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ENGAGING SPACE IN THE INCLUSIVE MUSEUM

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ABSTRACT

Museums are symbolic institutions as well as iconic buildings of our times, aspiring to become 'inclusive': to be spaces associated with social diversity and cultural innovation as well as meeting places in the contemporary world of plural identities and accelerated mobility. But what does it mean architecturally for a museum to be inclusive? Are these theoretical concepts about the museum's role and function reflected in changes in the architectural and spatial form of real museums? Do museums engage the building to express such 'inclusive' museological concepts as accessibility, openness, and 'being in the world'? And, in turn, do they through these engage visitors in cross-cultural informational experiences and social encounters? To explore these questions, we propose to look at a series of current case studies which show how through their physical and spatial nature, museums can be experienced as inclusive, diverse and engaging environments. Our spatial thesis is reflected in the structure of the paper that is organized around the spatial concepts of connectivity and unpredictability, which relate to the way the museum is activated as part of city space and works as social experience; and of the ideas of spatial embodiment and situated meanings, which relate to the emergence of new spatial typologies and concern its functioning as informational experience. The paper ends by discussing features of the current social context which suggest why the identified spatial changes are bringing about the realization of the inclusive museum.

KEYWORDS

museum space; connectivity; unpredictability; graphs; space-types; inclusive

1. INTRODUCTION

Museums are symbolic institutions as well as iconic buildings of our times, aspiring to become 'inclusive': to be places associated with social diversity and cultural innovation as well as meeting places in the contemporary world of plural identities and accelerated mobility (Basso Peressut and Pozzi, 2012, p.10). But what does it mean architecturally for a museum to be inclusive? Are these theoretical concepts about the museum's role and function reflected in changes in the architectural form of real museums? Do museums engage the building to express such 'inclusive' museological concepts as accessibility, openness, and 'being in the world'? And, in turn, do they through these engage visitors in cross-cultural informational experiences and social encounters?

The paper sets out from the idea that it is not only through 'universal design' or through its activities and programmes, that the museum manifests its intention of inclusiveness. It will be argued that it is also through its physical and spatial nature that it affects the way it is experienced as an inclusive, diverse and engaging environment. In particular the museum does this through the way architectural space is organised to create connections: between the building and its immediate environment, manifesting its role as a continuation of urban space; between displays privileging experience over abstract reasoning and visitors, so that meaning can be communicated to diverse audiences; and between visitors, so that the museum works as a generative social space.

To explore these arguments, we propose to look at a series of current case studies which illustrate the emerging inclusive transformations of the museum, from the point of view of the relation between spatial design, informational experience and socialization. Our spatial thesis is reflected in the structure of the paper that is organized around the spatial concepts of connectivity and unpredictability, which relate to the way the museum is activated as part of city space and works as social experience; and of the ideas of spatial embodiment and situated meanings, which relate to the emergence of new spatial typologies and concern its functioning as informational experience. The paper ends by discussing features of the current social context which suggest why the identified spatial changes are bringing about the realization of the inclusive museum.

2. SPATIAL AND VISUAL CONNECTIVITY

The idea of close relation, through spatial and visual links, between the museum and its immediate context, the city in particular, is not of course new. It dates back to the Altes Museum, Berlin (1823), and its upper floor loggia which offered a panoramic view of the urban context, a kind of collective space that linked the museum to the city (Basso Peressut, 1999, p.13). The New Nationalgalerie Berlin (1968) and the Centre Pompidou, Paris (1977) are two turning points in the history of this relation, with the former proposing the urban landscape of the metropolis as the background for the viewing of works of art, and the latter creating a new urban square, which extended inside the building. But what is striking today is the way the spatial link between museum and context is evolving, taking a variety of forms and rendering the relation more complex and richer.

