Article

Trust and Food Quality in the Valorisation of Geographical Indication Initiatives

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Abstract: This text delves into the elements on which the notion of quality of a product is built. We believe that, in addition to the standards that regulate a given quality seal, there are other elements that consumers link to the excellence that distinguishes them. In order to deepen these notions, we have chosen two localised agri-food systems (LAS), the first case corresponds to Iberian acorn-ham from Spain and the second to chorizo from Toluca in Mexico. We resorted to a mixed methodology by combining quantitative and qualitative techniques whereby a study of those food systems in two different socio-political contexts was approached. This methodology has allowed us to identify the importance of informal instruments, based not only on institutionalised certification, but on informal mechanisms such as trust and proximity between producers and consumers. The results of this study show how the food quality categories may be guided from various logics depending on the context, categories, and sort of stakeholders involved. Finally, we propose a categorisation of food quality based on the conceptual framework of trust. This categorisation allows the Geographical Indications (GIs) valorisation initiatives to visualise the elements on which they can be guided to work with the different qualities in their LAS.

Keywords: trust; food quality; geographical indications; Iberian ham; chorizo Toluca; localised agri-food systems

1. Introduction

One of the main contributions of this paper is to carry out a theoretical and conceptual analysis—as well as empirical—of the concept of agri-food quality and its relationship with the territory of two localised agri-food systems (LAS) (A LAS “is a concentration of locally networked farms, small firms and institutions, mainly located in rural areas, which are specialised in producing and marketing identity-based food products. It involves spatial concentration of a diffused entrepreneurial and institutional mesh of agricultural farms, agri-food industries, marketing companies, auxiliary industries and service enterprises to farmers and food firms, sectoral institutions and local development agencies, all located in one single territory and presenting a relatively high degree of spatial specialisation of production” [1]. LAS is also related to value chains and non-territorialised actors [2], which influence the dynamics of origin products. In this paper we will not develop a theoretical–conceptual discussion on LAS, we use this term for its conceptual contribution that differentiates our case studies and by its relation to initiatives for the valorisation of GIs. As it is stated by Muchnik, Sanz, and Torres [3], by employing in a theoretical and research framework, the concept of LAS may contribute to improve the analysis of agri-food systems with territorial linkages that seek to understand the organisation and functions of productive, social, cultural, etc. activities that support a particular system). The study of the variable food quality may be guided from various logics depending on
the socio-political context, framework, categories of analyses, and sort of stakeholders involved [4–7]. Moreover, the classification of qualities—linked or not to geographical indications (GIs) initiatives—is not standard, but changes among regions, which adds to its own heterogeneity.

The analysis of agri-food quality in LAS is a complex issue, being the result of the heterogeneity of the relationships between a number of heterogeneous actors [8,9]. While for consumers their desire to buy and their constructed perception of quality predominates, for producers it is the efficiency and the improvement of production costs that prevails [10]. The ability of producers to transfer tangible and intangible information to all consumers is crucial [7].

Transfer is usually restricted to institutionalised codes, leaving aside intangible variables, because this transfer is achieved through standardisation, codification, and external certification of quality [11]. This institutionalised quality is linked to industrial processes, in contrast to domestic quality models, based on face-to-face interactions, trust and traditions [12].

For those reasons, at the moment of studying GIs and its relation to food quality certification we have to take into account paths that are created and recreated in a number of contexts, based not only on institutionalised agri-food quality certification, but on informal mechanisms such as trust and proximity between producers and consumers. Hence, the importance of selecting two case studies that represent this heterogeneity. We analyse agri-food quality from a dual perspective, i.e., theoretically, through a conceptual revision of the term quality by analysing different frameworks, and empirically by analysing social practices in the valorisation GIs initiatives from two LAS, with the aim to propose a model to classify the heterogeneous quality/trust typologies that might occur among the participants of food chains linked to origin products.

1.1. GIs and Agri-Food Quality

The beginning of the protection of GIs during the past century in Europe was a means to safeguard certain local products with territorial links—largely rural [13]. GIs have become one of the most used tools for initiatives to valorise products with a delimited geographical origin [4,14]. The existing variety of certified quality seals are important public policy instruments at the European level, particularly Protected Geographical Indications (PGI) and Protected Denominations of Origin (PDO) [2,15]. However, in other latitudes, valorisation initiatives can be guided by different logic depending on the context, categories, and sort of actors involved [16,17]. For example, in the case of Latin America, some of these valorisation initiatives have led to the figure of the Collective Brand (CB), as a way to adapt a GI into its particular institutional frameworks, different from the European ones [18,19].

What is relevant in the development and implementation of GIs is that the actors involved in any LAS understand and assimilate the messages oriented to valorise a product by a certified brand [20]. Most of this discourse on GIs focus the information of their products on the differentiation of its “territorial quality” [5,21]. This information comes from expert technical committees or from governmental institutions that produce rules and regulations that intend to increase added value [7,22]. They assure some sort of quality in the eyes of consumers, graphically condensing such information in a logo or in the labelling that intends to make it distinguishable amongst the wide variety of marketed products [15,23,24].

This framework of GIs valorisation initiatives accounts for a project to assure food quality via an institutional certification (such as PDO-PGI by means of a formal quality scheme), that often take into account not only quality related to origin, but also other aspects such as organisational processes, hygienic food handling, sustainable modes of production, social responsibility, etc. In this way, quality becomes one more of the discursive keys to understand the bases on which the competitive strategies of territorial companies are built [3], and where the narrative on quality is linked to the construction of personal trust [11], which allows to reduce the purchase risk of a product [25].
Quantifiable quality categories for homogeneous products prevail, creating a world obsessed with measurable quality [12]. An industrial model that solves the uncertainty of the quality system through an external agent, which determines common norms or standards based on evaluations, inspections, and certifications [26]. These represent strategies to reach increasingly globalised and complex market niches. A series of standardised processes that assure that markets will have one “same” sort of product in any part of the world and ensure that the information conveyed by them is true and correct [27–29].

