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Permeable corporalities: Intersections between the environment and health

Introduction to the Special Issue

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ABSTRACT
Since the second half of the twentieth century, due to technological developments in various industrial fields, humans have had to coexist, to a greater or lesser extent, with various synthetic chemical compounds that can be found in air, water, land, and food. These compounds have affected, affect, and will continue to affect the health of many population groups in different ways. This Special Issue presents a space to think about the contemporary body through the multiple relationships between environment and health. First, this article introduces some anthropological literature around these issues, demonstrating its approaches and concerns in the field of health, risk, culture, politics, science, and especially food. Next, the concept of "permeable corporalities" is suggested to designate the moment in which the toxicity coming from the environment impregnates human bodies and turns them into permeable, relational bodies, open to the world that surrounds them. Finally, the articles that are part of this Special Issue are presented. These include three ethnographic studies in areas with high levels of pollution: Ghana, Argentina, and Vietnam. The Special Issue also presents three other contributions that focus on food risk and that deal with functional foods in Argentina, food toxicity in pregnant and breastfeeding women in Spain, and food classification and choices in Spanish society.

KEY WORDS
Toxicity, environment, body, risk, food.

CORPORALIDADES PERMEABLES: INTERSECCIONES ENTRE MEDIO AMBIENTE Y SALUD. INTRODUCCIÓN AL MONOGRÁFICO

RESUMEN
A partir de la segunda mitad del siglo XX, el desarrollo tecnológico en diversos campos industriales ha provocado que los seres humanos convivan, en mayor o menor medida, con diversos compuestos químicos sintéticos presentes en la atmósfera, el agua, la tierra y los alimentos. Estos compuestos han afectado, afectan y afectarán la salud de diversos grupos de población en distintas formas. El presente trabajo propone una visión del cuerpo contemporáneo pensado a partir de las múltiples relaciones entre medio ambiente y salud. En primer lugar, se realiza un somero recorrido por la literatura antropológica en torno a estos temas, sus planteamientos y preocupaciones, en el ámbito de la salud, el riesgo, la cultura, las instituciones políticas, la ciencia, y, especialmente, la alimentación. A continuación, se plantea el concepto de «corporalidades permeables» para designar el momento en que la toxicidad proveniente del medio ambiente se incorpora en los cuerpos humanos y los convierte en cuerpos permeables, relacionales y abiertos al mundo que los rodea. Finalmente, se presentan los trabajos que forman parte de este monográfico. Aquí se incluyen tres trabajos etnográficos en zonas con alta contaminación en Ghana, Argentina y Vietnam. Completan el monográfico otras tres contribuciones que tienen como eje el riesgo en la alimentación y que tratan sobre los alimentos funcionales en Argentina, los alimentos y su toxicidad en embarazadas y lactantes en España, y sobre las clasificaciones y elecciones alimentarias en la sociedad española.

PALABRAS CLAVE
Toxicidad, medio ambiente, cuerpo, riesgo, alimentación.

More than thirty years have passed since Ulrich Beck named our contemporary society as "the risk society" (Beck, 1986). Although previous studies existed on environmental risk (Douglas and Wildavsky, 1982), and even though some of the anthropological aspects of Beck's work can be debated (Jensen and Blok, 2008), it is evident that the expression, "risk society," has served to represent contemporary society, its risks, its contradictions, and its future. Just as Beck predicted, some of the more prominent contemporary risks in societies of the 21st century are connected to environment and local and global health.

From some technological advances in agricultural, industrial, chemical, textile, and food production in the last decade, it can be said that we are currently living surrounded by synthetic chemical substances present in the atmosphere, water, soil, and food. These compounds enter the human body through respiration, ingestion, and topical absorption. They can involve risks with large-scale effects that are difficult to predict and to treat, and they can pose a silent, but violently real, threat.

The environment has become a global concern. Global warming, the destruction of biodiversity, pollution in big cities, the accumulation of chemical and electronic waste in third world countries, large islands of plastic debris in the oceans, space debris that orbits the earth, as well as the use of pesticides or other chemical products in the food chain, are, among many others, some examples of the risks whose effects are at the same time local and global, present and future.

The idea for this Special Issue developed as a result of a panel of the same name that was held at the Second International Conference of Anthropology AIBR (Barcelona, 2016). The studies presented here analyze the intersections of environment and health under a perspective of the body as the place from which to observe individual, social, and political implications of these phenomena. This Special Issue introduces the term "permeable corporalities" to refer to human bodies as bodies exposed to an altered and changing environment and to the possible effects of that environment on human health.

