

THE PLURAL BASES OF TRUSTING ORGANIC FOOD: FROM CERTIFICATION TO THE “CATERPILLAR TEST”¹

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Introduction

The concept of trust in relation to foodstuff became more prominent within the social, political and media spheres in the 1990s, in the wake of a number of food scandals, some of which have had serious repercussions right up to the current decade, and others which have emerged since then.

These scandals - BSE, foot-and-mouth disease, bird flu, and the recent horse meat scandal in Europe – have been the visible face of more latent processes which have gradually come into heightened focus since the post-war period: the intensification of food farming; the concentration of power in the hands of large retail companies and the ensuing price-squeeze of small farmers; new space-time dynamics which overrides the natural limits of seasonality and freshness; the growing separation between production and consumption, both within the cartographic and cognitive spaces (EDEN et al, 2008); and other social transformations relating to the way we eat and experience food (MURCOTT et al, 2013).

These changes have resulted in the separation between producing more (quantity) and producing better (quality). The notion of producing better has been changing and becoming more complex as the various hidden factors within the food production system have come to light, alerting us to serious problems (e.g. pesticides; environmental impacts; labor exploitation; injustice and social exclusion).

As these visible signs emerge, they become part of the discourse of social movements (for example, fair trade, agro-ecology, local and organic farming), and in this way, they advance progressive conceptions for improving food on a planet where resources are finite and the population is growing at an ever-increasing pace. In addition to interventions by voluntary organizations the agri-food system was furnished with a

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complex network of regulations so as to control these changes. However, this hygienic-bureaucratic machine was expressed by multi-scale rules and regulations, resulting in a lack of integration between its many levels. (MARSDEN *et al*, 2010). For example, in some countries control of products in the food chain is compulsory, despite the fact that it is difficult to adhere to regulations pertaining to the different systems and in force at different spatial levels across the globe (KJAERNES *et al*, 2007). Similarly, we must point to gaps due to conflicts of interest at a national level (see the Brazilian case in ALLAIN e GUIVANT, 2010). Thus, new state or supra-state institutions emerged or were reconfigured in order to improve the control of food products.

However, it has not only been the State and non-governmental organizations which have moved in the direction of solving the conspicuous problems within the food system. Nowadays, the private sector (namely, large retail companies) demands that a whole gamut of rules and regulations (quality standards) are complied with by suppliers in order to maintain their contracts. Private quality standards (such as GLOBALGAP – a mechanism employed by a consortium made up of the large global retailers concerning good agricultural practices), often far more demanding than minimum national or supranational standards (such as UNECE - United Nations Economic Commission for Europe – which has been developing worldwide quality standards for agricultural products since 1962), are employed by the supermarkets to ensure consumer health and food safety.

In short, the market (food suppliers), the State (food regulators) and citizens (food consumers whether organized in social movements or not) make up a triad in which the relations necessary to ensure trust in the food system are established and channeled (KJAERNES *et al*, 2007).

The aim of this article is to analyze how the multiple forms of trust in relation to foodstuff is built by a group of consumers of organic produce. There are two main arguments in this article. First, through a review of the social studies on trust, we have critically reflected on their limitations, arguing that these studies are too focused on humanist perspectives. There is a need for integrating insights that go beyond humanism (we highlight the social studies of science by Bruno Latour and Michel Callon). Second, after delineating our qualitative research, we seek to illustrate the various bases people use for trusting organics, moving well beyond the triad of trust relations described in KJAERNES *et al* (2007). Beyond certification processes and interpersonal relations with products, it is observed how aesthetic, sensorial and metabolic characteristics become significant in the day-to-day relationship people establish with organic foods. The reformulation of the concept of trust is explored in more depth in order to arrive at a less ‘humanist’ and exclusively social explanation of trust in which the agency of animals plays an important role. The presence or traces left by caterpillars, worms, larvae and other bugs falls within what some authors call ‘ethological turn’ within social theory (LORIMER, 2008). This ‘turn’ is inspired by the theory of relational ontology of Deleuze and Guattari (1987) which describes itself as being “open to the ‘affects’ of different organisms” (LORIMER, 2008, p.379). In other words, this proposal takes into account “the potential intersections and

incommensurabilities between human and non-human affects and the constraints these place on behavior and ecology” (LORIMER, 2008, p. 379).

The absence of non-human animals and nature: humanist perspectives on food trust

There is a wide range of studies on trust which encompass many disciplines. However, it is possible to delineate the main conceptual tenets on the notion of trust. According to KJAERNES *et al* (2007), trust in foodstuff is understood as an emerging characteristic of the institutional fabric which brings together three significant and related processes: food retailers (market), consumers and the State. It is within the relationship between these three entities that the notion of trust is structured and negotiated. Thus, trust is both social and relational.

