# ABSTRACT
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Abstract

**Abstract:** Everybody plays. It is a behaviour that is common to all people and indeed most species. A person's inclination to play is dependant, not only on his mental and emotional state, but also on his surroundings. Despite our physiological separation from the rest of the evolving natural kingdom, our brains have scarcely evolved further than those of our hunter-gatherer forefathers. So often the playful side of adults is forgotten, un-nurtured and neglected, much to the detriment of public physical and mental health. In this ever-changing and fast-paced human society, we are constantly trying to avoid or subdue our primal instincts because we believe we are somehow different… "We are not animals". We make our primal desire to be free and rampant something to be ashamed of, afraid of and even embarrassed by. This thesis discusses the importance of play with regard to mental health and how urban environments can be and become conducive to play in adults. It poses some ideas about how designers can provide opportunities for both active and fantasy play in transitional urban spaces that we use on a regular basis.

The thesis addresses the issue of 'what is play?' by establishing a working definition of play in terms of an individual adult player and their surroundings. This definition then serves as the basis for evaluating how contemporary urban design uses a wide array of techniques and strategies to incorporate adult play within everyday life through literature review and case studies. Moreover, it tackles the concept of humour and identifies the benefits to encouraging communication of the self through humour and freedom of expression within the urban realm. These observations provide the basic structure for developing some design parameters which an architect or urban designer might utilise in designing spaces and environments that facilitate play and designing humour for playable cities in order to attain the 'playful' city.



**Key Words:** Urban Design, Play, Humour, Adult Play, Homo Ludens, Ludic Urban Design, Theories of Play, Creative City, Playful City, Playable City, Intelligent City, Smart City


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# DESIGNING FOR A PLAYFUL FUTURE: A Review Of How Humorous Play Within The Urban Realm Can Make Adult Play A Part Of Everyday Life

By Christina Guerrero

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***“Play keeps us vital and alive.***
***It gives us an enthusiasm for life***
***that is irreplaceable. Without it, life***
***just doesn’t taste good”***
***-Lucia Capocchione***

## 1 INTRODUCTION

Throughout history, the ability to play has helped man to survive and flourish, adapt and create. It is an essential component of human culture, which can be found in the roots of creative practices. The development of play in both humans and animals is usually described to an endpoint, which is maturity or adulthood. It is a critical component for the healthy development of each individual. Like eating, sleeping, working, grieving, or rejoicing, play is an essential life process, a type of behaviour common to all people that nurtures the mind and challenges our physical capabilities. Described as homo ludens by Huizinga (1950), humans have an innate playfulness, which extends throughout our lifecycle. In adult life, ‘work’ and ‘play’ are often separated. In our society, play is largely associated with childhood, yet Nancy Babtiste has suggested that maintaining a sense of playfulness is also useful for experiencing a healing activity and de-stressing[1]. Moreover, Erik Erikson stresses that it is a critical component of interesting and fulfilling adult lives[2]. Regardless of what is considered beneficial for adult psychology and psychological wellfair, where adults are concerned, play is almost exclusively studied in therapeutic contexts.

As such, how and why adults play has not been broadly studied within psychology. However interesting questions exist about whether play behaviour in adulthood has any adaptive function beyond being a mere vehicle for preventing boredom[3]. Negative socio-cultural attitudes that consider adult play as a frivolous and a superficial departure from the principal work ethic have given rise to a variety of euphemisms for adult play (hobbies, pastimes, etc.). There is, however, clear evidence that the need and desire for play persist across the lifespan. It is difficult to give a general account of how psychology can inform design for play, based on the

*1 Baptiste, N. (1995) pp.33*
*2 Levy, J. (1978) pp. 69*
*3 van Leeuwen, Lieselotte and Westwood, Diane(2008)*

limited data supporting the cause and we therefore do not yet know whether the nature of these needs change with age. Perhaps a less obvious question is whether design can inform psychology… Play happens without any singular goal and the abstract reasons behind play are just as illusive as the definition of the term itself. However, the design of useable objects can be backed by the specific user requirement brief or function.

Gaining a balanced understanding of how and why people engage in play can help us obtain the knowledge of human behaviour in general. It would also help provide designers with concrete strategies for imbuing lifelong play and supporting the healthy balance between seriousness and humour within the built environment. It is my view, that in order to better the societal conditions in which we live, we must try to support the idea of the playful adult and help breed a more positive and playful culture within city life. In particular, we must consider how humour has the immense healing potential to better our mental state. While both psychology and design can mutually benefit from one another, it is key that a multidisciplinary approach to the study of play that encompasses history, anthropology, sociology and psychology be addressed, studying adult play conceptually, play for play's sake, as a pertinent and relevant form of behaviour as opposed to viewing it as a predefined action limited to its role as a means to other ends. We need to stop seeing play purely as a way of physically evolving the brain and as a developmental process, as we do in children. It is clear that play and freedom to express a sense of humour is much more than this. As architects, we have this opportunity to help spearhead a surge of study into this particular field; we can open the floor to this discussion and become pioneering advocates for creating a society uninhibited by the taboo of play and leisure.

Our human ability to fulfil vital life practices is a functional part of our physiological and emotional state alongside the immediate environment. Although our way of spatially planning our environments has started to slowly blur boundaries between function and activity, we still live in a world whose physical form segregates us into separate places to work, play, sleep, eat, learn, pray, etc. Modernist notions of planning and design assign city districts or part of a building into specialised components, which meet particular occupations, functions or activities. These concepts are guided by the belief that an environment that is specifically



dedicated to and designed for a particular purpose will enable man to achieve maximum potential in that aspect of his life.

Although the immediate environment can indeed affect our behavioural responses, the various aspects of our lives cannot be treated as mutually exclusive functions. If we design playgrounds and areas for young children as colourful, playful spaces, why not our transitional urban environments, commuter spaces, libraries, offices and hospitals? The fundamental point is that the society in which we live demands a pronounced separation between play and work; in the workplace we are to take our jobs, the quality of our work and customer satisfaction seriously; we are traditionally supposed to study in quiet concentration, without distraction but in a relaxed state of mind; and when we are sick we have to be nursed back to health in a clean, professional and (most importantly) clinically sterile environment.

Our physiological and emotional makeup can operate on varying facets and intensities, concurrently or in series. As such, an environment that supports only one or two physiological and emotional responses will fail to fulfil other essential life processes. Since, as a species, we are complex thinkers capable of reading our environmental situations on many levels at once and give meaning to the world around us, it makes it possible for us to establish places, which can encourage a variety of life processes simultaneously.

This is not to say that every space should enhance every life process. Programmatic requirements should be the determinants of what combination of functions and life processes is most suitable.

Through writing this thesis I look to investigate the relationship between the physical world and play by taking a look at how certain urban interventions engage and inspire the public. It looks to better understand how we can allow play to become a more central part of our lives by making it an integral part of the urban environment. By understanding how play engages people actively through a series of case studies, we can explore how architectural elements and relationships with space can afford play.

Although play is an important element in the life of all people of all ages, this particular thesis focuses on solely adult play and how architectural and urban design

intervention can help inspire a more spontaneous, free-spirited and creative populous. Fundamentally, I aim to look at the idea of curating a 'playful' city, which emerges by combining facets of the 'Creative City' and 'Playable City' movements and carefully cultivating a newly embodied and universal culture. An incontrovertible part of life is that the significance of play becomes devalued with age, becoming reduced to short periods at specifically allocated times such as the weekend or holidays. Moreover, as opposed to playing in a spontaneous manner, us adults have a tendency to structure our play, providing qualified settings and boundaries unlike children who rarely create a distinction between regular activities and play. However, since almost all literature on play deals with children's behaviour and the sciences of children's play, it will frequently be cited in discussing the relevant characteristics of play.

Ever since the nineteenth century, capitalism and the modern city have marshalled us into various forms of schedule, appointments, meeting slots, diaries, and windows of opportunity. This is a regime of linear and artificial time, regulated by computers, management systems and social conventions. The urbanised and rapidly expanding world in which we live subjects the human psyche to unnatural circumstances which not only affect overall happiness of individuals and the collective, but also have adverse effects on public health. Until relatively recent times, man has lived in touch with the natural environment and existed in tandem with natural cycles of hot and cold, light and dark, safety and danger. It was not until the first agricultural revolution circa 10 000BC that man became a slave to the land, leaving the migratory life of the forager in favour of settling to tend and protect a single plot of cultivated land, that the domestication of humans suddenly began to take place. Some may argue that the phenomenon set mankind on the path to prosperity and progress. Others conversely assert that it lead to a certain kind of perdition. We discarded our intimate symbiosis with the natural world and propelled ourselves onto a higher pedestal, from which we could look towards a more solitary life of development, greed and alienation.

In simplified terms, the pre-historic agricultural revolution marked a pivotal point of no return for most humans, resulting in massive population increase, the likes of which could no longer be sustained by returning to the hunter-gatherer lifestyle of their ancestors. This very quickly lead to



people building permanent settlements and strong emotional and sentimental connections to solid shelter structures, which, in time, developed into what we would recognise today as the modern equivalent of a house, a workplace, an infirmary… This was a far-reaching revolution, whose impact was psychologically as much as architecturally foundational.

Following the turn of the industrial revolution and the emergence of the contemporary capitalist society, human beings find themselves spending the majority of their time inside of buildings. Today, 54% of the world population are living in urban areas and this number is expected to rise to at least 66% by the year 2050 according to the 2014 UN report on Urbanisation[4]. We have become disconnected from the flux of the natural world, disengaged from the natural rhythm of life and become caught up in corporate fictions that we ***choose*** to believe in. We allow these fictions to dictate the course of our lives. Until the Industrial Revolution, the city was considered as a reproduction or reflection of the society rather than a salient form of social living[5].

Foraging man was never meant to spend his time sat working at a static desk at the same job, day in and day out. In fact the amount of time spent physically working was relatively small; a couple of hours at most, directed at completing various tasks on which the tribe or troop depended to survive. These included foraging, hunting, making clothes and fixing shelters. No two days were the same. On completion of the daily hunting, a gathering and general survivalist chore, the rest of the day was spent relaxing, gossiping, caring for children and, perhaps most notably, playing.

By contrast, today's man is required to work the daily grind confined to a few buildings, which they experience on an everyday basis with little to no variation. Play is no laughing matter. Seemingly superficial and puerile, play undoubtedly invokes the childish delights of being mischievous and of testing the boundaries of acceptability. Yet underlying its surface appearence of childishness, play is much more: it has a deep-seated importance in the human psyche that engages us in light-hearted activities that help diffuse anxieties, connects our minds to creativity and imagination and, in a very real way, aids in rationalising, prioritising and shedding perspective on the things of presently seeming importance.

*4 UN (2014)*
*5 Sennett, R. (1969)*

It tells us that antagonism or dissatisfaction in cities is latent and not always detrimental, that being ridiculous is okay, that all of us are in some way children at heart. Above all, it tells us that our physical architectures are there not just for the purposes of work, tourism, retail and all those purportedly important parts of life, but also for having fun, for letting go, for, in fact, being ourselves in our full range of human possibilty… or at least they should be!

It was Mumford's belief that the city is a physical manifestation and fact of human potentials and social actions[6]. Jane Jacobs has highlighted how the city behaves as a flexible entity and the underscores that both the city and its people manifest this flexibility to create change, primarily through inclusiveness[7]. Lefebvre states that spaces are created socially through interactions: interactions between people, interactions with objects, interactions with technology and even interactions with open space itself[8]. For this reason, a city is not merely about policy and planning but also what varied interactions have created, spontaneously or intentionally. Distance and place are made relatively insignificant or inconsequential by the hyperconnectivity of the global infrastructure of today. High-speed global communication networks such as the Internet as well as increased freedom of movement and mobility and the powers of multi-national corporations define the primary functions of the city and urban life.

It is incredibly safe to state that the contemporary city is overpopulated, polluted, hyper-active, divided but also hyper-connected, and still connected through common practices, such as family ties, sociability, friendship and pleasure. Lefebvre's social production of space is a discussion on experiencing the city through these mutual practices. Play is a practice of experiencing pleasure and is very much grounded on humour, sociability, creativity and freedom. Play is by no means new to the city nor the city new to play. Cities are buzzing hives of information and creativity and active hubs for playing various games, such as conventional marathons, giant slip 'n' slides, extreme bull runs or hilariously exuberant air guitar events. Through play, the city becomes the centre of active participation, allowing opportunities for random events of activity, pop-

*6 Mumford, L. (1937)*
*7 Jacobs, J. (1961)*
*8 Lefebvre, H. (1991)*



up art installations and pleasurable spaces of humour and play. According to Jane Jacobs 'casual social interactions' create public trust, thus strengthening the activities, and enhancing the experience of joy[9].

The methodology of the thesis is one of personal observation and inquiry based on an understanding of the nature of play. Chapter Two briefly analyses various theories of play, the domains of play places, and the characteristics of play behaviour. This information provides insights for developing a definition of play, which can be used in evaluating how the environment can foster play. In Chapters Three and Four, this definition is applied to a variety of places. In Chapter three we address humour, its place in society and how it can relate to the urban realm. Chapter Four uses our definition of play to investigate some way in which facilitate play and looks at a means of adapting the concept of the 'playable city' to afford a playful populous or culture. Observations are made of places in which playful interventions have been adopted, adult play environments, and places that primarily serve functions other than play such as transitional urban spaces. From the definition of play and specific observations through case studies, Chapter Six outlines some design parameters, which can be used in creating environments that afford play.

In these chapters you will find neither dogma nor ideological certainty. We cannot guarantee how peoples' behaviour, present or future, will affect the feasibility of creating the seemingly idealistic reality of the playful city culture. Instead, this is a beginning—a point within a larger process in the search for the "playful city". The objective of this writing is to understand the concept 'play' in the city and how a city can be a playful and humorous space, encouraging spur-of-the-moment joy, unexpected experiences and participation to create a more light-hearted world and for the sake of our mental health.

*9 Jacobs, J. (1961)*

# PART ONE

## LITERATURE REVIEW

## 2 THE DEFINITION OF PLAY

Before delving into the study of what constitutes play, I want to address the immense role that humour plays in it and how, throughout this paper, we should bare in mind that all play behaviour is in conjunction with humour. Indeed, in order to afford playful urban environments it is vital for us to consider the aspect of humour before all else, for it is that that actually engages the playful mind – particularly in adults.

When we mention humour, we must first understand the intention behind the term within the context of this study. It is the idea of a holistic and free-spirited expression of the self and engaging with the environment in a light-hearted and positive way. These engagements may be reactionary to a stimulus, an object, an idea or an interaction. They may be spontaneous and manifest in uninhibited bodily movements or expressions, new ways of sitting, walking, climbing or dancing down the street. They may simply even be an engagement that brings out a smile, a gasp, a giggle, a sigh or an eye roll... as simple as a brightly coloured pavement or a lamppost with limbs. The engagements may be as complex as affording a more vibrant cultural atmosphere within the high street or the market square- engaging people through music, through craft fairs and street performance. Engaging the sense of humour is an act of engaging the sense of personality and the sense of self. It is being able to extract somebody's true positive nature without apology or self-consciousness. It is the ability to get to truly see a person and to get a better understanding of who they are without even knowing them.

So what is play? To some, play is the opposite of work.



Play is a state of being in which activity and momentary experience are unbound by time. These are generally chosen by a player or players and help to positively enhance their personal being and their immediate world for the duration of this unbound period through interactions with others or objects. It is also an interaction that makes the player feel good through creative self-expression. However, in scientific terms, no behavioural concept has proved more elusive, ill defined, or controversial than play. The term enjoys the status of being perceived as a very subjective, individual form of expression. The reasons behind this are not entirely well defined themselves, although the fact that every individual has an innate idea of what defines play for them may be a contributing factor to this obstacle. The fact that play is a concept that does not belong solely to the confines of a singe scientific area of study may also be a further problem of definition of this behaviour. Consequently, many people in a plethora of fields have assumed to classify human play, but no one true classification is comprehensive.