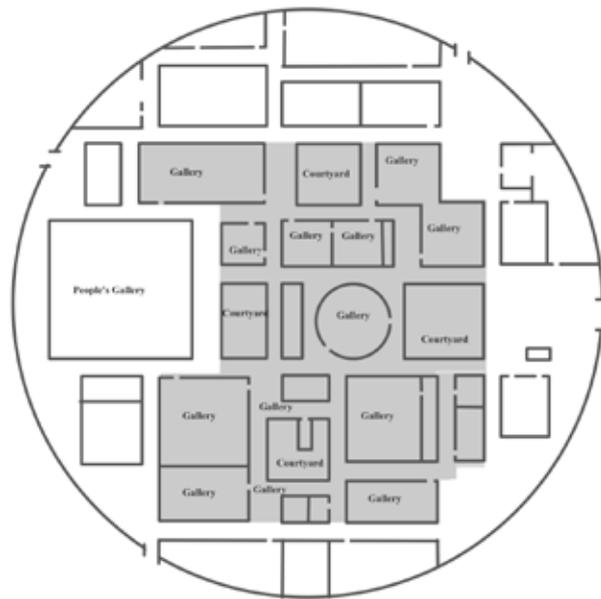


Figure 1 - Spatial layout of the 21st Century Museum of Contemporary Art, Kanazawa (based on the museum's floor plan)

Establishing continuity with the immediate environment and stressing the museum's permeability and approachability by multiple routes and entrances is not only a recurrent theme in the spatial design of museums but also a favourite expression of their openness, their integration into people's everyday life and their informality. Pioneering from this point of view is the 21st Century Museum of Contemporary Art in the centre of Kanazawa (by Kazuyo Sejima and Ryue Nishizawa of SANAA, 2004). The building was given a circular form, eliminating the

distinction between the main façade and the other sides and allowing approach equally from any direction and through different entry points (Figure 1). This was based on the concept that the museum should be open to the city like a park, in the sense of permitting different kinds of people to be together in the same space (Sejima, cited in Moreno and Grinda, 2007, p.361). In addition, its transparency and its low volume emphasize its accessibility and close relation to the city and its communities. The idea of a seamless relation between the museum's spatial structure and the urban context also shapes the shared ground-floor of the new building of the Musée de l'Elysée (Musée cantonal de la photographie) and the mudac (Musée de design et d'arts appliqués contemporains), Lausanne (by Manuel and Francisco Aires Mateus – planned to open by 2021). It is a space open on all four sides, a natural extension to the public esplanade outside, which, by accommodating the entrances of the two museums, relates in and out movement with circulation in them, contributing to a sense of urban density (Figure 2).



Figure 2 - The shared entrance of the new building of the Musée de l'Elysée and the mudac (courtesy of ©PLATEFORME10, Aires Mateus, Lausanne)

In addition to constructing connections to and from the city to facilitate movement, museums are also activated as part of the city space. They allow routes to pass through, rather than simply leading to the interior, and create urban spaces adjacent to or within the building, where visitors' paths converge and informal encounters occur. The ARoS Aarhus Art Museum building (by Schmidt, Hammer Lassen Architects, 2004) (Figure 3a) is traversed by a 'street', an axial space which bridges two parts of the city and connects the entrance space of the museum to the network of streets outside, through ramps at both ends. Via the ramps the city is drawn into the museum (Schmidt, 2004, p.49). The interior ground floor 'street' is also reflected in the museum exterior by a glass incision that cuts through the compact red brick building along its whole height.



Figure 3 - ARoS Aarhus Art Museum: the interior street (a), and on its roof, Ofalur Eliasson's 'Your rainbow panorama' (b) (Photographs: Adam Mørk (a) and Ole Hein Pedersen (b), courtesy of ©ARoS Aarhus Art Museum)

In contrast, in the Museum aan de Stroom, Antwerp, better known as MAS (by Neutelings Riedijk Architects, 2011), the 'street' is a vertical promenade that extends from the entrance to the tenth floor. It is made up of entirely transparent circulation spaces, which are separated from the 'black-box' display spaces, and create the rising spiral 'MAS boulevard'. Visitors perceive changing views of the city surrounding the museum, with each floor altering the visual field by 90 degrees. The museum route represents a vertical 'exploration' of the city through movement.