The authors argue that trust is rooted in institutional set-ups which go beyond the predominant perspectives which place too much emphasis on the cognitive and individualist positions. Within this conception, trust is understood as the result of cognitive processes associated with risk assessment, or more specifically, with the perception that there are failings in food safety.

Therefore, it is argued that the more information individuals have about transparency, regulation and food governance processes, the more they will trust the food they consume. In this perspective, the credibility of information sources is essential and any episodes of distrust are due to communication failures in relation to risks. Whenever individuals make risky choices it is because they either have been badly informed or have no knowledge on the subject. This approach places too much emphasis on information deficit, that is, specialized knowledge is more legitimate and predominates over other kinds of knowledge (for example, local, lay, tacit, experiential) (GUIVANT, 1998).

This line of study ends up overemphasizing the rational and cognitive attributes of individuals, despite some progress has been made to include social and cultural contexts to address shortcomings in the interpretation and theorization of trust. Furthermore, this approach is based on the premise that supplying information is a means of overcoming potential lack of trust. However, providing information to increase trust is problematic, because it is not always the case that furnishing information to the public about a particular risk translates into an increase in the credibility of the system. An example is the dissemination of information and risks of transgenic products, which instead of abating fears, resulted in alarming consumers to the extent that there is an enormous resistance to the commercialization of these products in Europe.

Another problematic aspect of the centrality of information as a solution for re-establishing trust in food is that it is based on the premise that *better and more information leads to better food choices*. This reduces the consumer to a rational individual able to act with total freedom of choice, a notion that is closely linked to an informed neo-liberal interpretation of consumption. However, consumer choice is far from being something conducted with total freedom; it is often limited by factors such as income,

social standards, food supply systems and social networks. This type of rhetoric, based on the ideology of consumer freedom of choice, only serves the interests of entities such as the State or large retailers and agri-food systems, who often have much greater power to significantly change the system structurally. However, they often transfer responsibility for structural change to individual consumers, appealing to a rhetoric of consumer freedom and the public's ability to choose.

Another view of trust and distrust processes in contemporary societies is linked to the concept of 'risk society' and the growing process of individualization, as proposed by Beck (1992).

As we move towards a society where modern risks abound and are diffused on a global scale, it becomes practically impossible to predict the emergence of these risks, making it very difficult to implement controls. According to this perspective, distrust and insecurity are important features of risk societies.

Once again, the focus is on the individual and cognitive nature of the concept of trust. A more critical view of this approach is offered by Kjaernes *et al* (2007). They argue that an increase in trust in food may not only lead to a reduction in feelings of insecurity or a drop in the potential failings of the system, but can also be a way of improving food quality and making the agri-food system more socially just. Trust in food goes beyond the restrictive notion of health safety, encompassing a whole series of issues which are associated with food, such as taste, health, environment, price and social justice. Thus, it is feasible to seek different trajectories which are not necessarily linked to continuous processes of distrust and insecurity. It is possible to think about the potential for rapid institutional changes after situations of crisis in the food chain in order to solve the problem, improve quality or balance asymmetrical relations. Examples of these relations may be the supply contracts supermarkets and large retailers establish with small producers, in which the former nearly always have the upper hand in relation to the terms negotiated. These institutional reconfigurations can result in the re-establishment of trust relations between consumers, the State and the market.

A third approach in relation to trust is advanced by Misztal (1995). She argues that trust is linked to ethical values, social cohesion and a sense of cultural community. The rules and regulations that guide social actions generate stability, order and trust in relation to the predictability of other people's behavior. These individuals behave in an expected way and it is this expectation that transmits trust. By contrast, disorder is associated with chaos and distrust. According to a functionalist position, trust is crucial for maintaining social order.

Within a more cultural and normative perspective, trust is conceptualized within the norms, values and routines that are maintained through time. It is, therefore, an important condition in order to acquire, appreciate and appropriate food products on a daily basis. Shopping in a supermarket is equivalent to a process of buying 'the usual brand'. The habitual and routine nature of food practices reinforces our irreflexive trust. This is one of the ways consumers deal with the complexity of the agri-food system. It is only when something unexpected happens that people start critically reflecting on events, so as to discover the reasons behind this deviation from normality.

It is when normality is broken that Bildtgaard's (2008) concept of reflexive trust is useful. Reflexive trust emerges whenever there is a critical situation which disturbs the usual way in which things happen, leading to a break or instability in the system, or when the consumer is confronted with new ways of doing or knowing things which cast doubt on issues they were previously certain about.