Play has been opposed to work or any activity, which is purposeful for the well being of a community. The fields of sports and recreational sciences as well as industries point out the health and psychological benefits of play in adulthood as a means of reversing the rhetoric that play is something that should be primarily the work of children. The dubious reputation of adult play is created by its seeming connection to "morally rejected idleness"[10].

Science tells us that as a species, we are unique in that we are among the very few animals on the planet that play into adulthood with no other purpose than to pursue pleasure. Winnicott (1971) describes play as taking place in a transitional space between the inner and outer reality that enables creative action. Indeed, for Winnicott:

*"On the basis of playing is built the whole of man's experimental existence… We experience life… in the exciting interweave of subjectivity and objective observation[11]"*

This is to say that there seems to be very little developmental or evolutionary benefit to it other than emotional stimulation and creative stimulation. In this sense, the mere action of playing is something that comes purely from our species: from being human. The one single event that has been studied

*10 Westwood (2008)*
*11 Winnicott (1971) pp.64*

by evolutionary scientists and anthropologists alike that defines the primary divergence of the ape and Homo Sapiens is the cognitive revolution some 100,000 years ago, in which we began to think creatively. The idea that we stifle this innate creativity on which the evolution of our species has been based seemingly dehumanises and demoralises us.

Traditionally, studies of play have taken a philosophical and phenomenological approach, which imbued play with mystical or religious qualities not yielding to rigorous scientific examination or empirical, quantifiable data. Although these approaches provide insight into the meaning of play on a pseudo-scientific level, they don't address the questions of 'What is play behaviour?' or
-'What are its determinants?'

Conversely, scientific analysis of play sometimes loses sight of the highly subjective nature of this form of behaviour and its unique status as a very "grey" area with few or no distinct "black or white" interpretations. The disciplines of biology, philosophy, psychoanalysis, behavioural psychology, education, and ecological psychology provide a range of views concerning play, but few from an adult perspective. A brief discussion of how each of these areas describes play will provide insights that can lead to a definition of play. Interrogating the spheres within which various forms of play occur, and some salient characteristics of play behaviour can glean further insight. By amalgamating this material in terms of the objectives of this study, a definition of play can be formulated which can serve as a device for evaluating how the built environment can foster play.

### *2.1 Theories of Play*

Biological explanations of play search for physiological reasons why play occurs. Such explanations are based on the assumption that play must serve something which is not specifically playing itself. Species with highly developed logical thought processes or social structures tend to play more elaborately than those whose similar faculties are less developed[12]. This leads to the theory that play has biological value as a process of adapting to a given environment. Moreover, play serves both as a device for discharging excess energy and also as a way to regenerate exhausted physical and mental strength. There is an explanation from

*12 Wilson (1975) pp.164*



an anthropological perspective of play, which describes it as a form of cultural evolution by which the customs of our ancestors are passed down from generation to generation. This accounts for the imitative nature and role-playing aspects of play, which provide training for the more serious aspects of adult life. Again, this does not take into account the fact that adults have a tendency to play to and therefore, this approach alone does not provide enough information to support a comprehensive definition of the behaviour.

In behavioural psychology, play is seen as a way in which to discover the limits and functions of the human body. The solution of a problem is not the object of play, rather play is a process of trial and error which allows each person to learn how to cope with genuine problems in the real world. This learning process is referred to as Funktionslust, or Function Pleasure, which can be described as the pleasure that is derived from the exercise of a newly developed function or skill. Children are able to integrate their experience of the world around them and form an understanding of their relationship to the environment through the development and practice of skills through play.

The same type of pleasure is a part of puzzle and problem solving. It is believed by some cognitive psychologists that the most fundamental form of intellectual pleasure is derived from reducing surprise and complexity to predictability and simplicity. The pleasure comes from the act of finding the pattern or solution, and not in the solution itself.

Many people find solving the Fiendish difficulty level Sudoku in the UK Times newspaper a challenge that they vigorously pursue all afternoon. Likewise, the multifaceted sequences of an intricately patterned façade or tablecloth invite us to seek its underlying order.

The reasons why people play are related to the extrinsic and intrinsic models of man's motivation. Extrinsic motivation provides a material reward for reaching a certain goal. It is the type of motivation upon which industrialized society and economy is based. Play, however, is intrinsically motivated, where the drive to become involved in an activity is internally generated and the reward comes from the process of performance.

During play, people have an "internal locus of control" in which they feel in control of their actions and resulting outcomes.

Therefore, according to theories of cognitive psychology, when play is described as Funktionslust, an activity pursued for its own sake, it is actually subconsciously being pursued for the fundamental reward and associated feeling of control.

The psychoanalytic view of play uses such ideas as instinct of mastery; wish fulfilment, assimilation of overpowering experiences, leave of absence from reality and the superego, and fantasy. Play gives us the opportunity to surpass ordinary functional ego levels to experience a world of peace, anguish, wonder and joy at an instinctive level. It is a fantasy with the purpose of mastering inner and outer conflicts as well as mastering the environment. When children train lines, police stations, airports or towers they are gaining control over things that usually dwarf them. Similarly, a holidaymaker who carefully researches which accommodation and daytrip opportunities before booking their holiday is shaping the conditions of his or her experience. Thus, play is the external manifestation of internal drives to control our lives.

However unlike in childhood play, in this effort to control, the player never totally loses their sense of reality. Thought processes can be described in two different ways in accordance with psychoanalytic study and as such, so can play be described as such. Primary thought is the unconscious cognition of dreams and free association found in the idea of creative expression and imagination. Secondary thought is the conscious, logical thought of the ego. Ordinarily, only one grade of thought dominates the mind at any given time. However, during play these two grades of thought are closely affiliated and work in tandem with one another. The primary thought processes allow us to suspend reality for the duration of play while the secondary processes preserve the quality fantasy. An indoor playground filled with ball pits, slides and rope swings may become a mountain where climbers hang precariously close to death yet, regardless how intense the play, and the fact that it is only a game remains obvious.

Researchers reflecting on the philosophical approach to play, comment on the utility, purpose and range of the behaviour. They begin by approaching it from a much broader angle. They seek both the spirit and the formal structure of it. Caillois suggests that play provides an escape from the conventions of social life. In The Ambiguity of Play, Sutton-Smith similarly describes play as liminal and 'amphibolous', existing on the



threshold between reality and unreality[13]. Play is a paradox in which one intensely pursues an end that is seemingly inconsequential and very soon forgotten. It is not related to wisdom or folly nor truth or falsehood, good or evil; it has no moral functions whatsoever. While Caillois (1961) and Sutton-Smith (2001) view playful activity as essentially unproductive, Huizinga's Homo Ludens puts an emphasis on its importance as a meaningful function beyond psychological reflex[14]. Although there seems to be disagreement in the fundamental utility of play Huizinga and Caillois are both in agreement that play must be voluntary lest it lose its appeal. In the same way, ludic interventions within the built environment must provide people with an element of choice. Forced interactions and activities only embitter people and in large quantities have the possibility of negatively affecting mental health. In play, people can achieve a degree of concentration and spontaneity that exceeds their regular behaviour. They can view the world from unique and different vantage points, which can often become the foundations for artistic expression.

The formal characteristics of play are described as a free activity, which is quite consciously outside 'ordinary' life. Although the act is not serious, it can truly absorb the player and provide a thrilling sense of immersion. It promotes the formation of social groupings, which tend to surround themselves in secrecy, stressing the difference between themselves and the common world through disguise and other means[15].

Educators and people immersed within the field of pedagogy have recognized the value of play since the time of Plato. Play is intrinsically linked with creativity. It embodies a release from the stress of work, providing opportunities for activities that are self-motivated and test physical and mental capabilities; mathematicians play with numbers and artists play with form. These are each creative expressions of educational value.

The Finnish education system has been undergoing reform in recent years, during which the conventional concepts of classrooms and set subjects have been scratched and a more integrated- one might say- more playful way of learning has been introduced. In todays changing world, Finnish schools

*13 Sutton-Smith (2001) pp.1*
*14 Huizinga, J. (1955). pp. 1*
*15 Huizinga, J. (1955). pp. 13*

are reshaping comprehensive schools in a sustainable and open-minded way with wellbeing and engagement learning being a central factor. Students are now encouraged to pursue their personal interests and talents through integrated courses of overlapping subjects, applying vast amounts of experimentation and in-depth study of any single subject over the course of the school year. In addition to this, state exams and homework are reduced to an absolute bare minimum, allowing children the opportunity to learn in a stress free, relaxed environment with play and experimentation at its core.

As if this wasn't enough, there have been yet more operational methods launched in the past decade such as the 'Finnish Schools on the Move' project. Since its launch in 2010, more than 70% of all Finnish schoolchildren have been reached by the project according to the Ministry of Education and Culture. The method promotes sitting less during lessons and introducing more PE classes, encourages learning through being active during other classes[16].

The use of play in an educational context stimulates new ways of structuring thought. Most logical, rational, problem solving approaches to a situation involve vertical thinking, wherein the solution is derived after building a sequence of irrefutable steps. The solution arrived at will not necessarily be wrong, but it may not be the best one possible. Play does not require logical, rational thought processes. Instead, it welcomes different ways of establishing relationships between objects or ideas and thrives on sequences of events which are outside of the box and unconventional. Play frequently utilizes lateral thinking, which is based on generating ideas rather than proving answers[17]. Lateral thinking does not require a step-by-step approach, it allows jumps in logic and can even begin at the solution and work backwards. Lateral thinking is a creative aide to the vertical, logical approach to thought and is a way of thinking that can be developed primarily through play.

Psychoanalytic and developmental theories of play tend to examine play behaviour independently of where it takes place. Ecological psychology, however, is concerned with the role of the environment in fostering play and is therefore of great interest in terms of this thesis. By understanding what kinds of environments make people more disposed to play, we can

*16 Liikkuva Koulu (2016)*
*17 DeBono, E. (1971) pp. 8*



better design urban interventions that will engage people and help nurture a playful atmosphere. Ecological psychologists investigate the properties of the environment that can enable certain kinds of behaviour to occur[18]. According to psychoanalysts, play settings that possess similar qualities will provoke similar play responses from different people, hereby indicating that there is a direct correlation between local environmental factors, a person's propensity to play, and the type of play likely to happen. Studies by Gump and Sutton-Smith illustrate how the same children had very different responses to play opportunities, depending on the setting[19]. Although the benefits of understanding the influence of environment on play would greatly help designers in the long term, at this time there are no more than a few studies, which add much relevance beyond laboratory sketching.

It is also important to remember that the environmental factors which influence play are only one variable in a form of behaviour that also depends on the physiological and mental state of an individual and are therefore almost universally subjective. This means that it becomes even more difficult to give a qualitative definition of what the ideal playful environment is. Nonetheless, there are two prominent theories in ecological psychology that link play and environment in ways that are of particular note in relation to this thesis. These are the theory of affordances and the theory of optimal arousal.

Ecological psychologist James J. Gibson from the verb 'to afford' coined the term 'affordance'. An affordance is what the environment offers, what it provides or furnishes for the people or animals who live there. For example, when we see a practically flat and horizontal surface, an assessment of how rigid, flat sufficiently extended and height from the ground can dictate to us where it is a suitable seat, table surface or shelf. This analysis is instantaneous and occurs within a fraction of a second within the human brain. The properties of the surface described can be measured in standard units of physics, but whether a person can actually sit on it depends on his relationship with the object. A horizontal surface two hundred millimetres off the ground may afford sitting for a small child but it affords kneeling stepping for an adult. Gibson argues that the composition and arrangement of surfaces establish what activities they afford. In this case, to ability to perceive objects is to perceive what they

*18 Turvey and Shaw (1979) pp. 199*
*19 Levy (1978) pp. 127*

afford. This implies that ‘values’ and ‘meanings’ of things in the environment can be directly perceived[20]. Affordances are therefore simultaneously both objective and subjective.

One way to analyse the environment in terms of fostering play, therefore, is to seek out elements that will offer play as well as satisfying their primary or functional purpose, creating a multifaceted experience. A delivery chute not only affords easy transfer of packages, but may provide a child with an entryway or new form of access. Similarly, a window with a deep sill affords light, view, and a place to store or rest inanimate objects. Yet, it could also afford associations with a person’s youth, provide a playful cubby or contemplative seat for a person. Such associations could evoke any number of responses, but a designer might seek out which physical elements or spatial configurations have pleasant or playful associations for the users of a particular place. The functional purpose of both the delivery chute and the deep window are available to all, but special affordances are available to people of different sizes or who attach different meanings to the elements.

The theory of optimal arousal adds additional insight to play by formulating the premise that man’s responses to his environment are not always rooted in some biological need; he seeks stimulation for the sake of stimulation. According to M. R. Leary and his co-authors, boredom “occurs only as a result of attending to stimuli that are not intrinsically captivating, and the level of boredom experienced should be a direct function of the cognitive effort required to sustain focused attention on the stimulus.”[21] The optimal arousal theory postulates that each individual functions most satisfactorily with a given amount of stimulus.

According to research into the causes and effects of boredom in humans, if a person is in a state of relatively low arousal and environmental dissatisfaction or discomfort and attributes it to something other than an inadequately stimulating situation, we would say it is not boredom. For example, a given person suffering from a bout of depression might be in a state of relatively low arousal and environmental dissatisfaction, which is attributed to aversive events that have happened to him or to negative opinions of himself and his abilities and low self-esteem.[22] When we talk about a

*20 Gibson (2014) pp. 127*
*21 Leary (1986) pp. 968*
*22 Mikulas and Vodanovich (1993), pp. 6*



“situation” we mean both the external and internal perceived worlds. As such, how stimulating a situation is depends only partly on external complexity and becomes an almost completely subjective thing once you consider a person’s internal perception of it. By thinking and fantasizing, a person can alter the complexity of a situation. It becomes very possible to convert an experience of boredom into an interesting set of mental dynamics by taking an active interest in your experience and your internal processes without too much external stimulation from the local environment.

In the consideration of the optimal arousal theory the amount of stimulus varies for each individual, but there are different norms for various cultures and physical settings. People gravitate towards their optimal level of stimulus by editing stimuli in over-stimulated environments or magnifying it in under-stimulated ones. The subway commuter blocks out tremendous noise, smell, visual, and tactile stimuli through daydreaming, gazing fixedly at his mobile phone or tablet, listening to music on a handheld device or reading. In general, urban environments produce increasing amounts of stimulus, in particular visual and auditory ones. The sounds of nature provide meaningful stimulus to forest animals but have far less instinctive impact on people who are accustomed to the constant hum of traffic.

As mentioned in the introduction to this thesis, the contemporary city is hyper-connected, hyper-stimulating, over populated, divided, polluted and socially active. Although the long-term consequences of persistent exposure to a high-stimulus environment are hitherto unknown, there are indications that when people have the opportunity to select their surroundings, they generally seek out higher stimulus environments as opposed to silence. Many people flock to shopping centres, bars, nightclubs, theme parks, and concerts as opposed to pursuing more sedate activities such as reading or strolling in their free time. In modern society there is even a tendency to remain stimulated in bed or during relaxation periods by screens and monitors. The genesis of social media, the YouTube and “Netflix ‘n’ Chill” cultures has meant that people rarely disconnect from external stimuli at all!

The implications of this for architecture are clear. A look at LeCorbusier’s houses at Pessac before and after the modifications by inhabitants indicates that people sought a higher level of stimulation than the International Style

provided. Although ecological psychologists believe that play behaviour is motivated by the need to elevate stimulus in under-stimulated environments, this should not be construed as a call for banality in order to advance play. While some people may respond to low-stimulus by playing, boredom, dissatisfaction or violence are other potential responses. For instance, most prisons are places where the physical environment offers very little stimulus to its inhabitants, yet these places would hardly be considered playful.

