Casu Marzu: A Gastronomic Genealogy



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L'esperienza quotidiana della nascita dei vermi dal formaggio putrefatto serviva a Menocchio per spiegare la nascita di esseri viventi - i primi, i piú perfetti, gli angeli - dal caos, dalla materia «grossa et indigesta», senza ricorrere all'intervento di Dio

Menocchio employed the everyday occurrence of worms being born in rotten cheese to explain the birth of living beings - the first, absolute perfection, were angels - from a chaotic 'large and undigested' mass, without relying on God's intervention.

Carlo Ginzburg (1999), The cheese and the worms. The cosmos of a sixteenth-century miller.

Abstract A dog's life, a shockumentary by directors Jacopetti and Prosperi (1962), for the very first time depicts culinary customs from some ten countries around the world. The authors employ a fast-paced sequence of *near and far-flung* cultures to ask viewers to what extent the cuisine of each country can embody differences, disrupt modernity, spark indignation, or simply create puzzlement and curiosity.

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1 Introduction

A dog's life is a tangible analysis of *eating taboos* which reflects on diets and using insects in the kitchen (a debate which, although myopic¹ in scope, has recently resurged in the West).

The documentary also visits one of the most important restaurants in New York, the Colony. It is the Sixties and the camera sweeps over small, packaged exotic delicacies and the upper echelon of society dining while, over the typical background buzz of a restaurant, the voiceover says:

In New York, for the person who likes to spend, there's a famous restaurant, one of the most sophisticated and expensive in the world. While the middle-class American has to content himself with the daily steak, here, the richer American con gorge himself heartily on the following delicacies: fried ants, stuffed beetles, butterfly eggs, worms au gratin, rattlesnake, muskrat, and so forth.

1.1 Western Society's Reactions to Eating Insects

A dog's life caused an angry outburst in Western society, especially in Italy, the directors' country. The outburst was caused by one fact: the documentary showed how unthinkable and uncommon dishes in our diet were being eaten in the West. These dishes, according to a commonly accepted belief, could, after all, only be cooked and eaten in underdeveloped regions of the planet.

Italy, and parts of the Western world, was getting back on its feet following World War II. It was a time of modernity, a useful watershed moment between *us and the other* (Clifford and Marcus 1986; Remotti 2011), a time where even gastronomy and the *Mediterranean diet* (Niola 2015) contributed to Italy's identity by means of new inventions as well as by removing some historical and cultural elements. Eating insects was unthinkable. In the past and, to a certain extent, even today, it was unacceptable for a modern society to eat animals or insects from *other cultures and diets*, or use them as ingredients in recipes.

This paper focuses on that debate. It aims to reflect, in part, on why Western societies are against using insects in their everyday diets and if there are any answers to counteract this phenomenon.

To illustrate this case, a paradigmatic food was chosen: *Casu Marzu*, a Sardinian diary delicacy. It visually reminds us how eating and using insects as a main ingredient in a recipe is part of *our gastronomic* tradition and, therefore, its rejection can be linked to legislative prescriptions as well as *gastronomic racism*.²

¹This short-sightedness is due to the numerous hard-lining practices which interpret the sales of insects as a cultural and economic threat.

²Gastronomic racism is a provocation which aims to highlight the shapes rejection and discrimination towards the 'other' can take by employing a process of crystallisation and rewriting the history of gastronomic cultures.

In Sardinian, *Casu Marzu* literally means 'rotten cheese'. This cheese is one of the 183 traditional food products recognised by the Italian Ministry for Agricultural, Food, and Forestry Policies (MIPAAF). The cheese is produced by processing the sheep's raw milk (at 35°), which is then curdled with calf rennet. Once it has been given its shape, it is placed in brine for approximately 24 h. After indicatively 15 days, the cheese is attacked by 'cheese flies', the *Piophilia casei*, which lay their eggs inside the cheese. The larvae feed off the cheese itself for around 2 weeks. The enzymes produced by the larvae favour the cheese's fermentation and give it its final shape. The resulting cheese contains hundreds of tiny worms delivering a unique flavour to the food product. By eating it, we are also eating small worms mixed with a creamy cheese. This is clear proof that eating insects is not a new phenomenon in our society.

For decades, *Casu Marzu* has been regulated by a law which bans its sale. It was passed in 1962 (Law No. 238) and which, strangely enough, coincides with the release of *A dog's life*. The law does not consider Italy's eating history, unable to balance food safety and the enhancement of traditional products, as it prohibits the sale of *Casu Marzu* and all products *beleaguered by parasites*.