Thus, trust is not something to be taken for granted, it must be actively negotiated and demonstrated. For example, after a crisis in (food) safety, the different intervening actors mobilize to make their operations credible in the eyes of consumers.

Another way of looking at trust, in accordance to institutionalist theories, is considering it as being interlinked with political or institutional performance. Thus, trust emerges when responsibilities delegated to institutional agencies are complied with and thus food products are kept within the criteria standards expected by citizens. Certification and health inspections can appease consumers in relation to the credibility of food products, reinforcing mechanisms of institutional trust (or systemic trust) (POPPE and KJAERNES, 2003; LUHMAN, 1979). In contemporary societies, where there is a preponderance of risks and uncertainties, individuals have to delegate responsibility for ensuring food quality and safety to abstract systems (GIDDENS, 1990). Examples are science, regulatory authorities, food certification and inspection agencies, and labeling.

Sassatelli and Scott (2001) distinguish two types of trust: trust which is grounded on institutions (disembedded trust) and trust based on interpersonal relations and local knowledge (embedded trust). In relation to disembedded trust, formal organizations are, par excellence, mechanisms for establishing trust in food.

Organizational efforts to make the agri-food system more transparent (e.g. inspection, labeling and certification) are some of the mechanisms that governance systems employ to maintain the trust of consumers in relation to food products. In embedded trust, it is argued that the close relations between producers and consumers reduce the complexity and uncertainty of the food system and thus, increase trust and transparency in production processes. The innovative case of participative certification in Brazil illustrates this point: consumers, producers and members of NGOs, as well as informal networks interested in agro-ecology actively participate in producing and monitoring standards for organic production, thus increasing credibility and trust in the system (see the case of Rede Ecovida or Coolmeia in Portillo and Castañeda, 2011).

Similarly to Sassatelli and Scott (2001), Kjaernes *et al* (2007, p. 39) adopt a more simplified formula of this concept and rely on two important aspects: familiarity, which relates to interpersonal relations (that is, 'embedded' trust) and confidence, which refers to institutional procedures of a somewhat abstract and general nature (for example certification and food labeling; in other words, 'disembedded trust' applied to anonymous and long food chains).

It is worth pointing out that all concepts of trust described here stress the fact that trust emerges from social relations including interpersonal and institutional relations. Kjaernes (1999) in Kjaernes *et al* (2007, p. 30), argues that the consumer

“most of the time, trusts or distrusts *someone* rather than *something*”, and “trust inheres in the relationships between actors”, in this case human and social actors. That is, non-human actors in general are absent in social studies of trust.

Research design and methodological procedures

This research was based on a qualitative study of food practices of consumers of organic products in the city of Lisbon. Thirty in-depth interviews were conducted with a group of organic product consumers, between November 2002 and January 2003. The sample strategy was based on a maximum case variability using the following criteria: age; education (whether educated to Further Education level); gender; whether participants bought organic products; whether they were able to make their own food choices; whether they had children. Once it was important that participants should be consumers of organic products (independently of their frequency of shopping), a number of recruitment strategies were employed by the author across various contexts of accessing this foodstuff: pamphlets were put in places where organic products were sold and the researcher interacted with members of organic consumption cooperatives and met people in organic agriculture fairs and markets. Furthermore, the snowball effect method was only used to fill in some gaps in the profiles of consumers. The aim was to obtain a sample that, although not representative of the community, illustrated a variety of cases. The point of saturation was reached when a sufficient number of cases were obtained. It was decided that adding any extra interviews to the thirty conducted was not going to significantly alter the results of the analysis, but simply re-enforce them.

The sample obtained indicated that the level of education of participants was high (Secondary and Further Education). This corroborates the profile of organic consumers found in other studies (TRUNINGER, 2010). In relation to other attributes, the cohort was mainly made up of people resident in the Lisbon region, between 21 and 66 years of age; 2/3 were women, predominantly working in the sciences, arts and media, education, health and environmental sectors.

The interview was conducted as a conversation where participants were free to steer the sequence of topics, with very little intervention by the interviewer. When interviews are understood as a conversation, they allow participants to reveal their feelings, concerns and opinions by developing a more in-depth inter-subjective relationship. Furthermore, a mutual understanding emerges between interviewees and interviewer (MILLER and GLASSNER, 2004).

The topics broached by the interview centered on the meanings and motivations for purchasing organic products; purchasing criteria; trust in food products; childhood memories around food; food restrictions and changes; perceptions of food risk; frequency of purchase and the main constraints in accessing these products.

The analysis was based on the codification of categories and thematic sub-categories without a predefined grid. The grounded theory method (SRAUSS and CORBIN, 1998) was employed, comparing similarities and differences within and

between categories. In presenting results, the interviewee's names employed are aliases in order to ensure confidentiality and maintain anonymity.