What then are the types of stimulation that can move man to play? Psychologists most frequently include simple intensity, meaningfulness, variation, novelty, complexity, surprise, and strangeness. These also happen to be most of the same qualities that elevate architecture to an art.

Each of the theories of play discussed present relevant and worthwhile points of departure for exploring how an architect or urban designer can approach the subject. The multifaceted properties of play are not possible to quantify in empirical data collection. This is because measuring the subjective and intangible perceptions of it is not possible. The fact that play is free yet controlled, clowning yet contemplative, gregarious and yet solitary isn't revealed by such analyses. The essence of play is that no matter how serious or intense it may be, it has a joyful mood and a consciousness of fantasy. Defining the behaviour should not lose the essence of this. Some of these theories, especially those of ecological psychology, provide insights as to how play might be defined from the viewpoint of a designer interested in fostering it in the built environment. Other clues will come from looking at the physical domains in which various play activities take place and analysing specific characteristics of play behaviour.

### *2.2 Territories of Play*

The realm of activities, which is usually called play, falls into two broad domains. The first is conscious play, frequently associated with organized recreation, physical exercise, and sports. The second is unconscious play, often associated with fantasy. Since all play takes place within some sort of boundaries in time and space, it is possible to look at the physical requirements of various play activities. The conditions beneficial to these activities will provide insights for developing a definition of play for the designer:



What kind of play do they want to afford in the space they design? How intense do they want this play to be? How many people do they want to be playing at once? Do they want to foster solitary play or social interaction?

Conscious play is the result of an intentional decision by a person to play. Many forms of physical exercise, cultural, social, and spiritual activities are forms of conscious play. Most (but not all) of these activities take place in set play spaces. Organized sporting events usually have well-defined arenas for example. Games of chance or strategy take place around game boards or gaming tables.

Rituals and feasts are all cultural displays of play whose validity frequently relies on a very particular setting, such as street festivals, dinner parties or colourful parades. The arts are also forms of play that often depend on special amenities. Although street art, sculptures, street performance and architectural influence graces the urban realm with examples of playful creativity, theatres, museums, and concert halls are where art traditionally flourishes without abandon or law enforcement intervention.

In order for children and other people to play with the world in a physical way, they must be part of that world as opposed to a segregated zone with a rope swing because Funktionslust and physical aspects of much play do not occur in a prescribed context, despite what regular town and city planning norms dictate. A playground that is supposedly designed for high-energy activities, running, jumping and climbing cannot possibly fully satisfy the need for spontaneous play because it is not integrated into the children's' real life world. Well-designed playgrounds can provide interactive experiences for children, but the environment, as a whole, should offer opportunities for exploratory, manipulative play.

Unconscious play behaviour is the realm of imagination, daydreams, and reverie. It can be described as the state of mind somebody adopts when they are absent-mindedly doodling on a scrap of paper or gazing off unseeingly into the distance whilst sat at a school desk. Once considered an evil tendency of the mind, fantasy is now considered an important process where the individual's desire takes precedence. It is science that tells us that the earth's rotation causes the sun to rise and set each day. If such a fact is unknown or ignored, we might say – for example - that the sun 'went to bed'. To poets and children, a sunset is not a scientific reality so

much as an event that allows them to propose an explanation, which is a fusion of their own experience and creativity.

Although unconscious play does not require a specific location, it can be provoked by the surroundings. Fantasy and daydreams are the fertilizer for creative, innovative growth where man relives his past and builds entire new worlds and plans a foreseeable future out of his imagination – essentially from nothing. As such, they need nourishment. When the environment presents hints which recall our past or an entity stored in the library of our mind, our psyche is prone to make new combinations of these discrete elements, thereby creating a new perceived reality from a few individual parts. For example, the Gherkin in London has a curvaceous bulb patterned with twisting graduated glass scales, which conjure in our minds a reptilian creature or an extra-terrestrial space vessel. The King Power MahaNakhon in Bankok has geometric cut outs in its facade reminiscent of a crumbling structure in a dystopian future, rocky landscape or great staircase. We can imagine scaling, leaping, and occupying its surfaces and dangling off of ledges elevated hundreds of meters above the ground. The myriad rhythms, forms, and distinctive elements of the Gherkin or the King Power can elicit more fantasies than the faceless mass of say London's Citi Tower.

Yet maximizing stimulus is not the only mechanism that affords unconscious play. Fantasy can also thrive in contemplative, meditative environments. These places are often charged with personal meaning be it through furnishing or triggered memories; our homes, our rooms, the memorabilia and places of our past are fertile areas for fantasy and daydreams. The essence of the world we create in these daydreams is associated with the meanings we find in our surroundings. For example, Gaston Bachelard writes of the daydreams of the garret, which are clear and rational, with a roof providing shelter and relating the sky view to the earth below, while daydreams of the cellar are dark, earthly, and in harmony with the irrational[23].

He also goes on to state that:
"...every corner in a house, every angle in a room, every inch of secluded space in which we like to hide, or withdraw into ourselves, is a symbol of solitude for the imagination..."[24]

Contemplative environments are often very personal and often

*23 Bachelard, (1969) pp.17*
*24 Ibid. pp. 136*



the experience from one person to the next is completely unique. However, all can understand the intensity of the experience and the way in which a person can relate to the space or contemplative element. For example, the earthy weight, human scale and rich presence of natural form present in Timo and Tuomo Suomalainen's Temppeliaukio church in Helsinki have a clarity and universality that invite contemplation. The same goes for the same goes for say the sculptures and peaceful gardens of the Rodin Museum in Paris. We do not see these as high or low stimulus environments, rather they provide a untainted provocation of the mind, simultaneously putting us at rest whilst inspiring imagination, emotion and allowing us to transcend our physical surroundings.

As was noted in the review of theories of play, there are several characteristics of play behaviour, which are actually common in almost any and all realms of play. Though they are not all conditions for play, any number of them may occur simultaneously thanks to the highly Technicolor and multidimensional nature of play behaviour.

Play is voluntary. As long as a player is allowed to work under his own steam and behave independently of instruction or task, it will be totally absorbing. The play can entail intense levels concentration or can be completely casual with minimal effort imparted on the psyche. It can also occur for extended periods of time or be suspended momentarily. External pressures or instruction immediately negate the play, creating something that the individual is now required to do. This can no longer be considered play: at least not in its purest form.

The voluntary nature of play, its rules, boundaries, and aura of secrecy all serve to put the player in a position of control. The player is the sole arbiter of whether they play or not, where they play, how and gives value to their play by allowing the air of secrecy to remain around it. Secondly, gaining control through play is possible by dominating the immediate environment by physically taking up space in such a way that the player achieves a superior position in relation to their surroundings. The child sitting atop the playground monkey bars gleefully screeching "king-of-the-castle" and the free solo wall climber both seek to gain self-esteem by conquering something which is much bigger than their humanity.

However, miniaturising the world around us is another means

of dominating. Immersing ourselves into an environment in which the physical elements with which we interact are much smaller than we are allows us to have a relationship with the world in which we feel a greater sense of power and autonomy. Playing with miniature train sets, dollhouses or even visiting Legoland™ and strolling through the miniature reproductions of real life buildings and even whole cities allows us to explore the world in our minds eye whilst remaining based in its reality, giving these things a magical quality. We can be totally enthralled by the small bits and parts, but all the while being able to understand and perceive the whole. In children's play, elements that are present in the adult world are often simplified and made miniature; replicas of adult environments. This allows the child to both freely explore their world whilst controlling the events that occur within it.

As previously mentioned, voluntary play ensues during generally unplanned conditions and within fixed boundaries of time and space. However, when we talk about fantasy and daydreams, it is safe to say that the physical need not correspond to this kind of invisible play. This kind of unconscious, seemingly invisible play that occurs within the minds eye itself is sometimes called passive play. The mind and psychical aspects of play are not defined by any reality or physical boundaries, as is the case with sports games, TV or theatre to which these boundaries are an integral part. These kinds of physical boundaries also play a large part in other forms of play. A good example of this is the playground: this is a fenced off area in which the act of play is confined specifically to this location for the purpose of safety, but also, in some ways, creates a societal structure, demarcating a specific time and location in which it is suitable and acceptable to climb, run, jump, scream and swing. The park allocates a temporary physical realm dedicated to the performance of an act.

But the act of playing itself, rather than its overall outcome, is a prime element in the satisfaction that is gained from it. The Funktionslust or functional pleasure of reaching the outcome or close of the play session is something that remains a critical aspect of the central goals of play activities. Whether you are splashing water or solving a puzzle, the act of doing this is initially not fully conscious and tends not to have its inception in a conscious decision to begin. However, over the course of the activity, the player becomes more aware of the nature of his actions. This



can often lead to a choice: you may realise that aimlessly splashing water around is actually quite a silly thing to do, and therefore stop or realise the same thing and continue regardless. The outcome of this subliminally posed choice is very often determined by the situation in which the activity is occurring, who is around, who is involved and whether or not it is deemed "appropriate". On the other hand, if the player were to continue splashing water around despite all of the present constraints, he enjoys this certain amount of choice, a lack of constraint from conventional ways of handling objects, and a freedom of movement. Sometimes, breaking off the shackles of the norm and acting in ways that are harmlessly inappropriate can deliver a huge sense of relief, freedom and self-expression, adding to the overall "fun-ness" of the activity and stimulating a hugely positive cognitive response through the release of endorphins.

Freedom of movement is a vital quality of physical play. We have basic movements that we, as humans, make everyday such as walking, lifting our arms, stretching… but the idea of freedom of movement means that we willingly complicate these movements in order to make the most of positive feelings within our selves and our physical bodies. It is the idea of holistically incorporating our mental state into our physical being and expressing ourselves through our extremities. Our bodies undergo a subconscious struggle against gravity as we preserve our equilibrium; as we stand upright, sit at a desk, walk and run. It is not uncommon for a child who has learnt to walk and become confident in their equilibrium to begin complicating the matter by balancing on beams, fallen trees and curbs. In a sense, through freedom of expression, we gain an experimental knowledge of how the universe works and understand our place in it. We also look to find ourselves through our self-expression and out of these serious efforts to challenge motor control come later play such as hopscotch, skipping rope, and dancing.

Through play, we also seek to find an image of ourselves in relation to the world around us. Consider the simplicity of a child climbing into a cardboard box. He not only learns about the box itself- its materiality, the texture of it, the way it smells and bends – but also learns about his relation to the box – his own size and they way he fits inside. Perhaps a more adult version of this kind of learning through play is the simple game of avoiding cracks in the pavement. Depending on the size of the paving slabs, the game can be easy or difficult and will change according to the person's

gate, walking pace and how seriously he takes the game. In participating in this game, the person complicates his rhythms, not only becoming aware of his movements, but also becoming momentarily one with – in tune with - the surface of the pavement. Physical play is a constantly evolving action throughout the human lifespan and continuously involved with how one measures themselves against the dimensional properties of their environment. As a result, miniaturisation is enjoyable not only for the sense of physical domination it provides, but also for the playful scale juxtaposition it allows.

The exploration of body image through play leads to the characteristics of play chiefly associated with symbolic play and fantasy. By suspending reality, one can lose the real self by temporarily giving credence to and accepting an imagined role or fictional self. Within the context of fantasy and make-believe, children can spend hours switching gender roles or even their gender altogether for the purpose of playing the game, societal status, inventing scenarios and dramatizing a real life response to a fictional world. This allows the opportunity to test their abilities, to respond to other people and the environment in unpredictable, personal ways.

In our search for personal understanding, the pursuit of vertigo or attempt to momentarily challenge the physical stability of perception becomes another part of play that also induces a welcome sense of panic, fear and adrenaline rush. This panic is introduced to an otherwise entirely lucid mind and can be relatively attractive to those seeking to touch the boundaries between life, death, hypotheticals and reality. This is the realm of play that the so-called "adrenaline junkie" pursues. But base-jumping, bungee jumping, free-solo rock climbing and other extreme sports are all related play movements just the same as roller coasters, sliding, spinning, and hanging upside down. It is toeing the fine line between safety and danger and the idea of conquering something larger than yourself through freedom of movement and lack of physical constriction that makes this play – albeit extreme versions of it.

Being able to physically manipulate and alter our surroundings is a notable part of some play styles. Although we speak of play as an exploration and a search for understanding and knowledge, it is not in the send of uncovering unchartered territories. Moreover, it is quite often the process of



manipulating a known object in new and interesting ways and discovering novel ways of applying function to pre-existing form. It is the idea of looking at a clay brick and giving it new uses; it could be a hat, or a pet, or a tool or even a swimming pool for a small doll; become a toy skyscraper or Ayres Rock.

In this vein of play, the phrase 'what if' indicates the beginning of symbolic play. In symbolic play, unpleasant reality is altered and replaced with an imagined situation in which the player's needs are gratified and met. In suspended reality, inanimate objects can become alive and new functions or form can be given to an existing entity. For example, when one cloud gazes, one is able to recognise relatable forms in the essentially shapeless appearances of the clouds. As such, life is given to lifeless objects through the imagination. Self-expression is sought after in the new reality. However, it is this kind of symbolic play state of mind that allows us to be open to illusion and accept fictional presentations as actual. This is also the true whether the cases of mental presentation are concerned with genuine memory pictures or simply some psychological content worked up for the occasion[25]. When a fever patient has a vision of something or someone bodily before them as he lies helplessly in bed, we identify this as a figment of the imagination, just as when or if he sees otherworldly things or visions of fairy-tale creatures. The primary feature, which determines whether the illusion appears as a dream, delirium or other such substitute for reality, or as a result of conscious self-deception[26]. The latter is the case within play and art, where the innate understanding that the illusion is a production from the conscious mind prevents the true substitution of reality. We remain totally engrained in reality whilst accepting the temporary fantasy.

Magic shows and visual trickery entertain and inspire us because it is bridging the gap between the impossible and reality, but also creates a game within the mind in which the viewer seeks to understand what he or she is seeing. Additionally, playful illusion may serve as a means of recreating the past. Building air castles is one of the most basic forms of constructive imagination and illusion. It mostly manifests itself as voluntary construction of playful and joyful images of the self or friends and relations set within rich and prosperous surroundings. Karl Groos gives

*25 Groos, pp. 135*
*26 Ibid.*

the example of a child who has enjoyed a new kind of treat at a birthday party. He states that by observing the future plays of this child, we can get an understanding of how they will remember and repeat the event. Sometimes, the details of how the treat was received and what it consisted of may be repeated in play just as it occurred in real life, according to the memory of the child. In other play combinations it may be altered and even turned into a joke. Such an image is a double illusion that both acknowledges the reality of the castle and manifests an implicit trust that the future will verify present hopes[27]. The value of this kind of play for making life worth living is very much evident in the fact that it veils the unpleasantness of everyday existence with this double illusion.

A final characteristic of play, and perhaps the element that I believe is of utmost importance when addressing design strategies to better mental health, is its humorous quality. Humour allows us to temporarily suspend misery. In the documentary series "Dark Comedy" by Larry Charles, premiered on Netflix earlier this year, it was shown that humour can be found very much in the darkest of places and helps humans to find relief from the horrendous daily turmoil of their existence. Positive psychology (the study of what people do well) notes that humour is not only useful for coping with the harshness of reality, but also helps buffer everyday stress, imbues positive feelings of well-being and allows people to gain intimacy amongst one another. In the technological age and the social media era, intimacy between humans and meaningful social interaction has become less common, much to the detriment of public mental health. By using humour, things that scare us and elements of society that cause us psychological and physical harm can be addressed and aired to the masses. It also brings people – strangers - closer together by allowing them to share a positive and spontaneous experience that is based entirely on a single moment of common mirth. We can find light-heartedness even in areas that seem not to have the slightest funniness to them. Humour has the ability to diffuse any subject that can be considered taboo, within the correct circumstances. All of these aspects of humour combined together help us forge connections to the world and provide meaning to life

Adults with a good sense of humour can see the world through a different lens. In this way, they are able to appreciate the ironies and absurdities in the world in which we live.