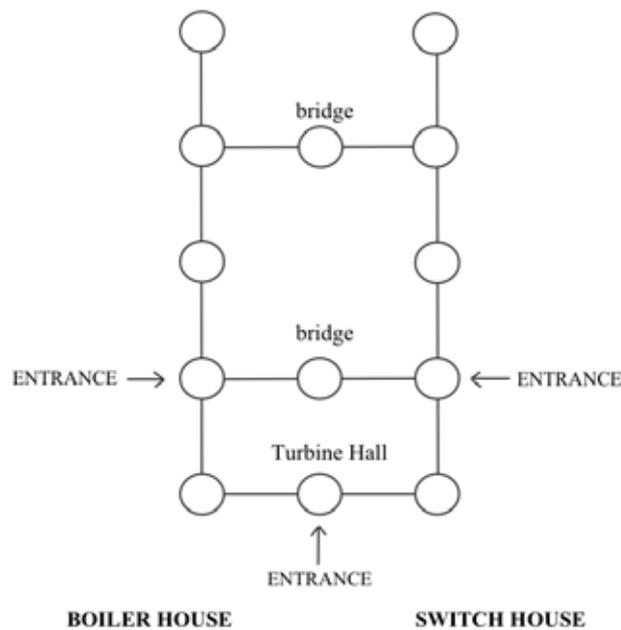


Figure 4 - Schematic graph of the internal structure of Tate Modern (2016)

In 2000, Tate Modern transformed its main space, the Turbine Hall, left intentionally void in the design proposal of Herzog & de Meuron, into a 'covered street', extending the active west side public space next to the building into the heart of the building itself. In parallel, it transformed its north side public space into a common ground, a natural space, where people like to go and, once they are there, they are encouraged to explore what's going on inside the building (Vogt, 2016, p.123). After its extension in 2016, with the new pyramid building (Switch House), the

Turbine Hall determines even more powerfully the main axis of the interior of the complex. As shown in the schematic *graph*¹ in Figure 4, the Turbine Hall provides links between the new and the existing building (Boiler House) on three levels (underground, first and fourth), and creates new ways of entering and exploring the museum. More importantly perhaps, this 'covered street' also works as a vast display space, which generated 'a wholly new way of showing art' (Herzog & de Meuron, cited in Moore, 2016), by inviting interpretations at that scale by artists. In spite of their different responses, in all cases, the work of art became seen as integral with the space, 'an iconic image, inextricably enmeshed in the public memory with the experience of Tate Modern's building' (Wagstaff, 2012, p.39). By provoking thinking and raising questions, the art displayed is said to have enhanced the social nature of the space and contributed to its sense of community and sociability. According to the sculptor Juan Muñoz (commissioned in 2001), the Turbine Hall is 'part of a city, rather than part of a museum. It's a fragment of the urban experience... It's a space of our time' (ibid., p.35).

The idea of the museum creating a continuous space with its context is taken one stage further by the Moesgaard Museum (MOMU), an archaeological and ethnographic museum in Aarhus (by Henning Larsen Architects, 2014). Instead of incorporating a public space inside the building, the roof becomes itself an extended green public space (Figure 5a). Positioned on the side of a hill and inspired by the concept of an archaeological excavation, the building is partly submerged in the site, blending with the natural landscape. Its planted sloping roof seems to grow out of it, inviting visitors to wander around and use it as a continuation of the landscape, but of an intense collective character. The contemporary museum, more than ever before, is concerned with – and so designed to – provide social space.



Figure 5 - Moesgaard Museum, Aarhus: the green roof seems to grow out of the natural landscape (a); view of the darkened main space (b) (Photographs: Media Department, courtesy of ©Moesgaard Museum)

3. UNPREDICTABILITY

Over and above linking their layout to local movement patterns, museums can also structure their own internal spaces so that they work like the street network of a city, introducing flexibility and unpredictability in the way space is used and explored. The layout of the 21st Century Museum of Contemporary Art (see above) is organised as a system of independent galleries forming the museum's core (in grey in Figure 1), and a network of public spaces, serving a variety of programmes, as an outer zone, with glazed interior courtyards between them. They are all arranged so that glass corridor-like linear spaces, connected at right angles, pass among them, creating axial lines of sight. Some axes traverse the whole building, others are more localised, while key long axes are linked to the main entrance space. The 'urban' nature of this network

1 The first paper in the history of graph theory is considered to be 'Seven Bridges of Königsberg' by L.Euler (1736) – see Biggs, N., Lloyd, E.K. and Wilson, R.J. (1986) *Graph Theory*, 1736-1936. Oxford: Oxford University Press. For graph theory applied to architecture, see March L. and Steadman P. (1971) *The Geometry of Environment: An Introduction to Spatial Organization in Design*. London: RIBA Publications. For its application to space syntax, see Hillier, B. and Hanson, J. (1984) *The social logic of space*. Cambridge: Cambridge University Press.

facilitates orientation and allows visitors to explore and choose at will, actively discouraging a predetermined route and constantly enhancing visitors' awareness of each other.