This law believes it is not possible for a healthy product to contain insects and, thus, it cannot be sold. It believes the product is produced using non-industrial fermentation processes or, even worse, that the product is made by purposely introducing larvae in it. Niola (2015) claims it is a law which threatens to promote orthorexia, an *eating disorder* characterised by an obsession with consuming healthy food which, in the time being, has become one of the most widespread eating disorders in the West.

Just like honey, which is produced by a bee's digestive system, *su Casu Fràzigu's*³ peculiarity is based on what the small larvae eat while nesting in the cheese.

An insect-based diet is not limited to the island but can be found across Europe, as proven by cheese similar to *Casu Marzu* in other Mediterranean countries: from Egypt to Greece as well as in Italy.⁴

Despite the legislative imposition, according to numerous experts and researchers, *su Casu Marzu* is a safe cheese from a microbial perspective: indeed, according to Professor Deiana (2016), Professor of Food Microbiology, the cheese features a concentrate of essential vitamins and amino acids. This may explain why its supporters have been talking for years of its virile-enhancing properties (Zerda and Mainarchi 1971).

Associating insects and diets is often trivialised as a hallmark of an underdeveloped country or society, as proven by many claims and word of mouth alike.

³Casu Marzu has a regional identity, meaning it adopts different names based on the province where it is produced: *casu mùchidu, casu modde, casu giampagadu, casu fatitu, casu becciu, casu 'attu, casu cundítu.*

⁴Italian examples of these cheeses can be found in the Friuli (*Saltarello*) and Abruzzo (*Marcetto*) regions. The *Gorgonzola delle Grotte*, *Begiunn*, *Formaggio di Fossa* and many others exist. The *Casgiu Merzu*, obtained using goat sheep, similarly to the Sardinian sheep, is found in Corsica. There is also a similar cheese in Croatia, as well as the German *Milbenkäse* or the French *Mimolette*.

Casu Marzu, even in Sardinia, is often judged as a product that is incapable of *delivering added value to the island's image of producing good wine and food.* Thus, Sardinia's image comes into question. Does associating Sardinia with *Casu Marzu* mean promoting an idea of an underdeveloped island population as claimed by Lombroso (1876)? Does it mean risking the loss of a recognised tradition in nearly all the world, namely that of an island known for its good wine, myrtle, and ravioli, expertly shaped into an ear of corn? It goes beyond that (Manunza 2016).

What is at stake here, to use Goffman's expression (1969), is succumbing to *gastronomic* racism at our own tables. This could lead us to distance ourselves from traditional experiences, an attitude which legitimises the misunderstanding between what folklore and tradition are: this misinterpretation is devastating for every culture and society (Cardini 2016).

Opposite values, like *cuisine and gastronomy*, cannot be objectively founded from an anthropological perspective. Cuisine is the number of ways and techniques society uses to transform nature into food products. Gastronomy is the art of preparing or cooking food well (Niola 2009).

The accepted opinion is that gastronomy is only present in complex, rich, and modern cuisines and they do not include insects. However, the poorest among the agricultural methods to prepare food were based on the *aesthetics and physiology of flavour*, which were not inferior to those found in 'better' cuisines. Therefore, each culture projects its particular culinary categories on the others, thus overlapping, and adopting an *ethnocentric* view towards everyone who eats differently (Douglas 1985; Goody 1985). This is what partially occurred to *Casu Marzu* from a micro perspective and to eating insects in the West from a macro perspective.

1.1.1 Su Casu Marzu: A Gastronomic and Cultural Product

For some people, it is important that their diversity not be stigmatised. Therefore, every cuisine has its gastronomy: outstanding principles that constitute the *aesthetic sublimation of its food grammar*, as said by Niola (2009). Thus, preparing a cheese using natural procedures, created by the human experience, represents a gastronomic and cultural passage that must be preserved; it teaches us how insects can be excellent ingredients and not only mere representatives of *eastern traditions and diversity*, as postulated by Said (1978).

Casu Marzu completely changes our perception of insects. As a protein source and unique, as well as complete, food product to an *all-round gastronomic product* based on dairy traditions employing different ingredients, the knowledge of the island's microclimate as well as overlapping traditions, history, and the knowledge of the territory.