'Disembedded trust' and the institutional process for certification of organic foods

Participants in this study showed that they employed a variety of means of establishing trust in organic products. Mechanisms such as labeling and certification were raised as being important to identify these products in situations of anonymous and impersonal markets. These mechanisms are implemented so as to increase trust in organic agriculture and provide consumers with information about a product's origin and production processes. For some of the participants it is a guarantee that products were strictly controlled.

This shows that trust in food requires systemic mechanisms grounded on product labeling and certification. On the quote below there is a good illustration of 'disembedded trust'.

I always check the certification... I do not believe it is organic if it does not have certification... I usually buy organic products in the market, there's a man there and everything he sells is certified, it is all classified!
[Albertina, 66 years, married, dress-maker].

However, some interviewees state that they are suspicious about how agencies conduct certification during their inspections. This suspicion relates to a general social distrust the Portuguese have "towards authorities and institutions" (DOMINGUES *et al.*, 2004, p. 61). Afonso, a hospital doctor, re-enforces this suspicion when he affirms that "it is relatively easy to falsify labels [...]. Unfortunately I know our country well". This is the reason he distrusts the authorities responsible for monitoring food quality. Fernando also suspects the competence of certifying agencies in food inspection:

You know that this [the certification] is a very complex subject [...]. Unfortunately quality control, inspection and certification are not conducted as well as they should be in this country... in other words, it does not work! That's why personal certification (...) is the best way to address this! [Fernando, 54 years, married, pensioner].

Certification distrust is also observed in a recent Brazilian study about trust in organic products by Portillo and Castañeda (2011), in which some consumers did not trust expert's systems and certifications, preferring to rely on interpersonal relations with producers and other consumers. Similar to the Brazilian study, here it was also observed that trust is displaced from more abstract and general aspects (certification systems, quality control institutions) to interpersonal relations with producers.

Further to seeking a more direct and close relationship with producers, there are other forms of establishing trust that some interviewees resort to. The lack of trust

in national institutions means that some look for more credible organizations and structures abroad to carry out monitoring and control of foodstuff. For example, David prefers products certified by international agencies, he has more trust in the judicial-legal framework of particular countries and the 'more rigorous' manner in which they monitor food products and deal with fraud:

Generally speaking I prefer organic products certified by other countries such as France or the United States, as opposed to Portugal... the laws in these countries are more rigorous in relation to fraud! [David, 43 years, divorced, yoga teacher].

'Disembedded trust', established by control and certification organizations and symbolically expressed in the labeling of organic farming, is therefore valued by some interviewees, particularly when there is substantial distance between producers and consumers.

However, consumers often seek additional information to what is expressed on labels (TORJUSEN *et al*, 2004). Individuals resort to other means of assessing trust, making official certification of organic food a superfluous and dispensable mechanism, particularly when they distrust the organizations which label food. This is analyzed in the following point.

'Embedded' trust and interpersonal relations

As the case of Fernando showed, the general distrust in relation to the ability of official authorities to control food quality led him and various other participants to seek situations where there is greater proximity to producers and situations of direct sales of organic products. Closer relations tend to substitute formal certification and the presence of official labeling in organic farming. A large number of interviewees shopped in their own neighborhood in small grocers and fruit stores, health shops, organic product cooperatives (as in the case of Biocoop in Lisbon, see below) and butchers, where long-lasting personal relationships have evolved with shopkeepers. These are some of the places for purchasing organic products.

The preference for traditional stores corroborates with results found in KJAERNES *et al* (2007) on Portugal. However, some supermarkets have also gained the trust of this group of consumers, for example, those in which there is a rapid turnover of stock. Thus, consumers use both retail systems - the 'conventional' and 'alternative' food chains. This means that it is difficult to employ a dichotomous language in relation to these two food systems (SONNINO and MARSDEN, 2006; KNEAFSEY *et al*, 2008; TRUNINGER, 2010). Indeed, these two food retail models - conventional and alternative - operate in parallel economic spaces, crossing and juxtaposing one another (FONTE and PAPADOULOS, 2010). Despite the multiple use of different types of food shops, according to the type of product being sought, many consumers are critical in relation to the large supermarkets. This is corroborated by other studies on this topic (see LOCKIE, 2002; SEYFANG, 2006; KNEAFSEY *et al*, 2008).

I do most of my shopping close to home. I can't stand going to supermarkets. I hate it! It's chaos! I hate the people there! I hate that environment! A lot of money is wasted in hypermarkets... [Inês, 36 years, divorced, journalist and music producer].

