6 Engagement

This chapter examines the impact of the narrative and the environment nodes on the people node of the narrative environments tripartite network, that is to say, how narrative environments *engage* people. Engagement has become a rallying cry in many industries, whether that be a call for greater customer engagement or employee engagement in business sectors, wider audience engagement in the cultural sector or an appeal for more socially-engaged design in activist circles. To understand why engagement has become so significant in recent times, it is useful to consider the change in research paradigms over the past 100 years. Interest has moved away from an ontology that posits an objective reality, with material objects or things identifiable through an empirical, positivist epistemology that points to what everyone can see, while capturing and collating this evidence using quantitative methodologies. While the empirical has remained, research now incorporates subjective ontologies, that is, the *experiential* dimension of reality and the ways that objects are constituted through social practice. Constructivist and interpretivist epistemologies have become necessary because they recognise that not everyone experiences the world in the same way. This shift is evident in the emergence, in the early twentieth century, of phenomenology and hermeneutics and, later in the century, of feminism, postcolonial studies and identity politics. Interpretivist epistemologies continue to shape innovation, to which the design of narrative environments is contributing.

The research of experience uses qualitative methodologies, including, for example, personal testimony and accounts of situated attitudes and feelings. All such qualitative approaches are concerned with the relationship between the subjective and the objective. A relevant architectural and landscape example is Maggie's Centres, which have pioneered new design in support for cancer patients. Maggie's Centres are inspired by the idea that good design could considerably improve the patient's ability to cope with their situation. They focus on changing those aspects of hospital buildings that are demoralising for the patients. Maggie's centres have material properties that mimic domestic settings, such as lightness, airiness, warm colours and they use natural materials creating a porous relationship to the immediate landscape. They also have a clear invitation to enter and feel welcomed plus a range of private and social spaces. They are designed "around the person not the disease" (Maggie's 2014). As a result, they have meaning for a human subject, in providing a breathing space between the two worlds of hospital and normal life and they aim to generate emotional responses such as courage, self-confidence and resourcefulness. The precise meaning may change from person to person, depending on their individual experience, their memories and cultural background. This example shows that while design continues to produce objects and environments with material qualities and practical uses, it has come to incorporate considerations of the meaning production and social impact that accompany the use of objects. Instead of first

thinking of the materials and use, many designers now prioritise user experience and interaction. These priorities are manifested in human-centred design, interaction design, user experience (UX) design and participatory design. This emphasis is particularly relevant for narrative environments, which are situations into which people enter, not just artefacts presented to people. The situational quality of narrative environments requires a consideration of these more subjective ontologies. It is in this context that the concept of engagement has assumed a significant role.

The importance of engagement is accompanied by a recognition of the value of narrative. Stories attract and sustain people's attention, both crucial aspects of engagement. In light of this, the chapter describes methods of cognitive and emotional engagement in literary narrative that are transferable to the design of narrative environments, focusing specifically on David Herman's theory that, through narrative, readers conjure up and viscerally inhabit storyworlds in their imaginations. The chapter shows how storyworlds are prompted by multimodal means in the spatial context of narrative environments. It analyses examples of how modes of address in explicit and implicit communications are materialised in space, and shows how cognitive and emotional engagement can be achieved through a synthesis of physical and digital interaction in narrative environments.

Cognitive engagement, explored in the humanities, discusses thought-based absorption in literary stories (Bilandzic and Kinnebrock 2009; Green, Strange and Brock 2002). Such deep mental absorption in narrative occurs when people become so intensely wrapped up in a book that they do not hear someone speaking to them. Such readers are described as captivated by the story, indicating the fascination it holds over their imagination. This is similar to a 'flow state' described by psychologist Mihaly Csíkszentmihályi (1975). The ancient Greeks developed a comparable theory that they called *enargeia* to describe how the world of the story appears so clearly to the reader or listener that they feel like they are actually present at the events in the narrative.

Frank Hakemulder (2011) discusses some narrative devices that may captivate readers. His examples include intense identification with characters. Empathy and affinity with characters prompts absorption in the events of their lives. Authors may allow their readers more information than their characters, which creates a compelling and engaging sense of power among readers. This can also be reversed in situations where the reader is kept in the dark about how much the characters know about their own situation. This encourages readers to engage attentively in order to discover clues (Gerrig, 1996). Readers may be captivated by the desire to know the outcomes, intrigued by the possibilities offered by inconclusive clues. Authors typically introduce uncertainty in the structuring of events, challenging audiences to anticipate and have their expectations confirmed or confounded (Brewer and Lichtenstein, 1982). Readers may be fired up by moral dilemmas if the situation presented resonates with their own. They may be amused by the irony or humour of the work and be carried along by its charm. Readers may feel absorbed by acquiring knowledge. Frank Palmer (1992) also suggests that characters' roles in narrative worlds enable people to learn about social interactions and moral and cultural codes. This is most clearly seen in fairy tales, fables and religious books. Such narratives may guide children in learning acceptable social behaviours and relations. All of these techniques are transferable to the design of narrative environments, as discussed below.