A number of studies demonstrate that the growing range of food products and quality certifications on the market increases consumers’ confusion at the moment of choosing a food product [20,30,31]. Furthermore, the classification of qualities is not standard, it varies among regions across the world, contributing to this confusion [32]. The reason is that, in a way of a public convention analysed herein after [33], each certification puts its graphic identities, different colours, symbols, terms, and images on the products, which make the information difficult to assimilate [34,35].

It should be noted that quality assurance implicit in the messages of some certified GI products, dilutes and loses effectiveness in the eyes of consumers. In contexts where such products are mixed not only with other certified quality, but also with non-certified products [5,34,36–39]. The institutionalised dynamic has to be joined by other practices that tend to implement new formats of agri-food quality. For example, alternative food networks (AFNs), such as community-supported agriculture, participatory assurance systems—understood as those social processes of certification in which the roles of consumer and producer are linked by means of trust that allows them to strengthen their business relationship in a local process of production and consumption——, Slow Food co-producer –conscious consumer who makes decisions with a view to changing the way foods are grown, produced and distributed; this consumer becomes part of the food production process [40], box schemes, direct sale, producers’ stores, etc.; they also allow creating and recreating other routes to assure agri-food quality on the basis of trust and proximity between producers and consumers [41–44].

These sort of relationships and strategies are implemented in the very social processes of consumption to which the initiatives to valorise GIs belong; however, it goes against conventional commercialisation channels, as they follow different logic (particularly on quality) that adapt to the dominant mercantile system [5]. These are valorising initiatives based on disparate logics and non-certified types of qualities, which in certain cases may complement institutionally certified qualities or act independently. In this case quality is internally defined and is guaranteed by the repetition of its history (recursivity in Luhmann’s terms [45]) within its territory, region, or country [46].

We state that in the choice and consumption of GI products, there are other cultural mechanisms that are activated at the moment of choosing food and that refer to social motivations, geographical proximity, heuristic, symbolical and identity values, etc. [8,47–50]. The conventions theory (CT) proposes to take into account these different mechanisms in analysing agri-food quality [51]. CT also establishes that actors are participants in the formulation of conventions via micro actions [11]. This theory contemplates both visions of quality (tangible and intangible), configuring different worlds of action, such as (i) the inspiration world that relates practices that cannot be certified by formal audits. Creativity replaces other types of quality; (ii) the civic world, in line with social benefits and environmental impacts. There is a collective responsibility for well-being; (iii) the domestic world, based on arguments on the importance of traditions, identity, and local origins. It is related to familiarity based on trust and where companies turn to loyalty; (iv) the social or public world, through friendships, respect, and social recognition in relation to branding, trademarks and packaging; (v) the industrial world, with institutional certifications that regulate everyday practices and habitus, based on the principle of efficiency and with objectives that are measurable; and (vi) in the market world, the principle is competitiveness. Products that are recognised by consumers and have been validated by standards that are based on usage, price, and commercial quality [33,51–53].
Some of these conventions assume a series of dynamics far from the attributes used in the standardised quality so-called total quality approach, whose thesis states that food quality is based on the shopping experience and on food security values (market world) [6]. Authors such as Goodman or Ponte point out the suitability of CT for analysing changes in consumer habits and preferences [12,26]. This way, there is a critical consumption in the face of the conditions to produce, distribute and market. Other interpretations of quality come into play to set up the valorisation initiatives of GIs [54]. Reflexive consumption in order to improve the environmental sustainability of practices, the management of agriculture and livestock, the shortest circuits, and the most equitable prices and respect of social rights [55,56]. These conventions also lead us to think of other sorts of consumption, since, currently, consumers are now food citizens and their choices impact politics and food economy [57].

In this context, GI valorisation initiatives are facing a double challenge. The first one is related to the variety of products certified by different standards ensuring a type of agri-food quality that have little to do with a territorial link. The second, the presence of many other forms of non-institutionally certified quality related to local logics that make production, sale, and consumption of certain foods easy. The existence of various forms of logic regarding food quality orient the research questions of this study: What is the perception of producers and consumers of the quality of the products with a strong territorial link? What sort of parameters of agri-food qualities are being applied in the territories which present initiatives to valorise GIs? Are trust relationships one type of certified quality, though they are not institutionalised? Further, a final question, which is central in this study: Is it possible to generate a holistic model of agri-food quality that combines various typologies of qualities related to akin forms of trust?

To answer these questions, we propose a new orientation to conceptualise the relation between agri-food quality and trust in LAS, applying Luhmann’s theory of trust [58]—this theory distinguishes between trust and familiarity; trust in information; trusts that reduces complexity; personal and interpersonal confidence; recursive confidence of selections; and, restricted confidence [58]—to the results of the analysis of the empirical data from our studied cases. This way, trust is a phenomenon present in any LAS in the flows of interactions with their environment and as a consequence, in the communication processes of the involved parties [59,60]. These circumstances are the background which may be resorted to in order to ask how objective structures, the rules, and regulations by means of which quality is institutionalised, produce trust. We may also wonder how in the absence of mediating normative and institutional regulation, trust that comes from commercial structures of proximity remains over time. From this point of view, it is necessary to deepen the knowledge of practices on food choice, including the same social context.

