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What happened to the subjects? Questions about mezcal

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Abstract

Mezcal is a Mexican agave spirit that has helped to create a sense of authenticity among global consumers, significantly increasing its presence on the world market. This has led to a great expansion of the production areas included in the Denomination of Origin, changing its artisanal forms of production and creating an ambiguous position for the subjects that produce this drink. The aim of this essay is to contribute a new theoretical perspective to the academic debate on the patrimonialisation of mezcal, incorporating analyses that focus on the issues behind the production of this emblematic beverage. It discusses the need to understand the productive dynamics of this predominantly rural beverage, based on an understanding of the relationships between subjects at different levels of the production chain. We have opted for a classical theoretical framework that dares to consider mezcal producers as peasants and that affirms the explanatory potential of revising the classics of peasant social theory in order to offer new insights into the problem of dispossession through the appropriation of the biocultural knowledge that underlies the production of mezcal.

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Introduction

Mezcal is a spirit that originated in Mexico and is made from the agave plant. It is obtained by fermenting the juice from the head or heart (stem) of the plant, commonly known as pineapple, or from the leaves, which is then distilled and rectified to obtain a clear or yellowish liquid that preserves the aroma of the raw material (DOF, 1994).

The origin of the production of this drink is due to a syncretic encounter between colonisers and indigenous peoples, who had the plant, fermentation and consumption techniques combined with distillation techniques that arrived on the continent from Europe (Plascencia de la Torre & Peralta-Gordon, 2018). Therefore, its historicity is linked to the social transformation of the territories.

Among the types of mezcals, Tequila can be easily identified as a beverage that is produced, in its generality, from *Agave Tequilana* Weber, commonly known as blue agave, and takes its name from the region of Tequila in the state of Jalisco, which obtains its denomination of origin, published in the Official Journal of the Federation on 13 October 1977 (DOF, 2000) this after a marked economic success and a particular need to shield and protect the productive exclusivity of the beverage.

With regard to the denomination of origin, both WIPO (1958) and the Federal Law on Industrial Protection (DOF, 2020), in the Mexican case, emphasise that a denomination of origin is linked to a geographical area and that both natural and human factors are the expression of the same in the product: the natural factors would be the relationships established for the extraction, production or manufacture of the products, determined by the raw materials, climatic, topographical and/or geomorphological conditions, which give a quality identity to the product to be protected. The human factors would be the links with culture, knowledge and know-how that characterise the techniques that unite the area to produce a quality product that is unique and exclusive to the area. At the same time, it is a legal expression of the protection and guarantee of quality, regulating the product and the production of related products (WIPO, 1958; DOF, 2020).

In 1994, the Denomination of Origin for Mezcal was published in the Official Gazette of the Federation, with the states of Guerrero, Oaxaca, Durango, San Luis Potosí and Zacatecas as the first beneficiaries (DOF, 1994), with subsequent modifications. In 2001, the General Declaration of Protection was modified to include the municipality of San Felipe, State of Guanajuato (DOF, 2001); in 2003, 11 municipalities in the State of Tamaulipas were added to the protected area (DOF, 2003); later, in 2012, a new modification was published to include 29 municipalities in the State of Michoacán (DOF, 2012). In 2015, another modification was made to include

the municipality of San Luis de la Paz in the state of Guanajuato (DOF, 2015A); in addition to the previous modifications, many municipalities in the state of Puebla were added in 2015, for a total of 115 municipalities (DOF, 2015B).

In 2018, after 24 years of legal operation in the country, the largest number of denominations of origin were modified, including 7 municipalities in the State of Aguascalientes (DOF, 2018A), 15 in the State of Mexico (DOF, 2018B), 23 in the State of Morelos (DOF, 2018C) and, finally, the municipality of Xochiltepec in the State of Puebla (DOF, 2018D). Similarly, at the end of this research, the last amendment published in the Official Gazette of the Federation was in 2021, for the inclusion of 4 municipalities in the State of Sinaloa (DOF, 2021).

However, these changes have been the subject of much controversy among stakeholders, with the aim of limiting the extension of the protected area. In this regard, Domínguez-Arista (2021) notes that “there are forces within the Denomination of Origin of Mezcal that contest the control of the Denomination, either from a legal or commercial point of view. This is clearly seen in the opposition of the mezcal industry, which appears every time a change is made. Different narratives are interwoven in the certification process, undermining the possibilities of democratising the instrument and highlighting it as an appropriate tool for rural development. The exclusion and marginalisation of small producers becomes a systematic constant.

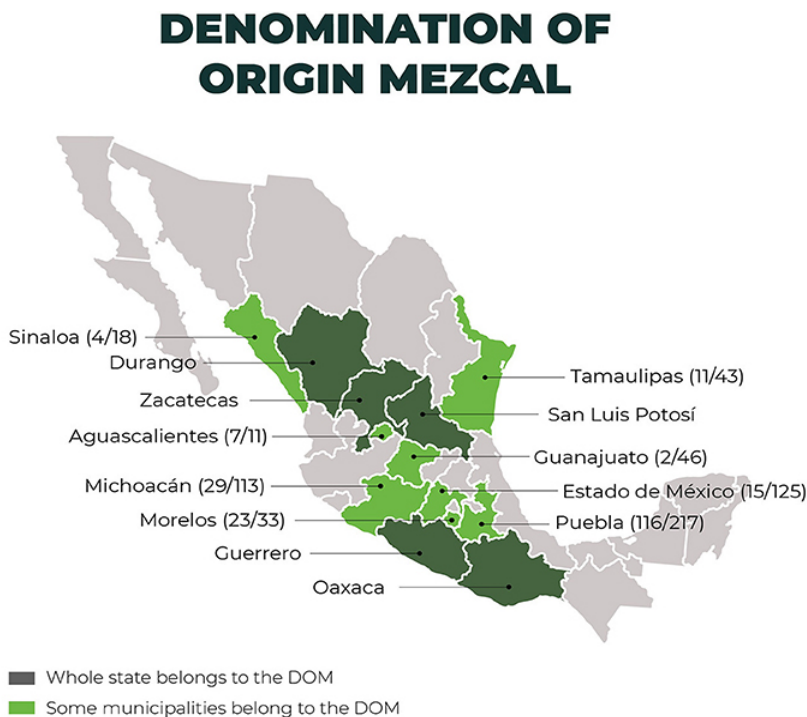
[...] by the regulatory bodies and the most influential players in the system, which seeks to undermine small-scale production that does not meet the conditions set by the DOM regulations. In this way, areas outside the DOM with a great mezcal tradition find themselves excluded from the traditional markets for the drink. Moreover, in the same areas where the D.O. exists, non-certified producers may also be excluded (Camacho-Vera, Vargas-Canales and Durán-Ferman, 2021. p. 189).

Beyond being expressed as a discursive element within the productive dynamics of mezcal, it becomes a pragmatism that represents a tendency towards the industrialisation of tradition, linked to the logic of late capitalism.