*27 Groos pp.136*



However, it is the ability to share this view effectively with others that allows their sense of humour to be perceived. The ability to appreciate humour is also important and bares a relationship to other positive qualities such as a love of learning, perceptivity and understanding and wisdom. Activities that encourage humour and humorous behaviour bring about feelings of optimism and sensations associated with overall emotional wellbeing.

Humour allows people to learn respect through laughter. In a time where respect for our fellow man is at an all-time high within western society, being able to appreciate our differences through humour is an incredibly useful way of creating solid ties between individuals. Experimental psychologists are revaluating our understanding of humour as they begin to prove its significance in our daily lives, how it impacts our mental processes and enforces our character strengths. As the joke goes, how many psychologists does it take to change a light bulb? Just one, but it has to want to change. Allowing humour to be a part of the everyday and deepening our understanding of it from a psychological perspective enables us to better engage with the theoretical processes involved with subjective wellbeing, intuition, reasoning, wisdom, time perspective and memory. The study of the behaviour helps us to better explain, appreciate and essentially predict how humour is perceived across the spectrum of the human race. By researching how people relate to humour, we can transcend the boundaries of age, gender, identity and culture and help create a more positive and cohesive urban environment fuelled by mutual understanding and tolerance.

There may not be a general and universal consensus on what is humorous/funny and what is not, it is very clear, even among those in the community of psychological and social sciences, that humour is extremely relevant to the science of behaviour and mental health. It is for this reason that it is something to be seriously considered when designing for public wellbeing and creating positive and uplifting environments

### *2.3 The Definition*

The topics discussed in this past chapter – various play theories, play territories and the characteristics of play behaviour provide us with a number of insights into how we may be able to come up with a general definition for play, that will help to establish the framework for the proceeding chapters of this book.

By highlighting our version of the definition of play, we can begin to evaluate how certain factors and elements within the urban realm open up the board to spontaneous play and help to create the playable and playful city.

**PLAY IS THE ACT OF SUSPENDING THE WORLD AROUND US BY FABRICATING ANOTHER WORLD IN WHICH WE DRAW A FRESH OUTLOOK AND PERCEPTION OF OUR REALITY AND THE ENVIRONMENT THROUGH HUMOUR.**
**WE ARE DRAWN TO THIS PARALLEL WORLD BECAUSE OF THE DELIGHT THAT IT AFFORDS AND BECOME THE ARBITOR OF WHAT HAPPENS IN IT AND HOW. WE GUIDE THE COURSE OF EVENTS TO SUIT OUR PLEASURE AND DELIGHT. MOST IMPORTANTLY, PLAYFULNESS IS A WAY IN WHICH WE ARE ABLE TO ENGAGE WITH HUMOUR; EXPRESS OUR SENSE OF HUMOUR, INTERACT IN HUMOUROUS WAYS AND ALLOW OTHER PEOPLE'S HUMOUR TO POSITIVELY AFFECT OUR PHYCHOLOGICAL STATE.**
**IN PLAY, WE SUBJECTIVELY REACT TO OUR SURROUNDINGS AND ALONSIDE HUMOUR, ARE ALLOWED TO SEE THINGS IN DIFFERENT WAYS AND ARE GIVEN THE FREEDOM TO BE CREATIVE AND INNOVATE. IN THIS WAY IT IS POSSIBLE TO ATTACH NEW MEANINGS TO OUR ENVIRONMENT. HUMOUR ALLOWS US TO BETTER UNDERSTAND THE WORLD AROUND US, BREEDING HOLLISTIC TOLERANCE AND SYMPATHY BETWEEN PEOPLE, BRIDGING GAPS BETWEEN FRIENDS AND STRANGERS AND ENGAGING THE BRAIN TO PROVIDE THE PLAYER WITH AN OVERALL SENSE OF WELLBEING AND MENTAL STABILITY.**



## 3 HAVE A SENSE OF HUMOUR!

A playful state of mind is one that is open to humour. Fry refers to this particular state of mind as the 'play frame'[28] in his 1963 book 'Sweet Madness: A Study of Humor'. It therefore follows that playful activities often lead to or consist of humorous events. In the book 'Reversal theory: Motivation, emotion and personality' written by Apter, the author writes about the concept of motivational states and goes on to introduce us to the idea of the 'paraletic' state of mind, which is defined as being inclined to being playful. This contrasts and balances the serious, more task-oriented state of mind[29]. Although it can be considered as the direct opposite to the humorous, the task-oriented state of mind can also appreciate humour as long as it remains based within the boundaries of the given task and able to relieve tensions. It can also be appreciated as long as the humorous 'surprise' is presented in a non-threatening way.

### *3.1 Humour in everyday life*

Play is a means of refreshing and reinvigorating the human spirit and physical stasis. It refreshes our ability to realize the activities and employment that makes society function. By all accounts, this is worthy reason for allowing play to play a more dominant role in our lives.
I would like to investigate for a moment the way in which humour can influence prospective playable cities. In today's world, the efficiency of social interactions through digital devices and the platforms and environments that they host is prioritised, more so even than showing interest in task-related efficiency. Although in theory, the idea of this is to bring people closer together and hyper-actively connect people at the tap of a touch screen, in effect it seems to

*28 Fry (1963)*
*29 Apter (1989)*

have the opposite result. Young people are slowly losing the ability to socialise on a face-to-face basis, society is being plagued with huge swathes of diagnoses of social anxiety, depression and other mental illness and overall, people seem to be losing touch with the world around them. Although the majority of people live in cities, it can be said that we don't feel the presence of all the people that surround us. We become isolated by the technologies that we are becoming slowly more reliant on and addicted to.
Humour plays an active role in our everyday lives, but with social online trends and migration towards universal digitisation, how much will this role change? It is my belief that humour has the potential to play an important role in counteracting this trend towards the human cyborg and entrenched loneliness. By studying humour theory and using the knowledge we gain from it, we can begin to develop environments that are able to analyse and understand humour, evolving with the social currents and facilitating humour to promote a humour-based cultural generation.

Affording humour within the urban realm decidedly will lead to unexpected, intriguing and funny events, which will help to bring people closer together and culture a greater sense of positivity and wellbeing within communities.

Humour research has its roots in ancient philosophy, supported later by later philosophers such as Schopenhauer and Kant but, more recently, psychology and cognition research specialists have become engrossed in the field, bringing with them a computational approach. These contemporary researchers aim to define algorithmic determinants to analyse humour and in doing so, introduced computational linguistics and human-computer interaction studies into the mix. Research concentrating on the linguistic traits of humour such as wordplay and verbal jokes were introduced in the last decades of the past century[30]. In the latter area of study, the aim was to investigate the potential role of humour in interpersonal encounters and to introduce humour through the use of social robots, smart devices and embodied conversational agents.

30 Raskin (2008)



However the functions of humour can be summarised into five main points according to Ziv[31]

1. Airing social taboos
2. Social criticism and satire
3. Consolidation of group membership
4. Defence against fear and anxiety
5. Intellectual play

As noted above, humour provides an outlet for the expression of taboo thought, especially those relating to sex and violence. Complete suppression of these natural needs and tendencies, is highly unrealistic and goes against the ideals of freedom, but they must be socially regulated. Primarily cognitive humour or intellectual humour temporarily alleviates the mind from the shackles of logical thinking. It provides us with a small break and an escape from the confines of reality and enables us to indulge in the creative and outlandish. Any psychological analysis relating to the human being and human functionality that annexes this most 'human' of functions- that ignores humour- is subject to being unbalanced.
"Play suggests not all human action seeks to be efficient or to serve one narrow instrumental purpose. The ways in which people experience the environment surrounding them are not merely instrumental; they are often exploratory, whimsical, unsystematic, and wasteful of energy. Hence there is no overriding normative reason for urban structure to always be legible or for city image to be fixed"[32]

### *3.2 Play → Fun → Humour*

Humour is a form of play. This has been common knowledge since the times of Aristotle, Kant and Thomas Aquinas. We can also say that we know this even without the help of these philosophers because we can feel the positive effects of it when we experience it, because it is fun and because fun typifies the essence of play[33]. With the apparent link and correlation that we can establish between the feelings experienced under the umbrella of all three terms, we may be able to also determine that fun actually also characterises as the essence of humour. Humour theory typically discusses jokes and conversational humour, however in a digitally

*31 Ziv (1984)*
*32 Stevens 2006, pp. 820*
*33 Huizinga, J. (1955) pp. 2-4*

enhanced world we can begin to start broadening our horizons of what is possible and what can be classed as humour and what kinds of interactions can actually spark or contain aspects of it. Indeed, humour can even be considered as an internal conversation between yourself and your body. It can be how you choose to move and expressed a relaxed and care-free whim in the presence of others or alone, for the sake of seeing the effect of an impact you may be causing on your surroundings. This perception of humour, however, is rather complex, intangible and has link primarily to whimsy and passive play, and is therefore difficult to study due to the subjectivity and personal nature of it. We can even think of embodied virtual agents (virtual humans) or physical social robots that engage in a humorous conversation with their human counterparts, owners or partners. This may sound like science fiction to some, but believe it or not, we are already living in a world where the iphone virtual help centre, Siri, or Amazon's Alexa can take part in conversations of banter and tease their human users. Otherwise, these kinds of virtual humans can appear on screens or devices throughout our present day environments and even on wearable items such as smart watches.

Face-to-face interaction is a subheading of humour under which the participants are partially reliant on non-verbal actions that will play a supporting role in the humour, such as facial expressions, gestures, posture exaggeration, mimicry etc. This subsection of humour deserves a mention because of how regularly we use it in our daily conversations and friendly interactions. Although we can embed conversational intelligence humour in the robots and smart agents we have the ability to employ today, I want to hone in on an even less explored area of humour research: the spontaneous, accidental or even the staged humorous events that can occur in the everyday comings and goings of life. Is it possible to embed this kind of spontaneous, staged or spontaneously manipulated humour into the design of our urban spaces? Can we afford humour in the public realm by harnessing the smartness of our urban environments? Can we even go as far as to suggest an even bigger step forwards, towards designing environments capable of some form of autonomy, where their adaptation or movements have the possibility of making a city more playable by generating humorous events and situations?



### *3.3 Techniques for Humour*

Humour researchers have tentatively introduced categories and typologies of humour, but they do not typically directly reference or relate to humour theories. However, we still need to observe these categories and identify how the may be able to enable humour. Typologies of humour techniques can be found in J. Morreall's 'Taking Laughter Seriously', A.A. Berger's 'An Anatomy of Humor' and M. Buijzen and P. Valkenburg's 'Developing a typology of humor in audiovisual media'. With the exception of 'Developing a typology of humor in audiovisual media' in which television media and commercial humour is discussed, these studies focus on the verbal humour techniques and jokes, in particular. Exceptions come primarily from academics that study live comedy stage shows, stand-up or humour in silent films[34] , where they mention techniques such as conceptual, slapstick and visual surprise. We could also highlight observational humour within this field. Within the visual arts such as film we can also include event sequences culminating in humorous situations within the plot or goings on in the movie as a humour technique.

In order for smart environments to be successfully humorous they must have a basis in incongruity and uniqueness whilst not being wholly dependant on language. Knowing and understanding humour typologies is useful, but it is even more useful to the designer to understand incongruity typology. Space does not allow us to truly delve in depth into describing these incongruity typologies. It cannot define for us how they can fit within the context of different art forms or media; how they may be framed, be worked into a script or choreographed on stage in such a way that they can be definitively pinpointed and categorised as a formal representation.

In Holland's 'Laughing: A Psychology of Humor', Wu's 'The laughter-eliciting Mechanism of Humor' and Nielsen's 'There's something about comedy theory' it is possible to find lists of possible incongruities. An example of particular relevance to us designers can be found in Yu and Nam's 'Let's Giggle! Design Principles for Humorous Products', in which they explore the idea of products being characterised by three dimensions: Appearance, Function, and Context of Use[35]. By means of using these subcategories, we are able to address each aspect when envisioning or designing for incongruity.

*34 Carroll (1996)*
*35 Yu and Nam (2014) pp. 275-284*

This gives us a guideline and various aspects to consider, giving us a choice of what kind of incongruity we would like to see within the environment: Would we like to see and incongruity in appearance, or perhaps in function or maybe we would like there to be an outlandish context of use? Likewise we can being to think about other ways in which we may introduce incongruities into space, creating events that play with bizarre or unconventional scale, peculiar interactions or even events that play with incongruity of time and place, dates and periods, festival traditions and types of participants.

### *3.4. Use of accidental and 'troll' humour within the urban realm*

Within the real world there are many situations in which we can encounter accidental humour and we can almost always recognise it and come up with example of it. However, we rarely consider accidental humour within electronic gaming environments, though considering it may come in extremely handy in our digitised modern world. Designers can likely harness this "new" kind of humour and create transcendent and unique humour events and experiences within the urban realm. So what is accidental humour in gaming? Gamers improvise new activities and fun within gaming words and interfaces, introducing humorous events by taking part in unusual game behaviour, exploiting bugs or by 'modding' or hacking the game environment. Otherwise, through online team playing and networking interfaces, players are able to communicate in real time, constructing group strategies and plans on ways of "trolling", "ganking" or teaming up and misleading opponents, or creatively exploiting the game's map in order to manufacture humorous situations. This can be seen regularly in games such as GTA V online in which players are able to talk online and plot activities with one other, be it racing one another naked up a treacherous digital mountainscape using dune buggies or throwing themselves out of apache helicopters whilst riding a jet ski.

By thinking about what we may be able to learn from humour in videogames, it becomes useful to view a smart urban environment as a kind of real life videogame, offering up opportunities for people to explore it in unusual ways, create humorous situations or an interface that can allow a digital mischief-maker freedoms that can be used to enter humorous situations. It also offers the option of designing



things such as digital or physical practical jokes that confuse, frustrate or amuse other players.

Just as in real life, we can have accidental humour in games (both videogames and real-world games) so we can therefore also assume that accidental humour appears in physical environments that have been digitally enhanced with smart systems. An example of this could be a person encountering a digital interface for the first time but being unable to get it working because it has an incongruous interaction technology or user interface.

### *3.5 Humour and Narrative*

Embedded narratives help us to give context to humour. We see this in examples of comedy such as sitcoms, stand-up, videogames and film. Generally speaking, when we think about generation of narrative sequences in the public urban environment, in which such sequences can be triggered, manipulated or designed in the environment. Triggers are activated by changes within the surroundings or by human subject interaction.

By contrast, in real-life scenarios (including modern day digitally enhanced scenarios) or in replications of real-life situation examples like in film, videogames or augmented reality simulations, it is also possible to have circumstances where there is concurrent play of two independent interpretations as opposed to a sequential play. However, it can be said that this concurrent form of play is also normally embedded within a predefined narrative.

We can take a look at 'prankvertising' in order to better understand this concept of the narrative and how it can enrich our experience of the urban realm. Although I am not the biggest advocate of capitalist and corporate oversaturation within our daily lives, this form of advertising is both innovative and creative. It has the potential to create positive as well as shocking or thought-provoking experiences, so it adds more to the lives of individuals than the usual, annoying, shallow and generic advertisement on billboards or onscreen popup windows. A particularly creative example can be found in the Adobe's Creative Day marketing stunt, in which they employed the use of a Photoshop artist to create humorous real-time photo edits of people as they waited at the bus stop. These edits were mirrored on the bus stop ad

billboard so that the 'victim' could see a work of art appear before his or her eyes in real-time. During the live session, the hashtag #CreativeDay was displayed over the work so that the participants could then follow the online conversations regarding the upcoming event.