The contribution from this study is to propose a new conceptual approach on the notion of agri-food quality from two valorisation initiatives of agri-food systems in different socio-political contexts: one in Europe, other in Latin America. We might say that one is located in the global North and the other in the global South; one in Spain, the other in Mexico. Here we analyse data from two social scenarios, which would at first glance seem antagonistic at the moment of producing a taxonomic model on food quality and trust. However, as we will demonstrate, not only is the resulting data compatible, but absolutely relevant for the design of the proposed new holistic model.

1.2. Context of Studied Cases

The data of this work are the result of the study of two cases of agri-food products, belonging to two different socio-political contexts representative of different valorisation logics: chorizo made in Toluca (chorizo Valle de Toluca, VT in acronym), Mexico, characterised by territorial valorisation processes started in recent years; and Iberian ham (jamón ibérico) from Spain, a consolidated case of valorisation of PDO.

El VT chorizo is a LAS characterised by dynamics with a very strong linkage to the territory, but as we have already stated, with a valorisation process still in its initial stage.
It is a sausage that enjoys wide fame and prestige both nationally and internationally. There are two kinds: green chorizo and red chorizo, their colours, stemming from their ingredients, give them uniqueness and added value within the market of this LAS. It is produced in the upper basin of the Lerma River, an area that belongs to the central municipalities of the VT. Its process of valorisation began in 2010 with the aim to obtain a GI, this process is still under way. The importance of this case resides in the social processes of proximity that are present in the dynamics of its production and commercialisation. In the absence of an institutional agri-food quality certification, the trust between people and the short circuits become non-institutionalised systems that validate the agri-food quality of this product.

Acorn-fed Iberian ham, on the other hand, is a product possessing an institutionalised quality certification. It is a part of a highly specialised productive sector, linked to a traditional production system in territories of dehesa—the dehesa is an agrosilvopastoral system with trees along a varying density gradient, herbaceous grasses, point crops, and livestock that are connected through relatively sustainable practices and agrolivestock knowledge [61]—characteristic forest in the south of the peninsula. The agricultural and livestock management of the dehesa is a basic pillar of the economy and culture of these regions. This ham owes its name to the native Iberian hog from which it is made and to the agrosilvopastoral systems, where this breed is raised and fed with acorns. The traditional knowledge of the raising of these hogs is protected by four PDOs: Guijuelo (1986), Dehesa de Extremadura (1990), Jabugo (previously Huelva; 1995), and Los Pedroches (2007). The proportion of certified Iberian ham by a PDO is less than 3% [18]. The other 97% correspond to a sector of Iberian ham that it is being sold without this certification, this percentage is distributed between acorn-fed Iberian ham and Iberian ham.

2. Methodology

A mixed methodology was the basis to develop this research, by combining quantitative and qualitative techniques. Two different strategies were employed: a qualitative one to study the aspects related to the production of these products and a quantitative one to examine in greater depth their sphere of consumption.

Different Modes for Data Collection

The strategy followed during the research (Figure 1) were designed on the basis of the proposals of De Leeuw [62], Dillman et al. [63], and Creswell and Clark [64], and enriched with the adaptation in an exploratory sequential design of the flow diagram suggested by Sinley and Albrecht [65].

Qualitative data: the use of primary and secondary documental sources, participatory observations, field work, and semi-scripted interviews were essentials to outline the concept of agri-food quality to be discussed further in the text. The analysis and results presented here are the result of fieldwork corresponding to various projects undertaken from 2009 to 2016. Qualitative data from primary sources was collected during fieldwork through 72 semi-scripted interviews with the various stakeholders involved in each LAS:

Iberian ham: interviews were addressed to stockbreeders, entrepreneurs, consumers, and representatives of the four Iberian ham PDOs, public institutions and technicians.

VT Chorizo: the study was developed by means of a discussion group with seven technicians directly related to rural policies, and by means of interviews to producers, stockbreeders, traders and academicians.

The analysis of this information entailed codification and triangulation work among people engaged in the research, in doing so, MAXQDA 12.3.0 and 18.0.7 software was used (VERBI Software GmbH, Berlin, Germany). The interviews helped in obtaining some categories of analysis for the design of quantitative instruments, validating production zones, and contacting other social agents in an attempt to extend the scope of the study and set its limits.

Quantitative data: The quantitative mode had a common premise for both contexts. On the one hand, it aimed to analyse the strategies for the processing, marketing and sale
of Iberian ham and chorizo. On the other, it sought to study the perception of consumers towards these products as well as their level of knowledge and the strategies they developed in their acquisition and consumption. We designed two web-based surveys to understand consumer perceptions, behaviour, and practices, and how people buy and sell Iberian ham (marketing strategies). In the case of VT chorizo, we produced paper surveys to include both producers and consumers. All multiple-choice questions and categories of analysis were established based on the qualitative information processed. Employing a transformative exploratory sequential instrument design [65], each was tested through pilot projects conducted in Andalusia (Spain) and in Toluca (Mexico).

<table>
<thead>
<tr>
<th>Modes and phases</th>
<th>Procedures</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualitative data collection</td>
<td>- Participation observation. - In-depth interviews (n=72).</td>
<td>- Transcripts. - Interviews and observation notes. - Verified territorial extension.</td>
</tr>
<tr>
<td>Qualitative data analysis</td>
<td>- Text analysis using the software MAXQDA version 18.</td>
<td>- Themes. - Sociopolitical contexts. - Codes. - Analytical categories.</td>
</tr>
<tr>
<td>Instrument development</td>
<td>- Created and adjusted surveys with academic experts. - Four pilot test</td>
<td>- Revised surveys. - Designed strategy to collect data.</td>
</tr>
<tr>
<td>Quantitative survey data collection</td>
<td>- Self-administered Web surveys CAWI and CATI</td>
<td>- Completed data collection.</td>
</tr>
<tr>
<td>Quantitative survey data analysis</td>
<td>- Face-to-face surveys PAPI</td>
<td>- Frequencies. - Comparative demographic analysis. - Mean, s.d.</td>
</tr>
<tr>
<td>Interpretation of results</td>
<td>- Descriptive statistic using SPSS and R.</td>
<td>- Articles. - Consumer analysis. - New methodological strategy for all chain in the agri-food systems.</td>
</tr>
</tbody>
</table>

![Figure 1. Flow chart for the data collection strategy. Compiled from Sinley and Albrecht [65].](image)

Given that the objective was to cross-check the data collected through the surveys in order to perform the comparative research, the questionnaire was designed around five blocks of categories for common analysis, based on all the previous information collected in the qualitative phase (Table 1).