Storyworld and the World of the Story

Readers describe narrative experience as like being 'transported to another place' in their imaginations. In doing so, they transfer their attention away from their immediate

surroundings, the 'I-here-now', to the world of the story and, subsequently, to different perspectives or levels within the world of the story. The process indicated by this transportation is mapped in the tripartite network model of narrative environments to develop a more methodical understanding of how the experiential 'I' is addressed by, and drawn into, the narrative to become a fictional 'I' with its own fictional here and now. Linguists, cognitive scientists and literary theorists have studied this phenomenon and describe it as a deictic shift (Galbraith 1995). Deictic shift theory is the departure point for narratologist David Herman (2004), who turns to cognitive science to move attention from the author's structuring of story elements to the recipient's construction of a mental model of the story, the 'storyworld', a notion similar to Rapaport et al.'s (1994) deictic centre: a mental model of spatial, temporal and character information contributed by the reader to understand the narrative. Herman examines and critiques the dominant structuralist approaches, prevalent in twentieth-century narratology (Todorov 1969; Genette 1980; Chatman 1978), arguing that literary stories are not only created through the organisation of story units or story grammar relating events, characters, settings and causality (Prince 1973). He states,

> Interpreters of narrative do not simply construct a sequence of events and existents arranged into a plot but imaginatively, (emotionally and viscerally) inhabit a world in which, besides happening and existing, things matter, agitate, exalt, repulse, provide grounds for laughter and grief […] storyworlds are mentally and emotionally projected environments in which interpreters are called to live out complex blends of cognitive and imaginative response.
>
> (Herman 2004:16–17)

For Herman, narrative theory is an aspect of cognitive science. He suggests the story recipients construct the storyworld in their minds using inferences from cues provided by the author, who shows the "who did what to and with whom, when, where, why" (Herman 2004:9). The storyworld, as the subjective, imagined mental model of the world of the story, is conjured up slightly differently in the mind of each recipient. Herman suggests that, for each recipient, the storyworld establishes the context and framework of the story. He uses the term 'world' to make the case that audiences do not just create a sequence of events in their minds, as they absorb the story. Rather, they create a multi-dimensional 'ecology' that integrates past, present and future states, events, actions and spaces. He sees spatialisation as crucially important in stories as it interconnects time, characters, objects and actions. Herman argues a sense of place and context is vital to stimulating people's imaginations. He suggests storyworlds cannot be richly imagined unless the spatial context as well as the historical frame is sufficiently evoked.

   Herman's focus on the relationship of imagination, spatialsation and story cues is crucial for the design of narrative environments. The space of a narrative environment is experienced as physically present but it is also used as a cue to evoke a storyworld in the mind of the visitor, providing a double deictic centre. Take, for example, the city of Skopje discussed in the previous chapter. Visitors and inhabitants know they are in the present, but they are encouraged, through associations they make with the neoclassical architecture and statues, to imagine another glorious, heroic, powerful Skopje in the distant past. These acts of imagination are prompted by all manner of cues: spatial, material, object-based, image-based, sound-, smell- and/or text-based. The physical monumentality of the architecture acts on the body to produce a sense of awe which, in turn, persuades the visitor of the actuality of that history. Story recipients are given

fragments which do not fully reconstruct the original context but are fundamental in stimulating the narrative imagination. In the design of narrative environments, these fragments and their position, their scale, their look and feel and their sequencing need to be carefully considered if they are to create an engaging experience that transports people in their minds to another place and/or time.

Examples of artists and designers who provide multiple cues and settings include Canadian artist Iris Häussler who reconstructs interiors, peppered with objects, documents and images, such as *The Material Evidence of Obsessive Lives and Works*, to create narratives for visitors to decode. Other artists and designers deliberately give few cues, leaving a great deal to the imagination. French artist JR, for example, in his installation 'Women Are Heroes' shows just the eyes of local women, albeit at an architectural scale. Giving few cues may prompt audiences to imagine more. Narrative imagination is stimulated by gaps (Gerrig 2010) so there is merit in paring back the cues. However, detailed settings with layers of content can offer multiple paths through content and, as a consequence, stimulate choice and imagination. Elaborate settings can also appeal to the senses, creating pleasant feelings of bodily immersion. However, if the setting produces a detailed rendering of the world of the story, without considering the experiential quality the story is trying to evoke, it may be exact but not imaginatively stimulating. In order to evoke storyworlds in people's imaginations, the setting needs to deviate from a literal transposition of the story elements. Carefully chosen materials, text and spatial or sensory cues will allow each individual visitor to imagine their own version of the world of the story, rather than being guided towards one specific vision.

The concept of storyworld, as an individual's spatialised mental model, should not be confused with 'the world of the story' or the 'mise-en-scène'. The world of the story in narrative environments is constructed as a layered, detailed, logical set of interrelating systems and factors that is discussed, sketched, agreed and written about by a multidisciplinary team. The world of the story is the outcome of a great deal of research. The mise-en-scène, a phrase derived from theatre, describes just the elements of that world that are placed on the stage, into the camera shot in film making or, in this case, in the narrative environment. The elements and the characters of the mise-en-scène can be understood as fragments of the world of the story. The world of the story will contain other characters and places which never actually appear in the narrative environment but are implied, for example, the Triumphal Arch in Skopje implies a past victory. The implied world of the story is imagined in the mind of the recipient on the basis of the mise-en-scène. Hence, narrative environments function as sensory or material synecdoches, in other words, tropes where a part represents a whole. In the design of narrative environments, the creative team will develop a comprehensive knowledge of the world of the story in text, image, objects, spaces and sometimes moving image. They will then select key elements to include or emphasise in the narrative environment. In cases such as the exhibition at Vischering Castle, designed by Duncan McCauley Studio and discussed in Chapter 5, visitors' attention is deliberately drawn to the grain of the stone walls, volumes and light in the castle as important clues in the telling of its history.

