23

2021

Museum, culture and digital innovations

Social innovation and accessibility in museum: some evidence from the *SoStare al MANN* project

Ludovico Solima*, Mario Tani**, Pasquale Sasso***

Abstract

In recent years, the function of museums has changed from focusing on protecting cultural heritage to reach out to a wider audience and proposing a series of new methods to promote and display its collections and contribute towards collective cultural and social development. In this new vision, accessibility acquires a central role, asking to enable people who otherwise would have been excluded, be it because of physical disabilities or because suffering from behavioural and/or cognitive disorders, to enjoy the benefits of culture. Accordingly, some museums have developed a number of new approaches for people with special needs affected by autism spectrum disorder. At the same time these new activities are designed leveraging new competences and knowledge that museums only rarely own, but they can get access to them engaging local stakeholders in a process that starts from

* Ludovico Solima, Full Professor in Management, University of Campania "L. Vanvitelli", Department of Economics, Corso Gran Priorato di Malta, 81043 Capua, e-mail: ludovico.solima@unicampania.it.

** Mario Tani, Lecturer, University of Naples "Federico II", Department of Economics, Management and Institutions, via Cinthia, 80126 Napoli, e-mail: mario.tani@unina.it.

*** Pasquale Sasso, Ph.D, University of Campania "L. Vanvitelli", Department of Economics, Corso Gran Priorato di Malta, 81043 Capua, e-mail: pasquale.sasso@unicampania.it.

analysing the local area' needs to develop new ways to visit the collections that can be seen as a social innovation. This work is concerned with analysing a project undertaken by the Museo Archeologico Nazionale di Napoli (National Archaeological Museum of Naples) with some of its stakeholders, aiming to understand whether, by altering the perspective of analysis, museums can introduce totally novel ways to approach their collections, so that they are more inclusive and welcoming for people affected by behavioural and/or cognitive disorders.

Negli ultimi anni, la funzione del museo è cambiata, passando dalla mera tutela del patrimonio culturale alla sua valorizzazione, tramite diversi e nuovi servizi rivolti a un più ampio pubblico, con il fine di essere un soggetto attivo per la crescita culturale e sociale della collettività. Al centro di questa funzione vi è l'accessibilità, che richiede di ampliare la fruizione del servizio alle persone affette da disabilità motorie e a quelle che presentano disordini comportamentali e/o cognitivi, tanto che alcuni musei hanno sviluppato nuovi approcci rivolti alle necessità delle persone affette da disordini dello spettro autistico. Allo stesso tempo queste nuove iniziative necessitano di competenze e conoscenze che solo raramente i musei hanno internamente, ma che possono essere ottenute coinvolgendo attivamente i portatori di interesse dell'organizzazione museale in un processo che parta dall'analisi delle necessità del contesto per sviluppare nuove modalità di fruizione che possono essere ritenute una forma di innovazione sociale. In questo lavoro si analizza un progetto che il Museo Archeologico Nazionale di Napoli ha avviato insieme ad alcuni stakeholder per comprendere come sia possibile sviluppare nuove modalità per valorizzare le proprie collezioni, rendendole più inclusive nei confronti delle persone affette da disordini comportamentali e/o cognitivi.

1. *Introduction*

According to the International Council of Museums (ICOM), a museum is «a non-profit, permanent institution in 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 the purposes of education, study and enjoyment»[1].

This statement explains that modern museums should set out to attract and welcome everyone[2], as the means to contribute to cultural and social development within its local area and, in a wider sense, to that of society as a whole[3]. In order to attain this goal, museums should become attractive to a broader set of visitors[4] and they should be able to overcome the barriers limiting the visitors from enjoying, appreciating and learning from the museum's collections.

The need for museums to be more open towards their community was emphasized by the Council of Europe in its *Convention on the Value of*

---

[1] <https://icom.museum/en/resources/standards-guidelines/museum-definition/>, 22.03.2021.
[2] Martins 2012.
[3] Solima 2004.
[4] Hein 2006.

Cultural Heritage for Society (Faro Convention), adopted in Faro (Portugal) in 2005. This framework convention opened a new season in cultural policies, promoting more democratic participation in cultural heritage and a new scheme for its accessibility. The first article of the Faro Convention underlines the importance of involving all individuals and communities in safeguarding and enhancing cultural heritage, the responsibility of all towards cultural heritage and the need for synergy between private and public actors in the sector. Within the new function of cultural heritage, museums have the social responsibility of becoming a centre of cultural production and ensuring that everyone has the *right* to participate. In this way, museums must promote, through their work, the processes of creating value for their local territory and help that part of the community which, for various reasons, is detached from the museums' traditional reach, to become active parts of the society[5].

As shown by Suchy[6], when museums are able to create, and nurture, their relationship with the key stakeholders in their community, they are able to create the emotional bonds that link a museum tightly to its territory and help to make it a central actor within the complex system in which it belongs[7]. In this perspective, communities should not be seen as homogeneous, but as multi-faceted and ever-shifting entities in constant evolution. The changes within a community may drive museums to redefine their own actions to accommodate the new environmental request.

At the same time, museums should be able to leverage their stakeholders' networks[8] in order to access the broad set of competencies needed to address the various types of accessibility. Drawing on their network of relationships, museums can create new visiting experiences, whereby they communicate the value of their permanent collections more effectively and succeed in their social function of being able to entertain their audiences, to fulfil their function of becoming a testing ground for new forms of cultural citizenship, and support social relations and the sense of belonging to the local territory, promoting the value of accessibility.

Therefore, the main focus in this paper is to investigate how museums can effectively engage other social actors to get two different effects: on one side, these relationships should be able to leverage the competences of the other actors in the local community to expand their professional resources and to define new solutions to address the specific requirements of people with special needs; at the same time these relationships should be able to strengthen their relationship with the local community. At the same time, as a second research

---

[5] De Luca 2007; Walters 2009; Rappolt-Schlichtmann, Daley 2013; Brown, Mairesse 2018.
[6] Suchy 2006.
[7] Onciul 2013; Phillips *et al.* 2015.
[8] Sciarelli, Tani 2013.

question, we want to investigate if these new solutions can be extended to other visitors, reducing the distance among the various audiences.

In this paper, we present a study on a specific example of a project developed by the Museo Archeologico Nazionale di Napoli (MANN), leveraging its network of relationships with a local association to design new services to answer the needs of a well-defined group of visitors, people affected by autism syndrome disorder, the *SoStare al MANN* project. We show how the project has helped in making the MANN more accessible, mostly in the cognitive dimension, to help these visitors fully enjoy their visit. At the same time, it has helped to design services that could be used even by other types of visitors.

The paper is structured as follows. The first part is dedicated to the analysis of the literature on the issues of social innovation, and we then present the literature on accessibility in museums. The third part covers the methodological approach of the work, to define the research questions and justify the case study selection; then, in the fourth part, we present the case, highlighting the actors involved and the various phases of the project. After describing the case, we discuss the main findings of this paper, giving some theoretical and managerial implications and, in the conclusions, we set out the main limitations of this study, together with suggestions for further research.

2. *Literature review*

2.1 *Social innovation*

Social innovation is generically defined as «the creation and implementation of new solutions to social problems, with the benefits of these solutions shared beyond the confines of the innovators»[9], although, according to some scholars[10], it still lacks a commonly accepted and comprehensive definition.

Van der Have and Rubalcaba[11] see social innovation as a multi-faceted phenomenon with four possible levels. The first is the level of grassroots social innovation, i.e. responding to pressing social demands which usually cannot be satisfied through more traditional market-based solutions. The second level consists of novel products and services produced by private, public, and third sector organizations (or a combination thereof). The third level is composed of the new combinations of social practices, attitudes and values, and the fourth

---

[9] Tracey, Stott 2017, p. 51.
[10] Pol, Ville 2009; Lawrence *et al.* 2014; Edwards-Schachter, Wallace 2017.
[11] Van der Have, Rubalcaba 2016.

and last level is that of systemic innovations, involving fundamental changes in strategies and policies, organizational structures and institutional frameworks.

Mumford defined social innovation as «the generation and implementation of new ideas about social relationships and social organization»[12]. Within the same stream, several scholars[13] have perceived it as the capability of society, or some of its parts, to see socio-environmental issues and solve them through processes of change. These new solutions mostly deal with issues linked to the environment, social services or culture and education. This is a broad vision of social innovation, and can encompass many different processes, starting from new ideas to address social issues and/or solve unsatisfied needs in a local area[14].

According to other scholars[15], the diffusion of social innovation within social sciences is a consequence of rising interest on the part of private companies, public organizations and community groups, which are actively pursuing more efficient solutions to existing social problems or, trying to anticipate potential new solutions before the problems escalate, with the contribution of, and the coordination with, institutions, business and other individuals.

Social innovation can still be considered as an emerging field of research[16], with several studies[17] seeing it as a way to improve quality of life, while some scholars[18] examined the outcomes of the processes of social innovation. According to them, these innovations are more about creating value and less about creating profit and, in most cases, they may lead to successful new enterprises and business models that may be seen as partially profit-oriented and partially not-profit oriented. At the same time, according to other academics, an innovation is only a social one when the new way to solve the problem is more effective, efficient, sustainable and fair than the existing solution[19]. Likewise, as these innovations are not developed for the purposes of profit only, the new beneficial effects must be able to create value for society as a whole, instead of being limited to only some individuals[20]. In a similar perspective, as highlighted by Ziegler[21], other studies see social innovation as a subdomain of normal studies into innovation[22].