Interviews were employed as a research technique for the quantitative data, as it is the best way to address a complex reality and where various sorts of consumption have to be considered. Four samples were obtained, in the Spanish case \( n = 204 \) entrepreneurs and \( n = 804 \) Iberian ham consumers were interviewed. Whilst in Mexico, this was an exploratory study in which \( n = 55 \) producers and \( n = 450 \) consumers of VT chorizo from the
VT took part. The surveys were carried out between 2015 and 2016 by telephone, mobile phone, webpage, and face-to-face—in Mexico. Quantitative data were gathered by means of CATI (Computer Assisted Telephone Interviewing), CAWI (Computer Assisted Web Interviewing) and PAPI (Paper and Pencil Interviewing).

Table 1. Blocks of analysis categories for producers and consumers in both localised agri-food systems (LAS).

<table>
<thead>
<tr>
<th>Producers</th>
<th>Consumers</th>
</tr>
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<tbody>
<tr>
<td>Iberian Ham and VT chorizo</td>
<td>Iberian Ham and VT chorizo</td>
</tr>
<tr>
<td>Free word association</td>
<td>Free word association</td>
</tr>
<tr>
<td>Look into perception of “agri-food quality” concept, tradition and first word in their mind for ham or chorizo.</td>
<td>Look into perception of “agri-food quality” concept, tradition and first word in their mind for ham or chorizo.</td>
</tr>
<tr>
<td>General information of company/business</td>
<td>Screening question</td>
</tr>
<tr>
<td>Number of workers, annual turnover, products for sale, activities, etc.</td>
<td>Important section for identifying consumers and non-consumers</td>
</tr>
<tr>
<td>Trademarks and certifications</td>
<td>Real purchase strategies</td>
</tr>
<tr>
<td>Existence or absence, colours, symbols.</td>
<td>How the product is really purchased.</td>
</tr>
<tr>
<td>Marketing strategies</td>
<td>Consumption habits</td>
</tr>
<tr>
<td>Clients, channels, frequency, sales methods, new markets.</td>
<td>Consumption methods, ways and habits for each product</td>
</tr>
<tr>
<td>Sociodemographic information</td>
<td>Sociodemographic information</td>
</tr>
<tr>
<td>Age, position in company, level of studies</td>
<td>Age, position, place of origin and residence, level of studies, gender, income.</td>
</tr>
</tbody>
</table>

The results presented herein form part a broader research project. So, in this paper we only use the open questions. This section was designed to ask for information about the food quality and particular information of food products according to the free word association technique [66]. With the aim for participants to mention the first word coming into their mind for relevant variables analysed herein after. We used this technique according to Ares, Giménez and Gámbaro [67], and Guerrero et al. [66], the first word expressed by consumers shows not only their perception, but also the word most positioned in the subconscious of a person related to a food product. We do not use any pre-established categories of analysis. Each word was obtained from participants and was analysed by the coding and triangulation of information among researchers [68].

3. Results. The Theoretical Concept of Quality and Its Reality in Two Food Systems

Agri-food quality is a complex concept which is related to scientific technology, food security, organisational process standardisation, the purchase process, new schemes of consumption, territorial linkage, etc. Production with standardised quality is characterised by its efforts to achieve organisational optimisation, increased profits, and international certifications. In other words, we are talking about models of a quality that can be quantified or verified by external agents. The theoretical discussion surrounding this is crucial and aims to provide answers for complex contemporary agri-food contexts where GI initiatives are involved. In associating it with socio-territorial processes, various studies show that GIs are representations of agri-food quality, as well as territorial quality. The concept of territorial quality was consolidated in mid-20th century with the Paris and Lisbon accords, respectively. At that period of time, that type of quality was already beginning to be elaborated in the LAS through valorisation initiatives of GIs. In tandem with this type of quality, as we demonstrate later in this text, another more standardised notion of quality is developed, not associated with territoriality. In this manner, we explore not only the origins of the concept of food quality or the theoretical approaches that have contemplated it, but we also employ an empirical study about the praxis of this concept in two LAS.
The food quality—measurable—began to be analysed in Japan and the United States (US) after World War II [69]. These initial approaches (for example, the 5S methodology proposed by Shigeo Shingo [70]) mainly focused on improving organisational management, cost efficiency, maximising production, ensuring innocuousness, and homogenising and standardising production processes [71]. In these initial steps the accumulation of capital in the firms was overvalued, particularly by making resources more efficient and creating an image of confidence in the eyes of the consumers [72]. Gradually, research and control-certification standards started increasing after the creation of international instruments that allowed continuous and objective quality assessment—and headed towards food security—intending to guarantee the entire process of production and distribution of agri-food products [73]. This quality process was also experienced by the two LAS studied here, as some data from our research display:

“... over the 1980s and 1990s these changes took place. Generally due to an institutional regulation ... all the hams, even the organic ones, are cured in the artificial dryer. This is neither bad nor negative, it’s a legal obligation, and for the consumer it means a product in optimal conditions for consumption” (stockbreeder/Iberian ham entrepreneur from Andalusia, 2015).