Multimodality

The advantage of, and the design challenge for, narrative environments is that they combine a broad range of media to engage and stimulate people's imaginations. The question for the design team is when to use which media, in other words, how and when to combine text, image, moving image, object, sound and performance with digital and

physical space. Narrative unity is sustained in part through tone of voice, a literary concept explicitly used by interpretation strategists, although not by all designers. It describes the choice of words and the moods and feelings they evoke. The tone could be, for example, formal, informal, technical, authoritative, intimate, humorous, playful or optimistic. The type of textual language used could be interrogative, exclamatory, declarative or imperative; or a mix. As well as being used to shape the text, tone of voice can be applied to multiple modes of communication including font, image, light, sound, form and spaces, which can all establish the atmosphere of the narrative environment. Defining tone of voice enables creative teams to think consciously about how to incorporate multiple voices.

German philosopher Gernot Böhme (2017) describes atmospheres as intangible tinctured interstices, which people sense but cannot attribute precisely. Böhme discusses the aesthetics, feeling and perception of space through, for example, the difference between material and staged materiality and the social character of materials as they are taken to signify particular meanings by particular cultures. He also points to the way spatial atmospheres are commodified to produce deliberately and overtly designed experiences in retail or leisure environments to encourage dwell time, identification with a brand and the purchase of goods and services. Atmospheres are recognised as very powerful communication tools and design researchers such as Valerie Mace (2014) are currently trying to make more explicit the ways in which atmosphere can be applied as part of a critical design process. The architect Peter Zumthor (2006) has spent much time reflecting on atmospheres, claiming that "We perceive atmosphere through our emotional sensibility – a form of perception that works incredibly quickly and which we humans need to help us survive".

Atmosphere is non-tangible but narrative environments, particularly museums and brand experiences, also use tangible objects as ways to engage visitors. Architect and writer Juhani Pallasmaa argues that we live in an image-soaked world and that visuality dominates our other senses and flattens our experience, reducing the multidimensional world to a screen. Pallasmaa (2012: 62) argues for a richer sensorium making a case for the tactile, saying, "The door handle is the handshake of the building". Pallasmaa makes a passionate plea for designers to address all the senses. He stresses designers should consider the eye, the ear and the hand to produce architecture addressed to the intellect and the senses. The tactile is often addressed in narrative environments through the inclusion of objects which, being material, have weight, density and texture, qualities that are typically emphasised through lighting. Light translates the tactile qualities into visual qualities but nevertheless evokes and heightens our sense of materiality.

The scale and materiality of objects, unavailable in books, images and film, can be used in narrative environments to make an argument. For example, Brazilian Néle Azevedo (Burke 2012) uses objects and their materiality to make political statements. Azevedo carved 1000 little ice men as a project for the World Wildlife Fund. The piece has been staged in the urban realm in France, Japan and Italy. The work uses its reduced scale to provoke curiosity and garner attention. As the ice men slowly melt, they make people conjure up the appalling consequences of global warming.

Objects and the narratives they prompt have become the focus of interaction designers (Grimaldi, Fokkinga and Ocnarescu 2013). To understand the emotional importance of objects to people, designers often look to anthropologist Alfred Gell (1998) who argued that artefacts enchant the viewer through technical and stylistic virtuosity which, he suggests, gives works of art an agency on a par with human beings, prompting strong emotional responses, such as love, hate, desire or fear. Research shows objects, including

mass produced products, act as complex symbols entangled with, for example, pleasure (Jordon 1999) and/or social status (Harman 2016). Designers of narrative environments need to understand how their audiences are likely to interpret the meanings of any objects used. This knowledge allows them to juggle and juxtapose objects to provoke emotional engagement and deictic shifts in their audiences.

Digital media may appear to stand in direct contrast to material objects but they can be a very powerful narrative addition to object displays. For example, interpretive strategists Tim Gardom and Alison Grey (2019) describe a temporary exhibition they worked on, *Transplant and Life*, at the Hunterian Museum, London, 2016–2017, a medical collection with a permanent display of preserved body parts. The exhibition-making team added screens and sound recordings of doctors' and transplant patients' testimonies. The collection was not touched but the installation transformed the space. Gardom explains the depth and substance of the experience owed much to the 15 years of work by photographer Tim Wainwright and artist John Wayne in collecting the testimonies and images. The power lay in the narrative and the aural and visual tone of voice, not in the technical devices themselves.

Digital media can be used to represent 3D objects using augmented reality (AR). Here, the AR objects are of quite a different order from physical objects. They occupy a place mid-way between representation and spatiality. AR makes use of internet connectivity, location awareness and cameras on smartphones or tablets to allow people to view 3D digital images, text and hear sound through their mobile phones, layered onto the 'real' physical environment. Users can move around the image or sound in three-dimensional space. German design company Art+Com has been researching AR since the mid-1990s. They developed a fixed interface, Timescope (1996), to look at the urban fabric of Berlin that had disappeared due to the dramatic upheavals after reunification, when the wall and border fortifications were demolished. A freeze-frame of the empty border strip was blended with historical edited recordings. Inhabitants and visitors who had never experienced the city divided could see what the wall was like and imagine themselves back in time. Local Projects, one of the leading exhibition design companies in New York, made a 9/11 app. Users could view video of the destruction of the twin towers through their smartphones by standing in the place where the film was originally taken. This was a very powerful geo-located narrative experience that used the actual physical environment to create a palpable deictic shift that would not have been possible in any other way.

