACTICE AFFECTING EXCHANGE PRACTICE)

A second chain of translations that affects market practices is the one linked to representational and symbolic practices affecting exchange practices. For example, the use of famous artists in certain advertising pieces can provide an increase in the final value of the product or in its sales. This linking of a given brand or a given product to a celebrity can provide the linking of values such as quality, safety, durability, transparency, among others.

In this sense, it is evaluated how much it can add to a brand of alembic cachaça to have a renowned country singer in its advertisements whose name of the cachaça is the name of one of his famous songs. This is the case of Cachaça Pinga Ni Mim with singer Sérgio Reis (Figure 4). In this advertising piece, it can be noted that in addition to the appearance of singer Sérgio Reis on the label, he is also in the background (in the background) playing next to a farm gate. And in the foreground, along with the bottles of cachaça (silver and gold), is a small barrel. In a quick analysis, this advertising piece represents traditional values for this cachaça market, such as roça, sertanejo, fazenda, cachaça prata (pure) or rested in wood (gold). At first glance, this piece is intended for a more mature audience, of medium-high age, as they identify or want to identify with the values presented by the singer, such as country tradition, farm, among others.

Figure 4 – Pinga Ni Mim Sérgio Reis Silver Cachaça 670ml



Source: Facity (2022)

Another example is the launch of Cachaça Sepultura, which bears the name and logo of the internationally known rock band Sepultura, from Minas Gerais. This brand links the drink with the rock audience (young people and adults). But how much does this representational practice effectively influence exchange practices? It is possible to get an idea of this symbolic-representational value, making a comparison of the sales price of Sepultura cachaça with another cachaça from its same manufacturer. It is known through Cachaçaria Nacional (2022) that Cachaça Sepultura is a cachaça from Cachaçaria Batista.

Batista Amburana cachaça is sold for R\$43.00 in 600 ml bottles (about R\$7.17 per 100 ml). The Sepultura Amburana cachaça (which is from Cachaçaria Batista itself) is sold for R\$87.90 in 700 ml bottles (about R\$12.58 per 100 ml). From this information, it can be concluded that the use of the Sepultura brand adds to Cachaçaria Batista's amburana cachaça about 75.4% of the sale value of the beverage $[(12.58-7.17) \div 7.17]$. Using this same reasoning with Batista's aged cachaça (R\$139.00) compared to Sepultura's extra premium (R\$697.00), a value addition of 437% is reached.

From these two comparisons, between the silver cachaça and the aged cachaça, from Sepultura and Batista, both from the same manufacturer, it can be stated that the symbolic-representational practices of these "famous artists", as a brand, influence the exchange practices of the formal market of alembic cachaça in Minas Gerais.

CATEGORY 3 – DESCRIPTION (REPRESENTATIONAL PRACTICE AFFECTING NORMATIVE PRACTICE)

In symbolic-representational terms influencing normative practices, there are two milestones that stand out, one being a federal normative and the other a state normative. The state framework is State Law No. 13,949 of July 11, 2001, which decreed that Cachaça de Minas is the official drink of the State. Article 11 says: "Cachaça de Minas is an official drink of the State Government and will be served at parties, receptions and official events in which alcoholic beverages are offered" (Minas Gerais, 2001).

As evidenced by Agência Minas (2020), the history of Minas Gerais and alembic cachaça have been mixed since their beginnings. And it is this socio-technical constitution of cachaça that makes the State of Minas Gerais the largest producer of cachaça in Brazil, with the production of 200 million liters per year, generating more than 100 thousand direct jobs and 300 thousand indirect jobs in the State.

It was exactly this historical aspect full of symbolic-representational values of cachaça in the State of Minas that encouraged Governor Itamar Franco to sign this law. These practices have influenced the creation of both the state and federal legal frameworks, promoting the maintenance and innovation of normative practices.