“... in the past, the hogs were slaughtered at home, but when it became more sellable, more profitable, that was when the secretariat of health intervened in the slaughterhouses” (producer of VT chorizo from Mexicaltzingo, 2016).

Over the years and with the inclusion of food products in these processes, disciplines such as engineering and food technology worked—and still do—to improve the processes of quality assessment regarding food. This was to such an extent that many local and transnational firms have their own quality control departments as our case studies clearly reflect.

“... some entrepreneurs even have their own laboratories to grade their quality. This makes us think that if they consider that a product can yield better quality patterns, could they grade them that way?” (Entrepreneur from Castilla y León, 2015.)

“... in the existing industries you see the amount of stainless steel and cleanliness..., it looks more like a nuclear plant than a traditional agro-industry... you go into places that are white rooms for filleting and slicing and it seems as if you enter a surgery room, you have to wear a mask and be covered up to not to touch the product and these are things stem from different regulations” (Institutional representative from Castilla y León, 2015).

Ever since agri-food quality became an important issue in political, economic, and social spheres, various authors have dealt with the analysis of this term, relating it to a number of fields of knowledge according to production processes [70], registration of industrial activities [71], reduction of consumption risks [6], extended consumer services [52], the extrinsic and intrinsic values of the products [74]—intrinsic values refer to properties such as nutrients, pH, water in the product, etc., which are part of the colour, odour and flavour, whereas extrinsic refer to the physical aspects such as label, price, shape, etc. [74]—, experience of consumption [54], image of the firms [75,76], and, as regards the present work, to the initiative to valorise origin products through GIs [16,77,78]. Although, as previously stated, agri-food quality is a very broad concept that moves between that which is measurable and that which is symbolic [7,71]. Two apparently opposing notions that intertwine, complement each other and link together both in the producers’ strategies to market an agri-food product and in the consumers’ practices to acquire it.

The first of these two notions points out that agri-food quality is measurable when the product is standardised, and its characteristics can be verified. These objective parameters contribute to consumer trust, precisely by means of the creation and establishment of standards that allow unifying and reproducing the same sort of quality. This measurable quality is mainly represented by international certification standards—such as ISO
certifications—which facilitate the management of entrepreneurial organisational models and the assessment of the final product [6]. As it is expressed by some of the participants:

“They are only here two days and they open all the drawers . . . and you’re behind them filling out forms. About everything, a lot of forms, we must have one person only in quality control and now with the Regulation [of the Ibérico] well . . . go figure!” (Iberian ham entrepreneur from Extremadura, 2012).

“. . . certification such as ISO, IFS or IBRS [three examples of international food certifications] we don’t have right now, our client does not ask for it, that is used by very large corporations, which have to certify processes to convey confidence” (stockbreeder/Iberian ham entrepreneur from Andalusia, 2015).

“We still keep on working as usual, the good old natural product, TIF quality meat [Mexican certification based on international standards], premium chilaca [a variety of dried chili from Mexico used to make sauces involved in the production of sausages], natural spices. I have them ground. We use spices, but they are natural” (producer of VT chorizo, 2016).

The expansion of the model of measurable agri-food quality is particularly based on food technology and marketing. Its analyses, among many other things, tried to understand consumers’ preferences, improve the final presentations of the products, and extend the service life of the products, according to the total quality analysis model [6,37]. This measurable control strategy permeated all the levels of each LAS, from production to marketing, as expressed in the following testimonies:

“Once they are monitoring everything, they make sure that, once the hog is slaughtered, they weigh the carcass, weigh the dead hog with the head, and it has to weigh more than 110 kg. Every hog that weighs less than 110 kg is disqualified [from PDO]” (breeder of Iberian hog from Extremadura, 2012).

“. . . yeah, I make a good quality one, 80% meat, 20% fat, but we do sell it for over 70 pesos [per kilo]” (producer of chorizo from Mexicaltzingo, 2016).

This same first notion of quality can also be linked to the creation and development of corporate identities present in the aesthetic aspects of the products, which together with quality certifications, try to offer a comprehensive description of the food product in the globalised market by means of labelling and formal certifications. Through marketing strategies, they position their own image as a quality symbol and intend to transmit confidence to the consumers. This trend of positioning large corporations in the main markets means that local consumption trends are left out. Thus, they have other resources to carry out such marketing campaigns, as reflected in the following excerpt from an interview:

“...look at [Iberian ham brand], which runs a TV ad and I know its Iberian ham is three times cheaper and all the hams are the same. Ours are not the same, but when you try the good stuff, you won’t forget that Iberian ham ever in your life” (Secretary of an Iberian ham PDO, Spain, 2015).

Therefore, corporate identities are a very relevant segment of the confidence transmitted by a brand and presently, they are considered one of the bases for the consumer’s recognition of agri-food quality (Figure 2). In the case of Iberian ham, the primary brand that consumers remember (Navidul, represented with a larger font size) is the most mentioned by consumers when they are asked to name the first jamón brand that comes to their mind. Even if it is true that they remember other brands from the Iberian sector such as 5 Jotas or Joselito, those dominantly positioned are the ones that have powerful marketing strategies supported by their corporate identities. In the case of VT chorizo in Mexico, fewer than 4% of the producers have a corporate identity [18] and the term home-made (casero) is the one that appears most frequently. Even so, words such as Capistrano, Fud, San Rafael, and Alpino are also mentioned; all of them being chorizo brands outside these territorial dynamics.
...if you go to the market, what you find are products disguised as Iberian with very poor quality, very low and I compete with that with quality, which can be differentiated from what I found in the market” (Iberian ham entrepreneur from Andalucia, 2010).