In 2018, Chilean artist Sebastian Errazuriz vandalised Jeff Koons' virtual 'Balloon Dog' using virtual graffiti on his own app as part of a "stance against an imminent AR corporate invasion" (Sayer 2018). This opens viewers' imaginations to the remarkable possibilities of AR, which can add facsimile objects, text, sound or moving image to any environment. It is an excellent medium for experimenting with scale. It can produce surprise and wonder, and prompt ideas of new worlds and new situations, transporting people into fantasy worlds, even in their familiar environments. However, AR has also prompted dystopian visions of urban space, such as that of film maker Keiichi Matsuda. In his video, *Hyper-Reality* (Winston 2016), an urban space is saturated with AR, designed as an anonymous backdrop with few material or formal design qualities so that continuously updated media can be projected onto it. In this world, everyone is sealed in their own self-referential system, steered by giant technology companies who have harvested data about each person's preferences.

Joel Lewis (2019), teacher, designer and researcher in sustainable computing and web-based augmented reality, believes AR has enormous potential in narrative environments. This is demonstrated by the worldwide AR phenomenon Pokémon Go, which

represents a blend of the digital and the physical world. Lewis adds that the AR technology in itself was not enough to create a compelling proposition, the Pokémon world of characters and stories were needed to bring it alive. Narrative was crucial to its success. Excitement was also created by the opportunity for all to participate, exercise and develop new friendships (Bonas et al. 2017). Lewis explains AR is very versatile in a practical sense. It can be used to prototype experiences at the beginning of the project before anyone has built or encountered the space. It can simulate spaces that are too far away to reach or expensive to get to. It is a cost-effective way of getting past the physical and budgetary limitations of the physical world. Lewis believes AR could also be a social connector. People in different locations could have a three-dimensional experience of eating together or watching a film together. Here AR would be a tool for human empathic engagement. Lewis believes that when the resolution, brightness and refresh rate is developed beyond that of human vision there will be no difference between AR and human experience. Its weakness is that it cannot be touched. Nevertheless, it can enable people to act upon and change the human and physical world around them, so it has an effect on the actual environment.

The relationships among text, image, video, light, objects and AR are among the determinants of our sense of space and place. Space and place, which are major constituents of the environmental node in the tripartite narrative environments network, are both intimately connected to the human body (Casey 2013). The body, the crucial means by which we engage with the world, translates between the people node and the environment node. In infancy, according to phenomenologist Maurice Merleau-Ponty (1962), we develop a body schema as we learn to live space through our bodies in relation to other bodies and objects, using touch, gaze, proximity and sound. Merleau-Ponty envisages the body schema as the physical body plus its sensory extensions into the surrounding world. He argues that, as we move, we exercise a sense of depth, dimensionality, flow, passage, form, colour, tactility, texture and lustre. Our bodies, therefore, extend beyond our skin to include our immediate surroundings and the physical world we perceive at some distance can make us feel disturbed, disrupted, reassured and so on. Merleau-Ponty blurs the boundaries among body, mind, objects and surrounding space arguing for embodied perception, by which he means learning and understanding through our whole body rather than just through cognition. Taking Merleau-Ponty's ideas, it is suggested that we make meaning from our embodied perception of the immediate world around us, through which are woven overt linguistic conceptualisations and that, as moving, perceiving bodies, we are inseparable from space and language. Using Merleau-Ponty as a starting point, spatial forms and rhythms, materials and atmospheres are understood to communicate in an implicit manner. This enables us to move away from the concept of communication as a single channel, two-way transmission model towards a model of communication that is multidimensional and multimodal. Communication is continually unfolding, receiving and sending messages from, and in, multiple directions through multiple senses. It is a model of material semiosis that is reciprocal and responsive, a network of messaging between body and world, with mind arising from and entangled with these ongoing processes, a conceptualisation not unlike Gregory Bateson's (2000) notion of an ecology of mind.

The messaging network and its meanings provoke changes in behaviour. Embodied perception causes people to act. This includes moving, pausing, talking, fighting and so on. One of the modes of acting is making and reshaping our environment, such as our buildings and the spaces around them. Yi-Fu Tuan (1977) discusses the central role of the human body in the conception and design of architectural structures and their

orientation. Tuan suggests many buildings echo the upright human body. The fact that we, as a species, have eyes in the front of our heads creates a sense of front and back and orientation to what lies in front of us. This orientation to the front, Tuan suggests, underlies the design of many buildings. Modelled on the human body, many houses, palaces, churches and so on have been designed to have a front and back.

Tuan explores the related meanings of front and back, arguing front represents possibility or future promise and back is regarded as past and is sometimes thought of as tainted. As a result, front is privileged over back. Hence orientation takes on numerous hierarchical and potentially divisive values. This corresponds to expressions in language such as 'going forwards' as a positive metaphor for making progress and 'going backwards' as a negative metaphor. Tuan argues that the standing body, ready for action, is more highly regarded than the prone body. He points out the words status, stature and estate all derive from the word stand. Upwards is privileged over downwards. Tall takes on meanings of importance and short, meanings of powerlessness and servility. Important buildings and monuments are raised on platforms and reach high into the air and command more visual space. This orientation is incorporated into religious belief when heaven is conceived as above and hell below. The body and the values in its orientation are translated into architecture which materialises and expresses values in larger-than-human scale. People then find themselves sensing and reiterating these meanings, consolidating them as cultural codes.