In the last decade, academic literature has generally studied the subject of mezcal from the point of view of the needs of a productive sector that is growing at an accelerated rate and is financially integrated into the country's economic framework.

However, as has been pointed out, the DO has two essential foundations: natural factors and human factors. Most of the arguments summarised in the above-mentioned amendments and the controversies that have arisen revolve around the extension of the geographical area, but the human factor appears in a diffuse form.

Illustration 1 - Map of the geographical area for the DOM

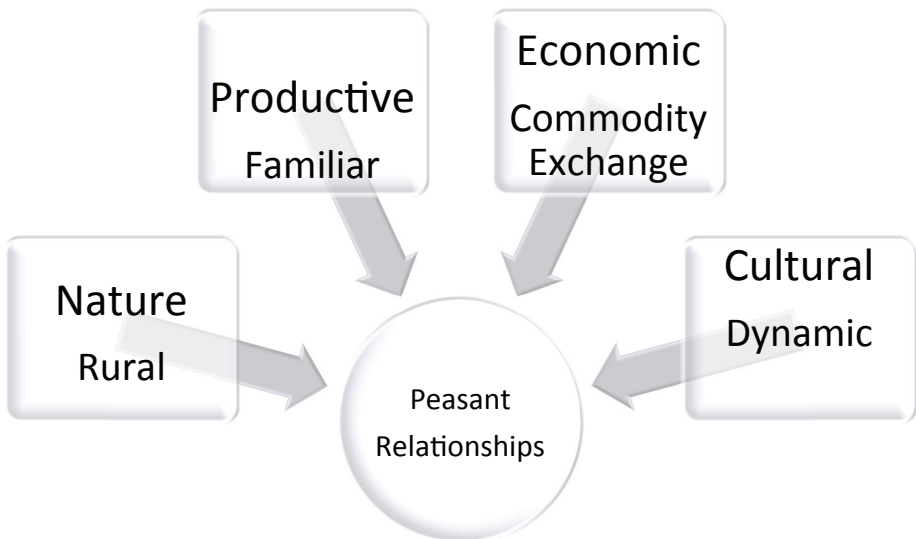


Source: From Arellano-Plaza, M., Paez-Lerma, J.B., Soto-Cruz, N.O., Kirchmayr, M.R., & Gschaedler, M.A. (2022).

To capture this factor, we propose the peasant perspective, based on the peasant concept used in this manuscript to discuss the place of subjects in the production of mezcal, in a context of productive normalisation (DO). This concept has been debated on numerous occasions by rural scholars, as it has been considered an outdated concept (Debenedetti, 2016) due to its inability to adapt to rural transformations. However, the UN General Assembly (2013) defines the peasant as a human being who has a direct relationship with nature through agricultural production, who is autonomous, family-based and works on a small scale. This includes animal husbandry, transhumance, crafts related to agriculture or other activities in rural areas. It also includes indigenous people who work the land in rural areas, as well as landless farmers, nomads or rural workers, among others.

Although the UN definition broadens the scope of the concept, it should be noted that this is due to the relationships that exist in rural areas. These relationships are of 4 types: i.) it establishes a permanent relationship with nature, that is, as an immediate rural subject (Perez, 1993); ii.) it establishes dynamic cultural relationships with other subjects that inhabit the rural environment, what Wolf (1971) would call the ceremonial background, and with other external cultures (Kroeber, 1948; Redfield, 1956); iii.) it establishes an internal productive relationship based on the internal functioning of the family as a production-consumption unit in search of equilibrium (Wolf, 1966; Shanin, 1971; Chayanov, 1979); iv.) it establishes an economic relationship through the sale of commodities that allows connection with the rest of society. In short, it is these relationships that distinguish the peasant from other subjects living and producing in rural areas (Krantz, 1977).

Illustration 2 - Peasant Relationships



These relationships go beyond the naturalisation of the peasant as a rural, agricultural and static subject, that is, one is not born a peasant. The peasant relationship, as a set of relationships, is a condition that is expressed in a certain way of life, and as such, what emerges from it bears the imprint of all its relationships, as in this case, mezcal.

In this sense, the text begins with a contextualisation of the current mezcal process, the way in which mezcal is certified and the argumentation of how

these categories annul the subject that produces. It then looks at how mezcal studies have evaluated economic issues and largely described cases. Finally, the Materials and Methods section explains the hermeneutic approach to the 33 texts that met the inclusion criteria.

In relation to the results, three main groups of research are found, to be discussed later in what we have called the peasant perspective. Finally, this paper concludes that the studies on mezcal lack a theoretical apparatus that allows the particularisation of the analyses and where the peasant perspective can be a reference to mark the differences in the commercial phases, as opposed to the categories offered by the DOM.

The aim of this essay is to provide a critical theoretical perspective to understand the socio-cultural implications of artisanal mezcal producers in the patrimonialisation of this spirit, through the constant expansion of the rural territories included in the Denomination of Origin. This expansion is due to the imperatives of the international agave distillates market, which generates socio-economic restructuring in the producing territories.

1. Materials and methods

This essay uses as a theoretical corpus the materials obtained through a systematic review of the literature in specialised databases such as Science Direct and Google Scholar, from which different texts were selected from Scopus, Springerlink, Taylor & Francis and Wiley. An interpretive documentary research was carried out (Gómez, 2011), with the aim of understanding the meaning of the texts analysed, placing them in the context of the treatment they give to the subjects of mezcal production, through a hermeneutic operation. In this sense, a methodological route was followed, divided into information gathering and information analysis, in order to answer the main question: where are the subjects in the global academic production of mezcal? (Gómez, 2011).

In terms of gathering information, we started by defining the subject of mezcal, the problem of the absence of subjects that produce mezcal, which, although mentioned in a few occasions, do not appear in the law; and from there the question arose: Who produces mezcal?

Academic products published between 2009 and 2021 were included, a period in which there is a higher concentration of academic production on mezcal. Priority was given to scientific articles in indexed and peer-reviewed journals to unify the quality criteria of the documents used. The manuscripts retrieved were classified as social science papers and those published in English and Spanish were selected. Some academic products, such as

dissertations and books, were also included to complete the bibliographical analysis of this essay, since they contribute significantly to the understanding of the producing subjects in relation to the processes of valorisation of mezcal through its denomination of origin. The texts were selected on the basis of their qualitative methodological perspective, the reputation of the authors, the inclusion of artisanal mezcal production in their central themes, and the availability of the materials on open access platforms or in institutional repositories. Texts that reviewed previously cited materials, those that moved away from a social perspective on mezcal production, those outside the defined time period and those published in journals that did not guarantee rigorous peer review were discarded.

Regarding the definition of categories and words for the search, we chose to search for Mezcal as the main word and Mezcal Artisanal as a specific segment.

