



Developing a Conceptual Framework for Understanding Children's Eating Practices at School

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Abstract. Recent calls by the European Union for a broader focus on school food and children's eating practices have prompted a series of initiatives that seek to understand school meals beyond a traditional nutritional focus. The EU calls specifically identify processes of teaching and learning as central to this new refocusing. In this article, we offer a conceptual framework as a proposal for understanding how children learn to eat in school, and thus we address some of the theoretical and methodological aspects of this recent call. We employ the concepts of 'foodscapes' and legitimate peripheral participation as central mechanisms of such framework at the structural and agency levels respectively. Records of eating activity in and out of school, documents and interviews with children and adults across school lunchrooms, school kitchens, and classrooms are employed to demonstrate the applicability of the proposed framework. Preliminary results reveal children may be developing eating practices-in-context, meaning they selectively assess, adjust and develop eating practices according to the particular elements or/and factors existing within a foodscape but employ other foodscapes comparatively to assess their conditions, eating experiences and the food in school. These results are discussed within the context of claims and assumptions that teaching children 'how to eat' in school may become an inherent quality of the individual and will 'transfer' to other settings or foodscapes.

Introduction

Traditionally, school food reform efforts have had a strong focus on how to meet the nutritional and caloric needs of children through the preparation of balanced meals; that is, a central focus on the food itself (Poppendieck, 2010). This continues to be a critical aspect of school food reform especially in countries where government agencies are developing school meal programmes, or where a nutritionally balanced meal is the only daily meal children can secure (WFP, 2013). In addition, the role that nutrition, as guided by nutritional sciences, has played historically in schools as an equalizing agent for access to food, or of correcting specific nutritional deficiencies among less fortunate children, should be understood in social, developmental, and political terms (FAO/RLC, 2012). In short, a nutritional focus, even considering its

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shortcomings as aptly highlighted by some scholars recently (Scrinis, 2002; Pollan, 2008; Poppendieck, 2010), has played and continues to be a critical factor in school meal programmes.

However, recent research indicates that it may be necessary to go beyond nutritional and caloric needs and centre on *accompanying measures* that seek, through *teaching and learning interventions*, to modify the eating behaviour of school children (European Commission, 2012) and to re-conceptualize school food¹ and school eating practices in broader terms (Stewart et al., 2006; Weaver-Hightower, 2008; Poppendieck, 2010; Mikkelsen, 2014). The reasons for doing so vary, but most seem to agree that the predominant *nutritional paradigm* has tended to overshadow important elements affecting the eating practices of children in school.

For instance, Bauer et al. (2004) suggest that there may be aspects of school environments that prevent students from gaining the full benefits of recommended nutrition programmes and policies: the poor quality and palatability of food served; easy access to non-nutritious snacks; insufficient time in which to finish eating a full lunch; and students dieting and weight-related teasing were described by students and staff as overwhelming barriers to healthful nutrition. In fact, a study conducted by ODELA (Food Observatory of University of Barcelona) in 2004 showed that even if lunch menus are planned in accordance with nutritionally balanced standards, the meal actually eaten by a student is not necessarily balanced (Contreras and Gracia, 2004). Psycho-physiological factors (individual perceptions of the organoleptic characteristics of the food), sociocultural factors (social meanings of food and meals, gender and age differences, among others), and organizational-pedagogical factors related to the school cafeteria (specific behavioural rules, the level of interaction among the people involved – students, lunchroom monitors, cooks, teachers) can influence the attitudes and decisions of students towards food. The same study identifies that students dining at the same table ate similar foods and consumed similar portions. This highlights that the social exchange around the same table has a direct impact on the actual consumption by the students. Other literature on children's consumption also emphasizes the influence of peers in their eating practices (Fischler, 1995; Ross, 1995; Roos, 2002; Stewart et al., 2006; Ludvigsen and Scott, 2009).

Even in those cases when school lunchrooms offer more than one choice of nutritionally balanced meals, there is evidence that children gravitate toward a preferred food item and end up selecting a nutritionally unbalanced plate (Brannen and Storey, 1998). Food preferences are especially important determinants of children's food intake (Birch and Fisher, 1997). On the other hand, others have found that 'healthiness' has very little influence on children's choice, and that there is a strong inverse relationship between children's perceptions of the healthiness of foods and their preferences for those foods. Factors such as taste, texture, smell, appearance and satiety value were found to be more important (Noble et al., 2001). As other studies have also suggested, there is a *knowledge-behaviour gap* as children do not translate their basic understanding of a healthy diet into action while making food choices (Ross, 1995; Roos, 2002; Stewart et al., 2006; Ludvigsen and Scott, 2009).

In the same manner, Fischler (1995) highlights that nutritional knowledge and eating behaviour have been misinterpreted constantly, assuming that modification in one would affect the other automatically, which we know is not the case. As evidence of that, it is worth noting that the nutritional paradigm guiding school food has not impacted significantly the alarming increase in rates of obesity among school-age children (Poppendieck, 2010). Only those programmes that have utilized

a nutritional model embedded within broad interventions have shown a better effect on children obesity (Veugelers and Fitzgerald, 2005), and that seems to be a way to make school feeding and school food a more *integral* part of the educational mission of the school (Weaver-Hightower, 2008, 2011; Mikkelsen, 2011). Other researchers advocating such a widening conceptualization seek to understand the link between school food consumption, and the emergence and sustainability of local agricultural economies (Ruge and Mikkelsen, 2013).

