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**11TH
AESOP
SUSTAINABLE
FOOD
PLANNING
CONFERENCE**

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**CONFERENCE
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11TH CONFERENCE

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PAPER SESSION 1.D

FOOD

MAPPING

INITIATIVES

The University as a Critical Player of the Urban Food Policies. Towards a Food Atlas for the City of Trieste

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— VENTURINI Camilla

The University's Critical Role in Co-shaping the Food-City Nexus. Towards a Food Atlas for the City of Trieste

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In the interdisciplinary food debate, food atlases are increasingly gaining attention. However, there is a lack of shared understanding of what a food atlas is, how it works and its empirical effects in reading the food-city nexus while driving its transformation. On the one hand, food atlases' blurred contours highlight their potentiality for experimentation in diverse contexts, downscaling European food politics to local urban policies. On the other hand, this suggests that the food atlas may act as a critical device to upscale food micropolitics, where urban food policy is absent or precarious. It seems relevant to explore the food atlas to disentangle its spatial agency. By questioning the university's role in re-shaping the food-city nexus, this study offers a preliminary Food Atlas for the multicultural city of Trieste. Despite the lack of urban food policies, Trieste and its university are relevant as a case study due to the recent rise of sustainable food practices and socially engaged food actors, suggesting the emergence of a food citizenship struggling to upscale its agency. Thus, the case study's specificity offers a lens to frame the food atlas and its spatial agency, shedding light on the challenges, potentialities, and limitations of exercising a systemic approach to food planning.¹

Keywords: food-city nexus, food atlas, university.

The Food Atlas: a Design Research Method

Since the beginning of the 21st century, the lens of food pushed a change of perspective in urban studies, recognising food systems as an urban question instead of an exclusively rural one. Food systems from being "a stranger to the planning field" (Pothukuchi, Kaufman, 2000, 113) turned into a core issue to face the challenges of advancing theoretical frameworks (Viljoen, 2005; Steel, 2008; Parham, 2015; Cabannes, Marocchino, 2018) and research and urban design methods (Bohn, Tomkins, 2024). This shift also led to implementing food policies, strategies (Verzone, Woods, 2020) and practices in various cities and their bioregions. In this debate, food atlases are increasingly gaining attention, emerging as a food mapping research method and tool in many European contexts, as in Italy (Rome, Milan, Turin, Matera), Austria (Wien), Portugal (Lisbon), and the Netherlands. However, there seems to be a lack of shared understanding of what a food atlas is, how it should work and its empirical effects in reading the food-city nexus while driving its transformation. Reflecting on the case-by-case scope the food atlas addresses as a means, it seems fundamental to disentangle its agency to inform the specific case for implementation and contribute to the food atlas' general understanding.

On the one hand, the food atlas is understood as the result of the mapping process, such as in the case of Milan (Comune di Milano, Fondazione Cariplo, Està, 2018, 95); or as a territorial photograph of the food system in a specific moment (Marino *et al.*, 2022), even though progressively implementable. In these cases, the focus on methodologies reveals its research potential to push shared knowledge creation. On the other hand, the food atlas' blurred contours may suggest a complex relation with policy making. For example, Turin's food atlas consists of "a context, a process, and an instrument" (Dansero *et al.*, 2018, 17). It performs as a dynamic interface between food system multi-scalar and multi-foci representation, a participative, interdisciplinary and intersectoral process of knowledge production, and a tool to bridge food practices and actors across scales. At the same time, the university seems to emerge as a key player among all the actors involved in the food atlas implementation. Even though playing different roles from one case to another, the transversal presence of the

¹ Authorship attribution: all authors made a significant contribution to the conception, design, implementation and writing of this manuscript. Moreover, it has been conceived as a collective and collaborative research. All the paragraphs are co-attributed to Valentina Rodani and Camilla Venturini.

university also suggests the need to question its position with respect to the food atlas formation, and the presence or lack of urban food policies. While the demand for a food atlas seems to arise in the context of urban food policy establishment, this contribution aims to explore another overlooked hypothesis.

The research questions the critical role of the university in re-shaping the food-city nexus while understanding the food atlas as a design research method to upscale urban food micropolitics where urban food policy is absent or precarious.