Table 1 - Ratio of the number of items per search filter

Data base	Element quantization filter. 1	Element quantification filter. 2
SpringerLink	7	3
Taylor & Francis	14	3
Scopus	20	15
Wiley	15	12
Total	56	33

In the second stage, a hermeneutic analysis (Mardonez and Ursua, 2007; Cárcamo, 2005; Baeza, 2002) was carried out on the 33 articles, using the technique of deep reading, in order to understand if, in addition to talking about the generality of mezcal, we could extract some categorisation about the artisanal aspect of mezcal and the themes that generate it.

A total of 21 articles were obtained, supplemented by information from other databases, with the aim of covering the descriptive and technical panorama of academic production on mezcal, and recording them in an analytical matrix. From these inputs, a discussion is generated with the classical positions (Kroeber, 1948; Redfield, 1956; Wolf, 1966; Shanin, 1971; Chayanov, 1979) on the social theory of the peasantry, which is presented in the following sections.

Table 2 - Selected articles

Code	Authors	Year	Language
1	González-Seguí <i>et al.</i>	2020	Spanish
2	Martínez-Gutiérrez <i>et al.</i>	2013	Spanish
3	Perez <i>et al.</i>	2013	Spanish
4	López-Nava <i>et al.</i>	2014	Spanish
5	Bowen, and Valenzuela	2009	English
6	Gaytan	2018	English
7	Gaytan	2019	English
8	Sanchez-Soto	2016	Spanish
9	Plascencia de la Torre, and Peralta-Gordon	2018	Spanish
10	Hernandez-Lopez	2018	Spanish
11	Garcia-Garza	2021	Spanish
12	Fonseca-Varela and Chalita-Tovar	2021	Spanish
13	Dominguez-Gaspar	2020	Spanish
14	Camacho-Vera <i>et al.</i>	2021	Spanish
15	Bautista <i>et al.</i>	2015	Spanish
16	Vargas-Ponce <i>et al.</i>	2009	English
17	Tetreault <i>et al.</i>	2021	English
18	Valenzuela	2010	English
19	Vaccaro, and Ortiz-Diaz	2021	English
20	Bowen	2010	English
21	Valiente-Banuet, and Verdú	2013	English

The selection of articles was divided into three groups, from which the analysis of the literature on mezcal was condensed. On the one hand, those dedicated to the description of production processes; on the other hand, those that discuss the quality of mezcal and geographical indications, and those that present an alternative vision of mezcal that breaks with mere production and geographical indications.

Given that the invisibility of the subjects who produce artisanal mezcal in rural areas is linked to the expansion of the geographical scope of the Denomination of Origin, driven by international market interests, we believe that the literature that constitutes the corpus for this essay should be framed within the sphere of international academic debate.

Table 3 - Distribution of Articles by Group

Group	Name Group	Codes	Number of articles
A	Mezcal production aspects	(2) (3) (4) (8) (10)(16) (18)	8
B	Quality and geographical indications	(5) (6) (7) (9) (11)	5
C	Other views of Mezcal	(12) (13) (14) (15) (17)	5

In this sense, priority has been given to the use of materials available in global databases, being aware that this methodological choice leaves out a number of valuable materials produced in universities and research centres. However, the aim of this essay is to develop a general reflection on how the production of artisanal mezcal and the people who produce it have been conceptualised and analysed in academic products with wide circulation and international visibility. This is due to the need to limit the selected texts for reasons of space and the way in which the argument of this essay has been constructed. In future reflections, it may be possible to analyse how artisanal producers have been approached from more local perspectives.

2. Results

2.1. Group A. Mezcal production aspects: in search of the subjects

With regard to the first group of articles, the way in which they refer to the artisanal process and, secondly, to the subject behind the production, this was only done in a narrative form.

Some articles recognise the artisanal and refer to it as a productive condition given by its derivation from traditional actions that are maintained in production. With regard to the second, the rural subjects, they are often presented as agricultural producers or peasants, without looking at how these terms have a specific origin and how their relations become specific and give a concrete meaning to production, both in its scope and its operation.

In this sense, we found that discussions on the production process showed the need to address the technical aspects of production. For example, González-Seguí, Hernández-López and Hendrik (2020) analyse methanol levels and how they pose a problem for producers. They argue that most producers do not certify their production because their methanol levels are above the norm. This could lead to a loss of quality in the product, in

Table 4 - Group A. References Mezcal, Artisanal Mezcal, and Subject

Code	Ref. Mezcal	Ref. Artisanal Mezcal	Ref. Subject
1	Yes	Yes	Yes* no peasant
2	Yes	Yes	Yes* no peasant
3	Yes	No	No
4	Yes	Yes*	Yes* no peasant
8	No	No	Yes* no peasant
10	Yes	Yes	Yes**
16	Yes	No* traditional	Yes* farmers
18	Yes	No* traditional	No

addition to its characteristic flavour, which could affect other distillations. This is a reflection of the quality of the drink and the tendency to industrialise production.

The authors present the subject as a producer in a generic way (**code 1**), without giving elements to understand if it is of rural origin. Likewise, when referring to mezcal, they refer to its physico-chemical characteristics and only mention the different categories recognised in the DOM.

Continuing with the theme of production, when asked about waste in mezcal production, Martínez-Gutiérrez et al (2013) mention the existence of areas of opportunity in the management of bagasse from mezcal production. They argue that if left untreated, it becomes a pollutant that can cause damage to water tributaries. As in the previous study, when referring to the subjects behind the production of mezcal, they refer to them as mezcal producers (**code 2**), which also does not allow us to understand the relationships woven for the achievement of the beverage. It should be noted that the focus of the research and the article clearly raised a relevant discussion for the sector and, in particular, to achieve sustainability criteria.

Continuing the discussion on the production process of mezcal, Pérez *et al.* (2013) communicated the results of experiments with new strains to improve the fermentation process, aspects that contribute to the acceleration and control of the production processes desired from an industrial point of view. In this text, the producer was not directly mentioned (**code 3**), since his activity is aimed at improving the physico-chemical quality of the drink and the production process.

Similarly, Valenzuela (2011) raises the possibility that the genus Agavaceae will have to be used in the production of biofuels, given the opportunities

offered by the production processes of the genus and the high demand and alternative uses that can be given to the plant. It should be noted that although the pressure on ecological systems is quite high, as demand increases, the competition between tequila and mezcal production, and the demand for biofuels and fructose, may increase the ecological risk and sustainability of the territories. Thus, the people behind the production (**code 18**) are not discussed as one of the main elements of production.

These technical approaches, at least in the discursive element and its narrative, denote an approach to the methods used in production, but not to who implements these mechanisms. Similarly, the approach of NOM-070-SCFI-2016 (2016) follows this argumentative pattern, where the beverage is important for its physicochemical and technological components, downplaying the importance of the subjects behind them.

Despite the above, Sánchez-Soto (2016) raises the need for information on the part of producers from a technical dimension. However, even if there is an approach to the subject, it is interesting to note the way in which the producer is conceptualised, mainly as a farmer (**code 8**), since it does not have the depth to allow a conceptual theoretical discussion of the approach and is undoubtedly at a descriptive and technical level, that is, it does not allow us to see the multiple relationships that are synthesised in the subject and its specific characteristics that differentiate it from the homogeneity of the concept of farmer.