1. Risk, environment and human health

Anthropology has concerned itself with the environment since its birth as a discipline, because the habitat of the communities analyzed by anthropologists is an essential part of their social life. Cultural ecology, political ecology, anthropology of health, anthropology of risk, or studies of science and technology, among others, are disciplines that have specifically dealt

with analyzing the environment and its relationship with all areas of social life (Haenn and Wilk, 2006).

The primary focus of this Special Issue is the relationship between the environment, health, and the human body. Since the publishing of the classic *Silent Spring* (Carson, 1964), which examined the effects of pesticides on human health and greatly inspired the ecological movements of the 20th century, a vast academic production has been dedicated to analyzing this relationship, which is rarely free of controversy. In the anthropology of health and related disciplines, one of the recurring themes has been the analysis of the ways in which health risks are perceived and conceptualized in different societies or circumstances, as well as the ways to cope with them in daily life (Harthorn, 2003; Hunt, Tinoco, Schwartz and Halperin, 1999; Larrea-Killinger, Muñoz, Mascaró, Zafra and Porta, 2017; Palis, Flor, Warburton and Hossain, 2006; Quandt, Arcury, Austin and Saavedra, 1998; Snipes, Thompson, O'Connor, Shell-Duncan, King, Herrera and Navarro, 2009) and according to the distinct discourses — scientific, historical, environmental, health, among others — that shape social and community knowledge about risks (Altman, Morello-Frosch, Brody, Rudel, Brown and Averick, 2008). These studies show the ways in which cultural, social, economic, and personal factors can make us perceive varying degrees of toxicity in certain circumstances, and even different levels of perceived risk depending on social situations. In this respect, for example, Erickson (2007) and Soares de Freitas *et al.*, (Soares de Freitas, de Souza Minayo, Lopes Pena and Miranda dos Santos, 2012) suggest the use of Kleinman's "explanatory models" (1980) in order to understand the various levels of perception of environmental risk within diverse social contexts. In fact, since the 1970s, the anthropological works of Mary Douglas suggested that symbolic-cultural factors were found to be the base of perception of any type of risk (Douglas, 1994; Douglas and Wildavsky, 1982).

Whether it is in regard to pesticides, nuclear radiation, industrial contamination, or any other type of danger, the bibliography of medical anthropology and related disciplines ultimately examines the creation of meaning. Thus, those disciplines attempt to clarify which are the social and cultural elements that bring meaning to various explanations of the environmental effects on human health or, more precisely, the interweaving of both. In this relationship, various fields play roles that are intertwined and superimposed. On one side, the political field has been analyzed as one of the relevant actors in this context. Closely tied to this, the field of scientific production has had a definite role in the analysis, especially for the controversies and uncertainty created by science and the

social agents implied within (Boudia and Jas, 2014; Checker, 2007). In this sense, many have written about how scientific facts are constructed and the subsequent political legitimization or illegitimization of certain medical conditions (Petryna, 2013; Phillips, 2010), as well as their relation to so-called "lay knowledge" (Wynne, 1996). Other main actors in the theater of environmental harm are the industries that pollute the environment, which are also frequently in collusion with local governments (Sicotte, 2009). Finally, the role of media as creators of social meaning has also attracted the interest of social sciences (Begueria, Larrea, Muñoz, Zafra, Mascaró-Pons and Porta, 2014; Brown, Zavestoski, McCormick, Mandelbaum and Luebke, 2001).

Throughout the works referenced here, and others that we were unable to include, the inequality–uncertainty duality creates a pattern that repeats itself through distinct societies and moments in history. The works of Auyero and Swintun (2008), for example, reflect on the political and social conditions for the creation of doubt and uncertainty among the population of a shantytown in Argentina with respect to the situation of environmental suffering in which they live. Employing the same approach, Lora-Wainwright (2013) analyzes how evidence and uncertainty are generated in two Chinese populations, both affected by high levels of pollution. Related to this issue, social inequality appears repeatedly, since the creation of social uncertainty affects, in many cases, socially and economically precarious sectors of the population (Auyero and Swistun, 2008; Harthorn, 2003; Singer, 2011). Accordingly, some studies focus on the elements around which a legitimate vindication is structured for those citizens affected by health problems caused by the environment (Phillips, 2010).