---

[12] Mumford 2002, p. 253.
[13] Mulgan *et al.* 2007.
[14] Mulgan *et al.* 2007; Murray *et al.* 2010.
[15] Lettice, Parekh 2010; Lawrence *et al.* 2014; Phillips *et al.* 2015; van Wijk *et al.* 2018.
[16] Dacin *et al.* 2010.
[17] Harrisson *et al.* 2012; McKelvey, Zaring 2018.
[18] Bessant, Tidd 2007; Bhatt, Ahmad 2017; Tracey, Stott 2017.
[19] Phills *et al.* 2008.
[20] Bessant, Tidd 2007; Phills *et al.* 2008; Bhatt, Ahmad 2017.
[21] Ziegler 2017.
[22] Ziegler highlights even a third stream in the social innovation literature. This less enthusiastic and more sceptical stream sees social innovation as a case for a switch to other concepts, such as social inequality and social justice that are less favourably accepted. See Ziegler 2017, p. 400.

Another group of scholars has focused more on the implementation of social innovation. For example, for Howaldt and Schwarz[23], this means the actions of actors, or a group of actors, ultimately create a new combination or new configuration of social practices that were intentionally designed to solve a given social need or issue better than existing established practices. Similarly, Cajaiba-Santana[24] identifies social innovations as new social practices created by one or more social actors that intentionally seek to induce social change by reconfiguring how these very same social goals are accomplished.

At the same time, according to Ruiz and Parra[25], social innovation is only really accomplished when the social actors can disseminate it to other parts of society that may need the new practices and related policies. Equally, Pol and Ville[26] claim that social innovation is only fully accomplished if it can have a permanent impact on the perceptions and behaviours of people in certain areas. More recently, Purtik and Arenas (2019) found that social actors can effectively leverage the process of social innovation to change societal norms, spreading other, more sustainable behaviour among the other actors in their environment, themselves leveraging their example[27]. In the same stream of research, several scholars see the processes of social innovation as system-changing practices that could alter perceptions and act as an instrument for social change[28].

Social innovations are usually more complex and more ambiguous than conventional business innovation[29]. This is because social innovators tend to have to satisfy a wider range of stakeholders, each with different priorities and potentially conflicting interests and viewpoints, and such social innovation may require fundamental and systemic transformations or change that challenge the status quo[30].

According to some scholars, social innovation is the direct consequence of the experiences and learning processes undergone by social actors, such as social enterprises and NGOs[31]. Mulgan[32], on the contrary, claims that social innovation is not limited to the actions taken by third sector actors, as its effectiveness is linked to how engaged the different social actors are throughout the various phases from design to dissemination. Papaluca and Tani[33] linked the third sector's effectiveness in implementing social innovation to their ability to involve a broader set of stakeholders in their processes, in that the third

---

[23] Howaldt, Schwarz 2010.
[24] Cajaiba-Santana 2014.
[25] Ruiz, Parra 2013.
[26] Pol, Ville 2009.
[27] Purtik, Arenas 2019.
[28] McKelvey, Zaring 2018; Westley, Antadze 2010.
[29] Hall, Vredenburg 2003.
[30] Gladwin *et al.* 1995; Noci, Verganti 1999; Mulgan *et al.* 2007; van Wijk *et al.* 2018.
[31] Dees 1998; Paton 2003; Harding 2004.
[32] Mulgan 2006.
[33] Papaluca, Tani 2010.

sector players can overcome their structural lack of resources by exploiting their social capital and gaining new perspectives on the different needs arising in their environment[34].

Mulgan[35] holds that social innovation is only rarely completely new innovation, and usually derives from the ability to observe and adapt solutions that have been applied to similar problems in different contexts. It follows that the value of social innovation is the outcome of a transparent and collaborative value co-creation process built upon a multi-stakeholder engagement[36]. Social innovation opens the door onto seeing innovation as a multi-disciplinary and multi-stakeholder collaboration, where various actors are able to participate in changing the behaviours of other actors in the same system[37].

In general, according to several scholars[38], social innovation is most effective when it is the result of a collective process initiated by individuals, or single social movements, that are able to engage other public and private social actors, in order to become more effective at capitalizing on the different resources accessed by the entire network of actors. Several scholars[39] speak about the need to identify a *social innovation system* composed of the various communities in which social innovation processes are developed, with the participation of a range of stakeholders, including those in the public and third sector and consumers.

Lusch and Vargo[40] argue that social innovation should be analysed by placing emphasis on the actor-to-actor networks and resource integration processes needed for enabling a co-creation of value that can potentially succeed in sustaining social innovation over time. According to Huq[41], social innovation may be a third path to designing and implementing new social services. The author suggests that organizations intending to design new, innovative social services, especially if these services are to be deployed in tightly regulated fields, should adopt a three-step process, involving professional organizations and individuals in the development of the new solutions. In the first step, defined by Huq as *entwining problems*, the organization should stop seeing the issues that it is tackling as separate problems and, instead, try to engage with the local communities and adopt a more systemic approach. The second step is known as *reconfiguring arrangements*, undertaken so that the various organizations are ready to accept the needed changes. The third step is *active waiting*, whereby

---

[34] Lipparini 2002; Papaluca, Tani 2010.
[35] Mulgan 2006.
[36] Brodie *et al*. 2019; Rahman *et al*. 2019.
[37] Ziegler 2017.
[38] Mulgan 2006; Salim Saji, Ellingstad 2016.
[39] Phillips *et al*. 2015; Carberry *et al*. 2019.
[40] Lusch, Vargo 2014.
[41] Huq 2019.

innovation is encouraged but not actively pursued in local settings, letting the various professionals drive the process of innovation.

In museums social innovation can be linked to the various activities designed, with the help of external stakeholders, to better fulfil their new social function.

2.2 *Accessibility as a driving factor of the social function of the museum*

According to the spirit of the Faro Convention, the *new museum* shifts from being a mere container to an institution where the cultural wealth of its permanent collections are assets to be shared and promoted[42]. The static vision has prevailed over the dynamic one for a long time, making it difficult for museums to engage with other than their traditional audiences, and totally excluding those whose knowledge does not meet the museum's lofty expectations[43]. One of the main criticisms of the traditional concept of museum is that it focuses overly on the protection and conservation side, paying too little attention to that of making its collections engaging and exciting[44]. The result is that the visitor experience is often overlooked or oversimplified[45]. The habit of not dwelling too much on the needs of users, or else considering the public to be an amorphous cluster of passive and uncritical consumers, replicates the positions taken for most of the twentieth century, and which had also applied to the entertainment and advertising sector, and has equally evolved. The primary mission of the museum has become the transmission of cultural heritage to future generations, helping to cultivate the community's own identity. The museum is now seen as the means by which society presents and acknowledges its relationship with its own history and that of other cultures.

In 2020, Taylor[46] found that even the image of art museums, traditionally perceived as repositories of fine art for audiences to observe at a distance, is no longer valid. Museums are considered to be places where people engage with the arts, and arenas for cooperation with audiences and neighbouring communities. Barnes and McPherson[47] found that one way for a museum to expand its accessibility is for it to engage with parts of its community in redefining museum services, or at least how artwork can be experienced by its visitors, transforming it into a hybrid institution that is able to educate and entertain its audiences at the same time.

In 2009, the Commission for Education at ICOM Italy classified museum visitors into adults, children, young people, the elderly, the physically and

---

[42] Besozzi 2007.
[43] Solima *et al.* 2019.
[44] Ferraro 2011.
[45] Rodari 2005.
[46] Taylor 2020.
[47] Barnes, McPherson 2019.

mentally disabled, citizens of other cultures, tourists, professionals in training, family groups and participants in social reintegration programmes, because the educational purposes of museums are the development and promotion of knowledge, skills and behaviours that manifest themselves throughout the life of each individual. The Commission emphasized the fact that museums have a social responsibility towards their local communities. Museums must necessarily place themselves in an open and *listening* position towards their communities, question their role and rethink their function, in order to interact effectively with current events characterized by elements of complexity and dynamism.

Museums can be the bearers of major social benefits[48]. Alongside the cultural value of knowledge built and disseminated by museums, is the value of social relations which they can potentially promote[49]. Without the relationship between cultural heritage and individuals, the museum would return to taking the simple role of container. By emphasizing the relationship between the museum, the various stakeholders and the community, museums are referred to as places where different cultures are put into contact, rather than as institutions that impart knowledge to visitors[50]. It should be noted that museums are themselves communities with their own values and conventions, and they differ from each other in the way they evolve in relation to the context in which they are inserted.

The museum has the purpose of supporting critical learning and the process whereby people internalize cultural heritage so that it becomes a value for each individual. This idea goes in parallel with the principle of leveraging continuous learning to help develop a democratic and active citizenship[51]. The social function of a museum is apparently even recognized by the medical sector; in Canada, doctors have recently been prescribing museum visits as a therapy in conjunction with taking medicines. It can be said then that the museum is *good for health*.