Another important outlet mentioned by participants and with which the most enthusiastic shoppers have a very strong trust relationship is the consumers co-operative, Biocoop. This outlet, established in 1993 in the city of Lisbon, was central in bringing new types of urban consumers to the organic farming movement. Today there are other shops which are important in the shopping habits of Lisbon residents who purchase this type of product (for example, hypermarkets, Brio supermarket established in 2008 which specializes in selling organic products and Miosóti, another store, as well as some markets in the city such as Príncipe Real or Campo Pequeno). However, at the beginning of the decade going to Biocoop was a significant undertaking, as it involved planning and organization, given the difficulty in accessing the store (in the outskirts of Lisbon).

Despite its difficult access, many of the participants used it, particularly on Fridays and Saturdays, as they perceived it as a place they could trust:

I believe in Biocoop because sometimes you meet not only producers there, but also the manager... and you can talk to them [...]. Now in shops such as Celeiro and Espiral where they sell natural foods together with organic products, I have to see the certification [Bruno, 33 years, divorced, works in advertising].

Bruno's statement suggests that criteria can be used together, when building a trust relationship with a shopping outlet. In some places, the close relationship with producers is valued, but in others, certification is prioritized. However, sometimes, people prefer to take on the role of control and certification themselves to check how organic products are produced. This control occurs through direct conversations with producers or occasional visits to farms:

Isabel - the trust relationship I have is with producers or farmers. Biocoop is the shop I most trust on the market, at the moment.

Interviewer - Why?

Isabel - Because... well, because when we are in a market characterized by transition, then the large stores and large organizations are less trustworthy than smaller institutions. Where there is control and we know the producers, we go there, we know where they are, Biocoop visits farmers, there are visits on Thursdays and we can see how it is being managed, we have direct contact and we can assess the situation... [58 years, divorced, senior official in the public sector].

But there are other important bases for building a trust relationship. As we have seen in the literature review, within the cultural or normative perspective trust is

placed on the production and reproduction of standards and values shared by the community. Belonging to a particular community instigates in consumers a feeling of well-being in the space they buy their organic food. This is because there is potential for establishing companionship and friendships with other people. Some of the participants in this study argued that Biocoop was more than just somewhere they shopped. It was a meeting place where friendship relations were established. Thus, it can be understood as a space where the moral economy emerges, given that economic transactions occur at the same time as leisure and social experiences, and where particular values and similar visions of the world are shared.

For me, there is something that is very important at Biocoop... that's the contact with the people that go there... we talk, we share experiences with one another, we exchange ideas, we try to find out about the activities for that month, find out about a person's problems, if they need any help, we try to help... there are visits to producers, meetings... for me, this is all very important... there's this side, leisure, social activities, that's what really interests me [Fernando, 54 years, married, accountant and pensioner].

The fact that consumers feel connected to a particular group of people who share the same values and ideals contributes to strengthening the links of solidarity and trust in the organic farming movement and, in turn, trust in the outlets which sell these products.

People trust one another because they have known each other for a long time, they have the same routines almost every week and share common values in relation to various aspects of their lives.

This feeling of belonging and shared identity between similar individuals leads to a sense of trust in that community. According to Bruno, Biocoop is a space managed by serious people. He believes that in the cooperative economic profit is not the priority and therefore they do not partake in fraudulent activities or in those which may harm the interests of their customers.

Some examples of personal and institutional trust have been observed in the empirical material. However, the relationship with aesthetic and metabolic properties of food, and the presence or absence of particular animals, was raised in interviews and therefore these can also be included in building the concept of trust in relation to food. This inclusion broadens the construction of trust in food and goes beyond the 'social' and 'human' scope.

From sensorial experience to 'the caterpillar test'

Sensorial experience was shown to be important as a basis for building trust in food. In a study by Portillo and Castañeda (2011) the differences between organic and conventional food products were marked by appearance, flavor, texture and color.

In this study, other elements were also used for building trust in food. The significance of sensorial experiences was stressed within the shopping context:

Ana: I really love markets, I really love that environment! It is also an aesthetic choice!

Interviewer: What is it that you like about these environments?

Ana: It's exactly that, the way it looks... (laughs). The way products are displayed, you can touch, smell them, the voices... I think this is crucial for a trust relationship with food... how it is bought... how it is sold, we are closer to the producer (...). I have known Biocoop for many years... I liked it better when it was in the previous location in the centre of Lisbon... I used to go by car, then we'd go through that street with those beautiful trees... I think that they were bougainvilleas, they were flowering at that time of the year... and so I really liked it... [46 years, married with dependent children, part-time student in History of Art]

Ana's motivations highlight the importance given to aesthetic (or cosmetic) processes in food production (MIELE and MURDOCH, 2002). These are also elements from which trust in food is built. These results corroborate those in a study by EDEN *et al* (2008) in revealing that food sold with a clean and shiny image within the ordered and tidy environment of supermarkets creates suspicion, whereas products with imperfections, covered in mud, with a recognizable smell and sold in markets are very quickly associated with authenticity and quality (see also TRUNINGER, 2006 and 2010).