Among the environmental insecurities, the question of food deserves special attention, since it is one of the privileged places where the ideas of environmental risk, health, and the body converge. The numerous food scares in Western societies in recent decades — along with the increase of chemical substances utilized in agricultural and industrial production, the steady increase in supply and demand of various food products, and the distant forms of production, ingestion and consumption — are bringing about changes in the social perceptions of food risk and its relationship with the environment. With this in mind, numerous socio-anthropological studies (Apfelbaum, 1998; Bredahl, 1999; Butz, Needs, Baron, Bayer, Geisel, Gupta, Oltersdorf *et al.*, 2003; Espeitx and Cáceres, 2012; Fischler, 2002; Guidonet, 2010; Latouche, Rainelli and Vermersch, 1998; Zafra Aparici, Muñoz García and Larrea-Killinger, 2016) have concentrated on the analysis of risk surrounding food, the industrialized food chain and

its technical applications, focusing the analysis primarily on the political and economic organization of our present society.

The present Special Issue attempts to expand the perspectives summarized here in order to focus the discussion on the human body as an area of anthropological exploration. This work responds not only to the relative void in the Spanish literature, but also to an emerging social concern for the incarnate and corporal consequences of certain governmental, industrial, and scientific practices in global societies.

2. Permeable corporalities

The Foucault quotation that describes the body as a battlefield where philosophic, moral, scientific, cultural, and social battles are fought has inspired multiple works, both academic as well as non-academic, and proves particularly thought-provoking for the topic discussed here (Larrea-Killinger, Muñoz and Mascaró, 2017). The body, the bodies of citizens, are privileged sites of discourse in which society expresses itself in its complexity and are inevitably subject to their economic contexts, their political situation, their cultural establishments, and also, unsurprisingly, the forms in which these contexts are expressed in the environment in which they live, drink, breathe, and eat. The moment in which this environment becomes a risk or a danger for the bodies, for their health and their life, is the place where this Special Issue is situated.

Just as epidemiologists Kavanagh and Broom (1998) emphasize, risk has been studied by the social sciences from two apparently opposing approaches: that of the "environment" and that of "lifestyles." The first, seen as collective and external to the individual, puts the root of the danger in the social, political, or economic system. The second is based on blaming the victims for their individual behavioral factors that supposedly carry health risks, thus omitting the social, economic, and political constraints that are concealed within the concept of "lifestyle." Introducing the human body as an axis of analysis, the authors introduce the notion of *embodied risk*, a kind of risk that is in-corporated, embodied, that is not entirely environmental nor solely individual, but it is both at the same time, because the body and the environment are inseparable. The body is understood as both a receptacle of the risks that come from without and as an active subject in its social construction.

The journal *Culture, Theory and Critique* has recently published a Special Issue dedicated to *invisible harm*, a term used to capture the extensive effects of environmental toxicity in the context of late capitalism (Goldstein, 2017). This toxicity is characterized, precisely, as being invis-

ible and only able to be measured through technological mechanisms. Our Special Issue lies in dialogue with this concept of "invisible harm," to locate this present or future harm specifically in human bodies. Furthermore, the notion of *embodied risk* (Kavanagh and Broom, 1998) is especially interesting for the analysis shared here. It is related to the ideas of "interior contamination" and "internal contamination" (Porta, Puigdomènech and Ballester Díez, 2009), since both presuppose that toxicity coming from the environment has been introduced into human bodies and is already an intrinsic part of them. Even though the toxicity itself may be invisible in the environment, its consequences are, or will be in the future, quite evident, in the physical as well as the mental and social embodiment of people. Likewise, the concept of "toxic bodies" (Larrea-Killinger, Muñoz and Mascaró, 2017; Larrea-Killinger *et al.*, 2017) accounts for the centrality of contemporary toxicity in human bodies and the necessity to analyze the socio-cultural practices and discourses of the corporal experience of internal contamination.

Another recent publication, in the English literature, is the November 2017 issue of the journal *Cultural Anthropology*, which, under the keyword *chemo-ethnographies* (Shapiro and Kirksey, 2017), publishes, among others, an article by Michelle Murphy about what she calls *alter-life*. Alter-life refers to life altered by persistent chemical substances and, by extension, the system that creates, develops, reproduces, and legitimizes them. This author has worked on a number of cases of chemical contamination and has coined terms such as "chemical regimes of living" and *alter-life* (Murphy, 2008 and 2017a), two concepts that account for the intimate interrelation between humans and their surroundings, at a molecular as well as social and political levels, and that emphasize the inequality and injustices that exist in places where environmental issues have become urgent.