What seems to be emerging among these initiatives are two distinct levels: on the one hand, there are calls and programmes to look *beyond* the school to factors affecting the school lunchroom and its organizational structures; and on the other hand, others attempt to look deeper *within* the school itself to examine how food and eating practices can be conceptualized as part of the 'educational' mission of this institution (Poppendieck, 2010). We think both are quite valid and critically important to school food reform, but we wish to caution about a possible divergence of approaches that may result in separate and unrelated levels of analysis of children's eating practices. Consequently, our initial approach in developing and proposing a conceptual framework centres on two distinct but highly interrelated levels. At a *structural* level, the framework attends to the organizational and sociocultural aspects of eating practices at school, employing and expanding on the notion of *foodscapes* (Johansson et al., 2009; Mikkelsen, 2011). At a more *agency* level, we propose a mechanism that could help us describe the processes of learning, and development that accompany those eating practices. We employ the notion of legitimate peripheral participation, or LPP (Lave and Wenger, 1991) to account for how individuals participate individually and collectively within the social practice of eating with others and develop an identity as *eat-in-context* (e.g. school eaters).

Considering that in the school lunchroom participants live the entire experience as a whole, these two levels (structural and agency) are mere analytical instruments. Nevertheless, we think that without an organizational and sociocultural analysis of school eating practices (structural level), we are left to conceptualize eating at school as an individual encounter with nutrients with possible over-attributed implications for the individual. Likewise, without an examination of processes of learning and development situated within a particular context (agency level), we are left with the need to explain how individuals and/or collectives act, change or develop within those organizational structures. In summary, the aim of this article is to propose an emerging conceptual framework, informed by our own observations, that seeks to link levels of participation around the act of eating at school at a level beyond the nutritional focus. We view this proposal as a first theoretical and methodological approximation to understanding the complexity of children's eating practices and thus we caution readers on its embryonic nature.

Theoretical Orientations

Considerations at the Structural Level

We use the concept of *foodscapes* (Dolphijn, 2005; Johansson et al., 2009; Mikkelsen, 2011) to conceptualize the *organizational* patterns of children's eating practices in school settings such as the lunchroom or canteen.² By 'organizational' we mean how people in a particular setting manage to organize themselves to do the work they are expected to do in that setting, and how existing resources available to them structure

such organization. In other words, we think the context or medium in which school eating takes place can be productively studied in interactional terms (Goodwin and Duranti, 1992; Becker, 1996). As Becker reminds us, 'concentrating on organized activity shows that what a medium can do is always a function of the way organizational constraints affect its use' (Becker, 2007, p. 15). Theoretically and methodologically, we seek to move away from the notion of 'setting' and its overwhelming attention to the physicality of a context and its *perceptive* effect on individuals. We prefer to think of individuals and settings in interactive fashion, meaning we centre less on the objects themselves and much more on the actions involving those objects. Nevertheless, this does not disregard the material culture of a school lunchroom: objects such as utensils, tables, and food itself are deeply embedded with histories, cultural attributes, and are often used to structure activity, but we prefer to examine how those objects are brought to life by its use in activity.

At a fundamental level, the notion of foodscapes evokes an ecological perspective, a description of the 'things' that compose a space and the relationship among them. From that perspective, it is safe to assume that disruptions or movements to one element in a foodscape will impact others in the same space (Odum and Barrett, 2005). When applied to institutional environments where children eat – what some authors refer to as 'captive' settings – then activities such as eating involve the participation of many agents and/or factors, and such activity is affected by and affects the context (Dolphijn, 2005). Mikkelsen defines foodscapes as 'the physical, organizational, and socio-cultural space in which clients/guest encounter meals, food, and food-related issues, including health-related messages' (Mikkelsen, 2011, p. 215). Johansson et al. provides a similar definition but with other nuances: 'the places and contexts where children eat and come into contact with food, and the meanings and associations connected to them' (Johansson et al., 2009, p. 30). These two definitions point toward the complexity of eating in a context (not just a 'place') composed of interactions, meanings, associations, organization, physicality and messages. Dolphijn provides a more interactive and constitutive notion of foodscape while examining consumption in public settings, by expressing an interest in 'how food moves in structures, how it changes them, and is changed by them' (Dolphijn, 2005, p. 8). We believe that the concept of foodscapes as defined by these authors (and others, see Winson, 2004; Sobal and Wansink, 2007; Burgoine et al., 2009; Freidberg, 2010) offers a theoretical and methodological approach in which to consider factors related to the act of eating in school that go beyond the intake of calories and nutrients.

We read these definitions as seeking to problematize a setting and a process that has traditionally been treated in a rather narrowed fashion (i.e. a site for the ingestion of food). Moreover, those definitions implicitly allude to one aspect we think is critical: *interactions*. Any 'socio-cultural space' (Mikkelsen, 2011, p. 215) is, by definition, an interactional space – a space where people interact with each other and with the resources (material or immaterial) available to them. Notice, for instance, that Johansson et al. (2009) do not talk about a 'child' or the meaning and association an individual creates or possesses. Instead they define foodscapes in terms of 'children' and the meanings and associations connected to 'them' (Johansson et al., 2009, p. 30). In short, we believe these authors are implicitly signaling a highly social and interactional environment in which children eat or relate to food in diverse manners. The conceptual framework we offer below is an attempt to elaborating on those definitions and operationalize the notion of foodscape in the context of school eating practices.