Thus, trust also involves the daily routine of addressing the aesthetic and metabolic attributes of food products, (their aromas and smells, different textures, how long they last, how they are prepared and cooked, and their taste), as well as the shopping experience, (sounds, the profusion of smells and colors, the ability to touch and feel products and their degree of ripeness, how stores are decorated, the type of people that go there, the way they present themselves and dress).

Many of these sensorial and food lived experiences take place on a daily basis. Although some consumers express doubts in relation to the safety of organic products, it is through daily practice that the quality 'test' is conducted, often through almost mechanical, automatic and routine ways of qualifying or disqualifying *organic products* as *authentic* or *fake* (ROE, 2006).

Thus, the meanings, perceptions and expectations of consumers in relation to the aesthetic materiality of organic foods are part of the way they build trust in the product. When these expectations do not match their practical experience of the product, consumers feel they are being deceived. As Isabel argues:

When I buy normal food in the supermarket, things don't last more than three or four days; when I buy them at Biocoop they last almost a month. Fresh food lasts for a long time, so I don't lose as much as with other products... So it's worth going to Biocoop... but when a Biocoop product

does not last at least fifteen days we know that something is up. Because they last longer than any other products... and I have systematic proof of this, I don't know for how many years... [Isabel, 58 years, divorced, senior official in the public sector].

In this case, the understanding and trust in organic food involves a metabolic assessment of the product in terms of how long it is expected to last (that is, the shelf life of food expressed through the duration of freshness). The spoilage of a product or its ageing before time undeniably leads to distrust. This suspicion can be further extended to social distrust in the production system, even when products are of local and known origin (such as those sold at Biocoop).

If an organic product does not last a certain number of days, then something went wrong with one of the stages in the food chain. The product is not qualified as organic, because it failed the metabolic test, which, for Isabel, has been proven through experience and repetition. The metabolic behavior of food products is clear evidence of a *material, biophysical* sign, a non-human sign, which provides legitimacy or otherwise to the *authenticity* of the product. These 'daily tests' can also be checked scientifically in laboratories (see AZEVEDO, 2012).

Fresh organic products presenting a *shiny* and *waxed* appearance are also signs people pay attention to when judging *quality* and *authenticity*. If the expected material attributes are found in the products, then the inspection and control system was well conducted and the products are credible. On the other hand, if these attributes are absent, consumers cast doubt on the quality of the control and the validity of the label.

Luis - at the market, I think, there were some tomatoes that looked so shiny... I even asked... are those organic? They don't look it! I have doubts about some products.

Interviewer - and when you see these products, do you buy them all the same?

Luis - If I am in doubt, I don't buy it, this is so clean...

Interviewer - Even when they have a certified organic label?

Luis - Yeeesss! But how does the certification system work? I wish you could tell me how it works! If there are lobbies in football and other things... perhaps people have a stamp, they go there and get a stamp... [37 years, divorced, researcher].

This claim reveals an interesting aspect of the processes of trust in relation to food. Even the legitimate and official organic farming certification is questioned and ultimately distrusted by consumers if expectations do not validate the material and aesthetic perceptions they have of organic products. In this case, the overly shiny appearance of the organic tomatoes condemned the institutional procedures for organic food accreditation.

Beyond sensorial experience and the metabolic elements of products (for example their bio-physico-chemical mutations, their shelf life), the empirical material suggested

other aspects which interviewees think are important to assess the quality of products, and thus, build a trust relationship: the presence of non-human animals. The visibility or absence of larvae or rice weevils, of fruit worms and traces left in the shape of holes or spots, are used by consumers as important tests in their routines and experience concerning organic produce. This peculiar conception of trust in food is understood as a co-constructed relationship between human beings and non-human beings. This becomes clear in a comment made by Maria José:

Fortunately, the rice weevil was there, thank God, because if it had not been there perhaps we should have doubts about the rice [Maria Jose, 63 years, divorced, retired and former air hostess].

Similarly, Afonso notices that conventional products do not have any caterpillars, for whatever reason, making these products less trustworthy:

Nowadays it is difficult to find caterpillars in cabbage! I remember when I was young that cabbages had caterpillars, it was rare to find one without, and now it is rare to find some that do... strawberries... there are no bugs...for some reason, there is never anything... and this make me extremely distrustful of the way things are produced... [Afonso, 58 years, single, hospital doctor].