And the other landmark, the federal regulation, whose symbolic values influenced its creation, was Federal Law No. 13,773 of 2018, which grants the Municipality of Salinas, (in the State of Minas Gerais), the title of "National Capital of Cachaça" (Brasil, 2018) with the following words: "Art. 1 - It is conferred on the Municipality of Salinas, in the State of Minas Gerais, the title of National Capital of Cachaça".

For the then senator Antônio Anastasia, this law formally recognizes a reality that was already socially consecrated. According to the senator "nothing fairer, therefore, than to recognize the great value and acclaimed flavor of artisanal cachaça from Salinas, granting it the title of National Capital of Cachaça" (Agência Senado, 2018).

Corroborating Senator Anastasia, a parliamentarian from Minas Gerais commented that "this was the greatest gift I could give to Salinas and the region". The search for this legal recognition by the parliamentarian was intended to foster the economy in the North of Minas region, both in terms of sales of cachaça itself, as well as regional tourism, with the aggregation of the value perceived in the *city*'s status as National Capital of Cachaça.

CATEGORY 4 - MEASURES AND METHODS OF MEASUREMENT (NORMATIVE PRACTICE AFFECTING REPRESENTATIONAL PRACTICE)

When representing markets, there are many issues at stake, which go beyond the practices of exchange of goods and services. The center of representational practices are ideas, values, meanings attributed to this representation. Therefore, any market representation thrives on a series of specific tools, norms and procedures, that is, they also occur within the scope of normative practices.

An example of a normative practice that influences representational practices is the bilateral agreement between Brazil and the United States that took place on February 25, 2013. In this agreement, the American government ceases to commercialize "*Brazilian Rum*" to commercialize "Cachaça", in addition to recognizing "cachaça" as a drink with a geographical identity, exclusively Brazilian.

Prior to the agreement, cachaça was exported to the United States as "rum" and now, with the recognition and permission to use the name cachaça, more producers can

enter this American market, which according to Expo Cachaça (2020) is the largest export market for cachaça in Brazil in terms of monetary value (about US\$ 3.1 million dollars).

Two other examples of normative practice affecting representative practice are the appropriations of the terminologies "Cachaça de Minas" (Minas Gerais, 2001) and "Cachaça de Alambique" (Ordinance 339 of 2021 – Brazil, 2021). In both cases, the use of the expressions "from Minas" and "from Alembic" refer to a production using a method of distillation by copper still, with the use of the separation of fractions and a natural fermentation of the sugarcane must. Thus, these regulations lead to an attribution of meanings that represent the market of cachaça from the Minas Gerais still, differentiating it from the industrial cachaça market (production by distillation column in stainless steel).

CATEGORY 5 - RULES AND TOOLS (NORMATIVE PRACTICE AFFECTING EXCHANGE PRACTICE)

The influence of normative practices on exchange practices can be easily seen in Decree No. 6,871 of 2009 (Brasil, 2009) which establishes the regulations for the standardization and classification of beverages. Within this legal provision, in its article 53, it typifies that cachaça is the sugarcane brandy produced in Brazil with an alcohol content of 38% to 48% of vol.

Thus, in order to negotiate a drink with the name cachaça, it must have been produced in Brazil, it must be a sugarcane distillate with an alcohol content of 38% to 48% vol. In this sense, the practice of exchanging producers with the market (whether B2B or B2C) requires that such criteria be met.

Another example is Normative Instruction No. 13 (Brasil, 2005), which is a milestone for the production and commercialization of cachaça, distinguishing cachaça and sugarcane brandy. As the rule clarifies, brandy can be obtained by the simple distillate of sugarcane alcohol (garapa) or by distillate from fermented sugarcane must (fermented garapa). Cachaça, on the other hand, can only be obtained through the fermented must of sugarcane (fermented garapa). In this sense, the use of unfermented sugarcane juice is vetoed in the production of cachaça. This requirement encourages exchange practices between yeast producers and traders. At the same time, it inhibits the exchange between cachaça producers and traders of antibiotics and chemical additives (which are used in the production of industrial brandy).