Considerations at the Agency Level

If foodscapes are complex interactional spaces, and if such conceptualization permits us to think of the main elements that constitute them, we are still left with the task of explaining behaviour inside of them through mechanisms that may take place below or through those elements. Thus, the theoretical task at hand is to use theories of interaction that may help analysis at that (agency) level. To do that, we centre on student feeding practices using sociocultural theories of learning and participation that can capture changes in the individual, and the collective eating practices of children. We are after the examination of *eating as a form of learning*, learning to participate in a collective practice, learning to become a member of a group, and learning to eat-in-context or within a particular foodscape. Within the interactionist perspective we offered above, those processes are all marked by *participation* as a leading activity. Participating is what provides purpose for participants and what directs learning or development (or not). As research in situated cognitions has revealed, 'learning is a process that takes place in a participatory framework, not in an individual mind' (Hanks, 1991, p. 15). Thus, for us the unit of analysis is the act of participation in the events of eating with the resources (such a language, norms, tables, etc.) employed to progressively become part of a group, or a community of school eaters (what we will later call, an *eater-in-context*).

At this agency level then, we employ the notions of *legitimate peripheral participation* (LPP – Lave and Wenger, 1991) to understand eating as a process of incorporation of the individual into a social group guided by personal goals and the collective norms of the group. This concept, used by Lave and Wenger to describe learning processes, apprenticeship and identity, allows us to examine the individual (in relation to a group) whose function is to *learn to eat in school* and be part of that group. In trying to understand what can be viewed as identity construction through legitimate peripheral participation (LPP) we propose the notion of *eater-in-context*. We think of an *eater-in-context* as an individual seeking to become part of a particular foodscape and to do that s/he employs, through repeated interactions with others, the material and immaterial resources available in that particular foodscape. Many of those resources are unique to the foodscape where the activity takes place (for instance, the way people organize themselves to eat in a school, the norms that guide such eating, the way food is served, etc.) and because of that, the learning that emerges out of a particular foodscape is context-bound or situated in the practice as it takes place there. But some resources are not unique, they exist across other foodscapes, and individuals make use of those resources to gain initial entry into other foodscapes (for example, children have knowledge of eating utensils and how to use them, even if they are employed differently across different foodscapes.) The notion of LPP thus serves us to understand and describe the development of interactions that take place in the school lunchroom or canteen between students and adults and among students in terms of what is expected institutionally from the student and what the student expects of the school lunchroom. This means understanding how students become or are incorporated into a way of eating in the school context. We offer the concept of *eater-in-context* to signal such construction and transmission of children's identity.

Inside those participatory structures, we make use of talk-in-interaction and language socialization theories (Ochs, 1988; Schieffelin, 1990) to understand how students use language in the process of 'learning to eat' at school. Through participation in school eating practices, and conversations with peers and adult supervisors,

students are socialized in relation to sanctioned foods, ways of eating, social order, and identity aspects of food (Karrebæk, 2012). *Participation in a community of practice* is the notion that links these two levels. The notion implies an activity-in-context and that context is in large part the structural, organizational and sociocultural elements of a foodscape. Yet, part of becoming a member of a particular community also involves a degree of resisting, contesting, and adapting those socialization efforts to form their own identities as school eaters (Torralba and Guidalli, 2013). We focus on how children in the school foodscape employ language resources with others to construct meaning and forge a collective identity as school eaters. As mentioned earlier, we offer an elaboration at the structural level of this conceptual framework, but first a word on methods.

Methods and Context

Methods

Data employed in this essay emerge from a larger corpus collected by the authors across schools in different parts of Spain. Some data come from observations, informal interviews and conversations with students, parents, lunchroom workers and school administrators at a public elementary school in Madrid, Spain, collected by Torralba during the 2012–2013, with the bulk of the observations taking place during the period of October 2013–February 2014. Observations were audio recorded, and conversations were transcribed in a relatively minimal conversation analytic standard (Karrebæk, 2013). A larger record emerged from extensive observations, informal conversations and focus group interviews with elementary and secondary students conducted by Guidalli in elementary and secondary schools across Catalonia (Spain). Consent from all participants was secured at the project levels (Guidalli) and the school level (Torralba), following institutional, national and European guidelines. We rely on student (and adult) perceptions of food, behaviour, and other social aspects of eating in and out of school. Those perceptions are articulated in statements made by children and adults in relation to food, dishes, eating in school, participating in a group, etc. As will become clear, we employ students' statements and observations to ground the development of our conceptual framework for those statements to illustrate the particular amplification to the notion of foodscape we offer in this article.

Audio records were used to produce *content logs*. That process consisted in laboriously reviewing video/audio recordings and making periodic notes and codes of moments representing instances associated with existing or emerging categories of relevance to processes highlighted by LPP and then writing analytical memos to examine their alignment with larger categories (e.g. organization, structure and interactions during lunch time). These content logs were then used as searchable records for additional examples and refinement of intended categories. Identified categories were used to guide subsequent analyses of data records, searching for samples and counterexamples of particular themes. The result of this iterative process is a collection of categories with exemplifying instances in the tradition of grounded theory (Glaser and Strauss, 1967; Strauss, 1987).