More shocking or thought-provoking examples of guerrilla marketing schemes are also good examples of this, such as the British road-safety campaign #PubLooShocker - which acted as a horrifyingly shocking public service announcement to combat drink driving- or the Telekinetic Coffee Shop prank in New York City back in 2013, which was a means of publicising the upcoming release of the latest film remake of Stephen King's horror classic, Carrie. In all of these cases, the situations created enriched the experience of those who encounter them and use of such novel ideas to generate conversation can lead to making people more playful and allow cities to become more playable.

Undoubtedly, it is much easier for us to provide examples of staged humorous incongruities as opposed to spontaneous ones, but pushing forward the use of smart environments that incorporate the use of sensors and actuators may be something that can afford a more playful mind-set within the urban realm. There are some papers that discuss the use of primarily digital platforms in order to afford play and to create fully playable cities[36]. They suggest that only through city smartness and digital platforms can the city become truly playable. This may be true to a certain extent, given that the existence of the Internet and wireless communications allows us to have an almost four-dimensional or metaphysical experience of the world. It allows us to experience the environment in a new intangible realm. However, as we may know, digitisation and technology has become addictive to us as a species. It is therefore my aim, within this book, to pose the argument that it may be possible to develop the playful city and allow cities to be, to a certain extent, playable without having to rely one hundred percent on smartness and technology. Technology can help us to incorporate humour into our spaces, but it would be nice to be able to use it, in some cases, more moderately in order to enrich the playability and playfulness of our environment without dominating the more subtle details.

*36 See Nijholt, Cheok and Donoff*



# 4 FROM PLAYABLE TO PLAYFUL

## *4.1 The Power of Play*

Adult play is often vastly underrated and shunned, seen as a luxury enjoyed by those who have the time and money to afford to be able to actively engage in it. Indeed, it generally is not an activity that is undertaken through necessity, but more one that can be more spontaneously experienced and has been recently recognised as bearing an important role in adult health and wellbeing. Physical activity is one of the immediate things that come to mind when talking about adult play: be it team sports, hitting the local gym or playing a round of golf at the weekend. Essentially within the zeitgeist, adult play has a tendency to being reduced to little more than engaging in activities that require physical work, outside of the realm of the work environment. As such, The World Health Organisation (WHO) includes play as a component of physical activity. They state that the physical benefits of exercise include but are not limited to improving cardiorespiratory and muscular fitness, body mass, bone health and general function health, whilst decreasing the risks of type 2 diabetes, heart and lung diseases[37].

Aron comments that, "Americans have struggled with the notion of taking time off." Moreover we seem to display "a love/hate battle" with our holidays, simultaneously longing for them and fearing the financial implications[38]. According to the view of our puritanical ancestors, work and not play was crucial to success and a means of glorifying God and therefore play portends to challenge both our triumph and salvation. Perhaps only partly as a result of this, however, today we tend to use our leisure time in performance of various sorts of work, whether it's time at the wellness spa or at a yoga retreat rather than using it to play. Perhaps the fast-paced

*37 World Health Organization (2014)*
*38 Aron (1999)*

nature of our lives makes it increasingly difficult to shut off entirely, so we seek to remain in a semi-passive state of work. Or perhaps we tend not to play in our free time in favour of simply lying around and doing nothing because the act of play can even, at times, seem too much effort when we are so exhausted from working the daily grind.

In addition to the physical health benefits, there is a proven link between play and the benefits to mental health. In fact, play encourages health and wellbeing across the adult lifespan and it has even been suggested that the five steps to mental wellbeing described by the National Health Service in the UK can be achieved even solely through play. This can be proven by the fact that through play it is possible to learn, to be physically active, to give to others, take not of our surroundings and connect with the community. Adult play increases social wealth, interpersonal connectivity and community relationships, all of which are important components for bettering and sustaining good mental health[39]. It is also crucial for sustaining creativity.

The concept of play being good for mental and physical health is by no means a novel idea. However, it is currently still only in its infancy in terms of tangible output within the urban environment and is only just beginning to come in from the peripheries of the general outlook on urban design consideration. This is important because it is urban designers who ultimately shape our daily interactions and experiences within the public urban realm and help influence our quotidian movements.

Indeed, more than a quarter of a century ago, Kerr and Apter underlined how play can noticeably improve our mental wellbeing, aiding in the processes of learning, personal fulfilment, creativity and coping mechanisms[40]. More recently, Wilcox, Hoppes, and Graham recognise five recurring themes of the significance of play for the geriatric population: maintenance of mental and physical fitness, continuity of past interests, time perception and routine structure, good-spirited competition and a sense of belonging[41].

Sutton-Smith cites a series of Dutch video-game-based studies and claims that memory is vastly improved when adult play, that they become intellectually more proficient and

*39 Mahdjoubi & Spencer, 2015.*
*40 Kerr & Apter (1991) pp. 168-173*
*41 Hoppes, Wilcox and Graham (2001) pp. 57*



ultimately, they are psychologically benefited with increased levels of happiness.

Similarly, children can reportedly be seen displaying the same benefits. In reference to a domestic study at Temple University in Philadelphia, a comparison was drawn between two sets of children entering into the first grade. The first sample consisted of children who had a basic reading background or studious childhood and the second was made up of children who had a more traditional play-based upbringing. Those children who fell under the category of the first sample typically performed better academically at the start of the school year, but their success began to falter towards the latter half of the year. Sutton-Smith states that the students were much more depressed. He goes on to famously quote that "the opposite of play is not work. It's depression.[42]"

### *4.2 Let's chill out, please!*

Healthy scholarly debate surrounds the state of leisure time within the west with many believing that the amount of free time that people have has drastically decreased since the 1970s. This trend began to pivot towards its current state after having seen a steady increase in leisure time following the Industrial Revolution. This increase coincided with a shift from an industrial economy characterised by hourly wages to a service economy promoting salaries. However, a widespread cultural rejection of 1960s ideals in favour of a new kind of materialism and the globalization of corporate interest and competition has since been boring into the body of our free time. Some claim that we have no less free time than those who worked in the 1970s, but due to the hectic and fast-paced nature of our globalised systems, we have become intimidated and stressed by the speed of daily life, and this therefore gives us the impression that we have less.

Terr cites the most recent findings of the time-honored Terman study -when he makes the claims to the magazine Psychology Today- that adults who play appear to live longer than those who do not. The study was established in the 1920s by psychologist Lewis Terman at Stanford University with the aim of examining how the consequences of high intelligence and a variety of other psychological factors may affect the overall health and longevity of intellectually gifted children. In the sample tracked by the study, individuals

*42 Sutton-Smith (2001) pp. 198.*

still surviving at the start of the millennium were those who had played the most throughout their lives[43].

When it comes to adult play, it becomes more of an attitude as opposed to an action or behaviour in itself. Within children, play is about development, but it is not so much about that as it is about unbridled enjoyment and ease. Indeed, with this view of play, we can easily consider it an alternative cultural form not unlike music and art. G.H Loudon and his colleagues cite Deci and Ryan's 1985 study of 'intrinsic motivation and self determination in human behaviour' calling both 'non-related' and 'social – play' typologies "autonomous intrinsically motivated activity"[44]. This is to say that adults play spontaneously, simply because it is fun. Concepts of the Ludic City and Playful City have begun to emerge into the mainstream since the late 1990s and have created analytical studies and revolutionary movement in the field of play within our urban environments. Opinions on what should happen within a ludic or playful city and what a ludic city should look like differ in terms of play typology, design and intervention style. The greatest divergence is between technology implementation and more design-based architectural paradigms. Stevens stresses the unstructured and more spontaneous quality of the ludic cities concept, saying that:

*"Play suggests not all human action seeks to be efficient or to serve one narrow instrumental purpose. The ways in which people experience the environment surrounding them are not merely instrumental; they are often exploratory, whimsical, unsystematic, and wasteful of energy. Hence there is no overriding normative reason for urban structure to always be legible or for city image to be fixed.[45]"*

If we are able to take the initiative to find a means of slowing down our personal worlds, allowing us time between our busy schedules to appreciate the world around us, perhaps our society would benefit. It may well be that injecting play into the urban environment could give people the chance to falter in their hurried tracks, to stop and contemplate for a moment on their daily commute or between meeting. Even small interventions within the daily cycle of the norm will enable people to find some relief from the torment of daily western life and perhaps, with time, encourage a less pressured

*43 Psychology Today (2016)*
*44 Loudon, Deininger and Gordon (2012), pp. 94*
*45 Stevens (2006) pp. 820*



mindset. Perhaps, as urban designers, we can help nurture a more "chilled out" culture by designing that "hang on a second, let me check this out" moment.

### *4.3 The City and Mental Health*

Living in the city has both positives and negative effects on mental health. On the positives side of the argument, the city hosts a variety of economic, cultural and educational opportunities, which may be less accessible in smaller towns and rural environments. However, on the negative side, there are those who argue that living in the city can have adverse effects on mental health and wellbeing. The brain is being continuously very stimulated with a large number of interpersonal encounters and having to process a general sensory overload. Some researchers make the case that this is one of the root causes of mental health issues in the long term, although empirical evidence on this claim is still in the process of being researched.

More solidly founded research states that cities have a tendency of shedding protective factors that support mental health. These include green spaces and especially deeper social interaction. There is a common feeling among those who live in larger cities that although you tend to be surrounded by people, you end up feeling rather alone because you tend not to engage in many meaningful interactions with them. This is exacerbated by the fact that city inhabitants tend to have migrated from smaller communities, leaving behind families and friends and therefore need to construct new friendship networks in a less socially supportive environment. This invariably causes vulnerability to anxiety and depression. It may also cause a lack of a sense of identity and give people a feeling of insignificance and loneliness.

People thrive on curiosities, humour and charm; revelling in mental challenges and things that excite the imagination. Play does this at all ages. In particular, humour has shown great promise within the urban realm for affording playful interactions and stimulating playful emotional responses in people, even on the dreary daily commute.

Furthermore, research is investigating the "boringness" experienced in cities, which appears to point towards the fact that cities are becoming progressively aesthetically boring because they not only create a sense of enclosure

with limited views of the horizon, but also have continuous facades with little to nothing that draws the eye. This and sensory overstimulation are threaded together by the background perpetual humming of the hectic modern lifestyle. Primary discussions regarding mental health have a tendency of focusing on access to therapy and medication, or promoting physical activity to those who have depression as opposed to discussing the design of the city itself. Governments and city councils throughout the world spend plenty of time and money investing into urban design approaches to combat obesity, for example. Although this is immensely positive, there is a missed opportunity here; a concept that is left unaddressed, about how to incorporate mental health support into designs of those interventions. It has to be said that mental health is not a straightforward issue and there are complex and varied factors that influence them. The reasons for mental health disorders are subjective to the individual, but there are many stressors that are experienced. Nevertheless, there is a role to be played by urban design in preventing these disorders and perhaps even in helping to reduce the number of stressors in the environment. There is also a great role to be played in helping people already affected by mental health issues.

Play reveals what we choose to do, not what we have to do and is therefore an exercise in self-definition. As such, it follows that in order to aid the support of a more positive attitude towards adult play, we should ultimately aim towards achieving the “playable” or - better still- the “playful” city. By adopting this, we will be able to nurture a more spontaneous, healthier culture.

So, in terms of designing an urban environment for good mental health and, specifically if we are hoping to successfully attain the metric of the ‘playful city’, a solid foundation of base mental health must be put in place in order to sustain the future urban interventions that will improve elevate it. So what can urban planners do to promote mental health?
In this section I will highlight four primary spatial themes that should be integrated into the design of our urban environments to support mental wellbeing.

• **Social spaces** – These are spaces where spontaneous social interaction takes place. It’s a case of creating an urban environment into which people will choose to enter for other reasons other than to shop and run errands, but to talk, engage and play. Facilitating social space is a question of



adding social elements to the public square by, for example, setting up a domino park, large chessboards or adding more benches.

• **Green spaces** – research based in studying the connection between mental wellbeing and a connection to green space has been well documented. Studies into the benefits of biophilic design and how our need for a connection to the natural realm influences how we feel in a space has been going on since the days of Neutra, Frank Lloyd Wright and even before. There is a compelling relationship between green space and mental well-being, showing how, for example, visual connection to green and access to green space reduces anxiety. It even has the potential to reduce symptoms of ADHD in children. Incorporating green space into the environment means that it would be such that people encounter it in daily life without having to make a special effort to do so – it is the idea that you should even be able to see green space from your window at various points throughout the day.

• **Safe spaces** – This is a vital theme, whether it be in terms of crime, ease of navigation for those with degenerative mental illness such as dementia, physical health and safety, traffic etc. Designing safe urban spaces does not mean designing cold, clinical and sterile environments, but should be about creating freedom of choice within the space – having a choice about which route to take through it, be it fast or slow, safe or daring, high or low.

• **Active spaces** – In terms of designing for public health, this tends to become the primary focus of both designers and city governing bodies. Although it opens up a great opportunity for promoting physical wellbeing, there is also a convincing correlation to mental heath and an opportunity that is being missed. Regular exercise and cardiovascular stimulation increases serotonin levels within the brain as well as other hormones that can act the same way as some pharmaceutical antidepressant medications. As such, regular exercise can help alleviate symptoms of mild anxiety and depression. In order to harness such design, we can create pedestrian-friendly environments, walkable spaces and settings that may encourage mild exercise on the daily commute, for example.

### *4.4 The Concepts of the Ludic and/or Playable City*

"A Playable City is a city where people, hospitality and openness are key, enabling its residents and visitors to reconfigure and rewrite its services, places and stories.[46]" It was an idea that emerged some years ago in Bristol, UK, with the aim of 'making cities playable'. Initially, it was presented as a means of distinguishing smart cities from playable ones, where smart cities primarily focused on bettering city management by increasing functionality, efficiency and digital intelligence as opposed to human-digital play interactions. There was a call for researchers and digital media artists to propose projects for implementation within the streets of Bristol, where an emphasis creativity and playfulness was encouraged going forward, offering the urban environment a contrast to play through the use of advanced and novel information and communication technology. To some, there is a strong belief that a playable is dependant on the smart technology that is integrated in a smart city environment. This is to say that the use of actuators, displays, sensors, smart objects and digital wearables could and should be used to improve the efficiency of city management, but could also introduce a new and playful facet to urban life.

The idea of a "playable city" began to captivate the minds of activists and cities worldwide, posing a means of affording fresh perspectives on interpersonal connection, social cohesion and culture. Children "play in a neighbourhood park, night time walking or bicycling along a trail, or even sharing a co-working space with other start-ups constitute playable experiences that attract a large number of urban citizens to more cohesive and participatory environments.[47]" Another movement or study concept relating to playability and playfulness within the city takes us back to the concept of the Ludic City, which evades theories of digital smartness. It has its basis in analytical and design-based "understanding of contemporary play and games through the lens of architectural paradigms"[48].