In this case, the holes in the organic cabbage are proof of the traces left by caterpillars and that they were not killed by pesticides. It is difficult to imagine these signs in cabbages produced in intensive farming. Official recognition of organic products does not simply involve the certification label of an institution, but the visibility (or visible traces) of worms, caterpillars or larvae - here colloquially referred to as the 'caterpillar test'. The fact that caterpillars can eat the cabbage and not die is a sign to consumers that the cabbage is not chemically contaminated. In this particular case, people ended up placing more trust on the presence of larvae and insects, that is, in animals (and the effects of their agency – the caterpillar eats the cabbage and does not die due to the absence of pesticides) than on the presence of institutional and social systems (labels) or personal relations with producers. 'Caterpillars' have agency and participate actively in the co-construction of trust in food products, that is, they have the ability to intervene and transform the state of things (see LATOUR, 2006). Their presence not only contributes to providing visibility to bio-materiality, they also have implications for reconfiguring social theory approaches on trust which are overly centered on humanist perspectives.

The plural bases of trust in food and post-humanist perspectives: final reflections

This article reviewed the literature on trust in food and concluded that its conceptualization is largely centered on a humanist perspective, marginalizing other

elements (non-human) which are also important for consumers when assessing and making judgments about food quality and therefore, building trust. Through the analysis of thirty interviews with consumers of organic products it was observed that the bases for trusting food are both heterogeneous and multidimensional. Some participants in the study seem to place less value on the need for labels which prove the certification of organic products when the product is purchased through a close relationship with the producer/retailer. Participants in this study valued the personal experience they had with products; the honesty and credibility of producers; the established social networks within the shopping environment; and the feeling of belonging to a community that shares the same values and visions of the world. The different images that people have of organic products are, in part, acquired and shaped by the place they are bought, the shopping context and the way in which foods are displayed.

However, day-to-day trust in food products was also fundamental. This type of trust was built through assessing the presence of non-human properties, a routine task carried out through tests which convey authenticity to organic products (ROE, 2006). For example, some consumers valued aesthetic, sensorial and metabolic characteristics, as well as the presence or absence of bugs, in accordance to expectations of what they characterize as organic: an appearance which is not polished, shiny or artificial; the longer shelf life of produce; the presence of caterpillars and/or their traces. This could be how individuals, within their private space, manage to reduce food anxieties transmitted from the public sphere, a way of regaining some control in relation to food production.

Thus, we appeal to a post-humanist conceptualization of trust (inspired by the works of Bruno Latour and Michel Callon). This can be understood as a co-constitutive relation between nature (the bio-physical content of foodstuff) and society (through an interaction mediated institutionally or by means of personal relations). It is co-constitutive, because trust seems to emerge out of a complex amalgamation of social and non-social, human and non-human forces (MURDOCH, 2001). It is suggested that trust is built through a permanent and continuous ordering of different heterogeneous elements. Trust is a phenomenon that is both relational and situated, it is not simply something that is present and owes its legitimacy to social relations between people or between people and institutions. This makes it difficult to provide an *a priori* definition of these relations as being inherently social, given that they are the result of heterogeneous complexes that go beyond what it is defined as social (LATOUR, 2006). Human and non-human animals and the rest of nature are linked in different ways, co-building the potential to strengthen or weaken our trust in food. Thus, it becomes imperative to study the materiality of trust relations in order to develop a more inclusive and wider-ranging concept of trust in relation to foodstuff.

However, from what has been presented, two important caveats must be made. First, the positive evaluation of particular sensorial, aesthetic, metabolic and bio-physical characteristics (e.g. the presence of bugs in organic products) can be understood as being socially constructed. That is, positive assessment and image can change according to historical, cultural and social trajectories of connections and

disconnections between people, society, animals, the environment, and ‘nature’ present in the makeup of agri-food processes. Thus, by assuming a humanist position, the ‘caterpillar’ has no agency (or the capacity to act or affect things), but its presence is normatively interpreted by people as positive, and for this reason, it is trustworthy. As KJAERNES (1999) argues, we always trust somebody and not something (or some animal). However, in this article, we argue that the ‘caterpillar’ has agency and it is its physical and living presence which displays a materiality that disturbs, affects or contributes to building a relationship of trust in food, and as such, cannot be reduced to a symbolic or representational trace (on the contrary, its trace is profoundly non-representational).