This idea of internal organization in the style of urban space is further emphasized by two recurrent museum tendencies. On the one hand, 'inspired by the vibrant, open public spaces' (Tate Modern, 2016), museums increasingly include, in their functional programme, spaces for unplanned activities, either initiated by the museum (as in the case of 'Tate Exchange', a dedicated suite of learning and research spaces for visitors, visual arts professionals and staff in Tate Modern) or by communities (as in the 'People's Gallery' in the 21st Century Museum of Contemporary Art). On the other hand, they make the public spaces of the building accessible to audiences independently of the exhibition programme as well as of the museum opening hours. The outer free zone of public spaces in the 21st Century Museum of Contemporary Art is an illustrative example, as are also the top floor of the MAS and the new pyramid building of Tate Modern (2016). Both are entirely dedicated to a panoramic view of the city and directly accessible from the urban level. 'The museum embraces the public as never before' (Chris Dercon cited in Dercon et al., 2015, p.85) and aims to work as an open space for both museum visitors and urban explorers.

Displays can also extend beyond galleries and occupy the informal space of corridors and courtyards, as in the 21st Century Museum of Contemporary Art and in Tate Modern, expanding our sense of possibilities for experiencing art and enhancing the sense of unpredictability in the use of space. In 2006, the ARoS Aarhus Art Museum launched a competition for creating a permanent work of art on the roof of the building. The winning project, Ofalur Eliasson's 'Your rainbow panorama' (2011) (see Figure 3b), is a circular walkway in glass in all the colours of the rainbow, creating intriguing contrasts: it is a space at the top the building with a circular shape conceived in relation to the square museum building, and a work of art that maintains its autonomy as an object; it is a space inside the museum as well as outside; it intensifies the view of the city and is visible from the city; and, while offering a collective sensory experience for visitors moving along the walkway and perceiving the surrounding urban landscape through changing colour zones, it transforms the museum into 'a beacon, visible throughout the city' and 'a compass in time and space' for its citizens, 'a lighthouse' (Eliasson, 2014, pp.90–91).

By providing many options for being used and experienced, the museum layout can then feel like an urban space, explorable by a mix of people coming with different goals and interests, implying informality and the museum visit as a relaxed activity. In doing so, museum space becomes active in the structuring of social relationships over and above encounters in the public spaces. The more exploratory the visitors' movement pattern, the more random their pattern of encounter and the more variable their co-presence, rendering the whole experience intensely social.

4. SPATIAL EMBODIMENT

Beyond shaping the experience of the museum as public space, open and informal, architectural and spatial design can contribute to new forms of curatorial representation, to 'practices geared towards breaking up settled interpretative models' (Basso Peressut, 2014, p.156). They stimulate new perspectives and encourage different modes of creating culture (ibid.), including embodied forms of knowledge, immersive experiences and affective engagement. By placing greater emphasis on the visitor's own perception and experience grasped through spatially embodied sensation, and so on the individual rather than the normative, museums informalize their environments. This, it is proposed, is another way in which the museum seeks to engage a wide audience of varying ages, abilities, interests, learning styles and cultural backgrounds.