These physical cultural codes evoke emotions and orient our imaginations. In *The Poetics of Space*, Gaston Bachelard (1964) explores our subjective, psychological and emotional investment in the spatial universe of the home. He argues people need houses to dream and imagine. He describes, for example, the house as a dual vertical polarity, the pointed roof averting the rain clouds, the attic being a place where our thoughts are clear, where we can see further. By contrast the cellar is a dark entity which is mysterious, heavy, labyrinthine and conjures up trepidation of a diabolical underground world. In *Body Memory Architecture*, Kent Bloomer and Charles Moore (1978) pursue the argument that architecture is a sensual social art, historically derived from experiences and memories of the human body. Experiential architecture is a phrase that has been used by those interested in how buildings can foster well-being in all its dimensions, beyond the visual.

The presence of the body in the space enables the designers of narrative environments to borrow from "theatre's now moment and feeling machinery" (Lavender 2016: 163), which stimulate affect and a visceral response through intelligible and sensible engagement. Lavender (2016: 163) adds,

> This isn't to relegate it [affect] to a simple register of sensation, sentimentality or consumer satisfaction. It has its own politics to do with invitation, involvement, identity, renunciation, pleasure, community and agency.

In narrative environments, the experience of being in a physical space, in the present and able to move differs from that of literature, film and traditional theatre, where the body is relatively disengaged. The active, embodied dimension of the experience can heighten narrative imagination while the intense feelings are also capable of prompting people to consider the meaning and implications of the narrative. Visitors are often accompanied in narrative environments by friends or surrounded by others and there can be transmission of affect to others nearby which produces, as in theatre, a shared communal involvement. Nigel Thrift (2008: 235) calls this "affective contagion" and

suggests that it reinforces emotional and transformative experience. The presence and normative actions of others in narrative environments is another element to consider in the design, as learned behaviours will vary among, for example, commercial, cultural and urban spaces.

To recap, the multimodal and multimedia communication of narrative environments is enacted through embodied perception of cultural encoding in architectural form, spaces, materiality, imagery, sound, sense of atmosphere, text, other people and their actions. Together, they communicate and materialise social norms, hierarchies, values and distinctions, along with the power dynamics enacted through these processes which we learn to read and conform to or resist, consciously or unconsciously. These phenomenologically oriented insights, which establish the intimate relationships among body, space and place, are further grounded in social practice by the thought of the Marxist theorist Henri Lefebvre (1991). Lefebvre, in emphasising that spaces and places are not neutral but sites of struggle over meaning, access and control, enables a more concrete analysis of the expression and contestation of power involving body, space, place and practice. Narrative environments engage with these dimensions in order to raise awareness or bring about material or behavioural change.

Spatial Arrangement as Mode of Address

A key aspect of engagement is mode of address. A useful starting point for examining spatial modes of address is Louis Althusser's (1977) theory of interpellation, in which addressees are called and recruited, as subjects, for specific ideological horizons. Although Althusser's theory of ideology and the state is not pursued here, nevertheless his general insight into how people are drawn into specific worldviews is useful in understanding how narrative environments engage people. It is argued that spatial configurations constitute modes of address which may, for example, be invitational, persuasive or possibly hostile but, in each case, they influence the expectations and behaviour of the subject of address, by calling for a response. Modes of address position the subject in relation to a specific place with its corresponding hierarchical frame of power relations. For example, city promenades invite visitors to stroll towards distant landmarks, positioning them as tourists within both a physical and cultural horizon, registering them in a field of cultural consumption. Museums position visitors as truth seekers through the display of objects which signify authenticity and origin. Luxury retail environments position visitors as belonging to a privileged and exclusive group.

Modes of address call and recruit visitors but this does not necessarily lead to intellectual and emotional engagement. In fact, they can lead to passive consumption. For example, the French critic and activist Guy Debord (2014: 5) argued that spectacle, the product of what Debord calls the dominant mode of production, "is the sun that never sets over the empire of modern passivity". Debord's Situationists were particularly concerned with the dynamics and experience of the city. They saw superficial spectacle, in the form of buildings and events that aimed at increasing touristic entertainment, as obliterating everyday life. Instead, they advocated the deliberate subversion of commercial and mainstream instruments. Whether designers are working with or against its economic and political inferences, the environment 'performs' certain constraints and opportunities. Changes to the mode of address of the urban fabric can have profound effects on inhabitants' responsive behaviour. Erika Fischer-Lichte (2015) maintains that joint action, prompted by physical change to the environment, can transform whole communities. In 2005, for example, during the severe financial crises of the post-communist

era, the Mayor of Tirana, Albania, Edi Rama, a former artist, distributed resources to enable residents to paint many of their grey communist buildings in bright colours. Although the change was purely aesthetic, and some said superficial, it immediately provided an uplift in civic pride, prompting an appetite for clearing away piles of rubbish, removing illegal kiosks and installing new street lights (Kramer 2004).

Modes of address can employ a range of communication strategies from predominantly explicit communications to predominantly implicit communications or aim for a more equal mix of both. Explicit communication, such as speech, text and graphics, is taken to mean expression that fully and clearly articulates content, leaving very little implied. Explicit communication is aimed at a cognitive reception. Implicit communication is taken to mean expression where content is not plainly or directly conveyed. It is hinted at, or evoked. Implicit communications can be expressed through three-dimensional forms, such as spatial rhythm, volume, scale, light, colour and atmosphere, often yielding emotional responses.