The exploratory study emerges from sharing the initial findings of a design line of research on the food-city nexus in the multicultural city of Trieste². As a case study, Trieste and its university are relevant because here, despite the lack of urban food policies, the recent rise of sustainable food practices and socially engaged food actors suggests the emergence of food citizenship (Basso, Di Biagi, Crupi, 2022) and the need to upscale its agency. Thus, the case study's specificity offers a lens to frame the food atlas' spatial agency, questioning the role of the university in upscaling the existing food practices and micropolitics while downscaling European food politics, be it a pioneer or a leader in triggering urban food policies. The understanding of a food atlas as "a context, a process, and an instrument" (Dansero *et al.*, 2018, 17) informs the research methodological approach, thus engaging the food mapping process in making visible the intersection of food spatiality, between the university and the city; food actors, in the university's community and the urban food system; and food practices, eating habits but also food-related socio-spatial practices.

Towards a Trieste's Food Atlas: Mapping Food Spatiality, Food Actors and Food Practices

The University of Trieste is an Italian public post-secondary education institution. With a population of approximately 20.000, the university's community quantitatively represents about 10% of the inhabitants living in the mid-sized multicultural city of Trieste. As in many other cases in Italy and Europe, the university is a hub of a knowledge-based economy, fostering interactions across the industry, the government, and the socio-ecological environment (Carayannis, Campbell, 2010). Since 2016, the university has committed its governance to the SDGs to contribute to the societal challenge of transition towards sustainability. Still, the cross-disciplinary and cross-sectoral lens of food seems to be overlooked in the university agenda; there is a lack of food didactic programs, the scarcity of food system research, and the deficiency of food-related third mission activities. The lack of university food governance may be related to the absence of local urban food policies if assuming a university's role as a merely passive consumer. However, almost unnoticed sustainable food practices are already implemented by local food actors, be they part of the university community (for instance, a community gardening association, held also by university's students; the university's canteen food waste redistribution practice enacted by a charity organisation) either the urban one (as alternative food chains, urban agriculture cooperatives, slow food movements). These socio-spatial food practices are now attempting to reshape the rural-urban relationships, performing a sort of food micropolitics (Dolphijn, 2004).

On the one hand, they risk shortly running out (as recently happened for a social value-based short food chain) or being co-opted by the conventional food system due to a lack of knowledge, resources, or capacity. On the other hand, this food agency embeds the potential to increase its impact on intensifying citizens' and community well-being in the short-term, while offering food experiential learning to "grow growers" (Bartlett, 2011, 109) in the long term. This

² The food-city nexus is under inquiry from multiple perspectives, the first intersecting spatial justice and food urban design and planning; the second addressing the regional and urban foodscape, and the latter on the food-university architectural and urban design, from foodspace to foodscape. For further discussion, see: Basso, Rodani, Venturini (2024) 'Decostruire immaginari per ripensare politiche e progetti. Cibo e rigenerazione urbana in Friuli Venezia Giulia', in *Proceedings of XXV SIU National Conference Società Italiana degli Urbanisti: Transitions, Spatial Justice and Territorial Planning*. Conference held in Cagliari, June 15-16 2023. Planum, SIU (forthcoming); or Rodani, V. (2024) *University and food system. University collective practices for sustainable food systems*. Research report, financed by LR 34/2015, art. 5. Trieste: University of Trieste. Venturini, C. (2024). *Foodscaping. Ripensare i territori attraverso il sistema del cibo*. PhD dissertation (ongoing). Trieste: University of Trieste.

phenomenon then questions a more active university's role in investigating the food-city nexus, addressing the food sustainability discourse, practice, and policy. By making the undergoing urban food laboratory more visible, the university may respond to the needs of local food actors in terms of shared knowledge creation, transmission, and capacity building. By bridging these gaps, the research advances the Trieste's food atlas as a systematic inquiry and design synthesis or to make the edible city more visible.