At an elementary level, museums seek to tell a bigger story, instead of a dominant art history. They extend the global reach of their collections beyond Europe and North America and create new patterns of connection by juxtaposing them spatially. Recently, both in the Centre Pompidou and in Tate Modern, the spatial arrangement of the permanent collections has been used to bring about alternative ways of looking at the history of art. Strikingly, this was realised through opposite approaches. Pompidou, in 2013–15, brought together the European

movements of art with artistic expressions developed in the States, South America, Asia, Middle East and Africa, in a chronological narrative from the beginning of the twentieth century to the 1920's, under the idea of 'Pluralitiés mondiales' (Worldwide pluralities). In the place of the chronological and art-historical approach, Tate Modern opted for a more experiential arrangement, after the completion of the new building which led to its entire and extended collection being rehung (2016). It proposed an overview of the twentieth century art through broad themes (e.g. In the studio, Artist and Society, Between Object and Architecture, Living cities) and a dialogue between past and present. One of the original aims in the creation of Tate Modern was 'to make difficult art popular', and in this, it has been argued, 'innovative ways in which the Collection was and is displayed have also helped' (Smith, 2005, p.21). By bringing disparate objects, experiences and viewpoints together, museum space works as a powerful connective space, and becomes an expression of the curatorial intention to show a more connected account of art. This approach also allows the possibility of multiple narratives to coexist and suggests alternative comparative contexts instead of a single way of seeing things.

At a deeper level, the design of museum space is used to complement the more rational, information-based content of the display with additional modes of understanding, creating responses which are embodied, sensory and affective. Two spatially innovative examples are the Museum of Palazzo Valentini, Rome (2010), and the Moesgaard Museum (see above). In these cognitive learning is complemented with embodied forms of knowledge and immersive sensory experiences, and interpretation is accompanied with affective and emotional engagement. More specifically, in the Museum of Palazzo Valentini, which is not a purpose-built museum, but an archaeological site (beneath the basement of a mid-sixteenth century palace, currently the seat of the Province of Rome), information is exclusively transmitted through an immersive visual and audio narrative and a powerful embodied experience. The architectural and archaeological remains of different structures, functions and periods (mainly a public building of Hadrian's time, and two private buildings of the mid- and late Empire – see Napoli and Baldassarri, 2015), often overlaid, and visible through glass floors, passages and bridges, are organized in a visitable sequence. The visitor passes through the – darkened – spaces of the sequence and what is seen is complemented by audio narrative, combined with targeted illumination and digital graphic effects. These guide the viewer to focus on meaningful details in the remains or to conceptually reconstruct elements of the original setting by 'drawing' their original shape or defining their perimeters. There are also virtual reconstructions, as for example completions of partially conserved remains of floors, and projections on the walls, which extend the visual experience of the visitor beyond the space occupied and the physical remains displayed. They give a sense of life by presenting the visual experience moving from space to space, together with the acoustic experience of residents' voices and surrounding sounds, or of neighbouring spaces and gardens. In spite of its character as an automated guided tour and the rigidly determined spatial sequence, the experience recreates a sense of the architectural and social past of the archaeological site, and of the life for the inhabitants ('Innovative ICT solutions', 2011). The resulting effect is both cognitive, in that the ancient structures can now be understood, but also affective, in that what has been created acquires cultural and social meaning through spatial embodiment. In this sense it becomes a more inclusive way of interpreting the past.

Like the Museum of Palazzo Valentini, the Moesgaard Museum reduces textual information and proposes instead a variety of modes of embodied nonverbal communication, including architecture and its sensory qualities, as well as the innovative use of technology, but combined with an explorable open environment. The display section devoted to the Bronze Age and Iron Age is organized on three levels as a series of experiences which are spatially separate, but at the same time intricately interwoven with each other. The complex as a whole is essentially an open space divided into sub-spaces, often characterized by curved geometries. A narrative is constructed as each experience builds on the previous one conceptually: the worship of moon and sun at the upper level; the cultural significance of bogs and examples of offerings in bogs, from rings to animals, at the ground level; the human sacrifice, the Grauballe Man, one of the world's best preserved bog bodies and the museum's highlight, at the lower level. Narrative synergies between spaces and levels are experienced through the carefully constructed visual connections between pairs of levels, and further supported by the spatial design. The darkened

spaces, the highlighted objects, the uneven floor that gives the sense of walking in a bog, the sounds in combination with the projection of short animated films on the walls of the building, activated by the visitor, all constitute an emotive atmosphere for the viewing of exhibits (Pallasmaa, 2014, p.246).