An example of a multimodal narrative environment that deploys predominantly explicit communications is the Whitney Plantation Visitor Centre, Louisiana, USA. It is a former slave plantation that produced sugar cane. There are numerous small museums in plantations all over the southern United States but the Whitney Plantation is the only one that tells the story of such plantations from the slaves' perspectives. The paucity of museums interpreting history from the slaves' perspectives shows that the slave experience is a neglected narrative in the southern United States and this may be one of the reasons why the communications are so explicit. There is a need to work against a culture in which black people's histories are ignored.

The site's grounds accommodate a car park, the visitor entrance building, a ticketing area, a café and shop, a church, landscape elements such as fields, trees, paths, a pond, a memorial and buildings such as slave cabins, kitchens, workshops and the owner's house. Visitors cannot wander around by themselves; they are required to book and wait to be escorted in a group. The visit takes the form of a two-hour guided tour. There is a fixed spatial sequence and the visitor experience is mediated by the guide or explainer. Spatial barriers or obstacles are used to control the flow and experience of visitors. Guides have standard scripts but they are allowed to improvise and engage in spontaneous conversation with groups. Individual visitors can express their own views.

Once assembled as a group of 10–15 people, visitors are welcomed by the guide, then led into the plantation grounds and invited into the church. The church is an original structure from the neighbourhood which slaves would have used. Visitors are physically inside the same building and can viscerally and psychologically identify with former congregations. There are figurative wooden sculptures of slave children in the church which visitors can choose to photograph (Figure 6.1). The church is a non-negotiable pause on the journey where visitors are requested to sit and view a video giving a visual and verbal overview of the plantation's 262-year history.

In the landscape beyond the church, there is a deliberate physical 'obstacle'. It is the 'Wall of Honour', a long tall slab of black marble. It is a memorial that implicitly communicates its meaning through its scale, material and solidity, firmly asserting the memory of past lives and events and their persistent relevance into the present. The guide stops the tour and asks visitors to read the testimonies inscribed in the stone wall, for example,

> When children used to get a whipping they was taught to turn 'round and say. Thank you, ma/am, for whipping me and bow. That was mighty hard to do, but we

Figure 6.1 Wooden sculptures at the Whitney Plantation, Louisiana, USA, 2016.

were never allowed to pout. If we did we got another. And if we just needed being punished, we were put behind a door and had to stand on one foot until we were ready to say we were sorry, and promise not to do it again. If we told a story, our mouths were washed out with a soaped rag.

The direct speech brings the characters alive in the visitors' imaginations and the brief halt on the tour allows time for questions and conversations between guide and visitors.

The tour continues as the guide explains the appalling working conditions and life-threatening hazards of working in the sugar cane fields or being assigned to boiling the sugar cane in the large metal sugar kettles to make molasses. The lives of the slaves are communicated through explicit spoken description but also implicitly brought to life through the physical encounter with the objects and conditions of the plantation regime such as the brutal, cramped holding cells that were used at slave auctions. Visitors are taken to the slave cabins, the kitchens and the workshops, which they can choose to enter and imagine the lives of the slaves through the objects and physical qualities of the spaces (Figure 6.2).

The tour concludes with a visit to the slave-owner's house. The fact that the grand house is the last place to be visited inverts the norm. In many plantation museums and films about slavery, the main focus is centred on the slave-owner's house as luxurious and appealing. In this tour, the slave-owner's house is seen in a different light, as it is explained that some of the architectural features, for example, those that supported the circulation of cool air, were based on African traditions. Slaves with such construction knowledge were highly sought after.

Figure 6.2 Slave cabin at the Whitney Plantation, Louisiana, USA, 2016.

The tour of the space is carefully planned, the overall framework is explicitly scripted, movement and choice are tightly controlled. Invitation is open but punctuated by conceptual and physical obstacles and challenges. The explicit communications are very powerfully complemented by the implicit communications arising from the encounter with spaces, objects and materials. In addition, visitors sense the commitment of the guide. They implicitly feel and share the presence, absorption and reflection of others on the tour and the result is that the multimodal communications challenge conventional plantation narratives. The mode of address is didactic but also radical and activist. Visitors are positioned as respectful listeners who are seeking knowledge. They are required to submit to the regulations of the tour during the visit but the revelations of profound cruelty and exploitation together with discussion about the persistence of racism in the USA suggests that visitors may leave as agents of change after their visit.

In contrast to the explicit narrative and didactic mode of address of the Whitney Plantation, the narratives and modes of address in the work of Daily Tous les Jours are usually implicit and open-ended. Melissa Mongiat and Mouna Andraos co-founded Daily Tous les Jours in Montreal, Canada, in 2009. They create positive, life-enhancing, inclusive interactive installations. Their mission is to enable ordinary citizens to be agents of change in the social and sensory urban landscape. Their work is rooted in designing and producing interactive installations in outdoor public spaces that welcome all passers-by to participate. Their installations demonstrate how participants can transform heavily built urban environments through their human presence and their explicit joy in coordinated, collaborative movement and sound.

Figure 6.3 21 Balançoires, Daily Tous les Jours, Montreal, Canada, 2011–2018.