In order to exercise its new social functions, as explicitly requested by the international community, the modern museum must open itself to the needs of the community, offer itself as a testing ground for new forms of cultural citizenship, promote and support social relations and the sense of belonging to the local territory, and oppose phenomena of social exclusion by promoting the value of accessibility[52]. As highlighted by Cerquetti[53], as a museum's organization must create value for all its stakeholders, it should not limit itself to protecting cultural heritage but should be able to promote and enhance it. The museum's

[48] ICOM 2009.
[49] Clifford 1997.
[50] Singer 2007.
[51] Pinna 2000.
[52] Solima 2012.
[53] Cerquetti 2010.

publics should be able to participate in the processes of value creation, and other actors should be brought in to improve the management skills held within museums. In other words, museums must activate practices that allow them to involve their community more closely. Engagement, according to Onciul[54], has the great potential of benefiting not only the museums but their communities as well. The outcome of these practices is to engender a closer bond between the two sets of actors, and more, the two groups can share their activities, and the interaction of a museum with new actors can create new narratives and new perspectives that can increase the value of the museum's offer. At the same time, the various organizations should be wary of the distribution of power within the engagement process as, even during the process itself, the different roles will be continuously changing, not according to some pre-defined plan, but because of the role that each actor effectively has in every single part of the process[55]. Community engagement, in museum literature, has been defined as «museum programs that usually involve individuals or groups who do not or cannot use museums, and that may take place both in museums and in a range of community spaces»[56]. In community engagement processes, art collections are relevant and meaningful, but they are clearly not central[57]; they are the means to create new connections, and how new interests are sparked. These processes may require people to break down the wall between visitor and works of art, so that the visitor can touch them, or a close replica, or interact with them through other media, arts, crafts or photography[58].

The only way for museums to be more open and involve their communities more closely is to promote the value of accessibility. The theme of accessibility in the museum sector is certainly a distinctly current topic, as it is still able to offer various possibilities for multi-disciplinary comparisons, open to the contribution of the widest spectrum of professionals operating in the various fields dealing with culture. There is an increasingly large and diverse section of population that, through temporary or permanent circumstances determined by physiological or pathological causes, has limited possibilities of freely accessing and using the museum spaces, or of joining in cultural and educational initiatives. In this perspective, the State and the bodies responsible for ensuring equal rights for all are expected and required to know the citizens' needs, and to provide suitable services. Therefore, both at central and local level, it is essential to pursue policies for equal opportunity and, above all, equal access, which increase dissemination and sharing a culture of accessibility among professionals and citizens, promoting the paradigm of culture open to all and for all.

---

[54] Onciul 2013.
[55] *Ibidem*.
[56] Morse, Munro 2018, p. 358.
[57] Morse, Munro 2018.
[58] Solima, Tani 2016.

This new model, set out by the United Nations *Convention on the Rights of Persons with Disabilities*[59], is inspired by the full compliance and application of the right to *accessible culture*, understood as both ensuring physical access to places of culture and cognitive access to the contents they produce and promote[60]. From this perspective, museums can be considered as effective tools against the bane of social exclusion, as they are not mere repositories of artwork, but suppliers of free knowledge able to reach everyone. It follows that, by pursuing their institutional purposes, museums can become instruments of social cohesion capable of fully interpreting the paradigm of open culture. The new vision of the museum focuses on its educational nature and its natural orientation towards the public, both being vocations that lead museums to be *of all and for all*.

The goal of becoming a space that all can access should not be interpreted as simply removing architectural or physical barriers, but rather as ensuring that everyone can fully enjoy the museums' collections. Only by promoting a dialogue devoid of any form of discrimination with the outside world will museums be able to take on a role of primary importance within contemporary society. The relationship between a museum and its communities is not new[61] and, according to Morse and Munro[62], is defined in several policies where museums are asked to engage with specific *target communities*, such as people from minority ethnic groups, socio-economically deprived areas and disability groups. In these undertakings, museum staff should provide a welcoming, inclusive and safe environment and, most importantly, a space where visitors feel that they will not be judged.

The term accessibility indicates, first of all, that all users can move around in complete safety and autonomy; therefore, accessibility is an indispensable requirement for liveability and is often associated with the concept of *environmental comfort*, alongside the removal of access barriers in buildings.

At a first glance, accessibility can be understood as the set of spatial, distributive and organizational characteristics in buildings designed to be used by anyone and everyone.

Accessibility is an essential prerogative for cultural places, as they are used by the community to carry out activities mostly associated with cultural heritage. As a consequence, a fundamental feature in the protection and enhancement of heritage is the fact that the spaces intended for this purpose must be accessible and welcoming in order to be adequately used. The issue of accessibility has always been associated with that of disability, but in recent years something

---

[59] United Nations 2007.

[60] Moussouri (2007) defined a social model of accessibility using three dimensions, i.e. economic, environmental, and cultural barriers; several years later, Solima (2012) added a fourth dimension to the social model, that of digital accessibility.

[61] Watson 2007.

[62] Morse, Munro 2018.

has been changing on this front. Because of a renewed attention on the various categories that make up the cultural demand, there seems to be a stronger interest in ensuring the right to access places of culture, and thus of providing an autonomous, easy and safe cultural experience to an extended audience, including all people with any physical, motor, sensory or cognitive special needs, whether permanent or temporary.

There are four main dimensions to accessibility, which can be economic, physical, cognitive or digital[63]. The economic dimension has its origin in the need to ensure that all citizens have the same opportunity to satisfy their need for culture regardless of their financial situation. In most cases, however, the entrance ticket is only one of the costs that users must incur to use the cultural service. There are clearly the direct costs linked to transport to reach the site, and the evaluation of the economic dimension of accessibility must also take into account the costs relating to the time spent on making an adequate use of the cultural service, and those associated with how and where to access information. It is clear that merely evaluating the costs a visitor incurs to access the service is only a small part of that person's overall investment to derive the maximum benefit from services in the cultural sector.

The second dimension of accessibility is equally important and concerns the museum's physical accessibility. According to this dimension, the service can be said to be accessible only when the museum is equipped with adequate infrastructures. Physical accessibility also takes on a double perspective. Within the structure, being accessible means having taken the necessary steps to eliminate all physical barriers that make it difficult, if not impossible, for even a relatively small segment of users to navigate around the museum's collections. Shifting the attention to outside the museum, it must be possible to evaluate how easily the museum can be reached without facing overly many logistics difficulties, assessing public transport and relative connections, car parks and, more generally, access roads. Another dimension of accessibility is that linked to the cognitive profile. It can often be the case that, even when a museum is easy to access physically, its information systems are difficult to understand.

Making a museum cognitively accessible has three positive effects. It makes up for any inadequacy on the part of the visitors, it creates more loyal visitors and it becomes a more active player within the local community.

When cultural enterprises manage to eliminate this type of barrier, they significantly reduce any sense of *cultural inadequacy* in the user. This feeling is a major psychological obstacle that can help to explain why some people belong to the group of *non-public*[64].

From this point of view, the categories of disadvantaged users deserve particular attention. These are people with motor or sensory problems, and

---

[63] Solima 2012, 2017; Da Milano, Sciacchitano 2015; Cetorelli, Guido 2017.
[64] Presta 2010.

who may not be encouraged to use the museum's services. Taking into account the growing diffusion of digital technologies, it is necessary to acknowledge the existence of an accessibility dimension specific to this area.

Museums must learn to manage their presence on the internet not by limiting themselves to a simple website, where they merely replicate information contained in their catalogues. They must try to initiate processes of user engagement, setting in motion faster content creation mechanisms that have themselves become the basis for creating a stable relationship with users, with the added benefit of increased user loyalty[65]. Through this relationship, a museum will have access to a varied set of resources, including videos and photographs of the museum's interior and of individual events, and will benefit from all the flows of information deriving from the interaction between users.

All museums recognize the importance of being more accessible to visitors and potential visitors, but today there are still many barriers to accessibility. For this reason, museums must find solutions to become more accessible and respond fully to their mission, including by resorting to external skills. Among the various types of accessibility, sensorial perception is one of the most important[66]. It, therefore, seems necessary to define the perimeter of the term multi-sensory, as it indicates more than one sense[67].

Taste comes into play least but still in a residual manner in a museum visit. The many possible relationships between the world of food and wine and that of art are easily appreciated. It is no coincidence that most major museums choose to sell edible products in their shops, often connected to their collections or temporary exhibitions. The sense of smell comes next, seemingly stimulated in a fairly simple and economic way, through the use of natural fragrances or electronic fragrance diffusers that can increase the experiential perception of the visit. In the third place is touch, as the tactile dimension can be affected both by the visitors' relationship with the objects on display and by the information presented. Museums can prepare tactile routes, identifying the works that can be touched by visually impaired visitors, and information can be written in Braille. The two senses most used by museum visitors are sight and hearing. In particular, sight is used by visitors to find their way around the often-unknown exhibition spaces, as well as to look at the exhibits and access the museum's various information media.