Food Atlas as a Context: Mapping Foodspaces between the University and the Public City

The food mapping process addresses the spatiality of food "from foodspace to foodscape" (Basso, Rodani, Venturini, 2024), between the university and the city by implementing a qualitative spatial analysis. Shifting from the architectural to the urban scale, the food mapping process implemented photographic surveys, site visits, GIS data collection, redrawing, and mappings to be synthesised in a map, making an initial and potential edible city visible. Starting from foodspaces mapping, it then layered the manifold spaces of food consumption (as literary café, restaurants, *trattorie* and *osterie*), food waste recovery (as charity's refectories, NGOs, associations), food transformation (as bakeries, oil mills, collective kitchens), food distribution (as permanent food and fish markets, temporary street foods, groceries) and food production (collective and community gardens, agriculture cooperatives and associations, *osmize*) both in the university and in the public city (Di Biagi, Marchigiani, Marin, 2002; Di Biagi, Marchigiani, 2009) (as the spaces of welfare as public services and infrastructures, public housing, public squares, public gardens and parks), to make visible the Trieste's urban foodscape. The food mapping process focused on spaces where food is perceived and experienced as a social and cultural practice, at the intersection of community making, experiential learning, conviviality, well-being, and welfare space.

The spatiality of the university – and particularly that of food – is deeply intertwined with the historical, cultural, and political background of a frontier city such as Trieste. In fact, in Trieste, the complexity of the rural-urban relationship has been the stage of a discursive polarisation (Verginella, 2008) whose socio-spatial features manifest still today, problematising the understanding of the manifold and tentacular foodways feeding the city. As a cosmopolitan free port city opened to the sea, the urban centre connected with shifting and distant hinterlands while enclosed by the Carso/Kras plateau, a culturally rich but scarcely productive *umland* [rural region] to feed the city. The complexity of the rural-urban relationship manifests also in the university spatiality, revealing some contradictions. The university's spatial realm reflects the different moments of urban development, manifesting today in the assemblage of spatial models, from the 18th-century urban building block to the detached university citadel, from the extra-urban campus to the more recent urban and regeneration designs in Trieste (as the new student housing in a former military hospital, or Portovecchio), its outskirts (as in Grignano, Padriciano and Basovizza) or even in other smaller suburban towns (as Gorizia, Pordenone and Portogruaro). The university's scattered foodspaces consist of the leading institutional canteen in the central campus, some cafeterias, and a few dining rooms, namely monofunctional spaces for catering only. At the same time, no spaces are conceived for hybrid, convivial, and collective uses, be it for food waste recovery, collective food transformation, or food production. Moreover, the extension and distribution of public university open spaces, gardens, and urban parks may presume an intense engagement with food production practices, but actually, there is none. Also, the physical proximity of the university's buildings and public students' housing with sites of urban food socio-spatial practices such as urban farming (as in S. Giovanni Park) suggest a potential for interaction among the university community and the urban food actors.

On the one hand, it is possible to observe at the architectural scale that the physical proximity of urban public foodspaces does not imply their spatial continuity. This seems to be the case when dealing with rigid spatial boundaries between the foodspaces' interior and exterior that reduce their accessibility, visibility, and flexibility. At the urban and territorial scale, a

fragmentary and scattered edible foodscape emerges, denser towards the city's core while dispersed in its margins. On the other hand, this also suggests some scenarios for designing and reshaping the edible potential. Firstly, the boundary between the university and the city can be blurred by designing public 'food thresholds', namely spatial food sequences between the interior and the exterior public space, improving food spatial accessibility, visibility, and flexibility to increase the spatial continuity of food-related uses and practices. Secondly, disuses, leftovers, wasted, abandoned or marginal open spaces – both inside and outside university areas – can be transformed into hybrid foodspaces to implement the existing ones. Thirdly, a network of food nodes and foodways can be structured according to the mobility network, especially the soft one. Moreover, urban spaces could be the visible stage of an urban supply chain shortening, where placing various phases of the food system near each other may improve the food-system sustainability while attempting to bridge the rural-urban polarisation. Finally, urban foodspaces may be incrementally designed as convivial spaces, enriching them with devices encouraging sociality, progressively representing the stage for empowering food citizenship.