One of their most well-known pieces is '21 Balançoires', a set of musical swings in Montreal's Quartier des Spectacles (Figure 6.3). As people swing, they play music. The higher they swing the higher the musical tone. Each swing releases its own variation of notes and as people notice the sounds from other swings they adjust their pace to align and harmonise with others. Harmonies emerge through collective cooperation and this stimulates an implicit sense of ownership of the space. A computer system, housed within the physical structure, plays a programmed set of notes that enable people to play freely. The swings are not an open instrument otherwise users would have to be advanced players to make them harmonise. Melissa Mongiat and Mouna Andraos (2019) explain that to facilitate interaction the sound needs to be beautiful the first time anyone uses it. In fact, the sounds are preselected and also progress over time so they do not become repetitive but the preselection is not obvious to the users. Some people will spend two hours on the swings, so the progression has to be quite extensive. Being an interactive installation, the overall narrative, about the potential for people to transform their cities, is activated and played out through people's participation. Each participant brings their own content and interpretation to the overall narrative framework.

At Daily Tous les Jours, they work on the principle that public space installations need to be part of people's everyday lives and habits. When working in public spaces, Daily Tous les Jours does not have a captive audience. Their work has to contend with people's other priorities, such as going to work or shopping. To get attention, outdoor installations need to be big; they need to compete at a city scale. However, they also need to be inviting and appealing on a human scale. There is a great deal of skill in managing these opposing scales. Surprisingly, Daily Tous les Jours tests the scale with cardboard prototypes in situ. They say there is no way to make a fully informed judgement from a

computer visualisation. They need to be in the space and work by responding to the surrounding physical environment. They believe the first level of interaction has to be obvious and easy to do. In this case, passers-by recognise and know how to use the swings. Then, as participants, they work out, through trial and error, how to align the sound of their swing with other swings as a second level of interaction. This experience and the other pieces designed and produced by Daily Tous les Jours are more than just fun. They combat urban solitude, they build community fabric, by encouraging people to talk to strangers, and they bring vibrancy to the environment.

Daily Tous les Jours developed a related concept for Mesa, a large suburb of Phoenix, Arizona, that suffers from the same urban problems as many downtown areas in the USA: inhabitants seem to be missing. People do not commune outside and the environment feels lifeless. Mesa Arts Centre is trying to contribute to urban life. It has been looking for reasons for people to spend time outdoors in its locale and commissioned Daily Tous les Jours to develop an installation. Mongiat and Andraos visited to research the space. They ran several days of workshops, meeting and talking with local residents, getting an understanding of the place. They met someone running a community garden who, with others, such as local businesses, wanted to enliven the space. There was an appetite for new initiatives. Mongiat and Andraos found it was very hot in summer, exacerbated by the numerous concrete buildings. Everyone was fighting the sun. As a result, Daily Tous les Jours realised they had to play with the sun and they conceived of Mesa Musical Shadows.

Mesa Musical Shadows (see Plate 4) is a custom-made interactive pavement that enables people's shadows to produce sounds of singing voices performing in musical harmony. As people walk over the pavement, they can join complete strangers in creating complementary melodies. The differing length and intensity of the shadows changes the sounds at different times of the day. For example, the voices are peaceful and ethereal in the early morning and more energetic and staccato in the middle of the day. The technology is hidden and produces a sense of magic and delight among visitors. It not only prompts human to object interaction with the pavement, it also creates a sense of connection and mutual cooperation and affiliation among the many different pedestrians. Mongiat and Andraos say they use music to create a sense of wonder because it is accessible to all, touches the emotions and is less cognitively demanding than screens. People can listen to music and simultaneously interact with each other. It does not prohibit people from speaking to others, fulfilling one of the goals of their studio: they want to create more opportunities for people to communicate with each other and experience the agency they have to transform their environment.

Whilst studying MA Narrative Environments in 2007, Melissa Mongiat and fellow student Kelsey Snook developed a scheme they called 'good participation' as a guide to interactive participatory design to which Daily Tous les Jours still refers. They set out the steps they felt would ensure good participation: send an invitation; provide an incentive; make the rules clear without limiting people's freedom or creativity; provide a feedback loop so that participants can confirm or augment their actions; pay attention to timing, using suspense and surprise; leave traces that can demonstrate the impact of the collective effort; stay authentic and sensitive to your audiences' needs; have fun; deploy technology to support interaction; share authorship; expect the unexpected; use all the senses; engage with narrative fantasy; rely on people's intuition, they know what to do; consider the price.

Daily Tous les Jours also uses a well-established interaction design paradigm to provide different levels of engagement. At their 'Giant Sing Along', part of the Minnesota

State Fair, where hundreds of people attend each day, Daily Tous les Jours provided numerous ways to participate. Giant Sing Along, 2011–2014, is literally a field of microphones where people can do large-scale karaoke. The voices are modulated, adjusting the pitch to achieve the best harmonies. People can listen; they can hum in their heads; they can lip sync the songs; they can sing aloud by themselves; they can go to a mic and start singing to the crowd or they can go online to the website to suggest songs. The multiplicity of possibilities for participation makes a rich environment. All the different levels of participation working at the same time create an air of engagement. The critical mass makes the environment welcoming. Mongiat and Andraos do not judge people by saying advanced users are the best. They believe all means of participation are important (Figure 6.4).

