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Education as policy: Museums' relationships to food governance in New York City

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ABSTRACT

The aim of this article is to propose an exploration on how museums, as places of education and training on issues related to sustainability and the food system, can and are currently involved in food governance processes and ultimately become themselves, or more specifically their education or training programs, part of food policies. The present study maps the activities undertaken by museums in the field of sustainability and food. In order to gain insight into the meaning and impact of current museum activities, we conducted interviews with various actors working on food and sustainability issues in New York City. These actors were selected to represent both the museum world and the food system. Through semi-structured interviews, we discussed with these actors how museums, through their interface with local communities and visitors, can become actors capable of developing new narratives, forms of communication, and actions on food sustainability, targeting not only “internal” (local) actors, but also “external” actors (people who do not live in New York City). The results demonstrate a notable increase in the interest of museums in engaging with food-related practices and activities and highlights the potential of these spaces to contribute to transformative change in food systems.

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Introduction

The main aim of this paper is to consider how museums can and are currently contributing to making food governance more sustainable. This is motivated by the growing interest over the last 20 years among professionals, researchers and managers of museums and other cultural institutions in issues related to sustainability, food and the consumption of healthy and sustainable food (Borrelli, Pigozzi, and Mura, 2024). The hypothesis discussed is that museums can contribute to making the governance of food systems more sustainable if they are able to function as dialogic laboratories (Bennett 2005; Kazepides 2012), i.e., spaces where dialogue and knowledge exchange between different actors, cultures and generations are generated in an inclusive way.

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The development of food narratives is not new for museums (Levent and Mihalache, 2016). Ethnographic and anthropological museums often organize exhibitions on food. These exhibitions show cultural differences and focus on different ways of producing, processing, consuming and cooking food. Some exhibitions also focus on cooking utensils and specific products. However, what is happening now is different from what has just been highlighted. Museums are interested in talking about food through new “narratives” linked to sustainability, environmental issues and climate change more broadly. The interest of museums in sustainability and climate change is present in the literature, and one indicator of this interest is the growing production of books and papers (N. Borrelli, Davis, and Dal Santo 2022; Brown 2019; Cameron and Neilson 2015; Henry and Carter 2021; H. McGhie 2019; H. A. McGhie 2019, 2020; Sutter et al. 2016; Sutton 2020). Food and food systems are also becoming a topic of increasing attention in museums, which are beginning to explore the connections between our food systems and their impacts and vulnerabilities in the face of sustainability and climate change (see Annex 1). This new discourse on food and climate change is very different from previous engagements with food, going beyond its cultural role and directly linking the way we produce and relate to food to the sustainability of our planet. These exhibitions provide people with knowledge, as a first step and then seek to inspire and call them to take action in their own lives.

In this sense, museums are being transformed into educational tools and spaces of dialogue “as a form of free, open and informed dialogue between all members of society,” as opposed to the traditional and normative vision of museums as “monological” and formal spaces of imposition (Bennett 2005; Kazepides 2012). Museums contribute to building a genuine dialogue, cultivating and enriching human ideas, perceptions and actions, not as a product or a goal to be achieved, but as a process of traversing and experiencing the world from different points of view (Peters 1966, 1973 in Kazepides 2012). In other words, the museum becomes a “laboratory,” a space where people from geographically and historically separated places come into contact and establish ongoing relationships: a “dialogical space” (Kazepides 2012) between the past and the present, the internal and the external, for the implementation and social construction of sustainable food systems.

The opportunity to develop this argument arises from a field study conducted in New York City (NYC) between 2022–2023. New York City represents a particularly fruitful field of observation for this work for several reasons, including the city’s leading role over the past 15 years in the development of urban food policies (see Ilieva, Fraser, and Cohen 2023); the active engagement of grassroots organizations in food-related issues (e.g., food security and food equity); the particular interaction between local and external actors that stems from a city with a high number of tourists; and the increasing attention that museums and other cultural institutions are paying to promoting knowledge about sustainability, sustainable food and food security (see Levent & Mihalache, 2016 and Annex 1). This article explores the hypothesis that museums, as dialogic laboratories, can contribute to the sustainable governance of food systems. The following structure is adopted: the first section provides a brief introduction to the role of museums in sustainability and food governance. The second section presents the fieldwork in New York City and the

methodology used. The third and fourth sections present the case study and discuss the conclusions and implications for future research.

Sustainability and museums: toward food governance

The concept of sustainable food systems was introduced by Gussow and Clancy (1986) who argued that for the field of nutrition it is not to think about how food impacts human health, once consumed, but that we also need to understand how our food production, processing, transposition, packaging and marketing, and managing waste (i.e., the food system) impacts the use of natural resources and the environment. They called for nutrition educators to expand their practices. They go on to show health education and food for sustainability are aligned in their goals, approaches. Around the same time, in 1987, the Brundtland Report¹ established the concept of sustainable development, promoting development that aims to ensure equal opportunities and resources for present and future generations. Over the years, this definition has been greatly developed and clarified, emphasizing actions planned and implemented that are capable of achieving not only economic development, but also social development (involving vulnerable populations) and environmental development (promoting c). Sustainability in the food system therefore means that the production of food, its consumption (as well as its packaging) and any reuse of surplus food must be managed not only for economic but also for social benefits and to avoid trade-offs (or even to improve the state) of the environment.

Food systems are exposed to various types of threats, which may arise from both biophysical and social components, and may be endogenous or exogenous in origin, with implications multiple scales, including local, regional, national, and global levels. It is not only the local dimension that ensures food sustainability (Born and Purcell 2006): other scales also make important contributions, if they are properly organized, reinforcing the need for coordination between the local and global levels. From this perspective, a particularly useful concept is that of distributed and translocal place-based systems (Marsden 2016). With this concept, Marsden emphasizes that in order to talk about sustainability in food systems, it is necessary to think of the local not only as something isolated, living without contact with the outside world, but also as interconnected with other local and supralocal scales, following a systemic approach (T. Borrelli and Marsden 2018).

Here we explore how local food systems can be more effectively linked and integrated with other local/supra-local systems and scales. Food governance processes are highly relevant in this regard, but more knowledge is needed to explore how food governance policies can be and are designed to achieve sustainability goals. Furthermore, we want to understand which actors/institutions are involved in promoting the (food) “dialogue” discussed by Kazepides (2012) and strengthening the activation of local society around food issues. A central question is whether and how museums can and are currently contributing to creating interscalar, cultural and intergenerational dialogs (Kazepides 2012), to activating local society and to strengthening the transfer of sustainability-based food knowledge at multiple scales (local and supra-local) (Maciocco and Tagliagambe 2009).

Food governance can be considered a form of territorial governance, as it relates to the capacity to integrate and give shape to local interests, organizations and social groups – internal integration, but also to represent them externally – external integration (Le Galès 1998). Some authors, such as Coulson and Sonnino (2019); Marsden (2016); Marsden and Borrelli (2018); Derkzen and Morgan (2012), and Borrelli, Mela, and Burgos Guerrero (2022) emphasize when food governance is sustainable and promote the idea of food as place-based governance, discussing it in terms of decentralized translocalist food system governance.

Ideally, place-based food governance should include policies designed and implemented by local actors, including local governments, to promote the development of local food system resources that are sustainable in economic, social and environmental terms. Such governance aims to control food quality, promote local production by reducing transport costs and carbon footprints, launch campaigns to promote the production and consumption of healthy, environmentally friendly food, and regulate land use.

From the perspective of place-based food governance, the ability to create dialogue, to make local society active and able to promote sustainable actions is particularly relevant, and this is what museums and other cultural institutions can and are trying to do.

Using the terms introduced by Le Galès (1998), food governance that aims to be place-based, distributed and translocal should facilitate both internal and external integration. The main point discussed here is how the museums can and are contributing to developing the internal integration of place-based food governance, by giving voice to local interests, organizations and social groups, making local society more active and protecting and promoting local resources; and the external integration by developing strategies for informing and building awareness in people/visitors/tourists about sustainable food practices and choices.

Museums and cultural institutions can make important contributions. The public or civic engagement that museums promote can become forms of place-based practice that contribute to internal integration and the spread of sustainable behaviors in food systems. Meanwhile, by welcoming not only local visitors but also international visitors and tourists, and by connecting with other cultural institutions around the world, museums can also contribute to the development of external integration.