Therefore, contrary to such marketing campaigns, data from this study demonstrates that the quality of a food product is a polyhedric concept that cannot be defined solely from the attributes conferred in purchase-sale \[18,80\]. When the respondents, both entrepreneurs and consumers of Iberian ham and producers and consumers of VT chorizo, were asked the question: “in one word, define, what is quality in a food product for you?” their answers reflect this broad conception of the term quality. The graphics in Figure 3 express each one of these responses.

The responses concerning what they understand by food quality are very diverse. We can categorise their answers into the following groups of responses: (i) objective variables or characteristics such as raw material, ingredients, colour, cleanliness, freshness, and presentation; (ii) subjective variables such as taste, best product, tasty, and good; (iii) safety and health variables such as healthy, harmless, safety, peace of mind, hygienic, natural, trustworthy, elaboration, and/or process; and (iv) price and expensive variable. In that way, consumers of both LAS agree that quality in food maintains a relation with flavour, though it is revealing that the health factor appears as a very important link. Other reasons mentioned in favour of quality by consumers, according to their frequency were fundamental, tasty, good, clean, hygienic and confidence. It is very interesting to note that producers of VT chorizo and Iberian ham expressed different notions of quality than the consumers. For the Mexican case, the most frequent are the concept of good raw material,
taste, and hygiene. While in the Spanish case, the most frequent was to consider quality as something fundamental (primordial), taste, safety, satisfaction, and healthy. Clearly, the concept of quality in a food product positioned in the subconscious the wide range of perceiving agri-food quality for each actor, which is displayed visually in Figure 3.

Figure 3. Cont.
Figure 3. Notions of the quality in food from producer and consumer of both LAS. (a) Producers of VT chorizo, (b) Consumers of VT chorizo, (c) Producers of Iberian ham, (d) Consumers of Iberian ham.

What these results point out is that taste and aspects linked to cleanliness and hygiene are recurrent among the four types of actors in the two AS. Even if hygiene may be controlled and standardised, the flavour factor, on the contrary, is not, as each individual has a particular perception according to their own social construction [81]. Moreover, among the answers given, other terms appear and enhance the number of ideas regarding food quality (tranquillity, security, natural, satisfaction, excellence, etc.) that directly link it...
to the meanings of contemporary food-consumer relationships, with reflections on what we eat and what we demand from food we take home. In addition to prices, for both LAS, variables such as freshness, colour, brand, and appearance are important to identify a quality food product. Here, two very frequent values appear in the conversations with VT chorizo producers: price and colour. These actors have to adapt their strategies to keep the price within the market, whilst colour becomes a priority marketing tactic aimed at consumers. The eye-catching tonalities of red and green are effective incentives for people to decide to buy the product (Let us bear in mind that we speak of a culture in which colour and particularly vivid tones are widely shared popular tendencies. By extension, a food or a beverage with a meaningful colour, it is synonym of desirable, good, and pleasant). While price could be thought of as a significant variable, it is only mentioned by consumers in a low percentage.

In other sense distant from a notion of quality, when we asked people about how they identify a quality food product. In the case of consumers of VT chorizo, they interpret that taste and price are relevant elements to identify a quality food product. Some actors did not want to answer or did not know what to say because, as we settled before, we are before a system whose quality strategies to consume this product comes from social practices like recommendations, guided by number of clients in a place, consolidated relationships of trust with the same producer or catching the attention of customers by the way the product is placed on sale—thanks to the play of colours.

In the case of Iberian ham, beyond the relevance of taste as a narrow concept, we found that trying the product, price, brand, appearance, and label are the main reasons why a food is identified as a quality product in Spain. It is worth mentioning that the PDO and the origin are among the barely significant factors respondents explain the way in which they can identify the quality of the product (Figure 4); replies that do not come from only asking for one word that defines quality for them.

These previous concepts are framed within the second notion of quality, the symbolic one, which cannot be measured solely by quantitative parameters. Symbolic quality is related to socio-territorial processes that link the product to the territory, culture, society, and the environment, as is the case with the two GI products analysed here [4,82]. Results demonstrate that for consumers of both LAS, locality, identity, and environmental sustainability or farming management are important. We are thus faced with new scenarios inherent to incipient social practices and forms of trust/reciprocity that determine the quality of agri-food products [8,26,83], as these data express:

“... very well because there is a relationship of trust. This has helped me and at times, when he [a pork supplier] has had a crisis or need for cash flow, I can pay for the piglets in advance because I know there will be no problems, and when I don't have money, because I have also been broke, then he doesn't charge me. It is a win–win situation” (Hog breeder and chorizo producer from Toluca, 2016).

“Jabugo has never needed an introduction. When one went to buy a Jabugo [ham] one knew what one was buying. It did not include courses, nor 7K quality, nor protected food product, neither 14 layers in black and red mixed with yellow ones. Nothing. You bought a Jabugo, and that is my inspiration. And they did it well, my grandparents did it well. And there were no 17 marketing technicians, there wasn’t even marketing, large brands, there used to be hard work and a good product” (Institutional representative from Andalusia, 2015).

We are talking about a quality related to cultural practices and habits, as well as components related to marketing and contemporary commensality such as sensations about the terroir, hedonism, taste, pleasure, environment, ethics, and definitively, a relevant number of variables about perceptions that are far from being quantified [12,47,84–86]. Street markets, traditional tianguis—which is from Nahuatl tuangustli that refers to the traditional marketplace that has existed in Mesoamerica from pre-Columbian times and which has evolved over centuries; itinerant marketplaces periodically take place on the
same day each week—, food fairs, direct purchase, and bartering are some of the mechanisms activated by trading and consuming these sorts of products [41,87,88]. Dynamics that can be considered as political, social, ethical, educational and leisure events [56].