This Special Issue is also based on the need to analyze embodied environmental risk from perspectives that consider its multifactoriality in a relational way. The body — individual, social, and political (Scheper-Hughes and Lock, 1987) — increasingly occupies the center of discourses and practices surrounding risk, the environment, and food. That is, the perceptions and practices of the contaminated body are not only developed according to the biomedical view of a physical, chemical, or biological body, whose interior has been contaminated, but they are also based on the individual, social, and political elements that it assembles (Larrea-Killinger, Muñoz and Mascaró, 2017; Muñoz, Larrea, Zafra and Begueria, 2014; Zafra Aparici, Muñoz García and Larrea-Killinger, 2016). It is of particular importance to note this viewpoint since, as Michelle Murphy

(2017a and 2017b) reminds us, if we only consider individual bodies and their biological markers of exposure to toxic substances, we can fall into the trap of forgetting their multiple social and political dimensions, and also contribute to the pathologization of communities that already live under "chemical violence," in hostile conditions or social inequality.

In light of this, we take as a starting point the classic English references, like those of anthropologist Mary Douglas, that stated that the analysis of risk should consider fundamentally symbolic and cultural factors of the body and the forms of social organization (Douglas and Wildavsky, 1982). In a similar vein, the sociologist Deborah Lupton has been working for thirty years on socio-anthropological study of risk as it pertains to the body, where the body establishes itself as constructed and experienced through discourse, knowledge, and strategies about risk. The author has explored the dimensions of risk on many levels of socio-structural, cultural, and symbolic significance in terms of how bodies live this experience (Lupton, 1999a and 2013; Tulloch and Lupton, 2003).

The works cited here show evidence of the multiple ways in which the body can be the starting point from which discourses about contemporary risk and its multiple ideological battles are constructed. In these battles, the body is not solely a passive object, in the manner of the docile bodies of Foucault (2009), into which potentially toxic substances accumulate, but rather also an active subject in the process of construction of discourse and knowledge, and with individual, social, and political capacity for the transformation towards a better and safer world (Zafra Aparici, Muñoz García and Larrea-Killinger, 2016). This double role does not suggest, however, forgetting the fact that not all subjects find themselves equally situated in social positions and in positions of power to exercise these capacities in an equal manner (Murphy, 2017a).

Building on these approaches, this Special Issue proposes the term "permeable corporalities" to refer to the body as a contemporary subject which is radically relational, whose embodied risk can be found across discourses, practices, concepts, artifacts, and substances, which are the focus of the studies presented here.

Throughout history, human bodies have been perceived as *opened* or *closed* as a function of their relationship with the other, that is to say, with the world that surrounds them. An example of this would be the medieval body, open to others, the universe, and to the community, in opposition to the civilized body, for example, individualist, dualist, and separated from the "other" (Elias, 1989; Le Breton, 2002). In this Special Issue, we propose a vision of the contemporary body irrevocably open to the world that surrounds it, when considering its relationship with environmental

toxicity. The idea that toxic elements already dwell in the human body weakens the classical dichotomy between the individual and society, since that which comes from the environment has already passed through the perimeter of the individual and can be found in their interior as much as their exterior. This symbolic boundary between interior-exterior has ceased to exist, and we are all already a part of the chemical environment at an intimate and molecular level. The classical dualities of individual-society, or nature-culture, that anthropologists have wrestled with for years, are left behind by this notion of contamination that breaks through the boundaries of the body, whether by respiratory, cutaneous, or alimentary routes. The breaking of this boundary converts contemporary bodies into permeable bodies, exposed and porous, bodies traversed by the environment in which they live, their social contexts and their specific cultures (Begueria, 2016; Larrea-Killinger, Muñoz and Mascaró, 2017; Mascaró Pons, 2013).

It should be emphasized one more time that the notion of *permeable bodies* does not imply that the bodies are merely vulnerable or passive, but places more emphasis on their radical relational nature, their intimate and constant contact with the world around them, human and non-human, and, with this, their active capacity to be affected (Latour, 2004) as much as to effect a consequence. It is precisely this relational capacity that confers to bodies, to people, the opportunity to build communities that articulate their rights and their political capacity to be active subjects (Petryna, 2013), at once vulnerable and porous, open to the world that surrounds them, even if the world is overflowing with chemical compounds and we, all of us, are irremediably permeable bodies.

3. Articles and contributions

The articles collected in this Special Issue present distinct visions of environmental risks in places around the world such as Vietnam, Ghana, Argentina, and Spain. The bodies in these places live and conceptualize themselves in historically and socially situated ways that are presented in each of the articles.