Over the past twenty years, the sense of sight has been strongly affected by technological progress. The extent to which museums can provide information on portable devices (through smartphones, tablets and wearables) via apps is now ubiquitous, paving the way for automatic orientation solutions (way-finding) as well as infinite possibilities for customizing the contents, i.e.

---

[65] Solima 2018.
[66] Dodd *et al*. 1998.
[67] Howes 1991; Levent, Pascual-Leone 2014.

presenting information flows according to the visitors' wishes, interests or more simply the time they have to visit[68].

People affected with the autism spectrum disorder are among the new audiences that can particularly benefit from a multi-sensorial approach to the exhibitions.

2.3 *Museum and autism*

According to the Diagnostic and Statistical Manual of Mental Disorders, a handbook produced by the American Psychiatric Association, autism spectrum disorder (ASD) is a developmental disorder that affects communication and behaviour. Although autism can be diagnosed at any age, it is said to be a developmental disorder because symptoms generally appear in the first two years of life. Autism is often seen as one of the most complex and pervasive disorders of the developmental age, as its effects are permanent and the sufferer is impaired for life. Autism is considered to be a syndrome affecting a person's whole personality; therefore, it is referred to as a generalized and pervasive developmental disorder[69]. Autism spectrum disorder is a serious disability and, while physical appearance is normal, it may affect several brain functions.

Autistic people are physically healthy and develop like their peers, moreover the effects may be rather uneven; autism manifests itself through a vast series of symptoms, so it is usually referred to as autistic spectrum disorder (ASD)[70].

According to Cottini and Vivanti[71], the most affected areas are:
– mutual social interaction: inability to establish social, emotional and/or empathetic relationships with others;
– impairment in communication: inability to communicate ideas and feelings plus language-related impairments;
– behaviour, restricted, repetitive and stereotyped activities and interests: constantly focusing on a few interests or habits, limiting the autistic child's ability to carry out other tasks.

Classic examples of the behaviour of people with ASD are sudden mood swings, with inappropriate laughter or crying, hyperactivity or passivity, self-aggressive behaviour, often joined by phobias and sleep and eating disorders. Some patients are particularly sensitive to sound, touch, sight and smell, and when their senses are stimulated, they can be driven to extreme reactions, such as panic attacks[72]. The three characteristic symptoms of autistic disorder (impaired social interaction, communication problems and abnormal behaviour) can vary

---

[68] Alunno 2017.
[69] Cottini 2009, 2016.
[70] Cattelan 2010.
[71] Cottini, Vivanti 2016.
[72] Ianes, Cramerotti 2002; Ianes, Zappella 2009.

widely in intensity and incisiveness. With such disparity in level of severity and appearance of symptoms, it can be difficult to understand the related behaviours and set in place suitable interventions[73].

Today, the focus of the debate seems to have increasingly shifted from the individual's disability to features in the environment, which can take the form of barriers and create an impairment or act as enabling mechanisms that can eliminate limitations and encourage full social participation. Every environmental context can be configured as a barrier or a facilitator; in the case of museums, many young people with ASD and families with autistic children find them a barrier[74].

One consideration concerns the fairly widespread practice of distinguishing between physical accessibility to the museum's buildings and accessibility to the museum's collections and symbolic meaning of exhibitions, as well as to the various educational programmes. While the first type of accessibility relates mainly, but not exclusively, to architectural and physical barriers, the second type presents a much broader perspective and, despite it being generally linked to sensory and psycho-cognitive disabilities, its topics and reasonings can potentially be applied to most users[75]. For a museum to be truly accessible and inclusive towards people with autism spectrum disorder, its work must necessarily involve these people, their families and experts in the field who often have no place in the museum's organizational chart[76].

3. *Method and research design*

The literature review on social innovation has highlighted that, for organizations to be effective social innovators, they must be able to set up a co-operative process, bringing in different stakeholders to create a wider viewpoint and increase the effectiveness of these processes[77].

In order to become active actors within these processes of innovation, museums should create a network of relationships to broaden their perspective[78] and transform their reality into a *social innovation system*[79]. Designing new social innovation processes may help museums to leverage the competencies of the various stakeholders in the community with whom the museum is able

---

[73] Anaby *et al.* 2013.
[74] Askari *et al.* 2015.
[75] Kulik, Fletcher 2016; Coffey 2018.
[76] Caldin *et al.* 2018.
[77] Onciul 2013; Carberry *et al.* 2019; Taylor 2020.
[78] Howaldt, Schwarz 2010; Lawrence *et al.* 2014; van Wijk *et al.* 2018.
[79] Phillips *et al.* 2015; Carberry *et al.* 2019.

to engage[80]. Moreover, according to Huq's model of social innovation[81], the actors should let the various professionals deal with the innovation process by tapping into their own pool of expertise.

In this perspective, museums that intend to include people with ASD among their audiences, to educate them in becoming an active part of the community, should be able to bring together the needs of these people, those of their families and those of the experts who deal with these issues. Museums should be able to create a system that includes expertise that is often not found within their own organization[82].

On the contrary, social innovation processes provide a link between the museum and its community and strengthen the museum's relationship with a number of stakeholders, which may be in the public or third sector, or be consumers. Local communities may also benefit from this stakeholder engagement process[83]. The two sets of actors are hence more connected and, additionally, they can share their undertakings and, through their interaction, the new actors can create new narratives and new perspectives, which, in turn, can increase the value of the museum's offer.

In the light of these considerations, we set out our first research question as follows:

RQ1: How may museums engage social actors within the local community to improve their activities?
- RQ1a: May museums engage with the social actors in the local community to expand their professional resources and to get access to specific skill and competences?
- RQ1b: May museums engage with social actors within the local community to strengthen their relationship with the territory?

As social actors and cultural institutions, museums have the social function of providing access to their cultural resources in an inclusive way to all their audiences[84].

Among the four different dimensions of museum accessibility[85], cognitive accessibility is particularly interesting because, by becoming more inclusive and breaking down barriers, museums may become more attractive to a broader group of audiences.

Some of the cognitive barriers to being an accessible museum, such as those related to ASD, demand the creation of new social services, which make use

---

[80] Morse, Munro 2018.
[81] Huq 2019.
[82] Caldin *et al.* 2018.
[83] Onciul 2013.
[84] Cerquetti 2010; Solima 2015.
[85] Solima 2012, 2017; Da Milano, Sciacchitano 2015; Cetorelli, Guido 2017.

of specific health-related professional services. While these areas are often in need of social innovation, they are usually unable to change easily, as they must comply with specific protocols[86]. At the same time, museums designing new services must interpret their cultural resources in a new light, proposing them in a new, multi-sensorial way and so create a broader range of options[87].

According to some scholars[88], these new multi-sensorial perspective approaches touch upon topics and thought processes that can potentially be valid for most users.

RQ2: May the solutions developed for people with special needs also be extended to other audiences?

In order to find an answer to these research questions, we decided to study the process of creating and implementing a museum service designed for people with ASD as part of a wider framework to study how to insert these people within the wider visitor set.

We used a case study, as this method can be used to analyse the items identified in our literature review within a real-life context[89], considering this approach as functional for the explorative purposes of this study, consistent with a *constructivist*, *qualitative* and *inductive* logic[90].

We focused our case on a specific project carried out by the Naples-based MANN museum, entitled *SoStare al Mann*. This name is a play on the words *sostare*, to pause/take a short time-out while in the museum, and *so stare,* knowing how to be/behave there.

We chose the MANN's project for our study as the museum is influential within the Italian landscape and it is a unique environment that was the first Italian museum to prepare a Strategic Plan and so become more transparent in the eyes of the local and not-so-local communities[91] and it has started several projects to re-define its social function[92]. It is one of the most visited museums in Italy (according to MiBACT, the Ministry for Cultural Heritage and Tourism, it attracted more than 670,000 visitors in 2019, and is the 10th most visited of all Italian museums and heritage sites).

Moreover, the museum had no previous experience in working with this specific group of visitors, meaning that it was easier to follow the progress of how the various sections of the involved community interacted with the museum's organization. The MANN was chosen despite it being possibly a

---

[86] Adler *et al.* 2008; Zietsma *et al.* 2017.
[87] Alunno 2017.
[88] Kulik, Fletcher 2016; Coffey 2018.
[89] Lazzeretti *et al.* 2015; Yin 2017.
[90] Hennink *et al.* 2011.
[91] Solima, Giulierini 2018.
[92] Seawright, Gerring 2008; Mariotto *et al.* 2014.

worst-case scenario for creating new services for people affected by ASD, with its wide galleries, mostly permanent collections and general lack of support material for visitors. As a consequence, the *SoStare al MANN* project could not draw on existing resources and/or practices when creating the new services, and the professionals were constrained by the actual collections, but nobody had to deal with internal resistance.

4. *Case study: the* SoStare al MANN *project*

The project ran from January 2017 to June 2018, at the behest the MANN's management, which has recognized the need for the museum to be accessible to people living under conditions of disability, especially people with ASD. *SoStare al MANN* is an experimental path aimed at widening the museum's community, engaging the community more closely in the museum's life and helping to carry out one of the museum's main social functions, that of spreading art and culture.