The resistance to using insects in cooking can be associated with using a *geneal*ogy of western diets and their perception of 'progress'. While it may be true that in many cultures there is a ban on eating something simply based on what it is, the



Fig. 1 Screenshot e-commerce e-bay. http://www.ebay.it/itm/Casu-Marzu-Formaggio-con-i-vermi-Crema-Delizia-Sarda-/252960802191?hash=item3ae5a3858f;g:tmwAAOSwB09YMzFb

criteria used to assess edibility is based on categories: near-far, similar-dissimilar, pure-impure, human-animal, man-woman.

This is where *eating taboos* in cultures come from: pork for Jews and Muslims, dogs, horses for Anglophone and German populations, or insects, which are considered unpalatable by the West during this postmodern period.

The debate on using insects in diets in the Old Continent has become more topical and global than ever, as proven by the presence of the Sardinian cheese, a Protected Designation of Origin product (PDO), on some of the most used e-commerce sites in the world (Fig. 1).

A fact limited to theories and musings which too often aim to create distance and make us forget that eating insects is part of our culture (Mellini 1956).

The speech by Foucault (1972) on the acceptance of insects as part of our diet does not consider history, but is based exclusively on the *a priori rejection* of eating insects and a distorted view of gastronomy.

Like with any other prescription, even *eating taboos* have a deep effect on our societies, becoming proper *dispositifs* (Deleuze 2007). The question is easy: how do we reject insects in our diets despite their widespread and proven presence? Do any tools and answers that allow us to reclaim and preserve the gastronomic culture exist, thus destroying this imposed eating etiquette?

The story about *su Casu Marzu* is an enlightened answer. Indeed, since 2005, Sardinia has had a *Committee to Promote Casu Marzu(PDO)*.⁵ The committee carried out all the required exams to produce the cheese. It also successfully requested that the larvae used in the production process of *Casu Marzu* be conceived in a controlled environment which complies with the hygienic and sanitary regulations of a regular laboratory (Mazzette et al. 2010).

The abovementioned process circumvents the pertinent legislation while at the same time guaranteeing the sanitary requirements demanded to produce a food product without any ensuing health risks for people. The committee's proposal resulted in the drafting of specifications shared among sheep farmers and sanitary institutions (which is why the Committee has a strong collaboration with the Faculty of Veterinary Medicine of the University of Sassari). Therefore, it would be ideal if dairy producers were to use colonies of *Piophilia Casei* produced in a controlled environment to manage their colonisation and avoid relying on accidental infestations.

Besides the myth (Lévi-Strauss 1969), the Sardinian Casu Marzu represents the umpteenth example of the intellectual liveliness of a people that transformed what looked like a mistake in the beginning, a potential disaster, into a gastronomic success.

A series of involuntary events, from the initial preparation in facilities which were far from aseptic, to the conservation and short maturing timeframe in nonconventional locations, organised in the correct succession, produced cheese colonised by *Piophilia casei* larvae – fought by dairy farms the world over – that transformed a sheep's cheese into a PDO of excellence.

What is the future of this cheese? One possible answer would be to contact the Committee which determines the production and sales regulations of 'novel food'.⁶ Adding Casu Marzu to the *Novel Food Catalogue* would be an important acknowl-edgment as well as being something owed to its producers and consumers.

⁵The Committee is chaired by Mario Demontis, Councillor for Agriculture of the Municipality of Ossi. Antonello Salis, an entrepreneur from Ploaghe President of Cna Sardegna, Mario Loriga (Mountain Community of Osilo), Nico Masia (former councillor for agricultural of the municipality of Florinas) and Antonio Meloni (President of the animal breeder cooperative of Villanova Monteleone) are also members of the Committee.

⁶Novel Food (new food or new food ingredients) fall under the European Union's legislation, specifically under Regulation (EC) 258/97. Novel food are all products and food substances where a 'significative' consumption cannot be proven on or after 15 May 1997 within the European Union (UE), date when the Regulation came into power. Casu Marzu perfectly meets the European directive on access criteria for being considered a 'novel food'. '*Novel food will only be approved for use in the EU if they do not present a risk to public health, are not nutritionally disadvanta-geous when replacing a similar food and are not misleading to the consumer. They must undergo a scientific assessment prior to authorisation to ensure their safety. The authorisation sets out, as appropriate, the conditions for their use, their designation as a food/food ingredient and labelling requirements', see European Commission website: http://ec.europa.eu/food/safety/novel_food/authorisations_en*

To do so, one would have to see the cheese as the container of larvae which need that type of product to exist. A shift of perspective which would benefit many people and change the current challenge to one which demands us to reinterpret traditions.

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