Museums and new narratives about food sustainability

According to the International Council of Museums (ICOM), the definition of a museum evolves with the evolution of society and is constantly updated to reflect the realities of the global museum community. Since its inception in 1946, ICOM has defined museums as “a non-profit, permanent institution at the service of society and its development, open to the public, which acquires, conserves, researches, communicates and exhibits the tangible and intangible heritage of humanity and its environment for education, study and enjoyment” (ICOM (2007), 9). More recently, the Extraordinary General Assembly of ICOM in Prague on 24 August 2007 approved the proposal for a new definition, which was agreed as “a non-profit, permanent institution in the service of society that explores, collects, conserves, interprets and exhibits the tangible and intangible heritage of humanity,” now including exploration, collection and interpretation. Museums are also interpreted as an open, accessible and inclusive space for the public that “promotes diversity

and sustainability.” According to ICOM, museums “operate and communicate ethically, professionally and with the participation of communities, providing diverse experiences for education, enjoyment, reflection and knowledge sharing” (ICOM (2022)).

These new approaches underline the call made in 1989 by Peter Vergo, who proposed a radical rethinking of the role of the museum in society, in what he called a “new museology” (Vergo 1989). Vergo proposed a vision of the museum that went beyond the collection of objects (Kirshenblatt-Gimblett 1991), based on a new relationship and involvement with visitors and communities, and the creation of interactive spaces for dialogue, learning and inclusion, with new public and social functions (Bennett 1995). As Bennett (2005) points out, the significance of museums extends beyond being mere repositories of artifacts, what Vergo called “living fossils” (Vergo 1989), to playing a central role in shaping social spaces and organizing temporal structures. Their influence is not confined to the boundaries of the museum itself; rather, museums have been instrumental in providing the spatial and temporal frameworks that underpin programs of social administration conducted beyond their walls. Bennett (2005), drawing on Latour’s assertion in the article “Give me a laboratory and I will raise the world” (Latour 1983), emphasizes these new possibilities in his emblematic statement: “Give me a museum and I will change society.” This perspective recognizes the museum’s unique potential to construct new entities by manipulating the relationships between people and objects within a purposefully designed environment. These entities can then be mobilized both inside and outside the museum to contribute to various social and civic programs.

Other scholars have also considered the potential role of museums in guiding social change, such as Morse (2020), who reflects on the evolving role of museums in community health and social care, and Murawski (2021), who posits that museums can become agents of social change, addressing contemporary issues such as climate change, poverty and sustainability. Building on these new efforts, and with the aim of supporting museums in developing sustainability practices, a working group on sustainability was established in ICOM in 2018. The group was constituted with the objective of integrating the Sustainable Development Goals (SDGs) and the Paris Agreement into the work of the museums and thereby contributing to the fulfillment of their sustainability objectives. A number of authors have explored the potential of museums for sustainable development and in achieving the UN Sustainable Development Goals (Brown 2019; Lanzinger and Garlandini 2019, H. McGhie 2019; H. A. McGhie 2020, 2022). H. A. McGhie (2020) highlights the role of museums in addressing sustainability and climate change and identifies potential areas of action, including research and internal operations.²

These approaches provide new methodological and conceptual tools to rethink and explore the potential of museums as resources and territorial catalysts for the development of sustainability practices and the governance of food systems. At the same time, the role of food in these spaces is beginning to be increasingly recognized (Levent and Mihalache 2016), providing new interpretive tools that contribute to giving meaning to these spaces in an interactive, attractive and accessible way for different population groups. Here we find the experiences reported by Mihalache (2016) on her analysis of taste and museum restaurants, as well as Borghini and Baldini (2021) on the incorporation of cuisine in art museums and artistic events, who highlight the opportunities of food to enhance the stories, experiences and coherence of the museum project with new

services and programs (Kotler and Kotler 2010). Hjalage and Wahlberg, discussing the case of regional shellfish farming in Denmark, also explored the construction of museums as catalytic partners for user-driven innovation processes. Levent and Mihalache (2016) also point to the role of artists in the future of food, noting that their contribution is “not always about activism,” but about “creating dialogues, questioning systems, revisiting histories and reimagining possibilities.” In this sense, museums become “laboratories,” contact zones (Clifford 1997), dialogical (Kazepides 2012) and intercultural (Bodo 2018) spaces for the implementation and social construction of sustainable food systems. These are spaces where internal and external dimensions of food governance interact, where geographically, culturally and historically distant (and closer) people come together and relate to each other, shaping new critical perspectives, capacities, engagements and (re) imaginings of potential futures and possibilities. These different actions can take the form of stories, objects, exhibitions, practices, experiences and encounters mediated by our relationship to food as a dialogue *in* and *through* museums.

These pioneering experiences illustrate the potential of these spaces to make a greater contribution to the realization of sustainability goals within the food system. This is achieved through the capacity building of visitors and practitioners in the area of sustainable food knowledge and practices, the valorization and dissemination of diverse knowledge systems, encompassing both scientific and traditional perspectives, and the application of effective communication and participation methods. By acting as dialogic laboratories, museums have the great potential to contribute to the development of new governance processes and facilitate the achievement of sustainability goals in food systems. The objective of this article is to examine these developments and analyze their recent application in the context of New York City.

Methodology of field research

The main objective of this study was to identify stakeholders’ expectations of the role of museums in food governance. Five phases were chosen as the main structure for this study. The first phase consisted of a review of key literature on food governance, sustainability and its relationship with museums and other cultural institutions, with a particular focus on the case of New York City (NYC). The second phase provided an overview of the key linkages and overall state of the use of food in the sector. We conducted an online search of food and food system related activities and exhibits in New York City from 2010 to 2023 that took place at institutions within New York City and were available to the public. We conducted a search using Google Chrome with the words [“food” or “food systems” and “cultural institution” or “museum” and “New York City”]. We recorded “activities” that fit the inclusion criteria in a database with the description. This resulted in the identification of 26 food activities across 19 different museums and other cultural institutions (Annex 1). The 26 activities identified were grouped by type of institution (event venue, museum, public garden, zoos and aquarium), type of activity (child/youth program, eatery, event, exhibit, food pantry, gardening, tour, virtual event), accessibility (in terms of price or available discounts) and time period, providing a brief description of the main food topics addressed in these spaces.

Based on this initial mapping exercise and literature review, in the third phase of the study we identified key stakeholders in the New York City food and museum

system who were contacted using a snowball sampling method to identify key actors from five different stakeholder groups: academia, local government, NGOs, private enterprise and museums/cultural institutions. The aim was to gain a deeper insight into key stakeholders' perceptions, experiences, challenges and opportunities regarding the relationship between food and museums. To this end, a semi-structured interview (SSI) method was employed, based on fieldwork conducted by Nunzia Borrelli with the assistance of the Pamela Koch between July and November 2022.³ The SSI methodology uses a comprehensive interview protocol based on the findings of the literature review conducted in the initial phase. This protocol facilitates the construction of an open and flexible dialogue for the identification of key insights into interviewees' experiences, perceptions, information and knowledge in relation to the local context and realities, in this case about museums and food governance in NYC. The SSI provides an effective comparative model for the analysis of multiple interviews while remaining relevant to the topic (McIntosh and Morse 2015).

In step four, 12 semi-structured interviews (nine face-to-face and three online) were conducted with the key identified stakeholders (see Annex 2). Each interview lasted approximately 45/60 minutes and was recorded and transcribed with the verbal consent of each interviewee. The interviews focused on the following topics: 1) key characteristics of the institutions studied; 2) modes of engagement, activities and key perceptions, interests and experiences regarding the relationship between food, museums and other cultural institutions; 3) expectations and opportunities for the role of museums in food system governance; and 4) key examples of this role, drawing on the experiences and collaborative responses achieved during the COVID-19 pandemic.