The challenge faced by MANN and its main partner, the FOQUS Foundation (mostly represented in the project by the FOQUS director, Renato Quaglia), was in changing the way to address cultural services for people affected by cognitive disorders. The museum created a new cultural experience by introducing targeted educational tours, exploiting new visual aids and special communication strategies particularly suited to autistic visitors, but open to all types of audiences, i.e. the museum had become more inclusive.

The common thread running through the project is the effectiveness of the communication tools used to spread the museum's cultural message.

4.1 *The actors involved in the project*

4.1.1 *The Museo Archeologico Nazionale di Napoli (MANN)*

The Museo Archeologico Nazionale di Napoli – MANN (National Archaeological Museum of Naples) was simultaneously the promoter and the place where the project was implemented. The museum is among the oldest and most important in the world for the wealth and uniqueness of its heritage and its contribution to the European cultural panorama. The origin of the collections can be traced to Charles III, who ruled Naples as Charles of Bourbon from 1734 to 1759, and his cultural policies. The king was behind the excavations of the cities buried by the eruption of Mount Vesuvius in 79 CE (with digs starting at Herculaneum in 1738 and at Pompeii in 1748) and he oversaw the construction of the Museo Farnese in the city, where he transferred part of the

rich collection inherited from his mother Elisabetta Farnese from her residences in Rome and Parma.

The museum acquired national status in 1860, and its collections were enriched with finds from excavations in archaeological sites in Campania and Southern Italy and with acquisitions from private collections. The Pinacoteca (Picture Gallery) was moved to Capodimonte in 1957, determining the museum's current embodiment as an Archaeological Museum. In 2016, with the arrival of its new director, Paolo Giulierini, the museum presented its inaugural Strategic Plan (the first of all museums in Italy to do so), which set out its various strategic objectives, among which the specific aim of improving the museum's accessibility for particular sections of public, including people with physical and cognitive disabilities.

4.1.2 *FOQUS Foundation*

FOQUS (Fondazione Quartieri Spagnoli) is an urban regeneration project operating in the heart of Naples' old city centre since 2014. The FOQUS Foundation is located in an old building in the upper part of Naples (so-called: Spanish Quarter). The Foundation has renovated parts of the building, providing spaces for young entrepreneurs and so creating new jobs and new businesses. It has hosted several independent public and private companies, to help build an economically productive community of cultural and creative industries, working in personal care, training and education. In 2016, with the help of private partners, the FOQUS Foundation inaugurated Argo, a centre providing assistance to people with cognitive disabilities. Argo helps children, teenagers and young adults with disabilities to discover their own value and pursue their goals through concrete objectives. The project claims to give each individual the basic skills to improve their life and their psycho-physical well-being autonomously, helping them to be better at school, at work, and so on.

4.2 The *SoStare al MANN* project

The project was intended for a group of ten young people who were already going to the Argo Centre, plus other pupils from a nearby school, *Dalla parte dei bambini*. The meetings were arranged in various ways, with the children attending the centre visiting the museum sometimes alone and sometimes with the other schoolchildren. The choice behind the Argo children visiting the museum with the children from the school was based upon two very specific reasons. Firstly, *Dalla parte dei bambini* has policies in place to be as inclusive as possible. Secondly, we wanted to see what would happen in a museum when schoolchildren were visiting the galleries and artwork.

4.3 *The project phases*

The project started in January 2017, with practical tests being carried out between September 2017 and June 2018. The phases of the project can be summarized as follows:
– First phase: meetings between the management of the MANN and the FOQUS Foundation, from January 2017;
– Second phase: study of international models of museum accessibility for people with cognitive disabilities, from April 2017 to September 2017;
– Third phase: direct testing and field experience with disabled young people and primary school pupils, from September 2017 to June 2018.

4.3.1 *First phase: understanding*

The project partners studied the cultural, territorial and experiential context on accessibility and cognitive and/or psychic impairments, as the project focused on understanding how a person visiting the MANN could relate to an artwork and discover the related meanings, the main opportunities and the consequences of this connection.

The first phase concentrated on identifying, for each different type of disability, the tools and/or devices best suited to help the visitors with cognitive or behavioural disabilities find interest and value in visiting a museum.

The project partners needed to define the museum's objectives, how to engage with the museum's employees and identify the room for manoeuvre in terms of breaking down sensory, communicative, architectural and financial barriers. The driving principles of this phase were both being accessible and let the children be an active part of the visitors' community, in order to consider the lack of accessibility as the problem, not the visitor.

In general, the group tried to identify new practices to be inclusive and accessible, not just for people with disabilities, but for anyone.

4.3.2 *Second phase: research*

In April 2017, FOQUS launched a research in partnership with volunteers from the International Napoli Network (a for-benefit company) to identify, classify and understand the accessibility models used in the main international museums for people with disabilities, specifically examining people with ASD or Down's syndrome. According to the American Alliance of Museums, over thirty museums in the United States have implemented proposals for these audiences, focused on creating spaces, visiting hours and conditions within the museum relating to noise factors and the non-excessive presence of other members of the

public. The answer as to whether a museum can become accessible to people with cognitive and physical disabilities is somewhat ambiguous. It depends on the people, their interests, what the museum is offering, its spaces and involvement.

When implementing accessible itineraries, the classic approach is to promote tranquillity during a visit or create short and highly structured visits, with the pre-defined use of photographs and short stories. The FOQUS Foundation's research involved a sample of one hundred international museums, with the objective of surveying what the museum was offering in terms of events and accessibility services. They were able to interview sixty-two museums, selecting eighteen museums for deeper analysis, as their inclusive and accessible activities were offered as mainstream museum services.

The results of the analysis pointed out that museums were able to change their point of view and adapt to their visitors' characteristics. Considering that museums are places with high sensorial and cultural stimulation, reducing the number of visitors and adjusting stimuli designed for able-bodied subjects, lowering sounds, lights and suchlike all together create a comfortable and welcoming environment for these visitors.

4.3.4 *Third phase: experimentation*

The third phase was carried out in three main sub-phases:
– in September 2017, a first meeting was held between the MANN's educational services, FOQUS Foundation managers, Argo operators and experts in teaching students with cognitive disorders from the Panta Rei Cooperative in Reggio Emilia;
– in October, the children visited the museum with the help of Argo operators;
– between October and November, the children visited the museum several times, in some cases they were alone, while in others, they visited the MANN with children from a primary school, *Dalla parte dei bambini*, guided by Argo operators and the school's teachers.

The operators (experts, educators, teachers, pedagogists, therapists and cultural professionals) visited the MANN to study how the museum's internal spaces are arranged and see how people organized their visits (how they entered, where they went and what they looked for). The experts focused on the changes in how the museum welcomed its visitors to see if the new reception methods could benefit all visitors, not only people with cognitive and behavioural disorders. They discussed the experimentation process and selected two galleries containing the Farnese Collection and the Villa of the Papyri for their test purpose.

The experts studied the galleries' features, the visitors' behaviour, the lights, visitor flows and any places where the visitors could potentially stop and stay aside for a short time. The Farnese Collection inspired a series of new stories evoking the shadows of the statues on the white walls, while the Villa of the Papyri in Herculaneum was chosen for the dynamism and expressions of the dancers and runners in the room.

4.3.5 *Meeting in the museum*

The direct experience of the children with disabilities (known as *Argonauts*) in the field was documented by transcribing reports on the actions carried out by the children and the operators observing them. The notes were used to understand the conversations between the operators and the children inside and outside the MANN. The first extract describes how a young girl, Donatella, suggests imitating the statues.

The operators follow her proposal and are corrected by Donatella, who gives precise indications. Donatella then welcomes an operator's suggestion to involve other children. The museum is seen as an evocative space in itself, which can stimulate imagination, curiosity and amazement. Play can make a visit more dynamic and more attractive. It can help people with disabilities overcome their personal limitations and create a new idea of the museum being a place where, always in the respect of artwork and other visitors, children can enjoy themselves in new ways.

The second extract describes the experience of children (in this case, Maria Francesca) in selecting a subject to photograph. Following her personal logic, Maria Francesca independently adds other works to her initial subject, giving a meaning to the whole. Photography is recognized as a tool used by children to choose, express, communicate and observe; cameras can stimulate their curiosity, with more possibilities arising from potential post-production services.

Another extract describes Alessia's experience. She wants to listen to music in order to relax and focus on the Toro Farnese (the largest single sculpture from antiquity so far discovered) and has even chosen a song. The operators follow her movements around the sculpture on the notes of her chosen song, seeing her touching the statue, feeling it as if it was the first time. The experience is used to create empathy with the statue, the music helps in creating a synaesthesia of senses, little by little involving the senses of all present.

Several children decided to use their smartphones to photograph the art. After an initial visit, they started to play at finding the works they had photographed, using the details captured in each photograph. This micro to macro research helped all the participants to join an active process of value co-creation, as operators, children and teachers were able to help each other.

This game was considered so important that the operators' note stated that the «visitors' involvement in this game was extraordinary».

4.4 *The new activities designed during the* SoStare al MANN *project*

The *SoStare al MANN* project has shown the importance of changing perspective in analysing the role played by a museum to cater for new audiences. Art has to be seen from a new, previously unapplied angle, and the interaction between visitors and art redefined; for example, mirrors of different shapes and sizes can be used to change the appearance of works of art, *fragmenting* them and letting the children reinterpret them.