Guidalli's fieldwork took place over a longer period of time and as part of a larger project (ODELA, 2010–2012),³ which sought to characterize, analyse, understand and explain the actual attitudes and eating behaviours of children and adolescents in

their school context. The sample size included 19 Spanish schools. Detailed records of the organization of the lunchroom, its normative aspects and demographics were generated. Direct observations were conducted in each school during mealtimes to capture attitudes and gestures of the students in response to the dishes served and the interactions among students and between the lunchroom monitors and students. Throughout the observations, students were informally asked about the quality of the cafeteria food in general and for that day specifically. In addition, 15 discussion groups were carried out with children and adolescents between the ages of 6 and 16 years old about students' opinions and perceptions of their school's cafeteria, concerning its environment, rule system, and the daily menus offered. The students also discussed their own behaviour and attitudes towards food in general and towards certain ingredients, specific foods, dishes and preparations. Finally, a questionnaire on food preferences was given to a larger set of students nationwide ($n = 6,000$), in which students were instructed to write freely about their food preferences and/or habits. Some of these statements will be used on the analysis below.

Contextual Aspects

Usually, meal services offered by schools in Spain can be operated in three different manners: 1. a catering company delivers ready-made food daily; 2. schools with kitchen facilities elaborate their own meals; and 3. a catering company supplies the raw materials and the kitchen staff prepares the meals. The type of food service also depends on each school lunchroom: the menu can be served to the students seated at their tables or buffet style, using a serving-line system with plates or aluminum trays. Each month, families receive the planned menus. In general, the Spanish *school lunch menu*, consists of a first course (a starter) usually consisting of rice, vegetables, soup, beans or pasta; a second course (main dish) normally consisting of beef, chicken, pork, fish or eggs – often accompanied by salad or a garnish of vegetables – and a dessert, preferably fruit or yogurt. In the vast majority of schools, children have only one daily menu. The daily food options vary only for certain health issues (allergies, celiac disease, diabetes, etc.) or due to ethnic and religious variables (schoolchildren of Muslim origin are not offered pork). The lunchroom supervisors are key figures who ensure students consume the meal served, and comply with the rules and standards of behaviour of the dining hall. They are also responsible for assuring that students follow hygienic habits, use utensils properly, maintain proper posture while eating, at least taste all the food, etc. These individuals can be contracted by outside companies (catering or otherwise) or be employed by schools (Guidalli, 2012).

Conceptual Framework

Structural Considerations

The contexts of children eating in institutions such as schools have been conceptualized as 'captive out-of-home' environments (Mikkelsen, 2011). *Captivity* refers to the length of time students spend in school daily, presumably the fact that students have to be in school (in most countries primary and secondary education is mandatory), and the little choice or no choice they have over the food prepared and served at school. These factors can be found across other institutions where individuals (not

only children) spend long periods of time and are constrained by similar factors (e.g. hospitals, prisons, etc.). The issue of ‘captivity’ is fundamental for understanding the formulation and applicability of our framework because captivity for us is not a discrete dimension but rather a continuous variable that shifts when elements of a foodscape change, and is *felt* differently by children with implications for their autonomy and the levels of authority exerted by the institution. Our proposal is that for foodscape to be useful in the study of school eating practices, it should be considered a *permeable* unit, allowing key factors and agents to enter and leave. And, because of this permeability, it should also be viewed as a *dynamic unit* that can suffer organizational, structural and social changes through time (Torralba and Guidalli, 2013). We find it useful to think of foodscapes as *contexts* organized and structured for *collective use*. Below, we explore these dimensions using specific examples from our data.

Permeability

‘The school salad is not a salad, it’s lettuce! My mother puts in onions, carrots, olives, cheese, apples, pears, everything!’ (fourth-grade girl).

‘And they make “paella” in a big pot, covered with a top, but that’s not a real “paella”. We want it like in a restaurant! They don’t even add seafood, only peas and a little meat... it’s not a “paella”’ (fifth-grade boy).

These (negative) assessments of the school salad and school paella – a well-known Spanish dish – reveal how some resources (i.e. concepts of what a salad and a paella ought to look like) from the home and restaurant foodscapes *enter* the school foodscape and are employed to qualify a particular school food as not meeting the standards of what a salad or a paella ought to look like. We can think of this action as a factor entering a foodscape and possibly having an effect on the ongoing eating behaviour of this child, at least as far as salads and paellas are concerned. This is what we mean by a permeable system, one that permits (willingly or not) factors to come into it. If factors are capable of entering a foodscape, it is reasonable to assume others will exit that foodscape as well.

‘Vegetables in school are better than those at my home because they are juicier’ (second-grade girl).

We can conceptualize this statement as a factor *exiting* the school foodscape. In this case, the (positive) assessment of school vegetables is used in comparative fashion to judge the preparation of vegetables in this child’s home. That is, an element of the school foodscape (a particular food and the manner in which it is prepared) is used to evaluate (albeit indirectly) the same product at home. The analogy of a permeable cell membrane can be brought to bear here (Singer and Nicolson, 1972). Two basic characteristics of cell membranes are selectivity and protection. Selectivity (letting some molecules enter while keeping others out) is achieved through chemical means on most cells, while protection is the consequence of such selectivity. In a foodscape, selectivity might be achieved by the rules and norms of conduct of the school lunchroom and by the preferences brought in by children. ‘Protection’ is a term recently used by some scholars in reference to school foodscapes to denote a setting that protects children from certain types of unhealthy foods (Poppendieck, 2010; Mikkelsen and Ohri-Vachaspati, 2013). The school foodscape, as a *selectively permeable system*,

seeks to protect the nutrition of children by providing well-balanced diets and enacts a set of norms (the chemistry of its membrane) that allows for some behaviour to be acceptable at the school lunch while others are clearly left out (e.g. children cannot eat at different times, or by themselves, nor can they request a different dish).