The article by Takeshi Uesugi attempts to understand environmental risk and its social perceptions from a complex and dialogic perspective that considers scientific discourse, historical narratives, embodied itineraries, and cultural and political factors. His ethnography took place in the A Luoi valley, in central Vietnam, where, in the 1960s and 1970s, during the second Indo-China war, the United States Army spread the herbicide known as Agent Orange throughout the region, contaminating land, rivers, and

people. This herbicide continues to cause, to this day, deaths, illnesses, and physical deformities.

In his article, Uesugi analyzes the social and embodied meanings associated with Agent Orange, among the inhabitants of the A Luoi valley, from the moment at which scientific studies verified the presence of the chemical compound in the area. The author does not specifically focus on the ways in which the knowledge of this toxic substance sparks political awareness through redefining symptoms that previously were not identified with Agent Orange. Rather, he focuses on better explaining the ways of subjectively and affectively understanding the situations of risk for the inhabitants of A Luoi. The author highlights uncertainty, past, present, and future, as one of the key elements for understanding ideas of risk among the population that spontaneously barges into their daily lives and through their encounters with other people affected, or not, by toxic materialities. These perceptions are all at once cultural, historical, embodied, and affective.

The article by Peter Little is based on an ethnographic study in the Abgogbloshie District, in the Republic of Ghana, which is considered to be one of the most polluted places in the world due to the presence of large quantities of electronic waste coming from the global North. This e-waste is recycled in Ghana, in formal processing plants as much it is through a highly-polluting, large and informal open-air labor market for recycling, where labor exploitation, migrant work, a lack of protective measures, and scarce public attention to the health of the workers combine. The author focuses on the embodied narratives of one of these recycling workers and their relationship with the toxic substances that permeate the land, air, water, and people. Thereafter, he traces a path through the post-colonial politics of disciplined corporalities, social inequality, and contamination, in an interracial context, to propose the concept of "post-colonial toxic corporalities," a concept that unites lands, bodies, economies, and artificial toxic substances, to demonstrate the interrelation of these elements. In addition, the author highlights the role of NGOs in the area, who through supposedly ecological interventions, perpetuate the vulnerable situation of the migrant workers and their culpability for their state of health. Little proposes an explicit relationship between postcolonial and global capitalist policies and the embodied toxicity of these communities living in hostile situations defined by the economic, political, and social precariousness.

Similarly, Marcelo Sarlingo presents an historical and anthropological tour of the Patido de Olavarría, Argentina, and the socio-political conditions that, during the last century, have allowed the region to become

highly polluted by a variety of industries, resulting in numerous cases of serious illnesses among its inhabitants, amid other severe environmental effects. The author analyzes this phenomenon which resulted from a combination of aggressive industrial mining policies handling the management of toxic waste; a political tolerance from formal structures of power; research and development, at the service of the industrial sector; and systematic censorship from the media.

This silencing of pollution phenomena is accompanied by collective symbolic and ideological representations that have reinforced civic inaction and its expression in the victims' bodies, in a sort of naturalization of neoliberalism within their own bodies, which the author refers to as "natural hegemonies" or "toxic habituality," a phenomenon that is also observed in the cases of Ghana and Vietnam.

It should be pointed out that the ethnographies presented in this Special Issue do not deal with communities that are politically conformed around toxic phenomena, as are the previously cited studies (Petryna, 2013), but are communities in precarious situations and relative ignorance of the environmental factors that directly affect their lives. Against this background, it is significant to analyze the role of the anthropologist, as suggested by Uesugi, since, on occasion, it is precisely their work that highlights this issue in the field, thus playing a relevant role in their own object of study.

Finally, the article by Sarlingo compares the situation of the Olavarría region in Argentina with the growing phenomena of the extensive soy monocultures in the country, and in Latin America in general, and cautions against the intensive use of agrotoxins with their suspected effects for the future of the region.

Just as Sarlingo suggests at the end of his article, food is one of the key elements for understanding and analyzing current environmental risks. In fact, this Special Issue presents a set of articles related by this theme. Food is, indeed, one of the fundamental pieces in the construction of the contemporary body, since food passes through the barrier between the world and the individual, incorporating what is being consumed into the consumer (Fischler, 1995). Therefore, food makes the individual permeable to the outside world and it is precisely in this role that its analysis becomes exceedingly relevant.

The article by Patricia Aguirre analyzes "functional foods," those which have been designed in a lab in order to add chemical substances to them that are presumably beneficial for human health. The article shows the relationship between regulatory public institutions, manufacturing industries, institutions of biochemical research, and the consumer market.