Another normative practice that has driven exchange practices is the Marrakech Agreement, of April 15, 1994, which assigns the geographical indication of the production of cachaça solely and exclusively to Brazil. According to the newspaper Estado de Minas, the demand for cachaça in the international market has been growing in the last two years (2021 and 2022). The two largest importers of cachaça are the United States and Germany (Dias, 2022).

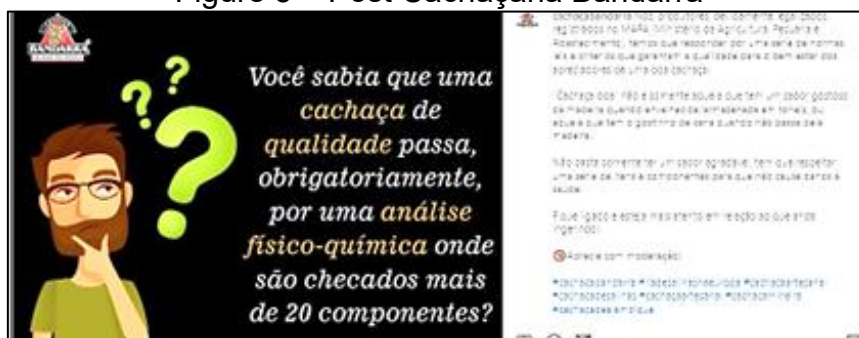
But how does the Marrakech Agreement influence these practices of import/export exchange of cachaça? The influence on imports/exports is due to the fact that, according to the Agreement, only Brazil can produce "cachaça". In this sense, this normative practice guarantees Brazil to meet the demand (the exchange practices) with the other countries.

While efforts to adapt to legal rules provide examples of how norms are translated into tools that are used in specific exchange contexts, it would be too limiting to consider this translation process restricted to cases of market regulation in the public sphere (laws, decrees, normative instruction). The growing number, for example, of certifications for products and production processes, such as the Certifica Minas standardization standards, or the National Cachaça Certification Program (PNCC), developed by Sebrae, Inmetro and the Ministry of Agriculture, translate into other important examples of this influence of normative practices influencing exchange practices.

Another regulation that influences exchanges are the limits of contaminants allowed by Normative Instruction No. 13. The method of separating the fractions (head, heart and tail) is linked to the still, and the heart portion is bottled. By removing the head (the first 10%) from production, a final product is obtained with lower levels of contaminants, such as esters, methanol and furfural (among others).

However, this information about contaminants and their relationship with the alembic production method is still little known by the general public. Therefore, efforts have been made to disseminate and raise awareness about the quality of the beverage produced by alembic and made with the correct separation of the fractions. As an example of these efforts, we mention articles linked on the internet on *specialized websites, blogs* and news agencies, as well as through social networks, with posts and *lives*. In this way, these normative practices on levels of contaminants influence exchange practices, since the consumer becomes aware of the dangers of products of dubious origins. Exemplifying this dissemination of information, here is a *post* published by Cachaçaria Bandarra:

Figure 5 – Post Cachaçaria Bandarra



Source: @cachacariabandarra Instagram (2022)

CATEGORY 6 – INTEREST (EXCHANGE PRACTICE AFFECTING NORMATIVE PRACTICE)

There is a clash between the formal market of alembic cachaça from Minas Gerais and two other markets: (i) the industrial market; and (ii) the informal market. In this first clash (i), with the industrial market, the main demand of the producers of alembic cachaça is the identification, the differentiation between the cachaça product distilled by the column method (industrial) and the cachaça product distilled by the alembic method (artisanal).

In the current legislation, it is forbidden for alembic producers to disclose on their labels the information that the distillation method was by copper still. However, due to various marketing actions, the alembic cachaça product has come to be recognized and differentiated by the consuming public, especially by consumers with higher purchasing power. With this recognition, the pressure for legislation that makes it possible to identify alembic cachaça began to increase, differentiating it from industrial cachaça.