Contemporary notions about The Ludic City contain links to the work of the Dutch architect and artist, N. Constant, and the Situationist movement, who praised playfulness and the ludic as a radically transformative and ground-breaking

*46 Playable City (2019)*
*47 Walz (2010) pp. 1*
*48 Ibid. pp. 1*



means of answering the very essential human desire for play, creative expression, exploration, adventure, and the freedom to determine the course or ones own life[49]. It also hearkens back to even more recent theories coined by the likes of Quentin Stevens in his 2007 publication entitled 'The Ludic City' and Steffen Walz's paper published in 2010 titled 'Toward a Ludic Architecture: The Space of Play and Games', which investigates game design theory and practice, notions of movement and rhythm and the kinetic nature of play alongside architectural theory and practice. It is important to note that the paper is not concerned with programming or more technologically inclined topics. Rather it "suggests a discourse of play and games as human practices in space, seeking to conceptually frame these pleasurable practices as architectural categories and places-to-play.[50]" Such publications that have come to light following the technological boom of the new millennium aid in reaffirming my personal belief and the argument that I primarily pose in this book, that it is indeed possible to afford and inspire playful culture and city playability without necessarily relying on technology and smartness, which ultimately tends to isolate, divide and un-socialise the younger generations. More recently still animated literature, studying parkour as a humorous and playful use of urban space, has shown yet more understanding and appreciation for the ludic. Examples of such papers include 'Playful urban spaces' written by De Souza & Hjorth in 2009 and 'Parkour: Creating loose spaces?' by Ameel & Tani published in 2012.

Overall, when it comes to both literary concepts of the playable and ludic cities, the basic assumption is that "some urban problems like loneliness, isolation, lack of liveliness, and social inactiveness should be addressed by communities"[51] and communal action. In this context, play or playfulness does not have to equate to the example of a pop-up surprise event, inconsequential experiment or include the installation of a temporary street-long slip-'n'-slide in Bristol city centre. Instead, urban citizens are encouraged to avoid daily routine and narrow horizons of functionality by being invited to connect to the environment in explorative ways and form individual responses to or group engagement with immersive activities that become part of the urban fabric itself. By affording this kind of humorous play, people learn to relate to others in an obliging, laidback

*49 Constant & Wigley, (1998)*
*50 Walz (2010) pp. 1*
*51 Saehoon Kim 2018 pp. 2*

and (sometimes) creative atmosphere.

### *4.5 The Creative City: What can we learn?*

As previously discussed in this work, play should be impulsive, free, joyful, humorous and open. In a city filled with sensors, systematic automation of interpersonal interaction, monitoring and control of activity, play becomes a new way in which we can take it back- recapture the city for ourselves. Explaining their objectives, the 'Playable' city movement stresses the need for connections to be formed in part by city infrastructure: that city infrastructure should be part of both person-to-city connections and person-to-person connections. In creating this seamless link between people and infrastructure, we can inspire the creation of spaces designed specifically for interactions to take place whilst allowing humour, play and joy to become guiding themes.

Having deliberated the concept of the playable city, benefits of play, humour and activity, I would like to address why and how the playable city is NOT an everyday experience, but moreover how it becomes a daily interaction that forms part of the city itself. However, how does this compare to the 1990s concept of the creative city – to Landry's creative city and Florida's creative class theory?

Copenhagen is a great example of a creative city. It has a government devoted to the implementation of creative and cultural strategies and host a number of exceedingly organized and inspiring projects. However, despite all of the positive elements that work in favour of it functioning successfully as a creative city, it is still not able to be one hundred per cent realized to the fullest of its potential and not able to achieve all goals. As a top-down initiative, it is challenged with the dilemma of how to afford an immersively creative environment

Conversely, bottom-up initiatives require, and indeed encourage, participation of the local community. As such, they are more sensitive to local issues and requirements. They also offer more possibilities of creating urban spaces that provide authenticity and a sense of identity, but they have the potential to lead to gentrification and commonly require public funding. This latter point can be said, particularly, in the case of the creative city, but could potentially be avoided within the context of play. However, the playful city concept being adopted into planning and policy will mean that certain constraints will become imposed



on these somewhat bottom-up approaches that the playable city adopts and also on especially satisfying and popular experiences, such as spontaneity and unexpected joy. If the public is not in support of the scheme, creative and cultural programmatic pockets with be confronted with many difficulties and will likely face challenges against future development of that particular area. The combination of a neglected historical inner city and active, driven, creative people has the potential to create an area that is full of identity and authenticity, opening itself to become a recognizable district within the city fabric. Much like architectural acupuncture, the development on cultural and creative initiatives is not necessarily planned, but can be rather emboldening to further investors whilst generated commercialisation is detrimental to it.

Conversely, public intervention can bring about a loss of vitality and authenticity. Top-down initiatives are able to provide the resources required to develop and organise revitalisation and creative-cultural projects, create a vision, local image and to encourage and support local community involvement. Like bottom-up initiatives, they can also lead to gentrification, but are instead dependent on a creative individuals and the community. In addition, the futures of these kinds of projects is reliant on their ability to evolve over time, to adapt and to creatively exist outside the box.

As previously mentioned, absorbing the playful city concept into policy will bring about particular constraints on the- to some extent- bottom-up approach utilized by the playable city. Nevertheless, In Lefebvre's 'The Production of Space', he states that social spaces are created by human social interaction. As such, appropriating the top-down playful city will create new and playful experiences. This is because those who will buy into it will be individuals who are able to interact with its ludic compositions. By being able to identify the city as a playful city, people will be coaxed into being humorous, establishing their own situations of self-expression and creating their own personal play environments.

At the beginning of the creative city movement, creative-cultural cluster strategies were a means of regenerating existing run down parts of the city. However, today, they have become a central focus and a general standard for city development throughout Europe. Although the implementation

of these strategies is generally seen in two extremes of either a one-stop solution to all social problems or as an elegantly concealed political and capital agenda bringing fresh needs and problems, in reality, the creative city is a conglomeration of complex phenomena and strategies with no single correct path or one solution. With the fast pace at which technology and the face of society is changing, implementing these strategies comes at a risk, with the potential of becoming obsolete, irrelevant and futile within the space of a couple of years. For this reason it is very clear that all technologies, resources and potential future outcomes must be considered before any solid implementation of a scheme.

Irrespective of whether the top-down or bottom-up approach is being used, implementation of an urban intervention will not succeed unless the community is involved, and unless an enabling environment is created by forming new, varied and straightforward networks, high quality spaces, authenticity of experience and unique identity for the area. The interventions should most likely also be publically funded in order to avoid corporate self-interest and create a sense of disenfranchisement, disillusionment and risk embittering the local community. Bottom-up stratagems should be considered first and foremost as creative initiatives and alongside their advantages. Indeed, we cannot write off wither approach, since we can very easily say that a balanced relation between top-down and bottom-up cultural and creative projects is actually the most likely way of creating successful implementation. However, in order for us to be able to say this with any certainty, there must be further exploration of this in the context of affording vitality, creative use of space, authenticity, inclusion and adaptability.

The creative city is not about creating economic growth and bettering employment statistics and touristic draws, affording square metres of living space, urban regeneration in and of itself or building new up-and-coming estates. Instead, it is a case of improving quality of life and creating a kind of legacy of creative thinking and identity for the area and future generations. It is with this kind of thinking that we should also approach the playful city.
As Bianchini outlines in 2004 at the Age of the City international symposium in Osaka, the three-tiered involvement of community, group and personal parties as well as creativity make up a vital part of urban-economic development through



cultural policy. As such spontaneously developed bottom-up projects provide the springboard of energy and authenticity that are required to kick-start a change, however it is essential to support them in a way that will permit further growth.

> *"Higgins's argument about play is especially important to the phenomenon, discussed earlier, of the danger of transforming cities more and more into theme parks. It would be more interesting and productive to try to, as Higgins suggests, recover a dimension of playfulness in cities, not primarily as an experience of consumption and carefully manufactured and staged commercial entertainment, but as a genuine expression of creativity, and as a process of education and rediscovery.[52]"*

By understanding where the creative city wins and fails, we can better determine how the playful and playable cities are likely to succeed. The "playable" city movement has already identified the importance of play within the modern city. It has also ascertained that it is, in most respects, a bottom-up initiative and also, that the city can be playable both through interpersonal social interaction and spatially. The shift from playable to playful appears to be more of a game of semantics or a linguistic differentiation as opposed to a significant difference in lifestyle and implementation. Nonetheless, it reveals certain realities in contemporary lifestyle etiquette and smart-city living. The first aspect is the continued use of existing security and safety measures in city infrastructure. One needs to be able to carefully plan for implementation of design interventions to come into fruition without creating an obstruction to the daily operations of the city, particularly when considering smart city interventions and inclusion of digital sensor and actuators as opposed to conventional play spaces. Nijholt discusses the inclusion of humour in digital environments as a community initiation[53]; even so, in order for seamless integration and continuous implementation of security to be achieved, the concept needs to become an integral part of city planning.

Another reality that needs to be addressed that is revealed by the playful city is being able to understand and acknowledge the limitations of play. As with the creative city concept, we must realise that there is no one-stop solution to fixing

*52 Bianchini (2004)*
*53 Nijholt 2015*

society and although play has the ability to better mental health, in the long term, this will not necessarily be enough to maintain overall wellbeing. It will only truly function with the combined implementation and maintenance of a variety of approaches and strategies. Whilst the playable city trials the notion of city as a playroom that improves the everyday experiences of city life, conversely, the playful city seeks to maintain the playful ideals cultivated by that playroom in the long term and for future generations. It seeks to answer the question of "why not look at the city as play in itself, not just a location for play?" It says that the city itself is play, and as such presents multifaceted concerns such as how we can newly interpret vague concepts such as spontaneity, humour, partaking or participation and even play itself. According to our definition of humour, which we established in an earlier chapter in this book, **"in play we subjectively react to our surroundings and alongside humour, are allowed to see things in different ways and are given the freedom to be creative and innovate.[54]"** Therefore, we can assume that both spontaneity and humour will be interpreted according to context and the participants' choosing. With these interpretations being subjective and user-defined, they will be enabled to seamlessly blend in alongside the tidal ebb and flow of the existing city flux.

I am not posing the creative vs playable city vs playful city, but more considering the notion of shifting the perception of the city as an enclosure in which play takes place to a place in which the populous is engaged in a continuous process of play and discovery; where it becomes a part of the psyche. As space is created through interaction or lack-there-of, any implemented play instigation, be it top-town or bottom-up, will propagate itself to become a continuous process through participation and the modification, adjustment, and interpretation of interactions.

### *4.6 From Playable/Ludic to Playful*

What is the difference between a playable and a playful city? Well in short, playable city is conducive to playful living, but playful city will be part of the living experience.
Our imaginations have the immense capacity to make our surroundings magical places. Through the power of the conscious and subconscious mind, it is possible to see and experience the same urban space in many different ways from

*54 See pp. 18 of this book*



day to day and to actually use them according to our moods, perceptions and the changing environment. As such, the urban realm can inspire playful behaviour, without overtly playful intent. Stevens notes how paths, intersections, boundaries, props and thresholds can command human behaviour[55]. This is reinforced by the idea that paths of unusual narrowness or width attract attention[56], for example. By observing the behavioural patterns of pedestrians, it was possible for Stevens to discern numerous opportunities for interaction. He was able to notice public connections without any obvious programmatic intent to encourage 'people [to] engage in simulative play not just as a display to others, but to test their own bodily skills, as an escape into fantasy, and even just for its own sake, for the pleasure of the bodily experience'[57]. From this observation we can gather that not only is the design of playful intervention important and necessary, but the way in which it is implemented is of equal importance

Design professionals and academic researchers alike are in agreement that it is not only possible, but also that opportunity to implement playful or ludic design is exceedingly abundant within the urban framework. Lefaivre and Döll propose the implementation of the 'play space' and provide the term as a means of representing the idea of a kind of mental freedom that supports autonomy and a form of liberty from everyday responsibility, convention and routine. They propose that it can symbolise an idea of self-determination and a deviation from the typical rulebook of society and a breakaway from the rules we subconsciously and consciously set ourselves in everyday life. They state that "play space is something ... for all ages and all places[58]" and call for "an inspiring alternative [to prescriptive infrastructure] that cultivates the potential of homo ludens in an urban context"[59].

Increasing play opportunity within the urban environment is an issue, which hosts a wide array of options and variables. Particularly since the early years of the millennium there has been some development in the realm of play and urban design and a variety of opinions have been published. In their book entitled Ground-up city: Play as a design tool, Lefaivre and Döll sponsor the concept of ludic elements

*55 Stevens (2006)*
*56 Lynch (1960)*
*57 Stevens (2004) pp. 145*
58 *Lefaivre & Döll, (2007) pp. 28*
*59 Ibid. pp. 28*

being linked through a play network. This kind of network seamlessly integrates opportunities for play within the urban structure (also known as "interstitial" play) or can support "polycentric" play, which activates spaces or gaps in urban planning, creating them into burning beacons demarcating opportunity for discovery[60]. Montgomery contributes to this by suggesting that designers can gain useful insights into designing playful urban spaces by studying principles of environmental psychology. For example, according to environmental psychology, loud unpredictable noises, deep shadows, darkness, dingy cul-de-sacs or alleyways and sharp edges are all things that are displeasing to us whereas soft edges, pleasant smells, novelty, pleasant music and gentle surprises are all enjoyable[61].

Infrastructural design implementation and city management tenders towards visionary ideas of bikeability and walkability of cities as the status quo. Also allowing the city to become age-friendly and accessible to people of all ages and abilities is an exceedingly popular and certainly positive step in the right direction to affording sociability and good mental health. Furthermore, the reduction of auto traffic within city centres allows for more programmatic development enabling more public usability and spontaneous social interaction without added stressors. It also benefits physical health by reducing pollution. However, despite providing all of these positive aspects, the approaches often focus very much on the quality of functional usability and convenience whilst completely foregoing ludic sensibility.

The walkable city is derived from the words "walk" and "usable". It means that the term holds significance in how functional and inviting the city is for pedestrians. Walkable cities achieve their status through the provision of a richly connected path network and affording safe and comfortable streets that allow people to cross them with ease. They also provide plenty of everyday spaces that people positively want to visit.

Without a doubt, by keeping to the definition, walkable cities do manage to make urban spaces safer and more accessible to pedestrians and cyclists by introducing cycle lanes, pedestrian zones, public bike storage and by installing more street furniture. They are successful in creating generally more convenient places to walk and cycle, but without affording

*60 Lefaivre and Döll (2007)*
*61 Montgomery, 2013, pp. 32*



much notion of playability beyond the usefulness of them. The question is how we can amplify the playability of these spaces? What kinds of ludic interventions can we incorporate into this urban fabric in order to foster a playful attitude and more cultural experience of an urban space?
For example, how can we to share the emotion of activeness with others? How can we begin to feel a sense of achievement through walking or cycling outside of the eco-friendly and physical benefit side of it? Team play may be a means of enabling us to explore new places in a way that refocuses the attention on the notion of playability. Saehoon cites an example in Bogota, Colombia, in which the employment of "traffic mimes" sheds light on the playable method for managing the city. He notes that traffic fatality within the city had become extremely high with roads being in an excessively chaotic state. In order to counteract this, "about 420 mimes were hired to control traffic on the roads by mocking reckless drivers and performing the frustration experienced by pedestrians moving through the traffic[62]"

Frequent use of a space does not necessarily equate to whether or not there is a sense of enjoyment or overall "liking" of the place. Indeed, oftentimes places are frequented out of necessity of function as opposed to enjoyment. From experiencing the public urban realm myself, I am of the belief that how successful the design of an urban space is depends on getting the correct balance between requirement, desire or "want" and enjoyment. It is, however, important to be careful in the design of an intervention focusing on unexpected surprise or sensory stimulation alone. Although it may be novel and entertaining in its initial implementation, later interactions with or experiences of the space will become less successful or even fail unless the design evolves over time or introduces more intense stimuli. Successful urban spaces that support long-term activity and exhibit signs of love from the local community demonstrate a healthy balance between likability and desirability/requirement of the space. The space needs to deliver a sense of satisfaction and reward in conjunction with positive emotional reaction for a prolonged period of time.

Although little is known about the true quantifiable "likeability" response to an urban space, we can begin to apply certain hypotheticals to our design criteria by taking on all the factors explored in this chapter.

*62 Saehoon Kim (2018) pp. 6*

1. A space that is open to change, evolution and adaptation whilst also leaving room for layered accumulation is preferable to a space that does not.