The author, acknowledging the strong relationship between health, pathologies, and food, covers the relationship between corporalities, types of ingestion, and commensality in different social classes in Argentina in order to relate them with functional foods. This article demonstrates that functional foods — promoted as quasi-medicines, when in reality they contain abundant synthetic chemical substances of uncertain beneficial effects on consumer health — imply a dominance of the purely biological corporality, putting aside social and political processes that shape corporalities within diverse socio-historical contexts. Moreover, the production, development, and commercialization of functional foods both prove and reproduce social inequalities in the health of the population to which they are directed.

The article by Larrea-Killinger *et al.* also examines the topic of chemical substances in foods, this time in a study of pregnant and breastfeeding women in Spain that investigates the perceptions around synthetic chemical compounds in foods and the risks that these pose to the women and their children. The article traces the ways in which the women access, or not, information about chemical compounds and foods, focusing on advice that the women receive from health experts, on one hand, and their close social circle, on the other. Given that the information that they receive is scarce and varied, the article tries to elucidate the perceptions these women have of food and chemical compounds: which are considered dangerous and why and what perceptions do they have about the bodily processes of accumulation and transmission of these substances.

Once more, scarcity of information about potentially toxic compounds and how this void affects perceptions and social discourse about the bodies associated with them appears as a theme. In this case, we encounter a situation in which the pregnant and breastfeeding women barely receive information from experts about the possible risks derived from the chemical substances and, as such, their perceptions are varied, contradictory, and at times confusing. Far from the mechanisms of blame that are usually applied to pregnant women (Lupton, 1999b), in this context, toxic corporality is ignored in the doctor-patient relationship, and this generates in the women a sense of acute helplessness. The uncertainty-defenselessness duality is also present in the articles of Uesugi, Little, and Sarlingo. It is worth noting that the articles about food, in comparison with the latter, do not work with subordinate populations or in politically and economically hostile conditions; the silencing and uncertainty around toxic substances becomes a social variable that maintains itself throughout distinct circumstances and societies.

Furthermore, the article by Larrea-Killinger *et al.* brings an important gender dimension to toxic corporalities. Their study revolves around women, who, due to their larger concentration of fat cells, are more prone to the bioaccumulation of toxic chemical substances in their bodies (Valls-Llobet, 2010). A vital moment of pregnancy or breastfeeding, in which the substances can be transmitted to children, creates a generational chain for the transmission of toxic compounds.

Concluding this segment on food, the article by Elena Espeitx and Juanjo Cáceres is based on a study of the forms of classification of food in Spanish society and the displacement of certain foods among said classifications. This paper is related to that of Larrea-Killinger *et al.* in that both deal with the population's perception of foods and, ultimately, their potential risks. It is worth mentioning that, in this article, health is an important element that defines the way that we classify foods, and that this concept is related with "natural" foods, even though the concept of "natural" is ambiguously defined. Similarly, there is an association between foods perceived as "artificial" or "industrial" and foods that are judged as "dangerous." This perspective ties in with the findings of Larrea-Killinger *et al.* and also with a number of other studies on food (Begueria, 2016; Contreras and Gracia Arnaiz, 2005; Guidonet, 2010). However, the dangerousness of foods does not appear to be especially relevant for the participants of the study. Additionally, the social context of consumption and the familiarity with food is an element of classification as important as health. In this study, it is interesting to observe that the perceptions of food-related risk, or the lack thereof, and its corresponding corporalities, are socially constructed by elements that are not solely related to the food itself, but rather to the forms of consumption and its social organization.

Although the articles related to food are dissimilar, as previously stated, their results coincide in the scant social consciousness about current food-related risks from artificial chemical origin. It is significant that in societies such as Spain or Argentina, despite the fact that there are numerous social discourses about food and risk, other elements, such as sugar or fat, emerge as more pressing issues than chemical toxicity.

These articles trace social, political, and economic contexts in which the invisibility or silencing of certain situations or toxic substances is generated, and they describe how this concealment is transferred to forms of knowledge, or ignorance, of the environmental risks to which certain populations are exposed. Through the analysis of perceptions and knowledge, the authors of these studies examine the embodiments that emerge in particular circumstances. These permeable corporalities, radically rooted in the environment that surrounds them, are found to be erased, si-

lenced, and, in some cases, covert. To this effect, we propose the necessity of further study of this area from different social sciences, and especially from Ibero-American anthropology, to expose, articulate, and discuss these corporalities and their undeniable relation to the world in which we live.

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