Finally, in step five, a qualitative data analysis was developed using the NVivo14 tool to organize, code and analyze the collected material. The qualitative analysis was carried out in an inductive mode, identifying emerging concepts related to the four topics presented above. Each identified concept was then coded and organized into main groups and subdivided into sub-groups, resulting in a total of 398 codes organized into 19 sub-themes and 3 main themes (see Table 1). The information collected was then analyzed

Table 1. Key themes, sub-themes and number of references identified in the qualitative analysis of interviews.

Main Themes	Food in NYC	#	Museums & Food Governance in NYC	#	Museums & Food Systems in NYC	#
1	NYC food policy activities	35	Internal integration	50	Role of museums in the system	84
2	COVID and food in NYC	31	Communication	21	From concepts to actions	44
3	Food pantries in New York City	16	External integration	11	Key opportunities: What could be done but isn't yet	31
4	Food issues in New York City	9	Education as policy	3	Role of food in museums	16
5	Food initiatives in New York City	6			Food Systems Approach	12
6	Food system actors	5			Limits: What museums can't do	11
7					Cultural institutions in NYC	8
8					Partnerships and Fundraising	3
9					Museums' capacities	2
Total		102		85		211

and discussed in relation to the literature review of the first step, which is presented in the following chapters.

Results and Discussion

This section presents the key findings of the online review of food activities of museums and other cultural institutions, as well as the qualitative analysis of 12 semi-structured interviews conducted between July and November 2022.

Our qualitative analysis of the interviews highlighted key aspects of the relationship between museums and food systems, and their contribution to the sustainability and food governance of the city, while the online review presents the growing interest and activities taking place in these spaces. The findings of this brief review and qualitative analysis are presented below, focusing on the relationship between food and museums; the role of museums in food governance in New York City, including their internal and external integration, and the potential and limitations of communication.

A first glance at food activities of museums and other Cultural Institutions in New York City

Food issues are becoming a growing topic of interest for visitors, curators, and cultural institutions, as demonstrated by the growing number of dedicated activities, programs and practices (see Annex 1). Sensorial experiences, historical and socio-cultural exhibitions on specific food products and cultures, community gardens and cooking sessions are some of the emerging food initiatives in New York City. Sectoral surveys have given insight into the growing interest of visitors on these topics, with about 51% of museum-goers expressing some interest in food (AAM 2011) and a growing number of articles and webinars dealing with the promotion of food issues and experiences in these spaces (AAM 2012; Johnson 2021; Levent and Mihalache 2016).

NYC museums are acting at different levels, organizing activities that provide concise information on what sustainable food is and how it can be achieved, both in terms of its production, consumption and distribution. Increasing attention is also being paid to promoting local food and a culture of healthy food in museums, through their restaurants and/or through educational programs for children. In addition, some museums are beginning to focus specifically on food, such as the Museum of Food and Drink (MOFAD).

Annex 1 illustrates the range of NYC museums and cultural institutions involved in food-related activities. Of the 19 institutions listed, 13 (68%) offer some form of reduced or free admission, or low cost (Decker Farmhouse \$3). The types of events range from one-off panels or talks, to temporary exhibitions, to permanent programs or exhibitions, as illustrated by the long duration of activities, to the promotion of sustainability in food services. Most of what is listed in this table addresses sustainability, while a few, such as the Children's Museum of Manhattan (targeting young children), focus more on health than sustainability. Taken together, this brief mapping shows that there are many places, events and opportunities for the public to engage in learning about the food system and taking action

for change. This also illustrates the growing interest generated by museums in working with the multidisciplinary potential of food in a variety of ways and for a variety of purposes.

Some interesting examples, also quoted during the interviews are emblematic exhibitions, such as “*Our Global Kitchen: Food, Nature, Culture*” at the American Museum of Natural History (AMNH (2012); see Annex 1) or the “*African/American: making the nations table*” organized by the Museum of Food and Drink at the Africa Centre in New York City (MOFAD (2022); see Annex 1). On these occasions people were able to think and explore food as a “system” and its multiple cultural identities, highlighting global food relationships and journeys. Other examples are the “*Talking Climate: Food*” and “*Taking Action*” initiatives at the Climate Museum, where people were able to discuss the intersection between climate, inequality, and food (The Climate Museum 2021), and explore proven carbon mitigation strategies, such as smart land uses (The Climate Museum 2019). More recent initiatives could be seen also in the ongoing “*Food in New York: Bigger than the Plate*” exhibition at the Museum of the City of New York, which explores the challenging nodes and networks of the city’s food system (Museum of the City of New York 2023; see Annex 1).

These initiatives create opportunities for visitors to critically reflect on the different dimensions of our daily encounter with food but also on its complexities and contradictions, building public spaces for dialogue in the construction of meaning, awareness, and engagement. This brief mapping provides an initial overview of the role that food currently plays in museums and other cultural institutions, complementing the in-depth analysis of the 12 semi-structured interviews that will be presented in the following section.

Food and museums in New York City

Food seems today to be a relevant topic of public fascination and reexamination (AAM 2011), but the relationship between food and museum is consolidated by a longer history (P1;P2;P3). As P2 noted, food-related exhibitions are not new to the city: “*There have been initiatives of one kind or another in different museums for many years,*” confirming the results of the brief overview, with some food activities spanning over a decade. Indeed, the integration of food can be traced back to the earliest days of museums, as a key attraction for visitors, as well as a useful medium “*to fundraise (.) and to make museums more community oriented*” (P3). Early cooking initiatives were run by volunteer women’s organizations to make these spaces more “*welcoming*” rather than “*academic.*” At the same time, museum restaurants were also tools of social differentiation, representing “*formative elements of the museum’s project*” to attract specific social strata (P3). The interviews do not only reflect the recent and long-lasting emergence of food issues in these spaces but the explosion of new food narratives and the growing intentionality to include and explore, through food, new ways to experience (P12;P10) and “*making sense of the museum itself*” (P3). The growing interest has brought new opportunities for more comprehensive and systemic approaches highlighting the interconnected character of food issues, and their willingness to “*look at the food system and food culture as a whole*” (P12;P2;P10). Food has become a medium from which to communicate complex concepts “*in*

simple ways” (P2) highlighting the intersection between food and sustainability, the SDGs, housing, social injustices (P1;P2), poverty, racism, public health (P4;P5), or climate (P11), among others.

Interviews emphasized not only the importance of exhibitions, conferences, and formal discussions but also the key role of active involvement and hands-on experience on food practices inside and outside of the museum, such as gardening, cooking, eating, making research (P10), field studies, youth/child programs, or even, making responsible food choices (P9). These practical experiences aimed to lead visitors to go from concepts to actions, to pass from “*pre-contemplation (. . .) to contemplation and ultimately to action*” (P4). As discussed in Interviews, Museums (can) have a key role to play in the food system of New York City (see graphic 1), building key learning and dialogue spaces on food education (P8;P9;P10;P12); building awareness (P2;P3;P5;P10;P12); strengthening linkages and cooperation with local communities (P3;P4;P5;P8;P10;P12); advocating for better food, climate and taste (P3;P9;P11;P12); sourcing sustainable food (P6;P7;P2), building engagement (P5;P10;P11;P12), discussion and critical perspectives (P1;P2;P3), enhancing capacities on sustainable food systems and practices (P1;P8;P10), and catalyzing change (P1;P2;P9)

Museums and food governance

New York City has built a long legacy and leadership in the development of new urban food governance mechanisms, policies, programs and initiatives⁴ (Freudenberg et al. 2018), which has been consolidated with the recent publication of its “Food Forward NYC: A 10-Year Food Policy Plan” in 2021 and the significant increase in the budget and staffing of the Mayor’s Office of Food Policy (Ilieva, Fraser, and Cohen 2023). The 10-Year Food Policy Plan sets out five key overarching goals, including, more recently, a sixth goal on climate change, as the city commits to reducing its food-related emissions in agencies by 33% by 2030 (City of New York 2023). These various initiatives and frameworks recognize the key role that food issues are already playing in NYC, creating a vibrant space in which museums are also actively engaged. This sub-section presents key examples of how museums are contributing to strengthening food governance processes in New York City, supporting the internal and external integration of the different actors around these goals.