Dynamism

A foodscape will change over time simply because its elements change and the interactions that characterize the relationships among these elements once inside of the foodscape will also change. Here, the ecological perspective of a foodscape mentioned in the first section may be helpful. In an ecological system any element that enters or exits that system creates a disruption in the existing relationships, and the system adapts to a greater or lesser extent. The important point is that the system changes over time (reaching a new equilibrium). We illustrate this below.

Shifting to Organic Food

Statements from adults and children at this particular school reflect the dynamic nature of a foodscape. These statements and observations emerge out of a school with its own kitchen that began to purchase a larger proportion of its food from organic sources. Their first step was to move towards organic fruits, vegetables, grains, and legumes (organic meats represented too much of a cost for them at the time).

'In this school they are introducing whole grain rice little by little. When I arrived at this school, they had already served it four times. The first day, according to the cook, was 'a disaster' but children are getting used to it, and the last time they serve it it was better accepted. The case of organic oranges is similar. When they first served organic oranges, the students resisted because they are darker than the ordinary non-organic oranges. Many children complained, the monitor explained, but after they tasted them they discovered that they taste 'better' than the non-organic ones' (Guidalli's field notes).

The introduction of these products can be viewed as a new element that *enters* this foodscape and clearly causes *changes* in the eating behaviour of children and in the food served. The change can be characterized by an initial rejection of and a gradual adaptation to the new (organic) food. In this case, the institution has brought about the shift to organic products, while the children are thought of as recipients of a 'good' thing, but nonetheless recipients. Their initial refusal to eat the organic oranges or whole grain rice no doubt changes to a certain degree the way these new foods were prepared for them and served (e.g. gradual introduction of brown rice as opposed to a complete shift from white to brown rice, perhaps a greater degree of interactions among children and adult supervisors who customarily circulate among the tables to ensure students eat their food). In the next set of statements we encounter a situation where the school foodscape changes but as a direct result of a minority's food preferences.

The Case of a School with a Majority of Romani Kids

Again, in Guidallis's field notes we find observations and conversations that are illustrative of how a school foodscape can be thought of as a dynamic system. Guidal-

li's notes refer to a school in the outskirts of Barcelona with a high degree of Romani⁴ students.

'All the food in this school is prepared in its own kitchen. Of the 97 students who eat school lunches, 60 are of Romani descent. Maribel, one of the cooks at this school, explains that they have had to adapt to the food preference of the Romani kids. "They like to eat harder food." Maribel gives me some examples of how they have had to adjust:

- The rice always has to have food colourants so that it appears yellow to them, so they like it. If the rice is white they say it doesn't have any taste.
- The tomato sauce is made with preserved, fried tomatoes, not fresh tomatoes.
- They always want more salt than the other kids.
- The tomato sauce (used for paella, lentils, meat, etc.) must be very smooth.'

"The Gypsy children are very finicky about their food. If something doesn't appeal to them, they just won't eat it", explains Maribel. "To serve these children we need our own kitchen in the school. That's why a catering system will not work in this school'" (Guidalli's field notes).

Maribel is revealing how the elaboration of a school menu has been adapted to the local contingencies particular to that school (i.e. the changing demographics and a clear majority of Romani children, where somewhere else they will form a minority). The Romani children affect food preparation at this school, and thus we see that the permeability of the system has indeed resulted in a shift or a change. It is worth noting that this particular school foodscape has changed not only for the Romani children but also for the other 30% of children who are not of Romani descent. When asked about this matter, Maribel seems to suggest that the remainder of the children do not complain about the changes. They got used to them.

Collectivity

We find it analytically useful to think of foodscapes as *structures that are designed, organized and enacted for collective use*. Our (interactional) theoretical orientations seem to dictate that we examine eating in that context. This is not to say that an interactionist framework could not support the analysis of, for instance, a child eating by herself at the school playground; that event would be an interaction with food and all constrains and resources available to this child. We view such individual eating experience as not being guided or structured by the same type of norms, expectations, and institutional organization than the school lunchrooms, homes, or restaurants are. Even if five or six students decide to go into a corner to eat their snacks on the same school playground would be a quite different event for us analytically. However, we wish to express our tentative thinking in this area since, on the one hand, setting limits is always an exclusionary exercise. But not doing so, on the other hand, leaves us with definitions that encompass everything and thus places us in a worse situation analytically. For instance, if we think that any encounter with food or messages about food constitutes a foodscape, then we are forced to ask what is not a foodscape. If we cannot think of any event that will be outside of the formal defini-

tion of a foodscape, then we see little need for the notion of foodscape. We would like to think that the notion of foodscape borrows heavily from the notion of ecology. That is, the interrelationships between the elements of a particular habitat and the notion that any disruption in any elements of an ecological environment would have an effect on some or the remainder of the elements of that habitat. The image of a boy eating a snack on the school playground while watching his classmates play football does not carry that ecological weight in our view. We think the *intentionality* of the design and organization of a foodscape is quite important because it carries with it a set of assumptions about the collective use of such settings (even if an individual eats in such settings by him/herself). There are restaurants designed and organized for single eaters (e.g. Eenmaal, <<https://www.facebook.com/popupeenmaal>>), but even such design and organization assumes collective use. We think of foodscapes as complex settings where not only consumption of food takes place, but also interactions with it. For instance, for us going to a market and interacting with the food (even if one does not eat it, or buy it) constitutes a foodscape because that setting has been designed and organized for collective use (even if individual customers attend to food individually). The important point here analytically is the interaction with the food, with others, and the organizational structures that constrain and support a foodscape. Figure 1 tries to capture the three main analytical characteristics of a foodscape we have just elaborated.