In this context, Vargas-Ponce, *et al.* (2009) raise an important discussion on the conservation of the genetic diversity of agaves, specifically of *A. angustifolia* from traditional management, allowing its survival over time to be sustainable, as opposed to the intensive practices of commercial monoculture models that degrade and suppress the genetic diversity of the plant. Specifically and appropriately, they refer to the category of “farmers” (**code 16**) to refer to small farmers. However, they speak of small plots of land managed and cultivated by subjects rooted in traditional milpa systems combined with low-intensity livestock grazing, which clearly identifies them as directly rural subjects.

From a different perspective, López-Nava *et al.* (2014) focused on the problems of the mezcal production chain, production processes and the technologisation of mezcal production systems. However, the authors did not have the notion of the subjects behind the production as a main or peripheral axis of discussion; therefore, the indicators presented are economic and productive. There is no fixed reference to the farmers in terms of those who produce the mezcal and those who produce the plant (**code 4**). This is an interesting situation, because there is a lack of popular and peasant knowledge in the face of the impending technologisation of the production of mezcal, which is based on this knowledge, on management techniques and their conservation, creating a symbiosis between man and nature.

Finally, Hernández-López (2018) reflects on the functioning of the DOM and the categories of artisanal and ancestral mezcal, postulating the “social and historical traceability” of the products, seeking a closer link between the territory and what is produced, in line with what is proposed by the denomination of origin.

With regard to the subject of mezcal production, the existence of family production units with multiple activities that differentiate the production process was mentioned, but the figure of the “Maestro Mezcalero” (**code 10**) is particularly important, since he is mentioned as the intellectual owner of the knowledge that shapes the drink.

2.2. Group B. Quality and geographical indications: elements that go beyond the productive aspect

As has been well expressed in the case of “mezcal”, to include the case of Tequila, its financial success is due to the protection strategy based on the Denomination of Origin, which at the same time becomes a paradigm of quality by which mezcal is measured. It is precisely this second group of studies that has led to discussions that go beyond the productive analysis of mezcal.

Like the previous group, which focused on production, this group is closer to the notion of subjects, with several issues of particular relevance: the identification of the multiple actors that produce or are inscribed in the mezcal production chain, its derivation from family work and the subject called to represent production, the maestro mezcalero, when mentioned, is posed more as an enunciation than an analysis of the subjects and their relationships, that is, their involvement in the production of the identity that is then transferred to mezcal.

Table 5 - Group B. References Mezcal, Artisanal Mezcal, and Subject

Code	Ref. Mezcal	Ref. Artisanal Mezcal	Ref. Subject
5	No*	No* traditional	Yes* no peasant
6	Yes	Yes	Yes* other actors
7	Yes	Yes	Yes* familiar
9	Yes	Yes	Yes* no peasant
11	Yes	Yes	Yes* Mezcalero Master

For example, Bowen and Valenzuela (2009), using the case of tequila, first propose a contextual discussion of GIs and terroir. They argue that this is an

unsustainable situation, given the weight of the large producing companies in production, in this case in determining prices and their supply, to the virtual exclusion of the region's producers. Although the latter are aware of the problem, they are so overwhelmed that it is difficult for them to remain active. This document problematises an aspect that is of particular interest to us in the study of GIs, in that it basically asks about this mechanism without its people (**code 5**), from which we could conclude that they are excusing themselves in the GI at the expense of the biocultural and popular knowledge of the people who are subsequently excluded from the process.

Faced with this problem, Gaytán (2018) reflects on the dispute over the control of mezcal's authenticity, searching for quality parameters. Among them, legality overrides the concept of authenticity, which is reduced to certification, suggesting that an industry has been built around mezcal based on the biocultural and popular knowledge of the peasants, but without them (**code 6**). A narrative of rurality that includes mezcal, but at the same time excludes the subjects, and in the end it is other actors who establish themselves as producers and bearers of knowledge.

The new narratives that link the exotic, the rural and the industry as a mechanism for concealing its people, Gaytán (2019) discusses the maintenance of the 'artisanal' ideal as a criterion of authenticity. The author argues how a kind of mezcal celebrity has been constructed out of a performative process in which knowledge is only displayed in one person, the *Maestro Mezcalero* (**code 7**). As in other articles, the condition of the actors is discussed, which represents a break with the literature that stages a harmonious, unusual relationship between local actors, whether they are called mezcal producers, and extra-local actors, called industrialists.

It is worth highlighting the figure of commercial intermediation and the importance of the export market, where the aesthetic dimension, very typical of restaurant and drink critics, is interesting, but it seems that this fact is argued as a messianic form that brings the solution to the problems of the communities, very much in the style of prescriptive approaches to development.

Similarly, García-Garza (2021) identifies four historical processes through which mezcal has passed, from indigenous and colonial syncretism to "traditional mezcal" or fourth generation mezcal, guided by technical assistance processes that have transformed production. In this sense, this traditional epithet is embodied in a performative and aesthetic way that is perceived in the drink, but not necessarily through a link between man and nature. In other words, it is more about what the commodity appears to be than what it really is or can become. In the same way, this modernisation combines the concepts of artisan and ancestral, with a strong charge of exoticism that gives it a special place in the global market of commodities, where the *Maestro Mezcalero* (**code 11**) appears as a central subject in the

performance that gives mezcal a notion of authenticity, ignoring the diversity of subjects that participate in other complementary rural productive activities; whose conformation as a collective subject emerges from the relationships built in the context of the productive fabrics of which they are part.

Delving into these processes in which narrative and performance strategies have taken a position in the mezcal industry, Plascencia de la Torre and Peralta Gordon (2018) proposed some current notions to understand the concept of fetishisation or performance, where the great beneficiaries are industries. In this sense, if we understand these categories, we can conclude that the protective figures, either GI or DO, that have become popular for mezcal, in their commercial form, promote the exploitation and expropriation of popular knowledge. They also express a historical dimension of production and how the constant changes in production have led both the government and the industry to use these mechanisms to progressively exclude the producers (**code 9**) of the past, creating a highly profitable but culturally and environmentally disastrous business.

2.3. Group C. Other views of Mezcal

This research group has focused on other discussions, approaches and views of mezcal as a commercial, identity and reproductive way of life.