Two features of the museum layout are of particular interest from a spatial-syntactic point of view. First, it uses all types of spaces, sometimes as immediate spatial neighbours (Figure 6) to create this powerful integrative experience. Second, it proposes different interpretations of the same space type, in particular of a-spaces, by varying the spatial and visual relations within their context. For example, the double-height main space (Figure 5b) is spatially enclosed, but visually it is entirely open, so a tension is created between accessibility and visibility. The way it is defined by a curved low fence-like form, and at the same time enveloped at a distance by the walls of the building, makes visitors feel like being on a promontory offering an all-encompassing experience of the ground and the upper levels, and so a place where they can stop and see the life in prehistoric Jutland. Notably, the main space is also visually linked (through a glass opening in the middle) to the underground Grauballe Man gallery, another a-space but here an enclosed and intimate space. Thus, by creating different spatial conceptions within the same space type, the design of space in the Moesgaard Museum allows for quiet seclusion as well as open expanse, for static and dynamic, and for the intimate and the perceived from a distance.

So in these two cases, the museum, by privileging the lived over the conceptual or analytic, engages visitors and allows them to use their own resources for experiencing the display. This meaning making through sensorial and embodied experiences can, it has been argued, potentially lead 'to a greater degree of understanding' in the sense of knowledge that is 'felt rather than rationally understood' (Witcomb, 2010, p.41).

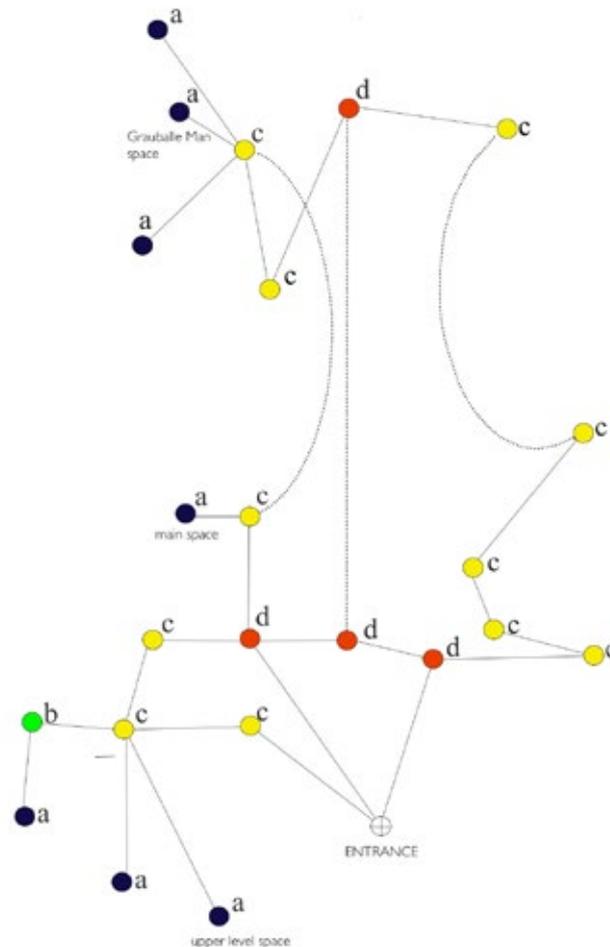


Figure 6 - Graph of the spatial layout of the Moesgaard Museum, with space types

5. SITUATED MEANINGS

Closely related to the tendency for sensory forms of knowledge (Witcomb, 2015, p.322) is the contemporary focus on subjectivity and experience, which also helps to make the case for openness and inclusion. New forms of art – for example in the fields of video art, light installation and interactive art – deal with experiential processes (rather than objects) where time is a key dimension in viewing and emphasis is placed on engaging visitors with their surroundings in ways which allow for differences in individual perceptions. The works, by being based on the sense of immersion, creating intense and complex experiences of light and colour, and amplifying visitors' physical reality and sensory presence, mark a shift of engagement from 'looking at' to 'being in', and a transformation from the 'viewer' to the 'navigator' (Dyson, 2009, p.2). So museum space is required to display works where the main part of the work lies in the experience of it, in effect to exhibit something immaterial (Eliasson, 1995/2015). As suggested by the spatial layout of the Moesgaard Museum and as proposed elsewhere in relation to the spatial culture of performing arts museums (Tzortzi and Hillier, 2016), this phenomenon seems to interact with emerging spatial typologies, and in particular with the growing emphasis on spatial complexes favouring a-type spaces to accommodate lived experience, rather than complexes of different ratios of c- and d-spaces.