At the same time, the project highlighted the opportunity to view how art interacts with its environment; for example, projecting the light of the torch on statues creates new shapes in the form of shadows. The children were able to re-interpret the statues using light to create new shapes. They were also asked to re-interpret various artefacts, including statues, through the medium of drawings, photographs and videos.

The museum was able to define six different activities for its new audiences:
1. *Change point of view*;
2. *If art is made of shadows*;
3. *From micro to macro*;
4. *Touch, move, see yourself*;
5. *Imagine the music*;
6. *SoStare* (as mentioned, a play on "pausing" and "I know how to be/ behave").

Change point of view involves asking visitors, with and without ASD, to alter their own visual perception of the work of art using distorting mirrors to fragment and rebuild them with different meanings, producing different ways of interacting with them.

If art is made of shadows involves re-reading artworks starting with their shadows and, by changing the source of light, re-invent how the item is perceived.

From micro to macro used photos of details of artwork to inspire people to search for these details within the collections, linking and connecting the various pieces together.

Touch, move, see yourself was designed to create an experience where visitors were asked to *discover* the museum using all their senses, even touching selected exhibits.

Imagine the music uses music or voices to change the perspective of the various collections.

SoStare is where the museum can identify areas where people can *stay* and interact with the other visitors, observing them from outside the visitor flows, slowing down their whole experience.

The children exposed to the new idea of a museum were able to develop their own perceptions, using all their senses; they were able to touch the works of art, use the background music to change their impression of the exhibitions and, sometimes, these new stimuli directed them towards proposing new stories.

5. *Discussion*

In this paper, we studied the *SoStare al MANN* project, examining the progress of its development and implementation with the engagement of various actors in the local community, and highlighting the main results of the project in terms of letting people with autism be an active part of the museum's audience, increasing the museum accessibility for people with cognitive disabilities.

Regarding *RQ1a*, we found that the museum's management was able to locate a third sector organization (FOQUS) within the local area and tapped into its competencies and into its relationships to identify, and later engage with a number of stakeholders, in the form of professionals, cooperatives, schools, children with and without a disability.

This broad approach later proved to be really useful in creating the services aimed for in the *SoStare al MANN* project, as highlighted by Mulgan[93].

Moreover, this approach is consistent with previous research[94] into leveraging external relationships to expand a project's portfolio of expertise beyond those of museum staff.

At the same time, as the changing role of FOQUS highlights, their relationship with the museum is a way for third sector organizations to become more legitimate actors in the local and national environment. Non-local stakeholders become engaged in its work[95] and, looking at how the various steps of the project were conducted, the project could be considered as a *social innovation system*[96], giving support to *RQ1b*.

The project can be represented through Huq's[97] model. During the first phase of the project (the multi-stakeholders' meetings), the various stakeholders were able to understand the problem from different perspectives; this can be considered similar to Huq's first phase of *entwining problems*, as museum management entered the forum with no pre-defined agenda but as a way to obtain

---

[93] Mulgan 2006.
[94] Papaluca, Tani 2010; Salim Saji, Ellingstad 2016.
[95] Morse, Munro 2018.
[96] Phillips *et al.* 2015; Carberry *et al.* 2019.
[97] Huq 2019.

information, gain a broader perspective and to hear from other stakeholders how to deal with these issues, giving further support to both *RQ1a* and *RQ1b*.

The project then conducted a desk study to understand how other museums had solved the same issues in order to gain an even broader perspective. The results of this approach are similar to those Huq describes in the second phase of his model, as the various stakeholders were studying international solutions as a way to gain an understanding of how the various skills and expertise could be combined into the social innovation system that the MANN intended to create with this project. Similarly, the first two phases of the project are aligned with previous findings in literature on stakeholder management and engagement as a way to increase stakeholder legitimacy[98].

The MANN was able to create a stable and flexible forum where various stakeholders were able to mediate their different approaches in order to create a more flexible set of solutions, which could satisfy not only the targeted audience of people affected by ASD, but also other audiences as well. The conclusions of the project, «each visitor is different from the others, since all visitors are bearers of a different diversity», give support to *RQ2*.

The MANN's lack of previous experience on this topic in its recent history proved useful, as the museum's organization was able to define new norms for being more accessible. In particular, the process diverged from Huq's model in its third phase. In the *SoStare al MANN* project, the third phase was left in the hands of the stakeholders but, as we can see from the interviews, the professionals were not really driving the process, but were observing the other stakeholders' behaviour and became mediators in the creation of a more engaging service. They were in charge of arousing the Argonauts' interest and making their visits more memorable. In this way, they were able to live the museum from a different angle, rather than being mere spectators passively looking at art; this is similar to the new perspective described in museum and community engagement literature[99].

In the *SoStare al MANN* project, it was the children who said how they would like to spend their time at the MANN and, in doing so, they came up with intriguing strategies and ideas that could apply to many different audiences. The new goal, defined during the project, was to interpret the works of art through the language of people with cognitive disabilities. FOQUS chose to engage with a heterogeneous group so as not to become entrenched in common prejudices whereby children with cognitive disabilities come to be excluded from discovering the arts. As a consequence, together they were able to define a tight group of activities that were valid for everyone, not only people affected

---

[98] Orr, Scott 2008; Vurro, Perrini 2013.
[99] Solima, Tani 2016; Morse, Munro 2018.

by ASD, and were able to use their different cognitive abilities to re-read the collections in a new light.

The children developed the new activities, while the operators tried to understand the children's real perspective, changing the way they interacted with them over time. The operators observed how the children touched the works, how they asked for background music and how they gave new identities to the statues. This experience was critical in discovering how to introduce people with cognitive and behavioural disorders to art, and how these new publics can become *real* visitors. The project was truly able to lower the barriers to cognitive accessibility[100].

This case study has several managerial implications as well, as it highlighted the need to factor in accessibility from the start of a project in order to take into account the specific needs of the new audiences in all the museum new activities encompassing the curatorship of the new exhibitions, interpretation, education and the necessary processes of communication.

The new services developed during the *SoStare al MANN* project helped to define a new vision of the museum where the exhibitions become a social place where the audience can develop their own vision, using all their senses, not just sight, as the new trends in museum management advise[101].

At the same time, the *SoStare al MANN* project highlights the need and the difficulties of making a museum accessible to everyone. The process needs to become part of the routine of every member of staff and, at the same time, it highlights the need to create partnerships with external actors, both practitioners and experts. The project also highlights the possibility that, in the future, people with autism spectrum disorder could themselves be part of the museum operators or they could work as guides in some areas or galleries. In the past, it was felt that museums were closed to disabled people a priori; with this project, we can affirm the exact opposite.

Moreover, the project highlights an opportunity that only rarely has been caught in previous international experiences, that of making the new audiences an active part of the broader local community. Normally, museums try to address the needs of publics with cognitive and behavioural disorders by reducing the stimuli provided, or they introduce events that keep one public apart from another, such as the various *nights at the museum*, generally designed for younger visitors. The initiatives created and developed at MANN during the project have highlighted the possibility of the various publics visiting the museum at the same time, but seeing it differently, a far more ambitious project. The effects ensuing from the interaction between these publics will have to be

---

[100] Presta 2010; Solima 2012.
[101] Taylor 2020.

studied to comprehend if and how this interaction can change the museum experience and how it is perceived, by linking it to a specific moment in time.

6. *Conclusions and further research*

Over the years, museums have changed their role in society, going from a place of conservation to a place of continuous learning, open to everyone, with an emphasis on their social role. Accessibility becomes a *conditio sine qua non* for these organizations, even beyond their legal requirements. In addition, modern museums are meeting places, encouraging the inclusive participation of all visitors. The *SoStare al MANN* project flung open the museum's doors to a new public, for the first-time welcoming people with cognitive and behavioural disabilities. The transition was not immediate, the museum had to work properly to break down its physical, economic, methodological and communication barriers. The *SoStare al MANN* project has shown the importance of engaging with the local community to change perspectives and become more accessible to some audiences.

The project helped the various stakeholders to go beyond the mere role of bystanders, to redefine the very essence of several works of art, as the children focused on the micro-level, the detail, to link different items in new ways, at the macro-level. Consequently, they were able to create a new identity, new processes of knowledge, their eyes seeing more and finding innumerable similarities not usually seen and, accordingly, they become the source of a new vision of the potential experiences that visitors, both normal ones and those with cognitive disorders, may share among themselves.

This paper has several limitations. Because the study was built around an influential case selection process, these results cannot be generalized, as they are deeply embedded in the resources that the various stakeholders, MANN included, were able to deploy, and most are not available to smaller organizations. The two main results of this paper, to reiterate, are showing how to engage with other stakeholders to become more accessible and how to overcome the limitations linked to social care professionals defining the new services, with their role changing from decision makers to mediators. These results should be tested on a broader sample; or another museum more representative of a *normal* museum organization in Italy could use this project as a beacon to help smaller organizations create effective social innovation processes by engaging with their community.