Table 6 - Group C. References Mezcal, Artisanal Mezcal, and Subject

Code	Ref. Mezcal	Ref. Artisanal Mezcal	Ref. Subject
12	Yes	No	Yes* no peasant
13	Yes	Yes*	Yes* nature peasant
14	Yes	Yes	Yes
15	Yes	Yes	Yes* nature peasant
17	Yes	Yes*	Yes* rural worker

Although financial evaluations can be included in the group of researches focused on production, they fall more in the segment of other visions, since their approach focuses on understanding the financial dynamics of the sector. In this sense, Fonseca-Varela and Chalita-Tovar (2021) proposed an evaluation of the profitability of mezcal in a specific case in the state of Puebla. Beyond measuring the financial feasibility indicators of the mezcal project, they stated that “[...] this agribusiness would be financially profitable in scenarios

where the price of its main raw materials: agave pineapples and bottles for packaging, increases its costs by 20%. However, its indicators could be reduced by up to 50%” (p. 272). However, the indicators do not take into account the various problems that arise after the establishment of this crop and its production in the territories. With regard to the subjects that produce, the treatment given is that of the producer (**code 12**), in this sense it seems that the relationships that they establish in order to make a living and those that are imposed on them are not taken into account, for example before the certification processes and the dynamics of the other actors that make up the production chain.

From another point of view, Domínguez-Gaspar (2020) tries to understand the production process of mezcal from a feminist perspective, highlighting and making visible the role of women (**code 13**). From this perspective, the importance of food processing is seen as a fundamental task, without which there can be no production process.

Turning now to the scenario of artisanal mezcal production, Bautista, Orozco-Cirilo and Terán (2015) addressed the situation of production in Matatlán, Oaxaca, focusing as a norm on the techniques and technologies used. It is highlighted that the discussion suffers from the cultural and social situation that entails and/or determines the use of these practices. In this text, there is already a descriptive parameter in the field of what would be an artisanal mezcal, as one of the ways in which the NOM-070-SCFI-2016 is implemented. Regarding the peasant condition (**code 15**), although there is a reference, the article does not really talk about what it is or what it refers to. The authors took this condition as an assumption, apparently related to the habitability of the rural area and agricultural production.

Continuing this double relationship between subject and artisanal production, Camacho-Vera, Vargas-Canales and Durán-Ferman (2021) proposed a notion of proximity of mezcal production from an economic/social perspective. In the artisanal and peasant component (**code 14**), the article is anchored in a rural process that involves the social, cultural and productive spheres that are synthesized in a particular rural economy that keeps proportions with the structurality of other expressions of the rural economy.

Finally, from a different perspective, Tetreault, McCulligh and Lucio (2021), based on the discussion of the concept of agro-extractivism and the case of tequila, raised a broad problematic situation regarding the dynamics of relations between the different actors in the production chain, demonstrating in the case of tequila the configuration of an oligopoly responding to the international dynamics of the liquor trade. They identified five negative environmental and social consequences of excessive growth and industrial dynamism: displacement of traditional crops, marginalisation of small producers, loss of genetic biodiversity, intensive use of agrochemicals

and soil erosion (**code 17**). A practice called “reverse leasing arrangements” was also added, which implies the externalisation of environmental impacts and exacerbates the decomposition of the social fabric through the transformation of subjects.

3. Discussion

Mezcal production systems in Mexico are diverse and complex, resulting in the coexistence of multiple actors at different scales including industrial, artisanal and ancestral forms of production. Most rural mezcal producers best fit the definition of artisanal mezcal.

According to NOM-070-SCFI-2016, artisanal mezcal has the following characteristics: it is cooked in earthen ovens, it is ground with wooden mallets, it is fermented in wooden vats, and it is distilled in clay or copper stills. As can be seen, this characterisation alludes to peasant techniques and artefacts, but never to specific social subjects who produce mezcal and are the custodians of its heritage. On the other hand, there are certain variations that can be accepted in the norm, depending on the resources and needs of each producer.

A large part of the academic production around mezcal and agave has neglected the conceptualisation and characterisation of the subjects behind the production, an aspect that is difficult to understand because the problems addressed are evolving.

It can be said that there are major problems that the literature reviewed has dealt with, the general sustainability and the sustainability of production, the direct impact of the territories in environmental, ecological and social terms. Nevertheless, as we have seen, there has been no systematic study of the condition of the subjects involved in the production of mezcal, and it has not been possible to identify the specific and structural relationships that it establishes and that constitute it as a subject.

Although in some texts the subject is identified as a peasant or an indigenous, this does not go beyond a condition that he takes for granted, that is, as a criterion of identification of his belonging to the rural territory, generally with a small property, thus leaving a blurred boundary between what kind of subjects they are.

The problem that we have traced in relation to the subjects behind the production deepens when we analyse the treatment that the authors give them, where they generally appear as producers, that is, from the development of the activity. This does not allow us to understand any of the relationships, since it is linked to an activity that could be carried out by anyone.

In this sense, although the subjects mentioned in the papers are undoubtedly producers, i.e. they carry out a productive activity in mezcal, neither the standard nor the studies themselves give any importance to understanding the origin of the subject, which is presented as a depersonalisation of the subject. This does not contribute to the operability of the categories of the drink in the appellation of origin, since it excludes the subject as a central element and only valorises technology, land and the drink as a commodity, like most goods and products in the capitalocene, which in its fetishistic dynamics alienates the producer. In other words, mezcal takes body and soul for itself and is produced at an increasing distance from the hands that conceived it (Schaffhauser, 2020; Marx, 2014).

With regard to the denomination of origin, which, as we have said, is a protection of the product, the geographical origin of the raw materials, the production processes, the natural factors and the human factors (DOF, 2020), its categorisation excludes the “human factors” from the equation, because there is no interest in identifying the subject that produces and from which comes the preservation and historical transmission of the knowledge of the production of mezcal. In short, not identifying the type of subject that produces mezcal means breaking with the denomination of origin by postulating a generic producer that has little or nothing to do with the drink as the subject that carries out the productive activity.

In the same perspective, the work of Lira, Robson and Klooster (2022) maintains a discursive line where, beyond the drink itself, in the amalgamation of territory and raw materials, it bears the imprint of the relations of subjects who, in their rural dynamics, can face a peasant relationship. It presents us with a scenario in which the peasant condition determines the specificity of the drink and distinguishes it from the rest of the subjects who inhabit the rural space, on the one hand, and from those who produce mezcal, on the other.

In this dimension, it is necessary to think about a new typology of mezcal, in which the identification of the subject and the way in which its relationships are constructed are highlighted, leading us to understand that by following the subject and its relationships, together with the other factors raised in the denomination of origin, we can bring the theoretical and normative postulate closer to the concrete reality of the territories.

In the case of the artisanal category, most of the articles present the subjects as rural producers and, to a lesser extent, as peasants and indigenous people. It is also stated that they produce on a small scale and that the presence of family labour is indispensable. Although this approach is clearly made from a hermeneutic perspective, the peasant perspective is used to interpret and identify the subjects.

In this sense, mezcal producers can be identified as peasants, since their production and habitat are in the rural environment (Perez, 1993), where

the presence and use of family labour is indispensable (Shanin, 1971; Shanin, 1976).