This diagram represents what we see as the minimal elements and relationships of a school foodscape. We think it is quite important to view a foodscape in interactional terms, simply because that is what people do when they organize themselves to eat collectively: they interact with each other and the resources available for eating. In a school foodscape we can, at a minimum, identify these elements: children, adults, food and material and immaterial resources. Children interact with other children while eating, and with food. Those interactions are shaped by the perceptions, preferences and meanings they attribute to the food offered to them. Adults interact with other adults (for instance cooks and monitors or supervisors) and with children. Those interactions are centred on elaborating food in particular ways and providing it under certain constrains and norms. Finally, we can think of

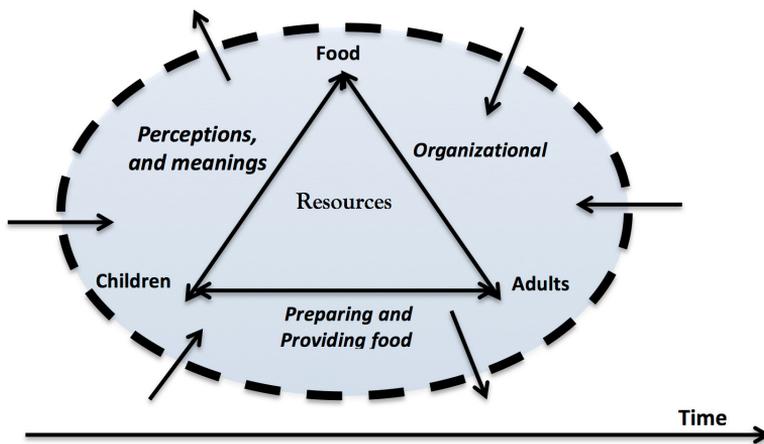


Figure 1. Permeable, dynamic and collective characteristics of a foodscape.

the interactions between adults and food as marked or mediated by the organizational, structural and institutional constraints. All these interactions are in some way mediated or facilitated by the material and immaterial resources available, such as plates, utensils, tables, cooking instruments, ingredients, norms, directives, routines, rituals, etc. *Using those three properties, we can think of foodscapes as more or less stable systems.* When we think of less stable systems, they become a *state of being*, while in more stable form they are marked by a *periodicity*. Some examples will help here: a school lunchroom is a stable foodscape, its daily periodicity marks its stability in time and space, while a birthday party on the school playground, or inside a classroom, is a transitory foodscape: even though it gathers many of the characteristics of a different foodscape, it ends.

Agency Considerations

How do children learn to eat inside of a foodscape? How do they develop into school eaters? These are questions that interest us because they represent: 1. fundamental knowledge about a particular human practice we seek to understand; and 2. answers that will reveal to a certain degree how best to intervene to improve the eating practices of children in school.

Our theoretical approach assumes that inside a school foodscape, children might be learning mainly through *participation* in what they see as the *leading activities* of that foodscape. That, of course, includes eating but it may go beyond that to include being with others, playing, creating alliances and so forth. We think such learning is mediated by interactions with people and resources, and language socialization may be a central resource in that process. Learning conceptualized as levels of participation implies movement or development. We think of development inside a foodscape as a way of becoming a type of eater. Under the LPP perspective, becoming a full practitioner of any sociocultural practice (such as eating collectively in school) involves a progressive movement from the periphery toward a centre of that practice. Just as in Lave and Wenger's model, we think in school foodscapes, or those foodscapes characterized as 'captive', such movement or development includes a permanent tension between what the institutions expect and what the children envision and construct as school eaters. This is often manifested by a gap in identity, which we adults recognize as 'undesirable eating patterns' on the part of children. Those gaps occupy a central concern of reform efforts (for instance, efforts to curb obesity, or to prevent food waste in schools).

Understanding how an individual becomes part of a sociocultural practice means that aspects on the context are not just important, they are constitutive – that is, they become part of the knowledge, skills, behaviours and identity constructed within that context. This suggests that children may be developing eating practices-in-context, meaning they selectively assess, adjust and develop eating practices according to the particular resources existing in the foodscapes they participate in. We propose the concept of *eater-in-context* to describe that process. An *eater-in-context* is an individual seeking to become part of a particular foodscape and to do that s/he employs, through repeated interactions with others, the material and immaterial resources available in that particular foodscape *to build a context-bound identity*. When we take this perspective, we begin to see that children are not necessarily passive recipients inside foodscapes, but instead, they become individually and collectively vested in crafting their eating experiences at the school foodscape. We will illustrate

this shortly. What this conceptual framework seems to suggest is that if children's eating practices change in relation to the foodscapes we may not be able to speak of a 'universal' good or bad eater, but instead of an *eater-in-context*. Below we offer statements gathered from students at different schools in Spain to give an example of how becoming a school eater may take place. The reader will notice that some of these same statements were employed in previous sections to illustrate the structural characteristics of a school foodscape. We are interested in how these statements reflect developmental stages in becoming a school eater, and how part of that development shows a *comparative framework* employed by students in assessing school food, their eating practices in the school foodscape, and thus position themselves as a type of school eater.