The AAM’s Centre for the Future of Museums (CFM) initiative on “Feeding the Spirit symposium” held in 2011 represents a clear example of the efforts being forged to strengthen the relations between Museums, Food and Community (AAM, 2012). In their resource and discussion guidebook, they identify three core themes, providing concrete suggestions from practitioners to connect both internal and external integration dimensions. These are the “promotion of food literacy,” addressing the access to fresh, healthy food and the promotion of healthy eating behaviors in museums; “feeding the visitor,” relating to the incorporation of health, nutrition and sustainability values in restaurants, cafeterias, and catering; and finally, “Food as a connector,” fostering relationships and connections with new audiences.

These three themes connect to the results identified in our analysis, consolidating the different types of internal and external integration and the food-related initiatives presented by interviewees.

Throughout the analysis of interviews, 61 different types of actions and initiatives were identified as contributing to both internal (50) and external (11) integration processes. These initiatives were divided and organized into 8 groups or types of integration, configuring the main contributions from museums to NYC's food governance identified in this research (see Table 2).

The first dimension analyzed is the internal integration within the museums and their work with food. As suggested in the theoretical framework, this involves the capacity to integrate and give shape to local interests, organizations, and social groups (Le Galès 1998). Internal integration becomes a collective self-reflective process of coordination and dialogue between actors, bringing together different groups, networks, and subsystems at the local level to enable public action. Six types of internal integration processes were identified in the interviews: fostering horizontal collaborations and partnerships between local nonprofit organizations, local institutions, and other food museums, as evidenced during COVID-19. Some examples include building “relationships with local organisations and (hosting) different events with them” (P11, also mentioned by P3;12), building “collective purchasing models” (P5), and partnering with “New York food businesses as part of exhibitions and programming”

Table 2. Types of internal and external integrations mentioned by interviewees on the relation between museums and food governance in NYC. Source: elaborated by the authors based on interviews.

Type of Integration		Type of initiatives and actions	#
Internal Integration	Horizontal collaborations and partnerships	Building relations and fostering collaboration with local organizations, among non-profits, and with other (food) museums	20
	Building connections and partnering with local authorities	Funding, contributing to local programs (e.g., free summer meals program in libraries), building awareness on local officials, collaborating with the departments of education and cultural affairs	7
	Grounded in local contexts, environments, and cycles	Involving local communities, supporting community gardens and food provision to neighbours, promoting food literacy in local communities, co-creating exhibitions, building awareness about surrounding ecosystems, cycles, and impacts	7
	Local procurement	Purchasing from local farmers and partners	9
	Multi-stakeholder engagement	Bringing together different agencies, policymakers, consumers, and producers, developing a sustainable platform of cooperation to face challenges (e.g., COVID-19)	3
	Integrating sustainability in internal processes	Mainstreaming sustainability objectives and values in internal processes, integrating healthy, nutritious, and sustainable food in their restaurant services, building a sustainability committee, building capacities on food issues in the team and the community	3
External Integration	Collaborations with external actors	Collaborating with farmers' organizations from other regions and countries, collaborating with global private initiatives and companies, working with other actors and networks across the country, consolidating an international network on SDGs, working with tourism initiatives and companies	6
	Food as a global issue	Promoting systemic food thinking, building awareness on global food relationships, intercultural exchanges, histories, and connections, and promoting sustainable food practices and habits	5

(P12). Other institutions also worked with schools and universities (P10;P11), as well as with “*other museums and non-profit organisations*” (P10), building connections and partnerships with local authorities (P5;P4;P10). As identified by some Interviewees some Museums are grounded in local contexts, environments, and cycles, including developing “*exhibitions from the perspective of the (local) community*” (P3), working directly with local communities (P3;P8) and supporting local farmers and community gardeners to grow food (P10). Other internal integration actions include also the promotion of local food procurement (P6;P7;P5), supporting multi-stakeholder engagement (P10;P11;P8), and integrating sustainability into internal processes and restaurants (P6;P8).

At each location we built relationships with local organizations and hosted different events with them that invited the public to explore climate art, science, and justice. (P11)

Purchasing from local farmers also has the benefit of supporting the local communities where our cafés are located. (P7)

The entire exhibition was from the perspective of the community, (involving) local organizations, (and being) much closer to their constituents. (P3)

(Involving) New York food businesses as part of our exhibitions and programming as well. (P12)

We’re promoting, our neighbours, our community members, to grow food and learn about the food systems themselves, (working with) schools that are nearby, and (...) creating a forum of all of those different growers and community gardeners and sharing best practices. (P10)

It explores food in different ways, either the producers, the science, the actual plants, (...) the culture of food. (...) You know, food is something everybody needs. (...) And so whether you have a relationship with it by participating in our program and growing it yourself, you visit and can see (and learn about) things that you eat every day. (P10)

On the other hand, Le Galés refers to external integration as “the capacity of social groups to represent themselves externally, to develop more or less unified strategies towards the market, the state, other cities and other levels of government” (Le Galés 1998). Two types of contributions to this concept were identified: 1) collaborating with external actors, such as working with producers from other regions and across the country (P12), working with external audiences as tourists (P8), or using a broader “*food narrative*” (P3); and 2) raising awareness of food as a global and multidimensional issue, linking different aspects of the food chain (P6), explaining “*global food relationships*”, *cultures* and *systemic nature* (P8); and connecting visitors to the realities of other countries and regions (P11).

So when they put this exhibition together, they wanted people to think about food as a system (...)including food, nature and culture. They highlighted several themes that help people understand global food relationships, and how we can, you know, make a difference as individuals. (P8)

What emerges is a view of museums as building blocks of negotiation processes between different discourses, perspectives, food cultures, histories, and trajectories as well as a dynamic and participative space between different audiences (external and internal),

networks and organizations working at different levels of the food system. Museums strengthen ties and work with local communities (internal integration), while at the same time, they reach new audiences and actors, seeking new collaborations, partnerships, and financial opportunities (external integration). [Table 2](#) summarizes the different types of integration and their respective initiatives identified in this analysis.

Communication

Communication was highlighted by interviewees as a crucial element in enabling or disabling both internal and external integration processes, bridging the gap between networks and actions, and helping people to be easily well informed and integrated into the system (P5). Museums as communication tools and spaces help to articulate, draw attention to and amplify key food messages (P10), voices (P12), narratives (P3) and benefits (P4) – as during the COVID-19 pandemic – and to inform, educate and engage people on food issues and sustainable practices (P4; P2). However, how and by whom certain messages are communicated is considered equally important (P4), requiring trust, respect, open-mindedness and a willingness to listen and connect with local communities (Shields-Argelès 2018). New forms of communication and education are highlighted from the perspectives of dialogue⁵ (Kazepides 2012) and cultural communication (Hooper-Greenhill 1992, 1994), which refer to the two-way transaction between different actors, cultures and generations: between past and present, internal and external. These forms address not only the transmission of information to a passive audience, but also the involvement and integration through active participation, association and communication in our ongoing understanding of the world and each other (Shields-Argelès 2018).

Museums are seen as key tools for highlighting and bringing to the fore voices and stories that are often left out of mainstream food narratives, especially those of the most vulnerable (P12), connecting the realities of local actors with external audiences and building geographical and intergenerational solidarities. New narratives on food and sustainability are forged and actively promoted by museums (P12;P3), connecting both visitors and external actors with local organizations and communities.

Key challenges and recommendations

The contributions identified above offer clear opportunities to strengthen the role that museums are currently playing and can play in consolidating internal and external integration processes. However, current barriers and possible opportunities remain, leading to the identification of key recommendations to guide the future work of museums in realizing their full potential to contribute to more sustainable food governance and systems.