Although mezcal is a beverage that is anchored in commercialisation processes, the dynamics are a form of subsistence. Although in some cases it is a complementary activity, when it becomes the main activity due to the high demand, the life of these producers is compromised and tied to commercial success. This aspect needs to be clarified in the designation of origin; according to the postulate of Krantz (1977), when showing the difference between capitalist and peasant agriculture, there is the need to achieve profits beyond survival.

The above makes a significant difference to what needs to be protected when this mechanism (DO) refers to territorial development and when it aims to protect history, tradition, culture and territory, even from an economic point of view.

It is necessary to highlight the character of the family composition and the division of labour in the production unit. It is essential to understand its internal functioning. Irrespective of the number of people living there, it is necessary to pay attention to the roles that are shown to bring production to fruition. Firstly, the role played by the transformation of the cultivated products of nature, food, as the basis of the productive act. In the words of Chayanov (1974): “The consumption-labour balance is therefore the basic regulating principle of the activity of the family farm unit. The economic organisation of the farm results from a complex interactive process of adjustments until the equilibrium is reached” (p. 56).

In the production of mezcal, it is possible to understand the relationship between the family and the product as the sum of the needs, skills and efforts directed towards the production and reproduction of the family, a specific feature of the peasant economy, which includes the family economy.

With regard to the cultural dynamics of mezcal producers, it is necessary to show the interactive processes that give rise to the form of production. Peasant life is linked to agricultural and livestock structures (Sevilla and Pérez, 1976). The specific forms in which their technology is configured imply a factual knowledge of the territorial conditions in which they are found, which unfolds a highly particularised culture.

Likewise, the implicit orientation of the productive process has led producers to enter into constant processes of negotiation with internal and external actors in the territory (Wolf, 1971; Wolf, 1977). Their survival is a sign of cultural adaptation and readjustment in cultural negotiation.

In this sense, we agree with the analysis made by Zamora-Reyna (2021) in relation to the success and fame of the mezcals produced in Sola de Vega, Oaxaca, which are directly related to the composition of the productive relations and the peasant imprint given to the beverage, given the type of

subject that carries out the productive work, In other words, over and above the consolidation of mezcal as a commodity on the market, it is also an expression of the identity of the people and communities that produce it, which clearly shows that quality is closely linked to the territory and, above all, to the people who carry out the work, who have learned it orally and from generation to generation.

This issue is also raised by Diaz de la Vega Nuñez (2020) when he discusses the situation in the town of Logoche, Miahuatlán, Oaxaca, where he highlights the familial and essentially peasant character of production, postulating that the category of artisan, in line with our approach, does not capture the productive essence and leaves out the subjects who make it, This reinforces the postulate of the need to create new typologies that correspond to the subjects that produce mezcal, in short, to the relationships that make the continuity of this artisanal distillate viable.

Similarly, we agree with Damián-Reyes's (2011) thesis, which links the productive and reproductive process of mezcal as a popular culture rooted in rural subjects, especially peasants, where this drink acquires value and accounts for processes of rural popular inheritance that are in constant negotiation and cultural adaptation with other subjects outside the territory. The point of convergence helps us to see the need to address the dimension of the subject and its relations, since in this case there are three specific cases that serve to exemplify the approach highlighted in this research, where the importance of the identification of producers is particularly relevant for the consolidation of agro-food quality processes, social and economic justice and parity in economic processes linked to sectors that are emerging on the world market scene, but which are tied to people and territories.

Conclusions

This text began with the following questions What has happened to the subjects? Where are they? There is nothing left to say but: there they are! This is why mezcal has been supported over time. As is well known, studies on mezcal have been structured around the description of production processes, quality and geographical indications, as well as what are called other views of mezcal, which, although important, lack a critical theoretical apparatus that would allow the analysis to be more specific and offer explanatory, analytical panoramas and innovation processes in line with the objective reality of the drink.

For this reason, it is important at this time to re-read the peasant perspective, since, as has been argued, the low-intensity production processes associated with traditional production systems are a productive alternative

that does not significantly affect the social, environmental and ecological balance of the regions. This alternative of conceptualising the mezcal producer as a peasant, i.e. as a subject bound in multiple relationships, is a viable and plausible option to make a difference to the industrial processes they have adopted, based on narratives of tradition and craftsmanship, for a drink that has an eminently rural and imminently peasant character.

Consequently, the peasant perspective focuses on the subjects, not on consumption, which would allow the policies, regulations and instruments of territorial development to necessarily include the human being, his economy and culture, in relation to nature and the territory that surrounds him, as the main object of his work, and not just the commodity, which is increasingly far from what was conceived in the DOM, raising the need to identify strategies that allow them to differentiate themselves from other actors producing mezcal and offer protection to this segment of the rural population.

In relation to NOM-070-SCFI-2016, there is a prescriptive and normative way of understanding the artisanal, since the assertion that the categorical character is indicated by the use of tools and, in short, one or another type of distiller, gives rise to interpretations that it is any subject that produces, it is at this point that the subject itself disappears or is hidden in the process. The use of tools and/or technologies corresponds to biocultural processes, and to assume this in a prescriptive way (techniques, technologies and tools, inputs) ignores the levels of subjectivity and consequently leaves out a myriad of relationships that allow the reproduction and indication of craftsmanship, which is endowed with peasant characteristics and normalises production. To summarise, the omission of the subject and, in particular, the absence of the peasant in the DOM, is to deny that those who are the bearers of tradition, culture, techniques and technologies, in short, of the biocultural knowledge that gives rise to protection, are an example of the appropriation of knowledge in favour of the commercialisation of rural areas.

It should be noted that this essay has limitations; it is based on a reading of a small amount of literature on the subject of mezcal, since the interests are clearly placed in the improvement of productivity and the design of business models linked to the denomination of origin. Being an essay, its possibilities of contrasting and directly operating the peasant perspective will be the framework of discussion for future research; this paper proposes a starting point for academic discussion that will provide interpretative panoramas of transcendence for the lives of producers. For this field of research, it is necessary to conceptualise the subject and its different relationships in order to understand the specificity of its work and to influence the correspondence between reality and the regulated categories. It is necessary to develop deeper perspectives on the relationship between producers and appellations of origin, which can be achieved by addressing the local visions contained in the work

of universities and research centres, which, paradoxically, are often invisible in the global channels of scientific communication. A better articulation between academia, policy-makers and producers is needed to produce better normative schemes and heritage policies that put people at the centre. This essay opens the way to an understanding of artisanal mezcal producers in the context of the implementation of the Denomination of Origin as a tool for the valorisation of agri-food products of global interest, such as artisanal mezcal.