Food Atlas as an Instrument: Mapping Food Actors and Food Practices

The food mapping process investigated the actors and their food socio-spatial practices in the university's community and the urban food system by implementing non-structured and informal interviews, an eating habits survey distributed to the university's population and informal meetings with several food stakeholders. A relational diagram has been designed to make visible the food network. The actors in the urban food system are very heterogeneous in terms of scale, role in the phases of the food process, and the virtual and non-virtual networks of relations and practices that weave them together. They range from individual consumers to communities, associations, and student movements, varying from small and big enterprises to cooperatives to significant institutions and networks. Another specific aspect is the city's multiculturalism, which highlights the heterogeneity of feeding cultures interacting differently.

The preliminary relational diagram consists of a matrix collecting horizontally the type of actors organised by scale (from micro and more minor actors to the more prominent stakeholders), vertically the sequence of phases of the food system whose an actor performs (as food production, food distribution, transformation, consumption, and disposal). Moreover, a notational system (with symbols, lines, and surfaces) qualifies the type of food practice and the stakeholders' relationships, aiming to highlight its spatiality and temporality. These relationships and interactions thus represent a central starting point within the food atlas mapping process since making visible the actors involved in the urban food system is seen as a core step in building "alliances between multiple stakeholders [that] can contribute to design, planning and implementing spatially bound food systems for all" (Bohn, Tomkins, 2024, 3).

On the one hand, soft food networks and relationships among minor and non-structured actors (such as associations, collectives, neighbourhood and place-based communities) have already emerged. However, they often represent specific niches that do not constitute a short food chain or a comprehensive foodway. On the other hand, among the prominent players (such as institutions, supermarket chains, and big enterprises), sustainable food practices appear segmented, focusing on limited phases of the food process. Moreover, some links between prominent players and minor actors, even though marginal compared to the whole urban food system, emerge (such as supermarkets' surpluses redistribution by associations and charity foundations), highlighting how complex and intricate food networks and relationships are.

Furthermore, the preliminary relational diagram raises the question of bridging players among the food system's actors. Considering the university's community as a cross-sectoral and cross-scalar agent, it seemed urgent to address explorative incremental scenarios of its engagement.

Food Atlas as a Process: Exploring Scenarios of the University's Incremental Agency

The initial findings of the food atlas mapping process brought to the exploration of the university's role, with different degrees of intensity: from facilitator and activator to catalyser, towards a leadership role in co-shaping the food-city nexus.

The first edible scenario explores a low-intensity role of the university, as a facilitator and activator. By redesigning its boundary with the city, the university can start expanding its agency from the food consumption phase to the others, experimenting with food circularity and socio-spatial practices. As a facilitator, the university can act as a system with the territorial actors to strengthen and expand existing flows and nodes in segments of short supply chains which are today disconnected from each other, to hypothesise one or more possible sustainable supply chains. As an activator, the university can create new nodes to differentiate the segments of existing short supply chains and extend the involved food system phases through local micro-actors' up-scaling processes.

The second scenario explores a medium-intensity role for the university, as a catalyst for food projects and practices. In this position, the university can experiment with innovative projects to create a network between and with local actors, multiplying and spreading the effects of the virtuous practices and projects already in place and exploring creative forms of short supply chains (e.g. a temporary market of local producers on Piazzale Europa campus). It envisages increasing interaction with local food actors and public city foodspaces such as the public markets and public social housing neighbourhoods, which may be activated as food hubs.

The third scenario explores a university's high-intensity and impactful role in co-shaping the food-city nexus. While expanding its agency from the food consumption to the distribution, processing, and disposal phase, the university can test a leadership role in the urban food system, experimenting with an urban food atlas and triggering local food policies and urban food plans. Strategic sites in this sense are the public city and public housing districts that could become off-campus university pilot projects.