Informants identified key challenges and barriers such as the difficulties in current funding models based largely on fundraising, philanthropy and or ticket sales (P8; P12). The little support from public resources is considered also a limitation to build new investments, enhance the participation of poor populations and extend the reach of museums to vulnerable social strata (P8; P3; P2). The importance of Museums being independent and not depending on a single sponsor is also highlighted, as to maintain an open, autonomous, and critical position in the system. As expressed by

P12: “it’s hard for us to find funding. You know, (. . .), a lot of food museums in this country have tried and have not made it. And in terms of like corporate sponsorships, that would be great. But also, we don’t want to have to lose our ability to critique the system.” This links to another limitation that of lack of capacities and staff, especially in smaller museums (P12). While most interviewees highlight the key role that museums and other cultural institutions can play in building critical and informed capacities and perspectives, raising awareness, food literacy and putting theoretical concepts into practice, as well as mobilizing and collaborating with local and external actors (Figure 1). Some informants also recognize the difficulty of engaging in direct advocacy for specific food policies, as this is not considered to be part of their role as nonprofit organizations (P11;P12). Museums have played an important role in facilitating dialogue with local communities and international visitors, with some actors recognizing the potential of museums and cultural institutions to facilitate communication, coherence and the dissemination of actions and policies to a wide range and type of stakeholders (P1; P4). However, their links with formal and informal food governance structures remain currently limited (P4; P1; P5). As stated in interviews 12 and 4:

Food policy makers seem to be aware of museums’ food activities and museum professionals highlight their potential impact on food policy (P1, P2 and P3), but these actors still seem to work independently. Museums and other cultural institutions therefore have great potential for dialogue and collaboration between food policy makers and museum

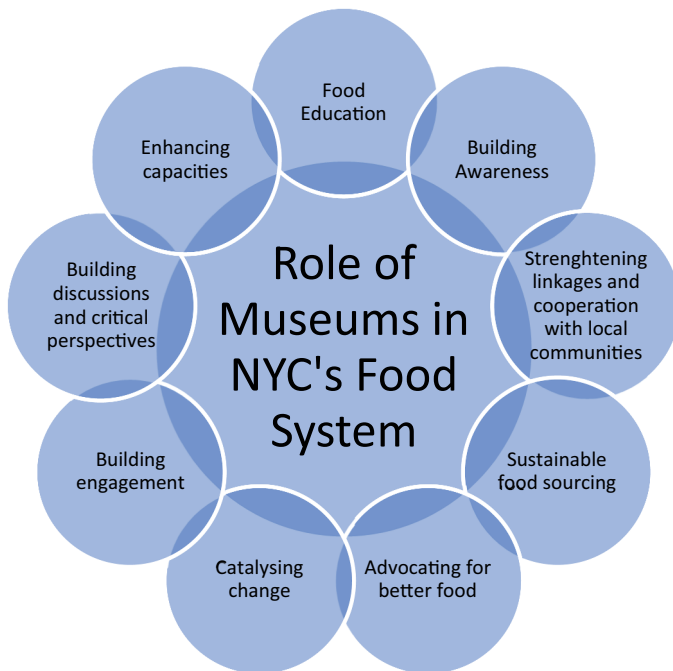


Figure 1. Potential contributions of Museums in the food system of NYC. Source: Elaborated by the authors based on interviews.

practice, including food professionals and other food governance networks such as food coalitions, policy councils, food pantries or universities.

Opportunities identified by respondents reflect the need to redouble efforts to establish specific surveys and monitoring and evaluation systems to capture and measure social impact, behavioral change and learning from current food initiatives and actions (P2;P3;P8). The provision of food in restaurants, cafeterias and catering has been identified as another area for potential improvement in museums (P6;P12), *“ensuring that the food they serve is sourced according to clear and measurable sustainability policies”* (P6) based on better quality and communication for “feeding the visitor” in a sustainable manner. Other key opportunities and recommendations relate to the potential role of museums as food advocates, not in terms of activism in formal food policy spheres (as discussed before), but in building spaces for dialogue and communication to create a collective voice (P12) with external and internal stakeholders (P8). This means building greater integration with local food governance structures such as food councils, universities, food pantries and other networks that can build on the comparative advantages of museum and other cultural institutions (P5) to communicate, debate and learn about key stories, programs and funding opportunities through dedicated exhibitions, portals and initiatives. This suggestion ties in with other suggestions about supporting transformative change (P2) by encouraging museums to play a more active role as part of the food system, for example by participating in and communicating about *“food waste programmes”* (F8), local food markets, food pantries or supporting and providing tools for local food producers (P10). Finally, some interviewees highlight also the need to promote a more coordinated approach that includes food not only in one-off exhibitions (see Annex 1), but through medium and long-term integrated food programming that involves collaboration with other internal and external actors (P1;P3). To this end, P12 emphasizes the need to build greater capacity and awareness of food issues among museum staff, building on stronger links with local communities, experts and other actors in the food system.

There’s certainly a world in which the local food, New York Food Policy Council or local food policy councils could partner with food museums, or really any museum, to help tell those stories through. (P12)

Being you know, sort of the voice in when food issues come up that those museums that have expertise should be present in those conversations, and perhaps be sitting on food councils and policy groups and really helping to shape what’s happening within their communities. (P4)

Food policy makers seem to be aware of museums’ food activities and museum professionals highlight their potential impact on food policy (P1, P2 and P3), but these actors still seem to work independently. Museums and other cultural institutions therefore have great potential for dialogue and collaboration between food policy makers and museum practice, including food professionals and other food governance networks such as food coalitions, policy councils, food pantries or universities.

Conclusions

This paper explores how museums can contribute to making food governance more sustainable and capable of achieving sustainability goals. To achieve these goals, we have examined how museums can and are currently contributing to a more effective internal and external integration of food governance: that is, how museums can make food governance place-based and translocal.

We reflect on these issues through an overview of the theoretical debate and an analysis of the New York City case study. In this final section, we draw conclusions from the case study and discuss its broader implications. The NYC case study provides evidence of both internal and external integration, highlighting key elements of what museums and cultural institutions are doing in New York City's food governance processes, what these institutions would like to do, and the expectations of the different actors involved. Food initiatives in New York City are beginning to receive increased attention from the public, civil society, academia and policy makers, in a city where social innovations are constantly being tested and scaled up (P2), but also where high inequalities, relative food poverty, (child) malnutrition (P8) and increasing food waste remain recurrent and challenging elements of its food landscape (Filomena, Scanlin, and Morland 2013). In this vibrant scene, museums are proving not to be the exception, but a relevant space for dialogue, learning and interaction between actors, promoting opportunities to contribute to sustainable food governance in the city.

NYC is very focused on food security issues and has a complex, articulated and far-reaching food policy. The case study analysis shows that, in addition to actions promoted by local authorities, many other actions are triggered by institutions not directly involved in formal food policy, such as museums or other cultural institutions. These institutions become places of “exchange” of information, critical views and practical experience on how best to achieve sustainability in the food system. [Annex 1](#) shows the activities promoted by museums and other cultural institutions in the direction of promoting sustainability of the food system: in many cases such activities are quite cheap or even free (at least for some days) but tend to be temporary and framed in one-off exhibitions. By being inexpensive or even free, these practices can reach out to broad segments of the population and raise awareness among local people and external visitors. In this sense, museums and cultural institutions are building key opportunities to work toward making food governance place-based and translocal, or in other words, they are moving toward stimulating internal and external integration, as illustrated by the relationship between the museum and food governance in NYC (see [Table 2](#) and [Figure 1](#)).

Despite these efforts, this article notes the current lack of involvement of these institutions in formal and informal food policy spaces, with some actors seeming to be unaware of the potential of museums and cultural institutions to further the communication, coherence and dissemination of sustainable food system actions and strategies across a broad range of internal and external actors (P1; P4). Museums demonstrate to be “listening” and “meeting” needs coming from the bottom, that is to satisfy the will of people who desire to be much more informed and involved in food sustainability and connecting visitors and participants to the realities of local food communities in NYC and abroad. Museums and other cultural institutions have also many opportunities to engage in dialogue with food policy makers, practitioners, and other food governance

networks, such as food coalitions, policy councils, food pantries or universities, but museums and these actors seems to be working independently. While museums are working to dialogue with local people and international visitors, considering the current potentialities, they are not working enough with formal and informal food governance structures, given the current opportunities (P4; P1; P5).

Some interviewees highlighted the importance of building bridges between food policy and museum practice. Food policy makers are aware of what museums are doing and museum practitioners are aware of their potential impact on food policy (P1, P2 and P3), but they do not currently work together. To this end, it would be useful to build stronger relationships between museums and the food governance structure of NYC, highlighting the potential of these spaces to contribute to and catalyze transformative change, especially when working at the “meso-scale,” in collaboration with local food communities, producers and other internal and external food actors (see [Table 2](#)).