'And they make "paella" in a big pot, covered with a top, but that's not a real "paella". We want it like in a restaurant! They don't even add seafood, only peas and a little meat... it's not a paella' (fifth-grade boy).

In this first example, a boy compares two foodscapes (restaurant and school) to assess the integrity and quality of a dish served in school. Perceptions of how a paella should be cooked and what it should have in it are employed as a way to disqualify school paella. Here 'the restaurant' stands for a generic cook that should be used as a model. Thus, *becoming a school eater* for this boy may involve having to eat paella that is not really paella. In other words, the school eater learns to recognize 'school' paella, and the context in which such a dish can be eaten (albeit reluctantly).

'One day... there was a pretty good lunch... but I was still hungry after finishing it. You know? It was just like in those fancy restaurants where they put a little portion on your plate... it was just like that. They put a little bit on my plate and they didn't allow me to have a second serving' (sixth-grade girl).

Here, a similar comparison between two foodscapes is made to produce a critique of school serving and eating practices and implicitly to supply an alternative to what sort of eating experiences students envision at school. This student is producing elements of what may constitute a school eater. She expresses how she would like to eat in school in terms of quantities and to make more decisions about quantity.

Girl 1: 'The school salad is not a salad, it's lettuce! My mother puts in onions, carrots, olives, cheese, apples, pears, everything!'

Girl 2: 'My mother's salads are very fun, full of colours...'

Boy 1: 'My mother puts fruits and pine nuts, those little ones, in the salad...'

Girl 3: 'And my mother makes it with tomatoes and lots of things.'

In the above exchange (collected from Guidalli's group interviews), fourth-grade students evaluate the appropriateness of a school salad in relation to the preparation of that dish by their mothers at home. For these children, the school salad is just lettuce ('it's lettuce'), it lacks colour and variety of ingredients, while the salads prepared by their mothers seem to be quite different. Again, *becoming a school eater* in this case may involve learning what a school salad often looks like. Finally, not all is bad at school. Sometimes, children perceive elements of the school foodscape as providing desirable social conditions that cannot be found at home:

'In school, there are more children than at home... to talk with. This is something good' (first-grade girl).

For this child becoming a school eater may involve having always someone to talk with while eating there. The sociability of the school foodscape is perhaps better illustrated by the active role children take in becoming part of particular groups in the school lunchroom. Below we offer a case study of one such student, and examine this student’s attempts at becoming part of a group as centrally related to identity building, attempts marked by his strategic and active use of the material and immaterial resources of a school lunchroom.

The student, Iñigo, is an eight-year-old Spanish boy who attended second grade in a public school in Madrid during the 2012–2013 academic year. Because he was identified as academically advanced for his grade, both the school and his parents decided to accelerate his progress through a slow transition into the grade level above his. Through the 2012–2013 period, he attended third grade in different subjects that could match his second-grade schedule. Thus, Iñigo was socializing with two different groups during that year. According to his mother, Blanca, the child ‘felt much more comfortable in third than in second grade, he was more in line with third-grade peers... When he would attend the third-grade classroom, it was like the joy of the day for him’. In December 2012, Iñigo suggested to his mother that since he was almost a third grader, why couldn’t he sit down with them at the third-grade table in the school lunchroom. It is worth noting that in this school the structure of the lunchroom is organized by grade level. We believe such geography was a key material resource to Iñigo for ‘becoming’ part of the third-grade table (see Figure 2). Iñigo recognized that geography, and employed it to develop affiliation and alliances with those sitting at the third-grade table. In these types of foodscares children like Iñigo develop collective ways of eating that at times align with how they are expected to eat and at other times do not. Eating becomes a highly social and collective practice uniting students into a group (a grade level in this school) and differentiates them from other groups and from adults. In this sense, we suspect that the daily interactions, the moment-by-moment interactions among peers at the tables are what

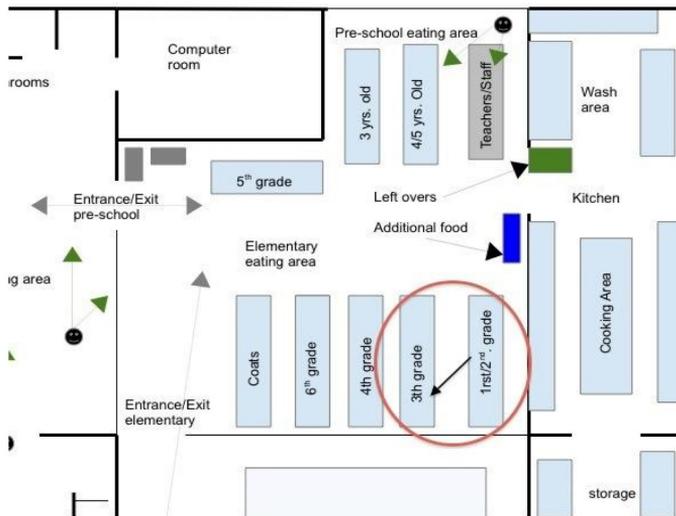


Figure 2. Iñigo’s school lunchroom.