References

- Arellano-Plaza, M., Páez-Lerma, J.B., Soto-Cruz, N.O., Kirchmayr, M.R., & Gschaedler, M.A. (2022). Mezcal Production in Mexico: Between Tradition and Commercial Exploitation. *Frontiers in Sustainable Food Systems*, 6. Doi: 10.3389/fsufs.2022.832532.
- Baeza, M. (2002). *De las metodologías cualitativas en investigación científico social. Diseño y uso de instrumentos en la producción de sentido*. Concepción: Editorial de la Universidad de Concepción.
- Bautista, J.A., Orozco-Cirilo, S., & Terán, E. (2015). La disminución de la producción artesanal de mezcal en la Región del Mezcal de Oaxaca, México. *Revista Mexicana de Ciencias Agrícolas*, 6(6), 1291-1305.
- Bowen, S., and Valenzuela, A. (2009). Geographical indications, terroir, and socioeconomic and ecological sustainability: The case of tequila. *Journal of Rural Studies*, 25, 108-119.
- Camacho-Vera, J.H., Vargas-Canales, J.M., & Durán-Ferman, P. (2021). Avatares de la producción de mezcal en la región Miahuateca de la Sierra Sur de Oaxaca. *Liminar Estudios Sociales y Humanísticos*, 19(1), 183-194. Doi: 10.29043/liminar.v19i1.794.
- Cárcamo, H. (2005). Hermenéutica y Análisis Cualitativo. Cinta De Moebio. *Revista De Epistemología De Ciencias Sociales*, (23), 204-216.
- Chayanov, A. (1974). The nature and logic of peasant economy. *The journal peasant studies*, 1(2), 186.
- Chayanov, A. (1979). Capítulo II. Economía Campesina. In: *Las concepciones de economía campesina* (pp. 51-94). Lima: DESCO.
- Debenedetti, C. (2016). El ángel de la historia frente al huracán del paraíso. El campesinado y la producción de ausencias en la historia latinoamericana. *Revista de la Red de Intercátedras de Historia de América Latina contemporánea*, 9-23.
- Damián-Reyes, R. (2011). Atiztatzin. El mezcal en la cultura popular en la región de Guerrero; consumo y producción cultural. (Tesis de Maestría). XALAPA: Centro de Investigaciones y Estudios Superiores en Antropología Social. -- Obtenido de <http://ciesas.repositorioinstitucional.mx/jspui/handle/1015/851>.
- Díaz de la Vega Nuñez, D.J. (2020). *¿Una onza de mezcal o una jícara llena? actividades familiares frente a la mercantilización del mezcal artesanal en la localidad de logoche*. Oaxaca de Juárez: Centro de Investigaciones y Estudios Superiores en Antropología Social. -- Obtenido de <http://ciesas.repositorioinstitucional.mx/jspui/handle/1015/1168>.

- DOF (1994). RESOLUCION mediante la cual se otorga la protección prevista a la denominación de origen Mezcal, para ser aplicada a la bebida alcohólica del mismo nombre. *Diario Oficial de la Federación*. -- Obtenido de https://dof.gob.mx/nota_detalle.php?codigo=4768551&fecha=28/11/1994#gsc.tab=0.
- DOF (2000). Resolución por la que se modifica la Declaración General de Protección de la Denominación de Origen Tequila, publicada el 13 de octubre de 1977. *Diario Oficial de la Federación*. -- Obtenido de www.gob.mx/cms/uploads/attachment/file/494487/3.Tequila.26.06.2000.pdf.
- DOF (2001). Resolución por la que se modifica la Declaración General de Protección de la Denominación de Origen Mezcal, publicada el 28 de noviembre de 1994. *Diario Oficial de la Federación*. -- Obtenido de www.dof.gob.mx/nota_detalle.php?codigo=759069&fecha=29/11/2001#gsc.tab=0.
- DOF (2003). Modificación a la Declaración General de Protección de la Denominación de Origen “Mezcal”, publicada el 28 de noviembre de 1994. *Diario Oficial de la Federación*. -- Obtenido de www.gob.mx/cms/uploads/attachment/file/494490/3.Mezcal.03.03.2003.pdf.
- DOF. (2012). Modificación a la Declaración General de Protección de la Denominación de Origen “Mezcal”. *Diario Oficial de la Federación*. -- Obtenido de www.gob.mx/cms/uploads/attachment/file/494491/4.Mezcal.22.11.2012.pdf.
- DOF (2015A). Resolución por la que se modifica la Declaración General de Protección de la Denominación de origen Mezcal. *Diario Oficial de la Federación*. -- Obtenido de www.gob.mx/cms/uploads/attachment/file/695078/5.Mezcal.02.10.2015.pdf.
- DOF (2015B). Resolución por la que se modifica la Declaración General de Protección de la Denominación de Origen Mezcal. *Diario Oficial de la Federación*. -- Obtenido de www.gob.mx/cms/uploads/attachment/file/695080/6.Mezcal.24.12.2015.pdf.
- DOF (2018A). Resolución por la que se modifica la Declaración General de Protección de la Denominación de Origen Mezcal, para incluir los municipios del Estado de Aguascalientes que en la misma se indican. *Diario Oficial de la Federación*. -- Obtenido de www.gob.mx/cms/uploads/attachment/file/358993/Resolucio_n.Aguascalientes.Mezcal_08.08.18.pdf.
- DOF (2018B). Resolución por la que se modifica la Declaración General de Protección de la Denominación de Origen Mezcal, para incluir los municipios del Estado de México que en la misma se indican. *Diario Oficial de la Federación*. -- Obtenido de www.gob.mx/cms/uploads/attachment/file/358995/Resolucio_N.Edomex.Mezcal_08.08.18.pdf.
- DOF (2018C). Resolución por la que se modifica la Declaración General de Protección de la Denominación de Origen Mezcal, para incluir los municipios del Estado de Morelos que en la misma se indican. *Diario Oficial de la Federación*. -- Obtenido de www.gob.mx/cms/uploads/attachment/file/359880/IMPI.Resolucio_n.Morelos.Mezcal_09.08.18.pdf.
- DOF (2018D). Resolución por la que se modifica la Declaración General de Protección de la Denominación de Origen Mezcal, para incluir al municipio del Estado de Puebla que en la misma se indica. *Diario Oficial de la Federación*. -- Obtenido de www.gob.mx/cms/uploads/attachment/file/359881/Resolucio_n.Mezcal.Puebla.09.08.2018.pdf.