Broadly speaking, museums and cultural institutions can contribute to more sustainable food governance if: (1) they can be an inclusive space for dialogue or a place where people from geographically and historically separated places come together, learn from each other and build long-term relationships of cooperation and joint action; and (2) activities are accessible to broader segments of the population to ensure their active participation. Museums can facilitate dialogue that integrates both theory and action, bridging the gap between concepts and practice. In this way it is possible to reflect on the vertical dimension of dialogue, which relates to why we do things and the reasons for our decisions, actions, policies and laws. These dialogue spaces also offer opportunities to work also on a horizontal dimension, which relates to the interaction between people in time and space, between the past and the present, the internal and the external, linking local actors with external audiences and building geographical and intergenerational solidarities. If museums are genuine learning and capacity-building tools, open to different population groups, creating real dialogue and acting as a laboratory, they can concretely support the food governance system to move toward sustainability.

Notes

1. In 1987, the World Commission on Environment and Development of the United Nations (WCED) published a document called *Our Common Future*, better known as the Brundtland Report. It was the first time that the term “development” was associated with the concept of sustainability in an official document and represented a fundamental step in the long process of defining the principles of sustainability. In it, sustainable development is described as a form of “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” The report is still one of the cornerstones of the international commitment to sustainable development, having formulated a definition that is still used today in many documents and initiatives. Furthermore, it initiated an international debate in which different opinions began to converge on the need to adopt ethical and political principles aimed at achieving the so-called “balance of the three E: ecology, equity, economy.”
2. They could reduce their own emissions; they could use public funds for the public good; they could incorporate climate change into exhibitions, events and educational programmes that could raise awareness of sustainability for society at large.

3. Nunzia Borrelli spent a short period of time as visiting scholar at the Columbia University of New York.
4. New York was the first city in the United States of America establishing nutrition standards, a good food pledge initiative and the New York food purchase program. The food policies in the city are now starting to cover broader issues, including climate action, incentivizing farmers to improve agricultural practices, introducing waste management initiatives, plant-based meals in public hospitals and plant-powered Fridays in public schools. In 2023, the city released its first integrated greenhouse gas inventory, incorporating emissions from food production and consumption (City of New York 2023).
5. Here we make use of Kazepides (2012) conceptualization of education, defined as “as a form of free, open, informed dialogue among all members of society.” Whereby, educational systems are seen as a “planned, systematic and genuine dialogue between the young and the old generations on all matters having to do with the human condition” This contrasts views of education as a “monologue, catechism, indoctrination, imposition, coercion and even various forms of training” (Kazepides 2012). Education as a genuine dialogue, cultivates and enriches human characters, not as a product or destination to be achieved, but as a process to travel and live the world from different views (Peters, 1966, 1973 in Kazepides 2012). Under these approaches, the dialogue relates to both horizontal and vertical dimensions. The former emphasizing all humanity and the achievements of humankind in time and space, past and present, internal and external, while the latter concerning the profundity of things and the reasons for our choices, actions, policies and laws (Kazepides 2012).

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References

- AAM. 2011. “Do Museums Need to Care About Foodies? American Association of Museums, Center for the Future of Museums Blog.” Accessed February 10, 2023. <https://www.aam-us.org/2011/09/22/do-museums-need-to-care-about-foodies/>.
- American Association of Museums. 2012. “The Feeding the Spirit Cookbook. A Resource and Discussion Guide on Museums, Food and Community.” *Aam’s Center for the Future of Museums*. Accessed February 10, 2023. <https://www.aam-us.org/wp-content/uploads/2017/12/The-Feeding-the-Spirit-Cookbook.pdf>.
- AMNH. 2012. “Our Global Kitchen: Food, Nature, Culture.” *American Museum of Natural History*. Accessed February 10, 2023. <https://www.amnh.org/exhibitions/our-global-kitchen-food-nature-culture>.

- Bennett, T. 1995. *The Birth of the Museum: History, Theory, Politics*. 1st ed. Routledge. <https://doi.org/10.4324/9781315002668>.
- Bennett, T. 2005. "Civic Laboratories: Museums, Cultural Objecthood and the Governance of the Social." *Cultural Studies* 19 (5): 521–547. <https://doi.org/10.1080/09502380500365416>.
- Bodo, S. 2018. "Museums as Intercultural Spaces." In edited by S. Watson, A. J. Barnes, and K. Bunning, 1st ed. Routledge. <https://doi.org/10.4324/9781315668505>.
- Borghini, A., and A. Baldini. 2021. "Cooking and Dining as Forms of Public Art." *Food, Culture, and Society* 25 (2): 310–327. <https://doi.org/10.1080/15528014.2021.1890891>.
- Born, B., and M. Purcell. 2006. "Avoiding the Local Trap: Scale and Food Systems in Planning Research." *Journal of Planning Education and Research* 26 (2): 195–207. <https://doi.org/10.1177/0739456X06291389>.
- Borrelli, N., P. Davis, and R. Dal Santo, Eds. 2022. *Ecomuseums and Climate Change*. Milan, Italy: Ledizioni LediPublishing.
- Borrelli, N., A. Mela, and S. F. Burgos Guerrero. 2022. "Dancing in the Dark: How Food Governance Can Support Resilience in Portland, Oregon." *Food, Culture, and Society* 26 (3): 1–24. <https://doi.org/10.1080/15528014.2022.2045161>.
- Borrelli, N., L. N. Pigozzi, and G. Mura. 2024. "Ecomuseums in the Mediterranean Area and the Promotion of Sustainable Food Systems." *Sustainability* 16 (18): 7891.
- Borrelli, T., and N. Marsden. 2018. "Moving Up and Down the Scale: The Food System Governance in Portland (Oregon)." *Sociologia urbana e rurale* (115): 11–26. <https://doi.org/10.3280/SUR2018-115-S1002>.
- Brown, K. 2019. "Museums and Local Development: An Introduction to Museums, Sustainability and Wellbeing." *Museum International* 71 (3–4): 1–13. <https://doi.org/10.1080/13500775.2019.1702257>.
- Cameron, F., and B. Neilson, Eds. 2015. *Climate Change and Museum Futures*. London: Routledge.
- City of New York. 2023. "Mayor Adams Commits to Reducing City's Food-Based Emissions by 33 Percent by 2030 After Releasing New Greenhouse Gas Emissions Inventory Incorporating Emissions from Food." Accessed April 18, 2023. <https://www.nyc.gov/office-of-the-mayor/news/263-23/mayor-adams-commits-reducing-city-s-food-based-emissions-33-percent-2030-after-releasing#/0>.
- Clifford, J. 1997. "Museums as Contact Zones." In *Routes: Travel and Translation in the Late Twentieth Century*, edited by J. Clifford, 188–219. Cambridge: Harvard University Press.
- The Climate Museum. 2019. "Taking Action." *The Climate Museum*. Accessed February 10, 2023. <https://www.takingaction.nyc/exhibition>.
- The Climate Museum. 2021. "Talking Climate: Food." *The Climate Museum*. Accessed February 10, 2023. <https://climatemuseum.org/blog/talking-climate-food>.
- Coulson, H., and R. Sonnino. 2019. "Re-Scaling the Politics of Food: Place-Based Urban Food Governance in the UK." *Geoforum* 98:170–179. <https://doi.org/10.1016/j.geoforum.2018.11.010>.
- Derkzen, P., and K. Morgan. 2012. "Food and the City: The Challenge of Urban Food Governance." In *Sustainable Food Planning: Evolving Theory and Practice*, edited by A. Viljoen and J. S. C. Wiskerke, 59–66. Wageningen: Wageningen Academic Publishers.
- Filomena, S., K. Scanlin, and K. B. Morland. 2013. "Brooklyn, New York Foodscape 2007–2011: A Five-Year Analysis of Stability in Food Retail Environments." *The International Journal of Behavioral Nutrition and Physical Activity* 10 (1): 46. <https://doi.org/10.1186/1479-5868-10-46>.
- Freudenberg, N., N. Cohen, J. Poppendieck, and C. Willingham. 2018. "Ten Years of Food Policy Governance in New York City: Lessons for the Next Decade." 45 *Fordham Urb. L.J.* 951. <https://ir.lawnet.fordham.edu/ulj/vol45/iss4/2>.
- Gussow, J. D., and K. L. Clancy. 1986. "Dietary Guidelines for Sustainability." *Journal of Nutrition Education* 18 (1): 1–5. [https://doi.org/10.1016/S0022-3182\(86\)80255-2](https://doi.org/10.1016/S0022-3182(86)80255-2).
- Henry, C., and K. Carter. 2021. "Communicating Climate Change Content in Small and Mid-Sized Museums: Challenges and Opportunities." *The Journal of Museum Education* 46 (3): 321–333. <https://doi.org/10.1080/10598650.2021.1937791>.
- Hooper-Greenhill, E. 1992. *Museums and the Shaping of Knowledge*. London and New York: Routledge.