All this allows us to confirm that quality in initiatives to valorise GI products moves away from abstract conceptualisation and is deemed as a complex social construction, based on a variety of characteristics that links the trust with the agri-food product. Each agent possesses, or not, sufficient information to presuppose the risks entailed in a consumption process, not only in the economic and temporary factors, but also in the distrust—mistrust is not only the opposite of trust, but an equivalent present at all times for trust to produce

Figure 4. Ways to identify a quality food. (a) Consumers of VT chorizo, (b) Consumers of Iberian ham.
and reproduce [58]—that may be transmitted in such process through an agri-food product [89]. This according to Krom and Mol [25], constitutes the basis for the formation of another sort of relationship between quality, trust and GI products that helps, among other issues, to reduce the risk that exists when buying a GI product. As stated by Agostino and Trivieri [15], GI certified labels enable the transmission of confidence by means of their quality credentials attributed to the link between the producer and the territory. We are, thus, pointing out that the certification of quality carried out by protected GIs adds an important degree of trust for the consumer, while outlining other perspectives on agri-food quality [25].

“The price by PDO has a direct impact on the final price of the product. Consumers are paying to have such trust certified, this way they place trust in an entire certification and control system that ensures a better-quality product for them” (Iberian ham entrepreneur from Extremadura, 2012).

This way, for instance, not knowing whether the other party may abuse this trust and in order to decrease this potential risk, purchasers often resort to the existing institutions—PDO, regulations, or laws—or else rely on experience and familiarity [59], which are aspects of a common and shared context of the actors involved in a LAS. Therefore, if the analysis of food quality is truly to be addressed, the study of trust and its types as an element closely linked to quality is unavoidable.

4. Discussion: Trust and Agri-Food Quality

Agri-food quality and trust are an indissoluble tandem, so their relationship is inseparable in any LAS, and obviously, the analysis of one entails the study of the other. As Ponte [26] point out, the link and diachronic relationship between quality, trust, and reputation will depend on the interaction and actions of the main actors involved in food processes. In this transversal relation, a concise dynamic is carried out in the management of trust by the social actors involved in the LAS, mainly between producers and consumers. There is always a desire among producers to achieve consumer confidence. The producers interpret and convey, through physical or symbolic characteristics of the product, the wishes of the consumers. The goal of the communication campaign by the producer is to build awareness, gain credibility, and produce a favourable perception regarding the quality and specificity of the GI product in order to stimulate the consumers’ interest in it. For their part, consumers put their trust in the producers to the extent in which producers have managed to correctly communicate with them, through a message in line with the perception of consumers regarding food trust.

In the field work we validate that the way trust allows recursive communication to be maintained over time among the actors involved is the key to enhance the business relationship, always thanks to positive past experiences [11,58]. Obviously, as we previously pointed out, together with quality and trust, other social mechanisms come into play in the choice and selection of GI products. Due to this, even if trust is a determining element when talking about the relationship between a LAS and the perception of its quality/trust, it is also fundamental to highlight, as well, economic, political, academic, regulatory factors, among others. Faced with this reality, as we previously stated—moving towards new horizons of reflection on CT—under Luhmann’s [58,60] conceptual framework of trust, we can approach the agri-food analysis from a holistic and inclusive perspective that enables explaining phenomena beyond agri-food and that are directly related to quality both in the global North and the global South; that is to say, establishing a framework of analysis applicable to the two LAS that constitute our empirical references. This proposal allows both modalities of quality (institutional and non-institutional) to be analysed, from the strategies currently in use by producers and consumers in order, among other things, to decrease the risks of generating possible distrust.

It is important to highlight that during our fieldwork, in both LAS territories, we found that social practices on agri-food quality simultaneously articulated the industrial and domestic variables [4,12,25], the global market and short circuits [6,88], the civic and
the public [11,90], food citizenship, and the hedonism of consumption [73,91]. Therefore, these variables, antagonistic on a theoretical level, require in praxis a common analysis based on the principle of trust. This theoretical model, together with Luhmann’s theory of trust [58], makes it possible to categorise agri-food qualities and move towards models that converge in a holistic rather than antagonistic analysis, given the complexity of the LAS. A territorial approach to agri-food systems that allows us to avoid a dichotomous perspective [5].

In his theory of trust, as Luhmann discusses [58], there are different types of trust that are present in all relationships between human beings. This trust is always associated with distrust as a social sanction. This theory leads us to verify the statement made by Ponte [26] and Torre and Rallet [8], which affirms that within the dynamics of agri-food or territorial quality there are forms of trust in proximity or domestic systems. Moreover, the field data analysed here also demonstrate how these relationships of trust are present in the so-called industrial worlds and even in the most globalised relationships. This last kind of trust not only is transmitted towards an external agent that guarantees a certain product; but also, the reputation of national and transnational companies becomes a symbol of quality and trust for recurrent consumers of a recognised brand. In other words, trust can be present both in proximity contexts and in those governed by the logic of the globalised market, such as industrial models.

In the LAS studied here, we also observe both dynamics that seem antagonistic to each other. These dynamics allow local actors to find different ways—unidirectional or combined—to achieve a higher trust in the eyes of consumers, and in this way to ensure the market acceptance of their product in such a competitive context. We are affirming that producers not only employ a quality strategy, but also combine the necessary resources to achieve better trust in their products. From this complex logic, we have constructed and proposed a model that links these observed dynamics with Luhmann’s theory of trust. We propose six categories built from Luhmann’s theory mentioned above, which together with the field data and the in situ observation of both LAS, allow us to propose a holistic model. This model is elaborated under the main principles of trust theory [58], and the qualities observed during our fieldwork in both LAS.