- DOF (2020). *Ley federal de protección a la propiedad industrial*. Ciudad de México: Cámara de Diputados del H. Congreso de la Unión.
- DOF (2021). RESOLUCIÓN por la que se modifica la Declaración General de Protección de la Denominación de Origen Mezcal, para incluir los municipios del Estado de Sinaloa que en la misma se indican. *Diario Oficial de la Federación*. -- Obtenido de www.dof.gob.mx/nota_detalle.php?codigo=5632309&fecha=12/10/2021#gsc.tab=0.
- Domínguez-Arista, D.R. (2021). Relaciones de poder en la Denominación de Origen Mezcal (Tesis Doctoral). Chapingo, Estado de México: Universidad Autónoma Chapingo. -- Obtenido de <https://repositorio.chapingo.edu.mx/server/api/core/bitstreams/838a534e-408a-4e76-b797-612e9ca768a7/content>.
- Domínguez-Gaspar, N. (2020). La participación de las mujeres a través de la cocina para la producción de agave y mezcal en albarradas, Oaxaca. *Cuadernos del sur*, 25(49), 107-126.
- Fonseca-Varela, M., & Chalita-Tovar, L.E. (2021). Evaluación financiera de producción de agave y mezcal: caso de estudio Caltepec, Puebla. *Revista Mexicana de Ciencias Agrícolas*, 12(2), 263-273.
- García-Garza, D. (2021). La modernización de la tradición. Algunos apuntes sobre la producción de mezcal. *Estudios Sociales*, 31(57). Doi: 10.24836/es.v31i57.1065.
- Gaytán, M.S. (2018). The perils of protection and the promise of authenticity: Tequila, Mezcal, and the case of NOM 186. *Journal of Rural Studies*, 58, 103-11.
- Gaytán, M.S. (2019). Extending authenticity: Going corporate in a craft market. *Poetics*, 77. Doi: 10.1016/j.poetic.2019.101380.
- Gómez, L. (2011). Un espacio para la investigación documental. *Revista vanguardia psicológica*, 1(2), 226-233.
- González-Seguí, H.O., Hernández-López, J.D., & Hendrik-Giersipen, J. (2020). Metanol: tolerancias y exigencias en las normas para mezcal y bebidas de agave. *RIVAR*, 7(19), 1-21. Doi: 10.35588/rivar.v7i19.4246.
- Hernández-López, J. (2018). El mezcal como patrimonio social: de indicaciones geográficas genéricas a denominaciones de origen regionales. *Em Questão*, 24(2). Doi: 10.19132/1808-5245242.404-433.
- Krantz, L. (1977). El campesino como concepto analítico. *Revista de ciencias sociales*, (6), 87-98.
- Kroeber, A. (1948). *Anthropology*. New York: Harcourt.
- Lira, M.G., Robson, P., & Klooster, D.J. (2022). Commons, global markets, and small-scale family enterprises: the case of mezcal production in Oaxaca, Mexico. *Agriculture and Human Values*, 39(3), 937-952. Doi: 10.1007/s10460-021-10293-z.
- López-Nava, G., Martínez-Flores, J. L., Cavazos-Arroyo, J., and Mayett-Moreno, Y. (2014). La cadena de suministro del mezcal del estado de Zacatecas. Situación actual y perspectivas de desarrollo. *Contaduría y administración*, 59(2), 227-252.
- Mardonez, J.M., & Ursua, N. (2007). *Filosofía de la Ciencias Humanas y Sociales. Materiales para una Fundamentación Científica*. Ciudad de México: Fontamara.
- Martínez-Gutiérrez, G.A., Íñiguez-Covarrubias, G., Ortiz-Hernández, Y.D., López-Cruz, J.Y., and Bautista-Cruz, M.A. (2013). Tiempos de apilado del bagazo del maguey mezcalero y su efecto en las propiedades del compost para sustrato de tomate. *Revista Internacional de Contaminación Ambiental*, 29(3), 209-216.
- Marx, K. (2014). *El capital: crítica de la economía política, tomo I*. México D.F: Fondo de cultura económica.

- NOM-070-SCFI (2016). NOM-070-SCFI-2016, Bebidas alcohólicas-Mezcal-Especificaciones. México. *Diario Oficial de la Federación*. -- Obtenido de https://dof.gob.mx/nota_detalle.php?codigo=5472787&fecha=23/02/2017.
- ONU (2018). *Declaración de las Naciones Unidas sobre los Derechos de los Campesinos y de Otras Personas que Trabajan en las Zonas Rurales*. New York: Asamblea general de las Naciones Unidas.
- Pérez, E., González-Hernández, J.C., Chávez-Parga, M.C., & Cortés-Penagos, C. (2013). Caracterización fermentativa de levaduras productoras de etanol a partir de jugo de Agave Cupreata en la elaboración de mezcal. *Revista Mexicana de Ingeniería Química*, 12(3), 451-461.
- Perez, L. (1993). *Introducción. Lo rural y la ruralidad: Algunas reflexiones teórico-metodológicas. Relaciones estudios de historia y sociedad*, 5-20.
- Plascencia de la Torre, M.F., and Peralta- Gordon, L.M. (2018). Análisis histórico de los mezcales y su situación actual, desde una perspectiva ecomarxista. *Eutopía*, (14), 23-42.
- Redfield, R. (1956). *Peasant society and culture*. Chicago: University of Chicago.
- Sánchez-Soto, A. (2016). Necesidades de información y comportamiento informativo de los agricultores de agave azul de Tequila, Jalisco: un estudio de caso. *Investigación Bibliotecológica*, 30(69), 143-178.
- Sevilla, E., & Pérez, M. (1976). Para una definición sociológica del campesinado. En: *Agricultura y sociedad. Agricultura y sociedad*, 15-39.
- Schaffhauser, P. (2020). *Environnement: Le capitalocène et ses cadences. En Les Germes de la Critique: Une mise en abyme du capitalisme contemporain* (págs. 116-163). Editions L'Harmattan.
- Shanin, T. (1971). *Peasants and peasant societies*. Harmondsworth: Penguin.
- Shanin, T. (1976). *Naturaleza y lógica de la economía campesina*. Anagrama.
- Tetreault, D., McCulligh, C., and Lucio, C. (2021). Distilling agro-extractivism: Agave and tequila production in Mexico. *Journal of Agrarian Change*, 21, 219-241. Doi: 10.1111/joac.12402.
- Valenzuela, A. (2011). A new agenda for blue agave landraces: food, energy, and tequila. *Global Change Biology Bioenergy*, 3, 15-24. Doi: 10.1111/j.1757-1707.2010. 01082.x.
- Vargas-Ponce, O., Zizumbo-Villarreal, D., Martínez-Castillo, J., Coello-Coello, J., and Colunga-GarcíaMarín, P. (2009). Diversity and structure of landraces of agave grown for spirits under traditional agriculture: a comparison with wild populations of *a. angustifolia* (Agavaceae) and commercial plantations of *a. Tequilana*. *American Journal of Botany*, 96(2), 448-457.
- WIPO (1958). Arreglo de Lisboa relativo a la Protección de las Denominaciones de Origen y su Registro Internacional. Lisboa: Organización Mundial de la Propiedad Intelectual (OMPI). -- Obtenido de www.wipo.int/wipolex/es/text/285840.
- Wolf, E. (1971). *Los campesinos*. Barcelona: Editorial Labor. S.A.
- Wolf, E. (1977). *Hacia una tipología del campesinado latinoamericano*. Barcelona: Labor S.A.
- Zamora-Reyna, R. (2021). El mezcal de Villa Sola de Vega, Oaxaca: Proceso de producción, comercialización y economía moral (Tesis de Maestría). San Luis Potosí: El Colegio de San Luis. -- Obtenido de <http://colsan.repositorioinstitucional.mx/jspui/handle/1013/958>.

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