A project by Daily Tous les Jours that tells more explicit stories is Amateur Intelligence Radio (AIR) (see Plate 5). The designers installed a radio station in a building, St. Paul's Union Depot, Minnesota, USA. They undertook interviews with local residents and historians to discover and piece together the building's history. Daily Tous les Jours says people bring a layer of anecdotes while the site itself, the way it has been structured and built, reveals the choices made by planners and architects. In the piece, the building itself appears to be the host. It introduces those who enter or pass by to all kinds of content. This includes the building's history; the stories, apologies and love declarations gathered from visitors; horoscopes; advice for a rainy day; and the real time ambient conditions, for example, the weather forecast. This is a narrative environment that takes the form of a pun on artificial intelligence.

Daily Tous les Jours always works with digital media and its work shows it has a profound understanding of human-to-machine, machine-to-machine and human-to-human interaction. The technology is not viewed as a siloed, non-human sphere. Mongiat and

Figure 6.4 Giant Sing Along, Minnesota State Fair, USA, Daily Tous les Jours, 2011–2014.

Andraos see digital technology as an enabler that can support a seamless integration of space, media, interaction and participation. They see a difference between interaction and participation. They say interaction is the mechanism but participation is more like an active state of being, a readiness. They use digital technology to increase the agency of the audience and address urgent social and spatial issues through the pleasure of the playful and the unexpected.

The mode of address and the balance and combination of implicit and explicit narrative can be scaled up and down. An example of a combination of an explicit and implicit narrative environment is The Gobbins, a remote coastal path in Northern Ireland that invites you to experience the drama of the landscape and the sea but also learn about the local history and flora and fauna (see Plate 6). The Gobbins claims to be the most dramatic walk in Europe. Two miles long, the narrow path hugs the enormous cliff-face along the rugged coastline. Walkers are suspended above the crashing waves of the North Channel by newly engineered bridges that lead to tunnels and staircases carved into the rock. It is an arduous but exhilarating experience, with 50 flights of stairs and a walk up a very steep 1-in-5 gradient. Overall, it takes 2.5 hours to complete the walk (Figure 6.5).

The path first came into being in the early 1900s. It was conceived and constructed by Berkeley Deane Wise, Chief Engineer of the Belfast and Northern Counties Railway Company. He wanted to increase railway use and therefore devised new destinations at the end of railway lines. He applied the engineering that he had developed elsewhere to build the path bridges at The Gobbins. The path was a popular ticketed tourist attraction for many years but was abandoned in the 1960s, until new investment was found in 2013. From 2013 to 2015, UK-based Creative Director Sam Willis oversaw the development of a new pathway commissioned by Larne Borough

Figure 6.5 The Gobbins cliff pathway viewing platform, Northern Ireland, 2018.

Council. It was a restoration project, described as a reimagined project, with completely new, specially engineered bridges, tunnels and staircases to make the coastal path accessible again. Only 30 visitors can take the cliff-face path at any one time, led by a trained guide.

On arrival at the nearby visitor centre, they are put into groups of 15 people, introduced to their guide and shown a safety video. Their footwear and outer garments are checked. They are given a helmet and taken by their guide to the path. Some visitors embark on the walk but get vertigo and need to be brought back. On the walk, there are two kinds of narrative experience that are interwoven. The guide offers an explicit spoken dialogical narration while the visitors are implicitly, bodily and emotionally immersed in the vast scale and proximity to the dramatic landscape and the sea. The guide's script provides three kinds of content: some background history about the path's origins; stories about the geology, flora and fauna and myths related to particular locations on the walk as visitors pass through them; and the stories of the engineering and of the people who worked on the original installation. As visitors walk along the new path, they can see the remains of the original Victorian bridges and pathway and learn about bridge engineering. Being outdoors is very different from the controlled environment inside a building. The physical space acts implicitly on the bodily senses of the visitor to induce a sense of wonder through the dramatic proximity to the forces of nature and their continual transformation. This is complemented by experiencing feats of human ingenuity in engineering. The stories the guide offers explicitly contextualise the main experience, the landscape and seascape which play out in front of the visitor. It is worth noting that here the space, rather than being the backdrop for stories or an actantial relay for them, *acts* as the main character in the story to which the other stories are subordinate.

The examples above demonstrate the priority given to engagement in the design of narrative environments. This reflects a general shift in research paradigms from positivism to interpretivism, resulting in an increasing focus, in narrative terms, on the experience of human action and participation. This has led to multiple creative approaches to visitor interaction in many spheres of design but particularly in the design of narrative environments. Discourse on engagement in literary narrative has a great deal to offer the design of narrative environments but skill and judgement are required to translate these insights into multimodal and multimedia formats. Current thinking on the importance of spatialisation, as a path to imagination in the audiences' construction of mental models or storyworlds, reinforces the need for designers of narrative environments to consider and experiment with a full range of sensory and scalar spatial cues, to develop an awareness of how they position visitors through their chosen modes of address. While pure spectacle creates passive audiences, narrative environments stimulate intellectual, emotional and moral engagement. They do so through implicit and explicit means, interweaving the narrative, or word- and image-based symbolic node in the tripartite model, with the artefactual and place elements of the environment node, while addressing both the psychodynamic self and the body in the people node. Theory and practice flow into one another, demonstrating the value of the tripartite model as a practical working methodology which is non-prescriptive, open and flexible. It is a way to think through common sense notions of narrative imagining to develop and deliver absorbing and moving human experiences. The resulting narrative environments can still be modulated. If the qualities of encounter and being surrounded by the world of the story are intensified, narrative environments produce immersive experiences, as discussed in the next chapter.

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