In this sense, Ordinance 339 of June 28, 2021 was issued, which was officially opened to public consultation to change the current rules regarding the nomenclature of cachaça on the labels. And in March 2022, after a public hearing, this ordinance is waiting to come into force, allowing producers of alembic cachaça to put the term "alembic cachaça" on their labels.

Such a change in legislation was only possible due to the recognition of this market segment, that of alembic cachaça. A distinct segment, with its own peculiarities, with its own values that differentiate it from the industrial segment. Therefore, it is this practice of exchange that is leading to a change in normative practice.

Another example of the practice of exchange influencing normative practice is the second clash of the formal market of alembic cachaça, which is with the informal alembic

cachaça market (ii). The commercial practices of informal producers with bars, restaurants or direct sales to the consumer, promoted changes and complements to the legislation.

It is worth mentioning, for example, the creation of Decree No. 2,314 of September 4, 1997, which regulates Law No. 8,918 of July 1994, among other matters, the registration and inspection of beverage producers. However, in Minas Gerais, there was still a growth in this informal market, which led to the creation of another regulation, Ordinance No. 1 of June 26, 2018 of the Ministry of Agriculture, Livestock and Supply, which accredits the Minas Gerais Institute of Agriculture (IMA) to exercise the function of inspection and inspection of the production and trade of cachaça in the State of Minas Gerais.

These normative practices were generated to combat the informal market and, at the same time, bring greater quality assurance to cachaças marketed within the State of Minas Gerais. It is worth mentioning that this informal cachaça market in Minas, in addition to being a commercial exchange practice whose existence is perceived, it is also a representational practice, since it is estimated that within the Minas Gerais market, informality corresponds to more than 90% of the market (Moraes *et al.*, 2020).

Due to this high representation of informality in the State, the creation of normative practices to curb informal production and trade, or to make the formality of informal workers viable, is intensified. As is the case of the possibility for some producers to adhere to the taxation of SIMPLES NACIONAL⁶ and/or access to financing for small producers.

FINAL CONSIDERATIONS

Resuming the initial discussion, this work aimed to study the formal market of alembic cachaça in Minas Gerais from the perspective of the categories of analysis of sociotechnical practices by Silva, Ribeiro and Santos (2024). Such categories were based on the understanding of the interrelations of the practices of Kjellberg and Helgesson (2007), and these interrelations used Bruno Latour's Sociology of Translation to support the understanding of this imbrication between the practices.

Answering the question-problem presented in the methodology, "how was the alembic cachaça market in Minas Gerais constituted and remodeled throughout its history?". It could be concluded that the formal Minas Gerais market of alembic cachaça is

⁶ Simples Nacional is a shared tax collection, collection and inspection regime applicable to Micro and Small Businesses in Brazil, provided for in Complementary Law No. 123, of December 14, 2006 (Ministry of Finance, 2024).

a market that differentiates and distances itself from the markets of industrial cachaça and informal cachaça. It is a market that has its history connected with the history of the State of Minas Gerais, bringing values, beliefs and meanings to its exchange practices, normative and representational practices.

The interrelationship between these practices in the Minas Gerais market of alembic cachaça could be perceived in its most different flows, which corroborates Latour's Sociology of Translation regarding the fact that market practices are entangled, and human agency as well as non-human agency, establish a close connection forming a chain of translations between these three types of socio-technical market practices.

Regarding the feasibility of using these six categories of analysis for studies of market practices (measurements, results, description, measures and methods of measurement, rules and tools, and interest), it was noted that firstly they corroborate with studies of socio-technical market practices. And that it maintains a coherence with the theoretical endorsement of Bruno Latour's Sociology of Translation, which harmonizes the theory of research with his practice. Leading to the conclusion that the categories of analysis of Silva, Ribeiro and Santos (2024) are feasible and aligned with the thoughts of Kjellberg and Helgesson (2007) and Bruno Latour (1984, 1986, 1994, 2012).

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