The Tanks in Tate Modern (the former oil tanks, enormous concrete cylinders that still retain their industrial feel) and The 9 Spaces in the ARoS Aarhus Art Museum (planned and specially designed from the outset of the creation of the building) can be seen as two indicative examples. In addition to the more 'conventional' layout that takes the form of a sequence of spaces supporting a curatorial narrative of some kind, both museums dedicate their underground spaces to large-scale installations, projected images or performance work. In The 9 Spaces, for example, each work tends to take over an entire space and immerse visitors in a different atmosphere, as in the case of Pipilotti Rist's installation 'Dawn Hours in the Neighbour's House' (2007), created especially for one of The 9 Spaces: through video, sound and light it makes visitors experience 24 hours in 8 minutes. Significantly, in both museums, the underground galleries are closed a-spaces, open to a common corridor or space, and homogeneous in syntactic terms (Figure 7a–b). By providing one permeability link to the other spaces of the complex, they intensify the sense of containment and enclosure, enveloping visitors in their embrace, and distance themselves from through-movement. These spatial properties can be seen as offering preconditions that facilitate the assimilation and understanding of the intense experiences they accommodate.

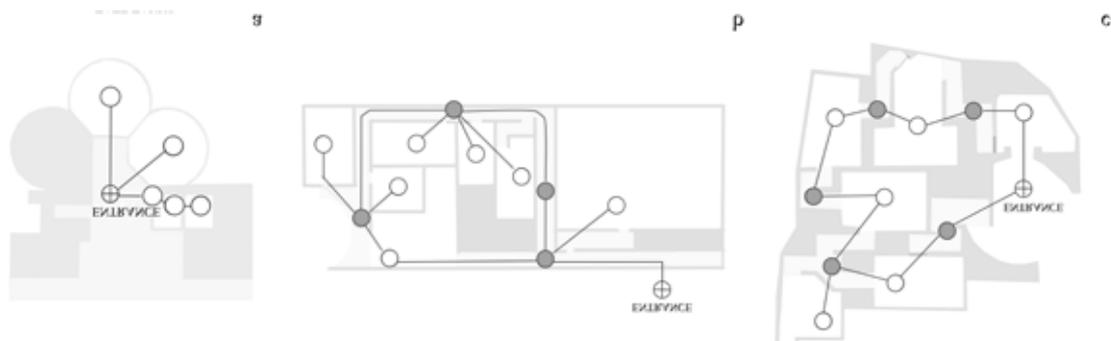


Figure 7 - Graphs of the spatial layouts of: Tate Tanks (a); The 9 Spaces, ARoS Aarhus Art Museum (b); the 'Soundscapes' exhibition, National Gallery London (c). White circles represent display spaces and grey circles intervening spaces

6. CONCLUSION

As the role of museums in society changes, together with museological concepts and curatorial approaches, museum architecture and spatial design are changing with them. Our cases illuminate some of the different ways in which museum architecture can engage space to express the inclusive museum. It can: create museum approachability and openness and shape an informal environment that encourages random patterns of exploration and fosters visitors' sociability; communicate the idea of cultural connectivity; provide the stage set and the means for experimenting with novel ways of presenting art and cultural heritage and new forms of viewer engagement; and generate layered experiences, in which the proprioceptive (related to the positioning and movement of the body), sensory, intellectual, aesthetic and social are interconnected for the visitor (Levent and Pascual-Leone, 2014, p.xiii).

We can then propose that what we are seeing are spatial interpretations of Manuel Castells's (2001) argument that, in the contemporary network society, marked by 'a lack of shared codes of communication between particular identities', museums can play a key role as 'cultural connectors'. They can contribute, Castells proposes, to 'the reconstruction of public space' and become 'spaces of cultural innovation and centres of experimentation', where people learn to communicate through shared experiences. The design of museum space can create the conditions that allow for individual perceptions, feelings and thoughts, and, at the same time, for staging a coming together, a collective experience. As argued by Basso Peressut (2015, p.103), the museum is now in parallel a piazza and a room (stanza), a public environment and a private space. Or, Using Olafur Eliasson's words (2010), 'we individually share the museum'.

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