References / Riferimenti bibliografici

Adler P.S., Kwon S.W., Heckscher C. (2008), *Professional work: The emergence of collaborative community*, «Organization Science», n. 19, pp. 359-376.

Alunno V. (2017), *Le tecnologie multimediali per la fruizione museale e l'esperienza dei visitatori. Prima indagine sui Musei Civici di Palazzo Buonaccorsi a Macerata*, «Il capitale culturale. *Studies on the Value of Cultural Heritage*, n. 15, pp. 265-295.

Anaby D., Hand C., Bradley L., Di Rezze B., Forhan M., Di Giacomo A., Law M. (2013), *The effect of the environment on participation of children and youth with disabilities: a scoping review*, «Disability and rehabilitation», 35, n. 19, pp. 1589-1598.

Askari S., Anaby D., Bergthorson M., Majnemer A., Elsabbagh M., Zwaigenbaum L. (2015), *Participation of children and youth with autism spectrum disorder: a scoping review*, «Review Journal of Autism and Developmental Disorders», 2, n. 1, pp. 103-114.

Barnes P., McPherson G. (2019), *Co-Creating, Co-producing and Connecting: Museum Practice Today*, «Curator: The Museum Journal», 62, n. 2, pp. 257-267.

Besozzi E. (2007), *Culture in gioco e patrimoni culturali*, in *Progettare insieme per un patrimonio interculturale*, edited by S. Bodo, S. Cantù, S. Mascheroni, Milano: Quaderni ISMU, n. 1, pp. 19-28.

Bessant J., Tidd J. (2007), *Innovation and entrepreneurship*, Hoboken, NJ: John Wiley & Sons.

Bhatt P., Ahmad A.J. (2017), *Financial social innovation to engage the economically marginalized: insights from an Indian case study*, «Entrepreneurship & Regional Development», 29, n. 5-6, pp. 391-413.

Brodie R.J., Fehrer J.A., Jaakkola E., Conduit J. (2019), *Actor engagement in networks: Defining the conceptual domain*, «Journal of Service Research», 22, n. 2, pp. 173-188.

Brown K., Mairesse F. (2018), *The definition of the museum through its social role*, «Curator: The Museum Journal», 61, n. 3, pp. 525-539.

Cajaiba-Santana G. (2014), *Social innovation: Moving the field forward. A conceptual framework*, «Technological Forecasting and Social Change», n. 82, pp. 42-51.

Caldin R., Dainese R., Panciroli C. (2018), *Didactics towards a bottom-up museum approach*, «Proceedings», 1, n. 9, pp. 1-9, <https://doi.org/10.3390/proceedings1091108>.

Carberry E.J., Bharati P., Levy D.L., Chaudhury A. (2019), *Social movements as catalysts for corporate social innovation: Environmental activism and the adoption of green information systems*, «Business & Society», 58, n. 5, pp. 1083-1127.

Cattelan L. (2010), *Autismo. Manuale operativo per docenti e genitori*, Schio: Industrialzone.

Cerquetti M. (2010), *Dall'economia della cultura al management per il patrimonio culturale: presupposti di lavoro e ricerca*, «Il capitale culturale. *Studies on the Value of Cultural Heritage*», n. 1, pp. 23-46.

Cetorelli G., Guido M.R (2017), *Il patrimonio culturale per tutti. Fruibilità, riconoscibilità, accessibilità*, «MIBACT Quaderni della valorizzazione», n. 4, Ascoli Piceno: Capponi.

Clifford J. (1997), *Routes. Travel and Translation in the Late Twentieth Century*, Cambridge: Harvard University Press.

Coffey C. (2018), *Creating Inclusive Experiences in Children's Museums for Children with Autism Spectrum Disorder*, <https://dc.uwm.edu/etd/1981/>.

Cottini L. (2009), *Il bambino con autismo in classe*, «Psicologia e Scuola», n. 4, luglio/agosto, Firenze: Giunti Scuola.

Cottini L. (2016), *L'autodeterminazione nelle persone con disabilità: percorsi educativi per svilupparla*, Trento: Edizioni Centro Studi Erickson.

Cottini L., Vivanti G. (2016), *Autismo: come e cosa fare con bambini e ragazzi a scuola*, Firenze: GiuntiEdu.

Da Milano C., Sciacchitano E. (2015), *Linee guida per la comunicazione nei musei: segnaletica interna, didascalie e pannelli*, «MIBACT Quaderni della valorizzazione», n. 1, Ascoli Piceno: Capponi.

Dacin P., Dacin T., Matear M. (2010), *Social Entrepreneurship: Why We Don't Need a New Theory and How We Move Forward From Here*, «Academy of Management Perspectives», 24, n. 3, pp. 37-57.

De Luca M. (2007), *Comunicazione ed educazione museale*, Milano: Franco Angeli.

Dees J.G. (1998), *The Meaning of Social Entrepreneurship*, Stanford University, working paper.

Dodd J., Sandell R., Coles A. (1998), *Building bridges: Guidance for museums and galleries on developing new audiences*, London: Museums & Galleries Commission.

Edwards-Schachter M., Wallace M.L. (2017), *Shaken, but not stirred: Sixty years of defining social innovation*, «Technological Forecasting and Social Change», n. 119, pp. 64-79.

Ferraro V. (2011), *Restyling museum role and activities: European best practices toward a new strategic fit*, «Il capitale culturale. *Studies on the Value of Cultural Heritage*», n. 2, pp. 133-177.

Gladwin T.N., Krause T.S., Kennelly J.J. (1995), *Beyond eco-efficiency: Towards socially sustainable business*, «Sustainable Development», 3, n. 1, pp. 35-43.

Hall J., Vredenburg H. (2003), *The challenge of innovating for sustainable development*, «MIT Sloan Management Review», 45, n. 1, p. 61.

Harding R. (2004), *Social Enterprise: The New Economic Engine?*, «Business Strategy Review», 15, n. 4, pp. 40-43.

Harrisson D., Chaari N., Comeau-Vallée M. (2012), *Intersectoral alliance and social innovation: When corporations meet civil society*, «Annals of Public and Cooperative Economics», 83, n. 1, pp. 1-24.

Hein H. (2006), *Public art: Thinking museums differently*, Lanham: Altamira Press.

Hennink M.M., Hutter I., Bailey A. (2011), *Qualitative research methods*, London: Sage Publications.

Howaldt J., Schwarz M. (2010), *Social Innovation: Concepts, research fields and international trends*, Dortmund: Sozialforschungsstelle.

Howes D. (1991), *The Varieties of Sensual Experience: a sourcebook in the anthropology of the senses*, Toronto: University of Toronto Press.

Huq J.L. (2019), *Conditioning a professional exchange field for social innovation*, «Business & Society», 58, n. 5, pp. 1047-1082.

Ianes D., Cramerotti S. (2002), *Comportamenti problema e alleanze psicoeducative: strategie di intervento per la disabilità mentale e l'autismo*, Trento: Edizioni Centro Studi Erickson.

Ianes D., Zappella M. (2009), *L'autismo: aspetti clinici e interventi psicoeducativi*, Trento: Edizioni Centro Studi Erickson.

ICOM (2009), *La funzione educativa del museo e del patrimonio culturale: una risorsa per promuovere conoscenze, abilità e comportamenti generatori di fruizione consapevole e cittadinanza attiva*, ICOM Italia – Commissione Educazione e Mediazione, <http://www.infologsrl.it/wp-content/uploads/2015/02/LA-FUNZIONE-EDUCATIVA-DEL-MUSEO.pdf>, 22.03.2021.

Kulik T.K., Fletcher T.S. (2016), *Considering the museum experience of children with autism*, «Curator: The Museum Journal», 59, n. 1, pp. 27-38.

Lawrence T.B., Dover G., Gallagher B. (2014), *Managing social innovation*, in *The Oxford handbook of innovation management*, edited by M. Dodgson, D.M. Gann, N. Phillips, Oxford: Oxford University Press, pp. 316-334.

Lazzeretti L., Sartori A., Innocenti N. (2015), *Museums and social media: the case of the Museum of Natural History of Florence*, «International Review on Public and Nonprofit Marketing», 12, n. 3, pp. 267-283.

Lettice F., Parekh M. (2010), *The social innovation process: themes, challenges and implications for practice*, «International Journal of Technology Management», 51, n. 1, pp. 139-158.

Levent N., Pascual-Leone A., eds. (2014), *The multisensory museum: Cross-disciplinary perspectives on touch, sound, smell, memory, and space*, Lenham: Rowman & Littlefield.

Lipparini A. (2002), *La gestione strategica del capitale intellettuale e del capitale sociale*, Bologna: Il Mulino.

Lusch R.F., Vargo S.L. (2014), *Service-dominant logic: Premises, perspectives, possibilities*, Cambridge: Cambridge University Press.

Mariotto F.L., Zanni P.P., Moraes G.H.S. (2014), *What is the use of a single-case study in management research?*, «Revista de Administração de Empresas», 54, n. 4, pp. 358-369.

Martins C. (2012), *Museum audio guides as an accessibility enhancer*, in *Accesibilidad en la nueva era de las comunicaciones Profesionales y universidad: un diálogo imprescindible*, edited by C. Álvarez de Morales, C. Limbach, M. Olalla Luque, Granada: Tragacanto, pp. 101-115.