Note: The arrow shows Iñigo movement from the first- and second-grade table to the third-grade table.

supports the construction of identity, as part of a daily routine that may structure and mediate the type of peer culture,⁵ from where to develop the skills to become a member of a group. In other words, through interactions within the daily routine, students may be crafting a culture of school eaters, and those interactions at the table are the epicentre of that process.

After a few months, Iñigo's mother thought that the shift to the third-grade table was what made Iñigo feeling part of the new group. Before that switch, the boy 'was like a satellite, he came and went, one day two hours... another day one hour, yet another day he wouldn't even go to the third-grade class. But the lunchroom gave him a daily routine, a consistent time he was with the third graders every day, he ate with his fellow third graders.' For Blanca, the fact that Iñigo got to eat with the third graders was a step forward toward the integration process of Iñigo, but 'one that was not focused on academics, but instead on his emotional adjustment'.

If his moving to third grade was part of arrangements, reorganizations and changes at the academic level, eating with third graders functioned as a further step in that process carried out by him and the support of the school. Iñigo perceived the school lunchroom as an institutionalized setting to affirm and strengthen his efforts to join a new group and his identity as third grader. He was learning to be a third grader, and that was taking place academically at the classroom and socially through the lunchroom. Certainly, interactions mediated by language played a role in mediating or facilitating such learning. The pattern of interactions between school lunchroom supervisors and students as a collective was very present in Iñigo's statements, which referred to the third or second graders as a collective he sought to associate with (the third-grade table) or disassociate from (the second-grade table). Becoming a third grader on that table meant learning to play particular games during mealtimes without getting caught, learning to be punished as part of a collective, and recognizing that all these activities were part of one group and not of others.

The notion of legitimate peripheral participation (LPP) seems quite relevant to describe such development: as the theoretical construct indicates, Iñigo was actively utilizing the material and immaterial resources of that context for the purpose of moving toward to centre of activity, populated by way of acting as a third grader in and out of the lunchroom. On the other hand, being a third-grade eater in this foodscape may not be as stable or permanent as the practices Lave and Wenger used to develop through the concept of LPP (e.g. learning trades as tailoring, metal work, meat cutting). This means the learner must be quite attentive to shift at the centre.

In short, analytically we have captured an individual, Iñigo, in the process of becoming part of a particular community of practice, and that means we can witness all the work done by the individual and the collective in going forward or not as part of the process of becoming. That work is characterized by processes of learning, teaching, and development, all subsumed within the leading activity of becoming, of crafting an identity as a third-grade eater. The notion of *eater-in-context* requires us to examine these processes, and when we do that we may be enhancing our understanding of how children construct and transmit an identity that forms part of their eating practices.

Conclusion

Our analyses have shown that examining the eating practices of children in schools, from a child-centred perspective, is a productive exercise at least in identifying the

key elements of such processes (e.g. children's comparative frameworks, and collective sense of eating). We looked inside of the school lunchroom with particular attention to how children *interpret and use* the material and immaterial resources of that and other foodscapes to craft a context-bound identity. We begin to see that children are not necessarily passive recipients of knowledge, skills, and norms, but instead, they become *individually and collectively* vested in crafting their eating experiences at the school foodscape. Becoming a school eater entails: 1. appropriating ways of eating that are deeply context-bound (eater-in-context) and thus unique to the school foodscape; 2. comparing elements of different foodscapes to articulate (sometimes in the form of criticism) an image of one's eating experiences inside the school foodscape; and 3. developing a personal notion of eating as a collective social activity. In short, we think children's eating practices could be productively examined within a framework that encompasses the school and other foodscapes as well. More importantly, we think children's eating practices should be understood inter-contextually, or in a way that will allow us to explain and understand behaviour in relation to how it emerges naturally. Our data strongly suggest that children's eating practices are modulated and shaped by factors that span more than one foodscape. This suggests that the impact of any intervention in or out of school will depend on building an understanding of and designing approaches that span those foodscapes as well. In closing, we, along with others, think that developing nutrition interventions and education strategies that promote healthy eating behaviours in young people requires an understanding of eating behaviour and perceptions of food and factors that influence eating patterns and food choices (Stewart et al., 2006). As Contreras and Gracia (2005, p. 10) remark, 'eating is not a mere biological activity: the food is more than a mere collection of selected nutrients according to a strict dietary or biological rationality. "Eating" is a social and cultural phenomenon, while "nutrition" is a physiological and health issue.'

Notes

1. In this article we use the term 'school food' to mean the midday meal officially offered to children in school.
2. We employ the concept of foodscape to settings designed and organized for *collective* activity (as we will explain later on the article), thus we do not envision the notion to be particularly useful to describe or explain the eating activity of a child eating by themselves in the school playground, for example.
3. 'Comer en la escuela y sus circunstancias: aprendizaje, cultura y salud' ('Eating at School and its Circumstances: Learning, Culture and Health', a project funded by the Spanish Ministry of Science and Innovation (CSO2009-08741).
4. Romani is the term currently preferred to refer to the Gypsy people. In Spain, Gipsy ('gitano') is the preferred term.
5. According to Corsaro and Eder (1990, p. 197), peer culture 'is a stable set of activities or routines, artifacts, values, and concerns that children produce and share in interaction with peers'.

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