- Hooper-Greenhill, E., ed. 1994. *The Educational Role of the Museum*. London and New York: Routledge.
- Ilieva, R. T., K. T. Fraser, and N. Cohen. 2023. "From Multiple Streams to a Torrent: A Case Study of Food Policymaking and Innovations in New York During the COVID-19 Emergency." *Cities* 136:104222. <https://doi.org/10.1016/j.cities.2023.104222>.
- International council of museums. 2007. *Museum Definition*. ICOM. <https://icom.museum/en/resources/standards-guidelines/museum-definition/>.
- International council of museums. 2022. *Museum Definition*. ICOM. <https://icom.museum/en/resources/standards-guidelines/museum-definition>.
- Johnson, P. J. 2021. "Sharing the Journey: Museums and Culinary Tourism." *Visions in Leisure and Business* 24 (1): Article 3. <https://doi.org/10.25035/visions.24.01.03>.
- Kazepides, T. 2012. "Education as Dialogue." *Educational Philosophy and Theory* 44 (9): 913–925. <https://doi.org/10.1111/j.1469-5812.2011.00762.x>.
- Kirshenblatt-Gimblett, B. 1991. "Objects of ethnography." In *Exhibiting cultures: The poetics and politics of museum display*, edited by I. Karp and S. D. Lavine, 386–443. Smithsonian Institution Press.
- Kotler, N., and P. Kotler. 2010. "Can Museums Be All Things to All People?: Missions, Goals, and Marketing's Role." *Museum Management & Curatorship* 18 (3): 271–287. <https://doi.org/10.1080/09647770000301803>.
- Lanzinger, M., and A. Garlandini. 2019. "Local Development and Sustainable Development Goals: A Museum Experience." *Museum International* 71 (3–4): 46–57. <https://doi.org/10.1080/13500775.2019.1706945>.
- Latour, B. 1983. "Give Me a Laboratory and I Will Raise the World." *Science Observed: Perspectives on the Social Study of Science* 141–170.
- Le Galès, P. 1998. "Regulations and Governance in European Cities." *International Journal of Urban and Regional Research* 22 (3): 482–506. <https://doi.org/10.1111/1468-2427.00153>.
- Levent, N., and I. D. Mihalache, eds. 2016. *Food and Museums*. Bloomsbury Publishing.
- Maciocco, G., and S. Tagliagambe. 2009. "The Local-Supralocal Relationship." In *People and Space. Urban and Landscape Perspectives*, Vol. 5. Dordrecht: Springer. https://doi.org/10.1007/978-1-4020-9879-6_8.
- Marsden, T. 2016. "Exploring the Rural Eco-Economy: Beyond Neoliberalism." *Sociologia Ruralis* 56 (4): 597–615. <https://doi.org/10.1111/soru.12139>.
- Marsden, T., and N. Borrelli. 2018. "Moving Up and Down the Scale: The Food System Governance in Portland (Oregon)." *Sociologia Urbana E Rurale* XL (115 supplemento): 11–26.
- McGhie, H. 2019. "Climate Change Engagement: A Different Narrative." In *Addressing the Challenges in Communicating Climate Change Across Various Audiences. Climate Change Management*, edited by W. Leal-Filho, B. Lackner, and H. McGhie. Cham: Springer. https://doi.org/10.1007/978-3-319-98294-6_2.
- McGhie, H. A. 2019. *Museums and the Sustainable Development Goals: A How-To Guide for Museums, Galleries, the Cultural Sector and Their Partners*, UK: Curating Tomorrow. www.curatingtomorrow.co.uk.
- McGhie, H. A. 2020. "Evolving Climate Change Policy and Museums." *Museum Management & Curatorship* 35 (6): 653–662. <https://doi.org/10.1080/09647775.2020.1844589>.
- McIntosh, M. J., and J. M. Morse. 2015. "Situating and Constructing Diversity in Semi-Structured Interviews." *Global Qualitative Nursing Research* 2:2333393615597674. <https://doi.org/10.1177/2333393615597674>.
- Mihalache, I. D. 2016. "Critical Eating: Tasting Museum Stories on Restaurant Menus." *Food, Culture, and Society* 19 (2): 317–336. <https://doi.org/10.1080/15528014.2016.1178548>.
- Morse, N. 2020. *The Museum as a Space of Social Care*. London: Routledge.
- Murawski, M. 2021. *Museums as Agents of Change: A Guide to Becoming a Changemaker*. Maryland: Rowman & Littlefield.
- NYC Mayor's Office of Food Policy. 2022. Food Forward NYC, a 10-Year Food Policy Plan. https://www.nyc.gov/assets/foodpolicy/downloads/pdf/NYC_FoodReport_18_CB_interactive.pdf.

- Peters, R. S. 1966. *Ethics and Education*. London: George Allen & Unwin Ltd.
- Shields-Argelès, C. 2018. "Anthropology on the Menu: Cultural Perspectives on Food and Taste in Museums." In *In Food and Museums: Vol*, edited by N. Levent and I. D. Mihalache, Paperback ed. Bloomsbury Academic.
- Sutter, G. C., T. Sperlich, D. Worts, R. Rivard, and L. Teather. 2016. "Fostering Cultures of Sustainability Through Community-Engaged Museums: The History and Re-Emergence of Ecomuseums in Canada and the USA." *Sustainability* 8 (12): 1310. <https://doi.org/10.3390/su8121310>.
- Sutton, S. 2020. "The Evolving Responsibility of Museum Work in the Time of Climate Change." *Museum Management & Curatorship* 35 (6): 618–635. <https://doi.org/10.1080/09647775.2020.1837000>.
- Vergo, P. 1989. *The New Museology*. New York: Reaktion.
- Willett, W., J. Rockström, B. Loken, M. Springmann, T. Lang, S. Vermeulen, T. Garnett, et al. 2019. "Food in the Anthropocene: The EAT-Lancet Commission on Healthy Diets from Sustainable Food Systems." *Lancet* 393 (10170): 447–492. [https://doi.org/10.1016/S0140-6736\(18\)31788-4](https://doi.org/10.1016/S0140-6736(18)31788-4).

Annex 1: Food-Related Activities at NYC Museums and Institutions: Linkages and activities Source: Own elaboration based on online review

Institution Name	Type	Food-Related Activities	Description	Dates (DD/MM/YR)
American Museum of Natural History (1)	Museum	Exhibit	<i>Our Global Kitchen: Food Nature and Culture</i> explore the food system from growing, transporting, cooking, eating, tasting and celebrating and highlight how food is produced and how it moves around the world	17/11/12 to 11/08/13
Brooklyn Botanical Garden (1)	Public Garden	Child/Youth Programme	Ongoing programs for kids to learn about gardening, as well as tours for school children, and professional development workshops for educators on topics such as Kitchen Botany: Plants We Eat, Food and Social Justice, and Agriculture and our Food System.	Ongoing
Brooklyn Museum (1)	Museum	Food Pantry	The Brooklyn Museum partnered with The Campaign Against Hunger to offer food. This was to not only provide food security but also to highlight disproportionate economic and social impacts of COVID-19 on New Yorkers that had already been suffering long before the pandemic.	06/2020 (end date unknown)
Children's Museum of Manhattan (3)	Museum	Exhibit	<i>EatSleepPlay™</i> This exhibit highlights the health focus of this museum. This exhibit was permanent in the museum for some time and is now closed. This exhibit also has a related curriculum, <i>EatSleepGrow™</i> that was developed with the United States National Institutes of Health.	11/2011 (end date unknown)
Decker Farm Museum (3)	Museum	Children/Youth Programme	<i>Apprentice Program</i> This program is a summer experience for 12–15-year-old youth that have an interest in history of centuries of American ingenuity and hand-on learning. One of the options is open art cooking which uses a Dutch Oven and griddle to cook a variety of 18th and 19th century recipes.	Summers (ongoing)