Second, it is important not to exaggerate the corporeal link with food and the agency of animals in building the bases for trusting food. These elements are important, but they are immersed within a network of other elements which are also central to the relational and situated processes of trust. Caterpillars do not always inspire trust (indeed, they can transmit feelings of repulsion and rejection), particularly when consumers are aware that they do not have all the information on how food was produced, transported and distributed within the agri-food system (note the horse meat scandal). That is, consumers do not have access to the hidden parts of this system and – to recover a Marxist term – are socially and environmentally alienated from production (see EDEN *et al*, 2008, p. 1049 and 1054). In this case, consumers seem to look for other clues (such as certification labels, conversations with producers or the advice of friends) to establish their plural relationships of trust.

Despite these observations, there are some advantages in taking a perspective which is more centered on a post-humanist approach: the decentering of agency from human beings to also include non-humans and the rest of nature (e.g. metabolism of food; the presence of animals); overcoming the dualist discourse on human and non-human animals and, paradoxically, further developing the concept of what it means to be ‘human’ (TWINE, 2010; KALOF and FITZGERALD, 2007).

Within this conceptual framework, trust is understood as resulting from the effects of combining, ordering and re-organizing relations between collective compounds with heterogeneous elements, for example, animals (including human beings) and institutions; food metabolism and distant abstract systems (e.g. science, certification agencies and quality standards).

We conclude with the words of Haraway (1992, p. 67): the reconfiguration of the concept of trust requires a vision of the world made up of “heterogeneous social encounters, in which all the actors are not human and all the humans are not ‘us’, however this term may be defined”.

Note

ⁱ In Latour the concept of agency encompasses a network of heterogeneous human and non-human actors. Agency includes all those that affect the transformation of the state of things (LATOURE, 2006).

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THE PLURAL BASES OF TRUSTING ORGANIC FOOD: FROM CERTIFICATION TO THE “CATERPILLAR TEST”

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Resumo: Os estudos sociais da confiança são extensos e multidisciplinares e partem, geralmente, de uma premissa que aporta a confiança nas relações sociais. O material empírico analisado neste artigo – trinta entrevistas em profundidade com consumidores de produtos orgânicos na cidade de Lisboa – dá conta de dois tipos de confiança (‘desenraizada’ e ‘enraizada’), explorando um terceiro tipo: a confiança nos orgânicos através de ‘testes’ sensoriais cotidianos. O comportamento metabólico dos alimentos bem como a ausência ou presença de minhocas, lagartas e respectivos rastros (e.g. buracos deixados na fruta e verduras), aqui alusivamente apelidados de ‘testes da minhoca’, são relevantes bases de confiança. Levanta-se a hipótese de a confiança ser entendida como um fenômeno que emerge das relações entre entidades humanas e não humanas. Defende-se uma noção de confiança que é ontologicamente relacional e informada por perspectivas não-humanistas, e que se manifesta de formas variadas no cotidiano.

Palavras-chave: Confiança. Produtos Orgânicos. Alimentação. Pós-humanismo.

Abstract: Social studies on trust are extensive and multidisciplinary and usually depart from a premise that places trust within social relations. The empirical analysis in this article - thirty in-depth interviews with consumers of organic products in Lisbon – reveals two types of trust (‘disembedded’ and ‘embedded’), and explores a third type: trust in organics through sensorial everyday life ‘tests’. The metabolic behavior of food and the absence or presence of worms, caterpillars and their traces (eg. holes left in fruit and vegetables) – allusively called ‘caterpillar tests’ – are relevant bases of trust. The hypothesis that trust can be understood as a phenomenon that emerges from the relationship between human and non-human beings is examined. A notion of trust that is ontologically informed by relational and non-humanist perspectives is advanced, wherein trust is diversely enacted in everyday life.

Key words: Trust. Organic food. Foods. Post-humanism.

Resumen: Los estudios sobre la confianza social son amplios, multidisciplinarios y parten, en general de una premissa que aporta confianza en las relaciones sociales. Los datos analizados en este artículo - treinta entrevistas en profundidad con los consumidores de productos orgánicos

en Lisboa - atesta la presencia de dos tipos de confianza ('arraigada' y 'desarraigada'), y explora un tercer tipo: la confianza en los productos orgánicos a través de 'testes' sensoriales cotidianos. El comportamiento metabólico de los alimentos y la ausencia o presencia de las lombrices, orugas y sus pistas (por ejemplo, orificios dejados en frutas y verduras) – alusivamente llamados 'testes del gusano' – son bases importantes de la confianza. Planteamos entonces la hipótesis de que la confianza alimentar es entendida como un fenómeno que surge de la relación entre las entidades humanas y no humanas. Se defiende una noción de confianza que es ontológicamente relacional y informada por perspectivas no-humanistas, y que se manifiesta de diversas formas.

Palabras clave: Confianza. Productos orgánicos. Alimentación. Pos humanismo.