2. A space that affords interpersonal interaction between strangers or interaction with a new culture on a more profound level than a passing glance is better than one that does not.

3. A space that is permeated by the collective perspectives and values of a community is better than one that has been planned or managed by a single organisation or person.

4. We can encourage a sense of emotional attachment, wonderment and discovery by blurring the boundaries between nature and man-made elements. The provision of greenery, water and organic form will help to achieve this. Also harnessing the power of wind/air movements of the sea and other natural phenomena will help create a sense of wonder in man-made installations (in Part 2 see case studies of Sea Organ, Roombeek, Sonus Loci and 21 Swings as examples).

By combining these hypothetical factors and incorporating them into ludic design interventions, public infrastructure and city management, we can begin to move from the playable to the playful by cultivating a mindset and a culture over disposable one-off experience.



# PART 2

## BUILDING A CASE

# 5 A SERIES OF CASE STUDIES

## 5.1 Case Study Anthology

Thirty cases have been accumulated for this study in order to explore in detail how designers are able to create inspiring playful interventions within the urban realm. These were gathered through a series of methods: through random internet searches of terms such as ‘playful’, ‘design’ ‘ludic’, ‘urban’, ‘intervention’, ‘innovative’, ‘novel’, ‘creative’, ‘art’, ‘interactive’ and ‘city’. Internet sources such as Pop-up City, Archdaily and Design Boom were searched and monitored for relevant cases during the search period (January–May 2019). There were also references to various papers regarding the playable city and ludic intervention from which some cases were taken. In addition to these searches, some cases were taken from my own mental arsenal and included in the study following deeper research into them. Below, the case studies have been listed in alphabetical order of their title and include the location of the intervention and the creator. Visual representations have also been included. Beneath each case study, a list of tactics has been drawn up in order to help identify patterns that can be explored to create a series of overall tactics for a playful city towards the end of this paper. In addition, each case has been explored for principle design philosophies to provide context and understanding to you, the reader. By providing multiple case studies in this writing, it is the hope that a data-rich analysis can be conducted, which will help to support the final conclusions.

### *1. Amager Bakke Waste-to-Energy Plant by BIG, Copenhagen, Denmark*

**Description:**
A Waste-to- energy plant also given the name "Copenhill", that is located in the industrial zone of Copenhagen that has turned into an extreme sports destination over the years. It is the most significant landmark in the area with a rhythmic metal façade and dramatic sloping form which houses a ski slope, natural trails and urban park on its roof. It intensifies the relationship between the building and the city by expanding on the existing sports activities in the area, which already include climbing, cable wake boarding, go-karting among others. The building features a steam tower that will, provided the technology allows, emit rings of steam into the atmosphere, in a humorous play or cross between a typical factory building and a cartoon.

**Design Principles:**
The design principle represents a mountain of waste but adds the humorous question "why not ski down it?" The design looks at the idea of waste and pollution – something that people fear and dislike – and instead, turns it into something that can be viewed as positive and a place where people can enjoy days out, physical activity and nature. Combined, the playful and humorous concept which also features a tower that should (in the future) emit conspicuous "smoke rings" and of course the ski slope on top will be an all new way to think urban resource handling. Amager's Waste-to-energy plant is one of the many steps that Copenhagen is taking as a city to become the first carbon neutral capital in the world. As such, the smoke rings have been designed into the building not simply as a humorous addition to the scheme, but to educate the local community about CO2 emissions, allowing them to become visible. Each steam ring represents and actually contains something within the ballpark of 250 kilos of carbon dioxide being released into the atmosphere.

**Tactics:**
Sport | Physical activity | Day Out | Self-direction/ability to control | Potentially ability to see beyond boundaries | Play on words | Choice of route| Nature | Topographical Building | Intergenerational appeal | Educational and inspiring | Exploration| Environmental mastery | Unusual ground covering| Contrast and dynamic movement| Ability to Observe |



**Other key features:**
Privately funded project| Permanent installation| Separate playful urban element hosted as separate entity from building function

*Figure 1.1: 3D visualisation of the designed building. People are able to ski and visit the green park and nature trail on the roof of the building*

## *2. Another Life by Usman Haque, Bradford, UK*

**Description:**
This project was installed in the heart of Bradford city centre in the UK as one of Europe's largest permanent interactive public artwork interventions. The project is intended to afford play and humour, bringing the city park to life by enabling people to interact with fountains, mist makers, multiple RGB pattern-drawing lasers, ambient lighting. The scheme uses a combination of sensors and actuators respond to visitors' movements through the space and draw unexpected dancing patterns of light on and around them.

**Design Principles:**
The work is designed such that two days should never contain the same experience. It encourages people to "become players upon the urban stage by choreographing the projections, fountains and ambient illumination of the park in a symphony of interactive urban experiences."[63] Another Life uses a pioneering interactive projection that responds to the movement and actions of visitors, allowing them to experience physical interaction with the water and mist of the Mirror Pool. An 'urban operating system' choreographs and coordinates the activity of various elements within and around the pool and how laser projections and fountains respond to visitors. The system continually adjusts its outputs in response to various environmental and infrared camera sensors, as well as external factors and community requirements. The system and choreographies can be easily modified in the future according to designs created by local artists.

The project gives the City Park development an individual identity and personality whilst being incredibly adaptive. It changes over time in accordance with varying conditions, with intensity and depth of interactions created by sensors, choreography and outputs, gradually becoming more enriched and developing as visitors and local community continue to engage with the project over an extended period of several years.

**Tactics:**
Simulation | Self-direction | Imaginary play| Solitary play| Separate from everyday experience| Acting contrary to social convention | Imageability | Intergenerational appeal| Pedestrian Lighting| Choice of route| Easily navigable| Use of props to alter movement | Ability to control/see cause and effect | Auditory simulation | Creative play | Unusual ground covering | Environmental mastery | Intergenerational appeal | Opportunity to observe others | Unique (illuminated) path texture| Delight | Contrast and dynamic movement | A sense of theatre | Delight | Element of surprise |

*63 Haque Design and Research (2013)*



**Other Key Features:**
Designers created their own drivers for the RGB laser equipment| openFrameworks software| developed a novel system for blurring the lasers to ensure safety while maintaining sufficiently colourful luminance| Design grew from concepts developed in collaboration with Ai Hasegawa, 2009| Project was commissioned by the City of Bradford for the City Park development| Permanent installation| Reinterprets mundane movement such as walking






*Figure 2.1 : Image of mirror pool in daytime*
*Figure 2.2: Image of people playing in the mirror pool*
*Figure 2.3: Image of mirror pool at low level at night*
*Figure 2.4, 2.5 & 2.6: Images showing RGB lighting interacting with pedestrian movement*

### *3. 21 Balançoires (21 Swings) by Luc-Alain Giraldeau and Daily Tous les jours Montreal, Canada*

**Description:**
Twenty-one swings is an annual, temporary intervention that offers a fresh look at the idea of cooperation. It particularly holds emphasis on the idea that more can be achieved together rather than separately. Twenty-one colourful, bottom-lit swings are erected along a broad downtown stretch of pavement neighbouring the Montreal Opera House and Science Faculty in Montréal's Quartier des spectacles. It is a musical installation that is triggered by motion, each swing emitting independent notes while swinging back and forth. Richer, more complex melodies emerge only through cooperation between users.

**Design Principles:**
21 Balançoires is an annual installation that has been reintroduced every year to celebrate the springtime from 2011 to 2018 so far. It was the brainchild of the interaction design studio Tous les Jours partnered alongside Luc-Alain Giraldeau, an animal behaviour professor at the Université du Quebéc à Montréal. Giraldeau explains: "cooperation emerges when the behavior of each individual depends on the decisions of the rest of the group: it's a game where, from the start, you need to adjust to the actions of others"[64]. The idea is to create a kind of "giant collective instrument" that motivates ownership of the space, bringing people of different social groups, age and backgrounds together to ultimately create a colourful place for playing and relaxing and socialising in the middle of the city centre. It is the intention to stimulate intuitive play and experimentation, provoke spontaneous social interaction between both friends and strangers, leading to players and onlookers becoming aware of one another and their environment. This helps to create a sense of community in an otherwise very large and cosmopolitan city.

**Tactics:**
Intuitive Play |Experimentation| Collaboration| Cooperation| Vertigo | Separate from everyday experience | Self-direction | Ability to see beyond boundaries | Use of props to alter movement| Developmental play | Acting contrary to social convention | Ability to control/see cause and effect | Auditory stimulation | Opportunity to increase social contact| Opportunity to observe others | Bold colours |

*64 Daily Tous les Jours (2018)*



Intergenerational appeal | Attractive lighting| Physical activity| Physical Sensation| Opportunity for humour| Incongruity | Enlargement | Contrast and dynamic movement | Delight |

**Other key features:**
Auditory feedback | Ownership of space | Collaboration with a behaviour researcher/ scientist | Temporary installation| Seasonal| Annual reoccurrence|

*Figure 3.1: 21 Balancoires in context*

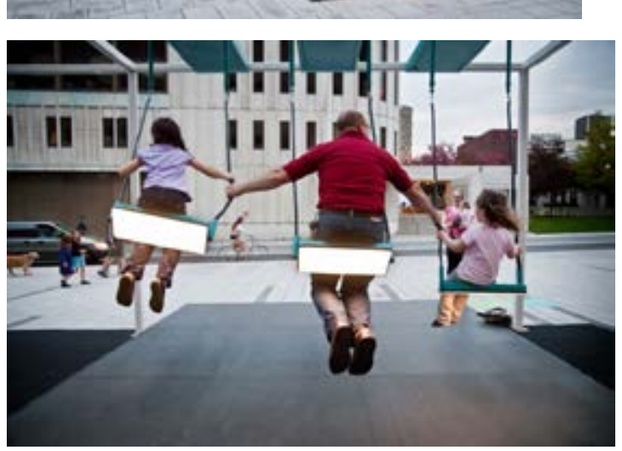

*Figure 3.2 : Interesting lighting and cooperation to create music creates an element of play*

*Figure 3.3: People can choose to participate or simply observe and use the space to hang out*

### *4. Boom Bench by NL Architects Amsterdam, The Netherlands*

**Description:**
NLArchitects designed Boom Box bench for Experimenta as part of the Framework of Urban Play II design event, organised by Droog Design and curator Scott Burnham. The designers we asked to create an interactive urban intervention. This was a temporary installation lasting 6 weeks that transformed regular street furniture into a loud boom box by enabling users to connect their phones to the bench via Bluetooth and play their music through it. The Boom Bench contained "The Boom Bench contains eight 60-watt co- axial speakers and two subwoofers, playing music with 95 dB high quality sound. The seat contains a Bass Shaker to "transform deep sounds into vibrations that enhance the physical sensation of your tunes"[65]

**Design principles:**
This project hearkens back to the time of the Walkman and the boom box. It was at this ime that music became mobile; allowing people, especially youth, listen to music on the go. Even now, people carry their music inside their phones or digital devices such as iPods and play it over headphones. The idea of sharing music aloud is especially popular with young people, allowing them to extend their personality onto the streets. Playing loud music will either attract or repel people depending on their musical tastes and whether or not they find the volume bothersome or disturbing. As such, the Boom Box Bench has the potential to shape the space around the user, either creating a lively upbeat party-like situation or marking his or her territory.

**Tactics:**
Multifunctional | Ability to control | Opportunity to increase social contact or observe others | Sense of belonging | Intergenerational appeal | Opportunity for escape | Celebrate community culture | Simple form| Street furniture| Sense of ownership| Sense of permission| Personal expression| Auditory stimulation| Self-direction | Physical Sensation| Reinterpreting the familiar |

**Other key features:**
Common street furniture transformed | User control| Bluetooth connectivity| Social vs Antisocial elements juxtaposed| Temporary installation

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*65 NL Architects, (2008)*



*Figure 4.1 Boom Bench*

*Figure 4.2 People and particularly youth could play music from their phones through the bench speakers*

***5. Cloud Gate by Anish Kapoor, Chicago, United States of America***

**Description:**
Located in Chicago, Cloud Gate, commonly referred to as "The Bean", invites pedestrian interaction with the surrounding urban environment. The ten meter high glossy, curvaceous mirrored surface reflects the surrounding site, building and the changing sky above. It was completed in 2004 and boasts a scale of 10 meters in height and 20 meters in width. It also includes a 3.7 meter high central arch, through which people are able to walk, and where they can look up to the large 'dent' and see numerous distorted reflections of themselves. It is situated in Chicago's Millennium Park and is only accessible by pedestrians.

**Design principles:**
Inspired by liquid mercury and, not unlike a fun-house hall of mirrors, the reflective quality of Cloud Gate switches pedestrian's orientation and scale within the city and visually alters their relationships to the surroundings. By being accessible only on foot, it is made easy for people to spend prolonged periods interacting with the intervention, taking photos and experimenting with their facial expressions and body movements to see how their reflections humorously change.

**Tactics:**
Reflects Environment| Distorts reality| Opportunity to socialize| Opportunity for humour| Ability to see beyond boundaries | Rare texture (mirror)| Opportunity to observe others | Imageability| Intergenerational appeal | Solitary Play| Small Group Play| Intuitive Play| Body exploration | Scale manipulation | New perspective |

**Other key features:**
Local Landmark| Mirror | Permanent Installation | Local attraction | Creates shelter



*Figure 5.1 : Cloud Gate at nighttime with a temporary paving illumination installation.*

### *6. Dancing Traffic Light Manikin by Smart, Lisbon, Portugal*

**Description:**
The Dancing Traffic light was a temporary installation in which car brand Smart collaborated with advertising agency BBDO Germany to create a unique pedestrian crossing light in Lisbon, Portugal. The light features a red stick figure or 'traffic mannequin' that dances to attract the attention of pedestrians who might otherwise walk out into the road. Members of the public who were filmed in a booth set up in a nearby square created the movements of the red man. The booth contained a small dance floor and cameras to capture the movements of each person whilst these movements were translated in real time to the 'audience' waiting at the pedestrian crossing. Video screens inside the booth displayed the audience's live reactions to the 'dancer'.

**Design Principles:**
The concept behind the project was interrogating the idea that, "what if waiting was more entertaining?" The intervention was designed to distract people and prevent them from dangerously crossing the road and to engage them until the light turned green and it was safe for them to cross. By humorously engaging the audience, it was noted that people even began copying the dancer reproduced in the traffic light.

**Tactics:**
Separate from everyday experience | Self-direction | Expression of humour | Use of props to alter movement | Environmental mastery | Pedestrian connection | Pedestrian safety from traffic | Smart intervention | Safety and security | Sense of belonging | Connection to community | Intergenerational appeal | Physical activity | Interactive | Surprise element | Opportunity to observe others | Opportunity to be observed| Opportunity for self-expression | Altering temporalities | Sense of theatre| Reinterpreting the familiar | Delight | Sense of narrative|

**Other key features:**
Privately funded and commissioned by SMART| PR Intervention | Temporary Installation |




*Figure 6.1: The dancing red man catches the attention of pedestrians and humorously engages them*
*Figure 6.2: Inside the nearby booth, people can select a song to dance to and their movements are relayed to the traffic light*
*Figure 6.3: People were engaged and even began to join in, copying the dance moves on the manikin*
*Figure 6.4: The booth in which the dance moves were recorded in real time was located closeby the crossing*

### *7. Das Netz by NL Architects Berlin, Germany*

**Description:**
Das Netz is a hang-out structure or a playground that is not restricted to children alone. Located in Berlin between 2006 and 2007, the structure acts as a belvedere, offering views over the nearby lake, as a climbing object, urban playscape and 'urban hammock'. The dimensions of the project allow it to gain the role of a suspended public square, an extension of the café terraces and a platform/seating arrangement for an outdoor cinema.