Making visible edible cities: co-shaping food citizenship by design

Despite its fertile and widespread food tissue, Trieste's food-city nexus still emerges as a complex and multifaceted relation. On the one hand, the urban foodscape appears fragmented, spatially translating into a discontinuous relationship between foodspaces physically close by, both in the urban and the university context. Moreover, even though present in the university agenda, the food system is still scarcely investigated by the research and third mission activities. On the other hand, some – even though tiny – relationships among minor actors have emerged, suggesting their potential interest in seeing their agency intensified. The proportion between the city and the university population – the latter representing about 10% of urban citizens – also reveals a potential university's more acknowledged responsibility in the food knowledge creation and transmission process, while supporting and developing the existing food citizenship, including the university's spaces. This engagement process is represented by progressively more intense scenarios of the university's role in co-shaping the food-city nexus. These scenarios (facilitator, activator, catalyst, and leader) represent engagement intensity gradients rather than temporally consequential steps of responsibility. Even though today the University of Trieste is still playing an activator role, the creation of an interdisciplinary (yet not formalised) food working group – whose earliest minute results are occurring, such as a small educational event – may represent the first step towards the emplacement of university governance within the food-city nexus. To this respect, the emerging Trieste's food atlas still lacks integrating the nexus with other disciplines (which could be done by starting, for example, from the university food working group) and sharing learning and decision-making with the multifaceted food urban tissue, both representing necessary steps towards the creation of shared knowledge.

This food atlas – conceived as a tentative research process rather than a final product – thus highlights its multifaceted role. As an instrument, it produces shareable knowledge and mapping about the urban food system, highlighting existing relationships among food actors

and spaces from both the university and the city. The food atlas also potentially constitutes a context where actors and spaces can relate to each other through its representations and as an opportunity for the university to play an overlooked and critical role while emplacing its social and ethical responsibilities. It thus is also an incremental knowledge production process about and within the food system, an interface enabling food actors to share their planning ability, projects, and resources, while upscaling and emplacing their agency. Moreover, after activating a process such as the food atlas as understood in this contribution, defining an urban food policy does not come as a necessary consequence. The atlas can thus intervene in the urban tissue of practices and micro-strategies, generating an impact even before the food policy establishment as a governance device.

The specific design perspective offered a projective understanding of the food atlas. More than a fixed result of a dynamic and plural food mapping process, the food atlas allowed to mobilise several analytical tools and represent diverse viewpoints to make visible the spatiality, temporality, and agency of food, not just in its physical and socio-material dimension but triggering its projective potential, even just by initial design and scenario's thinking. Yet, exploring other design tools to address food actors' spatial imagination would enable deconstructing the conventional food system's representation in multiple and shared ways and drawing alternatives. Thus, the food atlas performs as a dynamic interface between food system multi-scalar and multi-foci representation, a participative, interdisciplinary and intersectoral process of knowledge production, and a tool to bridge food practices and actors across scales. In addition to a context, an instrument, and a process, the food atlas is a site for food politics negotiation and an empowering design research method to make visible citizens' food knowledge in the transition towards food sustainability as a collective practice.

Even though specific, the context of the food atlas experimentation suggests that it could be implemented in similar contexts, while analysing both the food atlas' methodological structure and the university's role within the process. Some aspects seem particularly relevant and could represent key comparing elements with other contexts. Firstly, many cities lack addressing local urban food policies but, at the same time, experience the rise of food citizenship. This suggests that the food atlas could be experimented with as a design research method to upscale existing practices' agency while potentially leading towards the definition of an urban food policy. Secondly, the quantitative importance of the university's community in a mid-sized urban dimension such as Trieste – common to other contexts – reveals the hypothesis of the university as a more active player in the urban food system, bridging food micro-politics and practices and triggering food politics and plans while informing, developing, and enabling its food citizenship. Finally, the city's frontier condition and, even more, its multiculturalism represent a fertile context for comparison with other urban centres.

These aspects question again the food atlas as a design research method, involving its multiple dimensions. In the interdisciplinary debate, food emerges “as too fundamental, ephemeral or subjective to be controlled by a single professional discourse alone. This does not come as a surprise given the multitude of actions and stakeholders engaged and intertwined with the urban food system” (Bohn, Tomkins, 2024, 4). The food atlas' multiplicity engages at least two levels of interpretation. Firstly, its mapping, participating, and design process necessarily involves multiple disciplines, while engaging the various competencies from both the university and the professional tissue within the food-city nexus. Secondly, the subjectivity of perceptions and intimate relations with food suggest the existence of multiple edible cities within each single context. On the one hand, this strengthens the necessity for a collective process towards shared knowledge about the foodscape. On the other hand, the multiple edible cities intertwine and interact with each other, while continuously shaping, re-shaping, and potentially co-shaping – through a collective food atlas – the urban foodscape.

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