(Continued)

Institution Name	Type	Food-Related Activities	Description	Dates (DD/MM/YR)
Dyckman Farmhouse Museum Alliance (1)	Museum	Gardening (1)	<i>Growing Uptown.</i> In partnership with Garden Kitchen Lab and New York Common Pantry the Dyckman Farmhouse Museum is closing the gap on food insecurity by working alongside 120 families to grow food in their apartments. They have regular workshops for families.	Started 03/2020 (ongoing)
Farm to People (3)	Event Venue	Events	Farm to People is a food distributor and also has a large indoor and outdoor venue space with frequent panels, discussion, and events on sustainable food systems.	Opened 10/06/22
Metropolitan Museum of Art (MET) (1)	Museum	Eateries	Throughout the seven eateries in the MET there is information on food system sustainability and education on how choices were made to source and prepare the food, so it is delicious and sustainable.	Ongoing

Institution Name	Type	Food-Related Activities	Description	Dates (DD/MM/YR)
Museum of Food and Drink (MOFAD) (3)	Museum	Exhibits	<i>Food is Culture™</i> This museum that is dedicated to food and drink aims “to create cultural change toward a more thoughtful, equitable, and delicious future,” and has had many exhibits in various places.	2013 to present
Museum of Reclaimed Urban Spaces (MoRUS) (1)	Museum	Exhibit	<i>Fridge Street: Bridging Sites of Mutual Aid.</i> This exhibit showcased the network of community fridges that are across NYC and how these fridges are helping to build food security, community, and sustainability. Community fridges first appeared in NYC during the rapid rise in food insecurity during the COVID-19 pandemic.	17/07/23 to 30/07/23
		Events	<i>Reclaiming Space: Community Gardens.</i> MoRUS plans events that help to improve and highlight the 39 community gardens in the East Village of NYC. This includes workshops on planting, composting, and soil treatment. They also highlight community gardens on their tours offered every weekend.	Ongoing

(Continued)

Institution Name	Type	Food-Related Activities	Description	Dates (DD/MM/YR)
Museum of the City of New York (1)	Museum	Event	<i>Feeding the Apple: New York's Future Food Supply</i> explored the juxtaposition of New York City having an expansive and exciting worldwide culinary creativity with a million people having limited access to fresh healthy food	18/04/18
		Event	<i>Gastronativism: Food and Politics with Marion Nestle, Fabio Parasecoli, and Krishnendu Ray.</i> This panel discussion explored how food can be exploited in order to ensure people with limited resources are not continually the losers.	09/08/22
		Exhibit	<i>Food in New York Bigger Than the Plate.</i> This exhibit explores how food binds us as humans through issues of sustainability, labor, and justice. The goal is to create activists through an "invitation to feast for a more equitable and exciting future."	15/09/22 to 18/09/23
New York Botanical Garden (1)	Public Garden	Exhibit	<i>Around the Table: Stories of the Foods We Love.</i> This exhibit featured artists from Bronx, New York, the location of the botanical garden to tell the stories of how food center's all of our life's most important events.	13/06/22 to 11/09/22
		Children/ Youth Programme	<i>Edible Academy.</i> This is a large garden space and well-equipped cooking classrooms for hands-on activities for children from toddlers through high school. The current facility opened in 2018 as an expansion of the Ruth Rea Howell Vegetable Garden which has been operating year-round as an educational program for over 60 years.	More than 60 years (expanded facility opened in 2018)
The Climate Museum (3)	Museum	Event	"Talking Climate: Food" aims to create ground for community-building, democratic engagement, and civic action on the climate crisis. Panellists were able to discuss food at the intersection of climate and inequality, including food access and sustainability; farmworkers' rights; prospects for agricultural regeneration; and more.	21/05/2021
		Exhibit	"Taking Action." Hands-on learning about solutions for the climate crisis; a space to confront the barriers to their implementation; and an invitation to meaningful group action, inspired by the new youth climate movement.	June-October 2019

(Continued)

Institution Name	Type	Food-Related Activities	Description	Dates (DD/MM/YR)
Queen Farm Museum (1)	Museum	Tour	<i>Insiders Tour.</i> This tour explores how the farm (which is one of the oldest farms to continually be producing food in New York State) uses sustainable practices to for their livestock and organic practices to grow crops, including how they compost on their farm to how they produce value added products such as eggs, yarn, and honey.	Year-round (ongoing)
Queens Botanical Garden (1)	Public Garden	Child/Youth Programme	Programming for children and families to garden, taste foods grown in the garden and learn about environmental stewardship	Ongoing
Queens Museum (1)	Museum	Food Pantry	This food pantry provided food to increase food security and to have events that brought together communities and highlighted the roots of inequity that made the COVID-19 pandemic disproportionately impact Black, Brown, and immigrant communities due to systemic unequal access to resources.	17/06/2020 (end date unknown)
Stone Barns Center (4)	Public Garden	Gardening	<i>Leading an Ecological and Accessible Food System (LEAF) Program</i> In partnership with Bruckner Mott Haven Community Garden this program is providing resources for families to grow their own leafy greens as well as to provide education on healthy and sustainable eating.	2022 (ongoing)
Tenement Museum (5)	Museum	Event	<i>Kitchen Liberation: Immigrant Home Cooking and Women's Rights</i> This event celebrated women's power through keeping cooking lineages alive.	16/01/20
		Event	<i>League of Kitchens: Tenement Edition</i> This cooking demonstration on making two different types of dumplings invited attendees to discuss women, culture, and how the past can inform a better future.	29/01/20
		Virtual Event	<i>Virtual Tour: Tenement Kitchens</i> This virtual tour explored how immigrant women fed their families during the 19th and 20th centuries to learn how the many decisions and challenges immigrant women faced can help us to think about our food future.	11/08/21

(Continued)

Institution Name	Type	Food-Related Activities	Description	Dates (DD/MM/YR)
Wildlife Conservation Society (2)	Zoos and Aquariums	Eateries	The Eateries in the WCS five New York City locations have extensive information and educational materials in all their eateries about sustainable food choices.	Ongoing

- (1) Admission to this venue is pay as you wish, a suggested donation, and/or free through CULTUREPASS (free entry with a New York City Public Library Card)
- (2) Flex pricing and free days for admission fee to make venue more accessible.
- (3) No known discounts to make this venue more accessible. Note for the Decker Farm Museum admission is \$3 USD which is a modest price.
- (4) Since Stone Barn Centre is outside of New York City, the only discount is with public library cards from libraries local to Stone Barn Centre. This program was free to participants and had significant giveaways.
- (5) Only discount for admission is for New York City school teachers on Sundays.

Annex 2: List of interviews by type of actor and role Source: Own elaboration

#	Role	Organization	Type of Actor
1	Professor of Food Studies (New York)	University	Academia
2	Professor of Food Planning (New York)	University	Academia
3	Professor of Museum Studies (Toronto)	University	Academia
4	New York City Food Policy Director	City of New York	Local Authorities
5	CEO and Executive Director	Westside Campaign against Hunger, New York City	Non-Governmental Organization
6	Director of Communications	Bon Apetit, New York City	Private Company
7	Communications & Content Specialist	Bon Apetit, New York City	Private Company
8	Food & Museum Consultant	Slow Food, Independent Consultant, New York City	Non-Governmental Organization
9	Culinary Director at the Metropolitan Museum of Art	Metropolitan Museum of Art (MET), New York City	Museum/Cultural Institution
10	Director of the Edible Academy at the New York Botanical Garden	Edible Academy, Botanical Garden, New York City	Museum/Cultural Institution
11	Design and Curatorial Associate	Museum for Climate, New York City	Museum/Cultural Institution
12	Food Museum Director	Museum of Food and Drink (MOFAD), New York City	Museum/Cultural Institution