McKelvey M., Zaring O. (2018), *Co-delivery of social innovations: exploring the university's role in academic engagement with society*, «Industry and Innovation», 25, n. 6, pp. 594-611.

Morse N., Munro E. (2018), *Museums' community engagement schemes, austerity and practices of care in two local museum services*, «Social & Cultural Geography», 19, n. 3, pp. 357-378.

Moussouri T. (2007), *Implications of the social model of disability for visitor research*, «Visitor Studies», 10, n. 1, pp. 90-106.

Mulgan G. (2006), *The Process of Social Innovation*, «Innovations: Technology, Governance, Globalization», 1, n. 2, pp. 145-162.

Mulgan G., Tucker S., Rushanara A., Sanders B. (2007), *Social Innovation: What It Is, Why It Matters and How It Can Be Accelerated*, London: Young Foundation, Oxford Said Business School.

Mumford M.D. (2002), *Social innovation: ten cases from Benjamin Franklin*, «Creativity research journal», 14, n. 2, pp. 253-266.

Murray R., Caulier-Grice J., Mulgan G. (2010), *The open book of social innovation*, London: National endowment for science, technology and the art.

Noci G., Verganti R. (1999), *Managing green product innovation in small firms*, «R&D Management», 29, n. 1, pp. 3-15.

Onciul B. (2013), *Community engagement, curatorial practice, and museum ethos in Alberta*, in *Museums and communities: Curators, collections and collaboration*, edited by V. Golding, W. Modest, London: Bloomsbury, pp. 79-97.

Orr R.J., Scott W.R. (2008), *Institutional exceptions on global projects: A process model*, «Journal of International Business Studies», 39, n. 4, pp. 562-588.

Papaluca O., Tani M. (2010), *Stakeholder Relationships Management: Effects on Strategy Definition in Social Enterprises-Some Evidences from a Fair Trade Organization in Naples* (October 11, 2010), available at SSRN: <https://ssrn.com/abstract=1690520> or <http://dx.doi.org/10.2139/ssrn.1690520>, 22.03.2021.

Paton R. (2003), *Managing and Measuring Social Enterprises*, London: Sage.

Phills J.A., Deiglmeier K., Miller D.T. (2008), *Rediscovering social innovation*, «Stanford Social Innovation Review», Fall 2008, pp. 34-43.

Phillips W., Lee H., Ghobadian A., O'Regan N., James P. (2015), *Social innovation and social entrepreneurship: A systematic review*, «Group & Organization Management», 40, n. 3, pp. 428-461.

Pinna G. (2000), *Il ruolo socio-culturale dei musei scientifici*, «Museologia Scientifica», 16, n. 1, pp. 1-19.

Pol E., Ville S. (2009), *Social innovation: Buzz word or enduring term?*, «The Journal of socio-economics», 38, n. 6, pp. 878-885.

Purtik H., Arenas D. (2019), *Embedding social innovation: Shaping societal norms and behaviors throughout the innovation process*, «Business & Society», 58, n. 5, pp. 963-1002.

Presta I. (2010), *Non-visitors: who are they, why is it important to know them?*, «Cadmo», n. 1, pp. 49-61.

Rappolt-Schlichtmann G., Daley S.G. (2013), *Providing access to engagement in learning: The potential of Universal Design for Learning in museum design*, «Curator: The Museum Journal», 56, n. 3, pp. 307-321.

Rahman M., Bose S., Babu M.M., Dey B.L., Roy S.K., Binsardi B. (2019), *Value co-creation as a dialectical process: Study in Bangladesh and Indian Province of West Bengal*, «Information Systems Frontiers», 21, n. 3, pp. 527-545.

Rodari P. (2005), *Apprendere al museo. La costruzione del sapere come attività sociale*, «Journal of Science Communication», 4, n. 3, pp. 1-5.

Ruiz C., Parra C. (2013), *New forms of organization in knowledge-based societies: Social innovation*, in *Non-profit Organizations and Social Entrepreneurship*, New York: Routledge.

Salim Saji B.S., Ellingstad P. (2016), *Social innovation model for business performance and innovation*, «International Journal of Productivity and Performance Management», 65, n. 2, pp. 256-274.

Sciarelli M., Tani M. (2013), *Network approach and stakeholder management*, «Business Systems Review», 2, n. 2, pp. 175-190.

Seawright J., Gerring J. (2008), *Case selection techniques in case study research: A menu of qualitative and quantitative options*, «Political research quarterly», 61, n. 2, pp. 294-308.

Singer S. (2000), *The social role of museums in contemporary society. Evaluation as a tool*, in *Pensare, Valutare, Ri-pensare. La mediazione culturale nei musei*, edited by E. Nardi, Milano: FrancoAngeli, pp. 345-353.

Solima L. (2004), *L'impresa culturale*, Roma: Carocci Editore.

Solima L. (2012), *Il museo in ascolto. Nuove strategie di comunicazione per i musei statali*, Catanzaro: Rubbettino.

Solima L. (2015), *I musei e la progettazione partecipata. L'esperienza dei musei nazionali di Lucca in un contesto multiculturale*, «Il capitale culturale. Studies on the Value of Cultural Heritage», n. 12, pp. 955-977.

Solima L. (2017), *Museums, accessibility and audience development*, in *Bridging theories, strategies and practices in valuing cultural heritage*, edited by M. Cerquetti, Macerata: eum, pp. 225-240.

Solima L. (2018), *Management per l'impresa culturale*, Roma: Carocci.

Solima L., Amirante F., De Vivo C., Molino L. (2019), *Attraverso gli occhi degli altri: un progetto di accessibilità per il MANN*, «Il capitale culturale. Studies on the Value of Cultural Heritage», n. 9, pp. 307-332.

Solima L., Giulierini P. (2018), *Quando il museo diventa impresa culturale: il Piano Strategico del Mann*, Naples: Electa Editore.

Solima L., Tani M. (2016), *Do Not Touch! How 3d Printing can open the way to an accessible museum*, Referred Electronic Conference Proceeding del XXVIII Convegno annuale di Sinergie, pp. 523-533.

Suchy S. (2006), *Museum management: emotional value and community engagement*, in *New Roles and Missions of Museums*, INTERCOM 2006 – International Committee for Museum Management 2006 Symposium, edited by Chinese Association of Museums, International Council of Museums, pp. 1-10.

Taylor J.K. (2020), *The Art Museum Redefined: Power, Opportunity, and Community Engagement*, London: Springer Nature.

Tracey P., Stott N. (2017), *Social innovation: a window on alternative ways of organizing and innovating*, «Innovation», 19, n. 1, pp. 51-60.

United Nations (2007), *Convention on the Rights of Persons with Disabilities*, New York: United Nations.

Van der Have R.P., Rubalcaba L. (2016), *Social innovation research: An emerging area of innovation studies?*, «Research Policy», 45, n. 9, pp. 1923-1935.

van Wijk J., Zietsma C., Dorado S., De Bakker F.G., Marti I. (2018), *Social innovation: Integrating micro, meso, and macro level insights from institutional theory*, «Business & Society», 58, n. 5, pp. 887-918.

Vurro C., Perrini F. (2013), *La valutazione degli impatti sociali: approcci e strumenti applicativi*, Milano: EGEA.

Walters D. (2009), *Approaches in museums towards disability in the United Kingdom and the United States*, «Museum Management and Curatorship», 24, n. 1, pp. 29-46.

Watson S., ed. (2007), *Museums and their Communities*, New York: Routledge.

Westley F., Antadze N. (2010), *Making a difference: Strategies for scaling social innovation for greater impact*, «Innovation Journal», 15, n. 2, pp. 1-19.

Yin R.K. (2017), *Case study research and applications: Design and methods*, London: Sage publications.

Ziegler R. (2017), *Social innovation as a collaborative concept*, «Innovation: The European Journal of Social Science Research», 30, n. 4, pp. 388-405.

Zietsma C.E., Groenewegen P., Logue D., Hiningspurtik C.R. (2017), *Field or fields? Building the scaffolding for cumulation of research on institutional fields*, «Academy of Management Annals», n. 11, pp. 391-450.

Texts by
Nicodemo Abate, Nicola Albergo, Gianpaolo Angelini, Giulia Beatrice,
Giacomo Becattini, William Cortes Casarrubios, Tiziano Casola, Mara Cerquetti,
Matteo Cristofaro, Stefano De Falco, Alfredo Del Monte, Alice Devecchi,
Luigi Di Cosmo, Tamara Dominici, Patrizia Dragoni, Selene Frascella,
Luciana Lazzeretti, Luna Leoni, Lauro Magnani, Chiara Mannoni,
Giovanni Messina, Sara Moccia, Andrea Morelli, Umberto Moscatelli,
Sharon Palumbo, Luca Pennacchio, Andrea Penso, Pietro Petraroia, Gaia Pignocchi,
Federico Saccoccio, Pasquale Sasso, Giovanna Segre, Ludovico Solima,
Mario Tani, Roberta Tucci

http://riviste.unimc.it/index.php/cap-cult/index