This proposal allows us to establish a categorisation for agri-food quality by means of the following taxonomy: (i) business quality, related to information—corporate identity, branding—present in the products and that is source of interpretation by consumers; (ii) standardised quality, trust is placed on external agents to regulate, control, and certify a process that decreases risk; (iii) exclusive quality, as it allows the exclusive use of a message for the consumer, linked to an agri-food product by its geographic origin, production process, equitable relationships, etc.; (iv) experiential quality, related to relationships established among stakeholders and, besides, to the repetitive consumption of the product; (v) interpersonal quality, from organoleptic sensations and individual preferences, but which can be recommended or shared with other people; and (vi) contextual quality, linked to belonging to a social group, territory, culture, or specific space-time. This link of each typology with their corresponding confidence pattern in LAS may be represented graphically as in Figure 5.

By means of this taxonomy, where different types of quality and trust are linked, we are able to verify that, among other issues, there are standards that institutionally regulate quality. Such standardised quality corresponds to a sort of trust we call “complexity reducer” insofar as it guarantees standardised quality to the consumer. Relatively close to this sort of standardised quality, since they resort to a sort of regulation, are exclusive quality and business quality, which correspond to restrictive trust and trust in information—i.e., PDO, organic labels, corporative identities, fair trade, etc. In parallel, other types of quality/trust that depend on direct relationships or familiarity take place; they are implemented outside of any documentary mediation or bureaucratic processes among the parties. The reason is that, at the local level, processes and interactions occur directly among actors [83], in the form of short marketing channels, as it is the case we studied in Latin America. We
refer to experiential quality, interpersonal quality, and contextual quality, which correspond to a sort of trust based on personal or family relationships. What we point out, beyond the fact that they may seem like ideal models on quality/trust, applicable to LAS both in Latin America and in Europe, is that in social practices and in business processes, any of these typologies can take place simultaneously, even if one of them prevails owing to the sociological characteristics of each context. This way, empirical data show that in the LAS of VT chorizo, the qualities/trust that prevail are linked to practices generated in short marketing channels. Familiarity, direct agreements among producers and consumers, acquaintance between the LAS agents are the basis to generate trust and personal confidence. On the contrary, in the LAS of Iberian ham, the quality standardised by rules and regulations prevails; taking into account the quality accomplished by means of the flavours and sensations experienced by individuals as consumers. This individual sensory experience may become a collective quality recommendation—interpersonal quality. The data presented so far corroborate that understanding the complex and dynamic quality processes within the two LAS analysed here, it is necessary to consider the existing typologies of quality, and from them, categorising quality always linked to trust.

![Figure 5. Proposal to conceptualise agri-food quality.](image-url)

The results of this work in the two LAS we studied reflect the concurrence of the flavour factor as a quality criterion both in consumers of Iberian ham in Spain and those of VT chorizo. However, it is revealing that the healthy variable appears as an important criterion. Further linked to this, are reasons for what they consider quality is tasty, good, clean, hygienic, and trust. Trust is always the variable inherent to quality or qualities, the various sorts of quality, thereby, trust. From this standpoint, trust is the base material to establish a taxonomy, which always configures from the sort of link between quality/trust. On one end, we place standardised quality, which corresponds to a trust we call complexity reducer and that ensures standardised quality for the consumer. On the other, different
sorts of food quality/trust, which depend on personal relationships among LAS actors without the mediation of labels or certificates.

5. Conclusions

The food quality seals that appeared since the beginning of 20th century in Europe in order to protect, among other things, GIs from copies and substitutes, basically provided a guarantee of the quality of products with PDO. At all times, quality has been one of the main variables in the context of certified products, mostly if we consider that over time markets not only have become complex and global in a unified way, but also the voracious commercial competition and marketing strategies deem quality as the basic mechanism to position into their market niches. The international social science literature has produced many relevant contributions in the last decades to multivariate and multi-attribute research on food quality, focusing on both supply and demand perspectives. However, it remains today a major interest for research on this topic, which has great temporal, spatial and sectoral variability. The analysis of food quality was not systematised until after World War II, barely eighty years ago. However, at present there are new technological resources, among others, specifically applied to quality analysis and/or able to ensure homogeneous food quality standards supported by regulations of varied nature. Now, as we have demonstrated here, these largely quantitative factors only explain one of the facets of quality, measurable by means of ponderable factors. However, the quality of a food product goes much farther, as the possible manners to certify it, hence we call attention to the other factors that must be taken into consideration, which come from diverse sociologic contexts and market relations, whose main exponent is the notion of trust and closeness among the actors in LAS. The informants’ mental categories of food quality, whether producers or consumers, are not very different in that they are linked to basic objective elements (raw material, colour, and presentation), to others of a subjective nature (taste, and good) which are linked to aspects of socialisation and food practices particular to specific territories; and finally to variables which we can call universal in terms of health (harmless, and hygienic).

Therefore, obtaining a holistic model on the food quality of origin products is the most important contribution of this work. This way, as we have shown in this study, interpersonal confidence, but also other typologies of trust, each one according to the quality model for a certain food process, always accompanies, in an inherent way, the quality of each product in the LAS. Our proposal is that the initiatives to valorise GI products must consider the concept of agri-food quality in its broad expression, to take into account that consumers do not only visualise price when selecting and choosing a product, but characteristics associated with environmental sustainability, animal welfare, or other parameters related to the quality of life of the actors involved in each LAS. Based on this evidence we can state that in order to understand the complex and dynamic of quality processes—either with certified quality seals or where quality is guaranteed on the basis of close relationships—it is necessary to consider multiple factors. Some will be quantitatively measurable, others are regulated by intangible values regarding health and well-being in today’s postmodern societies, and are similarly relevant to analyse and define quality, as well to add value in agri-food production.

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