**Design philosophy:**
Post-war Berlin is still to this day perforated with empty lots, remnants of the air raids. Although planning and restoration ideas have a tendency to fill this gaps in the urban fabric with more architectural programme and development schemes, NL architects questioned this and, through the design of Das Netz, suggested the idea that these voids could be used for multiple urban purposes that would benefit social urban life in a more positive way, such as pocket-parks, playgrounds and parking.

**Tactics:**
Opportunity for escape | Sense of risk | Vertigo | Separate from everyday experience | Self-direction | Ability to see and move beyond boundaries | Use of props to alter movement | Exploratory play | Path of unusual material | Route choice | Environmental mastery | Pedestrian connection | Safety and security | Sense of permission | Sense of ownership | Connection to community history | Imageability | Sense of enclosure | Human scale |Intergenerational appeal | Multiple functions | Choice of activity (active or idol)| Reflection and memory | Quietude |

**Other key features:**
Infill | Client-funded project | commissioned by two art and culture institutions – tadkunstpojekte e.V. and Kunst und Arkitektur in Alt Köpenick (KAIAK) |



*Figure 7.1: Children and adults alike can use the intervention for multiple activities*
*Figure 7.2 & Figure 7.3 : Images of the intervention in its context*

## *8. Delirious Frites by Les Astronautes, Quebec, Canada*

**Description:**
The installation was constructed as part of a public art festival called Les Passages Insolites, curated by local organisation Exmuro in 2014. Hundreds of pink and orange tube-shaped pool floats or pool noodles were fitted to pink-painted panels so that they drooped into the alleyway. Lighting on both walls illuminated the installation so that the alleyway would also encourage use at night.

**Design Principles:**
The concept behind the work was to take advantage of the narrowness and anonymity of the forgotten space between two buildings. It would create a stark contrast between the historical surroundings of the city and draw attention to the neglected space, throwing passers-by into a whole new world. Visitors were able to touch and hide amongst the tubes, exploring their texture and the flowing volume created by the pattern. "The large number of pool noodles generates a colourful atmosphere reminiscent of summer that also has something uncanny, organic and lifelike, almost like vines in a jungle"[66]

**Tactics:**
Separate from everyday experience | Self-direction | Use of props to alter movement | Environmental mastery | Pedestrian connection | Intergenerational appeal | Material exploration (touch encouraged) | Interactive | Surprise element | Ability to see and move beyond boundaries | Exploratory play | Path of unusual material| Transporting (Provokes imagination) | Delight | Incongruity | Contrast | Sense of theatre | Element of surprise |

**Other key features:**
Infill | Competition win | Part of cultural expo| Temporary installation

66 *Dezeen (2014)*



*Figure 8.1: Delirious Frites was a temporary and surprising intervention in the space between two buildings*

*Figure 8.2: The installation was lit at night so that it could also be experienced after sundown*

*Figure 8.3: People could touch, walk through and hide inside the installation*

***9. Duracell Heated Bus Shelter by Duracell, Montreal, Canada***

**Description:**
The PR advertisement stunt by Duracell was realised in the winter of 2014, the company designed and constructed a heated bus shelter that would only turn if travellers maintained physical contact with one another. The bus shelter featured positive and negative contact pads on each end, which needed to be connected to complete a circuit, allowing the electrical current to flow to an overhead heater.

**Design Principles:**
Instead of avoiding eye contact and remaining hidden behind a mobile device and a pair of headphones, commuters waiting for the bus in sub-zero temperatures needed to acknowledge one another's existence and cooperate in order to get the heat functioning inside the shelter. Although holding hands, touching palms or fist bumping might not cause any issues for people who already know each other, it could prove awkward between strangers. The idea was to get people to start talking and perhaps allow people to make new friends or acquaintances.

**Tactics:**
Use of props to alter movement | Environmental mastery | Pedestrian connection | Intergenerational appeal | Interactive | Smart intervention | Use of props to alter movement | Intuitive play |Opportunity for humour| Opportunity for social interaction | Cooperation | Sense of theatre | Reflection and memory | Active mind/ problem solving | Element of surprise | Reinterpreting the familiar | Emotion and expression | Sense of narrative|

**Other key features:**
Familiar object | Private corporate funded | Part of advertisement campaign| Temporary installation




*Figure 9.1:Users of the bus shelter were required to have physical contact to get the heater working*
*Figure 9.2:People could also go for the slightly less intimate fist bump*


*Figure 9.3:Contact pads were positioned at each end of the shelter*

*Figure 9.4:Heating filament was located in the top of the shelter*

***10. Entree Station Overvecht/ Transfer Accelerator by HIK Ontwerpers, Amsterdam, The Netherlands***

**Description:**
As part of a complete renovation of the Overvecht railway station, the designers capitalized on the opportunity to inject a unique, fun and playful experience to travellers and commuters in Utrecht. It provides an alternative to walking down the stairs that are located at the entrance to the station. In addition to the slide, there is also open, terraced courtyard space with greenery, which has been punctuated by bursts of bright red colour in the handrails and other metal elements.

**Design principles:**
Nicknamed the 'Transfer Accelerator' by ProRail, the slide is intended for the use of both children and adults alike. The urban designers responsible for the intervention worked as part of the complete overhaul of the station, but were given the opportunity to enforce their design philosophy, providing urbanites a platform for interaction and dialogue. Through this and by adopting a flexible attitude, they were able to design a site-specific public installation that not only demands for change in daily routine, but also creates an element of fun and humour to the transitional space.

**Tactics:**
Acting contrary to social convention | Separate from everyday experience |Vertigo | Path of unusual form | Solitary play | Self-direction | Use of props to alter movement | Route choice/ environmental mastery | Pedestrian connection | Attractive colour scheme | Intergenerational appeal | Easily navigable | Humour | Delight | Contrast and dynamic movement |

**Other key features:**
Reduces travel time | Familiar equipment| Commissioned by ProRail (railway maintenance company) | Permanent installation



*Figure 10.1: The dynamic gemoetric design of the courtyard is engaging to commuters and the slide creates a playful alternative route down the stairs*
*Figure 10.2: Image of the staircase not in use*
*Figure 10.3: The slide can be used by children and adults alike*

## *11. Floating Island by OBBA and Dertien12, Bruges, Belgium*

**Description:**
Designed by architecture studio OBBA in collaboration with local architects Dertien12, the installation was built as part of the Bruges Triennale in May 2018 and remained until September of that year. It features a floating pavilion on one of the city's many canals, creating an invitation for people to walk, rest, play and explore whilst enjoying the water. The pontoon has been designed in a long, fluid and streamlined shape, consisting of metal frames, timber decking, metal pillars, upper metal rails interconnecting the uprights and white rope curtains.

**Design Principles:**
The concept of the pavilion was to create a translucent space that could be explored though touch, exploration and movement. The rope curtains were designed to react to natural light and wind, blurring the boundary between the structure and its surroundings, making familiar landscapes feel fresh and new again. The tensile ropes and loosely hanging rope create a variety of spatial qualities and the flowing and undulating of the deck also helps to mark out various functions in changing shapes and forms along the linear trail, allowing visitors to play on swings, climb on ropes, sunbathe, rest reclining or seated, or lay on the broad rope hammocks.

**Tactics:**
Separate from everyday experience | Path of unusual form | Unusual material| Unusual texture | Touch encouraged | Easily navigable | Solitary play | Self-direction | Use of props to alter movement | Pedestrian connection | slick colour scheme | Intergenerational appeal | Choice of activity (active or idol)| Opportunity to escape | Sense of permission | Connection to water/nature | Opportunity to observe others| Humour | Delight | New Perspective| Quietude |

**Other Key Features:**
Part of citywide exhibition | Temporary installation | Water|



*Figure 11. 1: People can come down to the level of the water and relax in hammocks*
*Figure 11.2: Ropes are used as tactile transluscent walls and used in combinations of loose and tensile conficurations to define various spatial qualities*
*Figure 11.3: The intervention offers opportunities for playing, swinging, climbing, strolling and relaxing*

***12. 'Hello Lamp Post' project by PAN Studio in cooperation with Tom Armitage and Gyorgyi Galik, Multiple locations***

**Description:**
The "Hello Lamp Post" initiative was a playful engagement platform that was aimed at inviting people on the street to engage in surprising and often funny conversations with familiar inanimate street objects using messaging services on their mobile phones. These objects included trees, lamp posts, Parking meters, bridges, boats, cranes, post boxes, bins and other such items and conversations with them looked at encouraging people to gaze upon their city with fresh eyes and experience it as more of a playground. Hello Lamp Post ran for the first time in Bristol in 2013, running throughout the summer, and was met with great success. This was demonstrated by the 25,000 text messages that were sent by players in a mere eight weeks of its existence. The project has since been commissioned in large cities worldwide.

**Design Principles:**
All street furniture within the United Kingdom has a specific and unique maintenance code allocated to it; this project utilised this pre-existing infrastructure. Individuals who choose to participate in the play send a text message quoting the unique code associated to the object to an advertised number on or beside it, thus 'awakening' the object. The street object would then 'talk' to the player through the text-messaging platform, prompting them to answer a series of playful questions, which would become more personal with each response. Interactions and text rallies to the objects were stored and used in exchanges to other people in order to allow this. Creating exchanges between people and these street objects not only allowed to inject humour and play into the everyday lives of participants, but also made it possible to look at the city as a diary that could be walked through as opposed to simply an intense bundle of infrastructure.

**Tactics:**
Separate from everyday experience | Smart intervention | Solitary play | Pedestrian connection | Intergenerational appeal | Humour |Connection to community history | Connection to surroundings| Ability to see and move beyond boundaries | Familiar objects/ equipment | Interactive | Surprise element | Reflection and memory | Incongruity | Potential change in temporality | Emotions and expression | Sense of narrative



**Other Key Features:**
Temporary installation| Helped people reconnect with their environment through humour

*Figure 12. 1 & Figure 12.2: Pedestrians can interact with inanimate street objects in humorous way via a mobile messaging service*

***13. Ira Keller Fountain by Lawrence Halprin, Portland, United States of America***

**Description:**
Major transformative works were undertaken in and around the city of Portland between the 1970s and 1980s, creating a pronounced shift towards an emphasis on public space. However, according to Randy Gragg, president of the Halprin Landscape Conservancy, "it was Halprin's fountain plazas of the 1960s that first made downtown safe for fun."[67] The Ira Keller Fountain is an urban design intervention that has been designed with water and nature at its core. Constructed from concrete, Halprin designed the water fountain to imitate a natural waterfall within the centre of the city.

**Design Principles:**
Halprin's unique combination of sculpturally unifying water, references to natural landscape and public space enables his plazas to become an instantaneous crowd-puller, enticing local investment and, in fact, serving as precedent and foundation for Portland's unique urban renewal policies for many years to come. Working alongside Angela Danadjieva, Halprin designed the Keller Fountain Park in such a way that solved the site's complex level changes with a powerful urban waterfall. This was, at the time, a revolutionary idea and this new type of people's park, "where nature is abstracted with a geometric naturalism, was based on Halprin's studies of the High Sierra's spring cascades"[68]. In his design of the landscape plazas, Halprin saw the opportunity to see them as a means for choreographing human movement. Furthermore, the fountain wan not designed solely for viewing, but for interaction and active, playful enjoyment.

**Tactics:**
Use of props to alter movement | Exploratory play | Unusual path | Route choice/environmental mastery | Connection to community ecosystem| Pedestrian connections | Reflects the natural environment | Intergenerational appeal | Opportunity to observe others | Grand scale | Interaction with water | Opportunity to escape | Biophilic Design | Imageability| Contrast and dynamic movement | Sense of theatre | Quietude | Transporting (Provokes imagination) | Biophilic design |

67 *Halprin Conservancy (2013)*
68 *The Cultural Landscape Foundation*



**Other key features:**
Water | Alternate paths | Local ecology | Abstract geometries| Permanent installation |

Ira Keller Fountain, Portland, Oregon, USA, 2008. Photo © Charles A. Birnbaum, courtesy The Cultural Landscape Foundation.

*Figure 13.1: The Ira Keller Fountain is a people magnet affording play, exploration and social interaction*
*Figure 13.2: Unlike regular fountains, the Ira Keller is intended to be used as a fully immersive public space with which people interact*
*Figure 13.3: The geometric concrete is an abstraction of natural falls, mirroring nature and creating a reflective and contemplative space in the heart of the city*

### *14. La Musidora by ESRAWE + CADENA studio, Denver, United States of America*

**Description:**
La Musidora was a colourful and interactive thirty-meter long installation designed by Hector Esrawe and Ignacio Cadena from ESRAWE + CADENA studio. Its name "is a combination of the Spanish words "la música" (music) and "la mecedora" (rocking chair)"[69] The temporary art installation was commissioned by the Denver Art Museum and was located in the esplanade opposite the entrance to the museum itself. The length of the piece was made up of a series of repeated modules of facing woven chairs, which could rock back to front through cooperation of the users and allow the couple using it to talk face-to-face. Each module was also outfitted with a percussion mechanism generated unique musical notes when rocking that went progressively from low to high along the length of the installation.

**Design Principles:**
The designers' intention was to have a dynamic woven piece that explored the idea of 'swinging' with two clear objectives. The first objective was, of course, relaxation. The second was the "possibility of an encounter between two people through movement who dialogue to establish a rhythm in common agreement"[70]. The linear piece was conceived as a metaphor of an oversized marimba or xylophone.

**Tactics:**
Intuitive Play |Collaboration| Cooperation| Separate from everyday experience | Use of props to alter movement| Developmental play | Ability to control/see cause and effect | Auditory stimulation | Opportunity to increase social contact| Opportunity to observe others | Bold colours | Intergenerational appeal | Choice of activity (active or idol) | Sense of theatre |

**Other key features:**
Auditory feedback | Temporary installation| Art museum commission | Promoting social interaction

69 *Denver Art Museum*
70 *Designboom (2017)*



Museum visitors enjoying La Musidora during an Untitled Final Friday event. Photo (c) and Courtesy of Denver Art Museum.

*Figure 14.1: The installation is designed as a metaphoric xylophone. Couples are able to sit facing each other to talk and cooperate to create sound*

***15. Limelight: Saturday Night by Sans Façon, Touring installation***

**Description:**
This was a live public art installation and video work by Glasgow-based arts practice Sans façon. The simple intervention replaces two streetlights with theatre spotlights instantly transforming the street into a stage and passers-by into performers, somewhere between spectacle and surveillance. The spotlight became engaging for participants and passers-by alike, attracted the "young and the old, solo performers and couples, family groups and folks out for a night on the town. Some avoided the limelight, slinking around its edge like jail breakers avoiding the watchtowers light, whilst others bathed in it whole-heartedly. Performances have been spontaneous, surprising, and often quite touching. They ranged from the hilarious, the tipsy, the tender and the skilful but above all the romantics hogged the limelight. Displays included all manner of dance moves, from graceful stag leaps to the robot dance, serenades and passionate canoodling. For some it was simply enough to stand basking in the warmth of the lights whilst other needed to display their physical strength and sporting prowess."[71]

**Design Principles:**
The intervention was intentionally designed to be subtle. It alters the street lighting in order to evoke the dormant potential of the public realm as a place of spontaneous interaction and the latent humour and joy that people can bring forth, that bubbles right beneath its surface. It also offers an alternative approach to city lighting as more than a mere security measure, but by changing the quality of light, it shows that certain play behaviours and positive experiences of the space can be provoked.

**Tactics:**
Acting contrary to social convention | Opportunity to observe others | Imaginary play | Solitary play | Separate from everyday experience | Self- direction | Use of props to alter movement | Creative play | Unique path texture (illuminated) | Opportunity to increase social contact| Imageability | Intergenerational appeal | Potential to celebrate community history and culture | Pedestrian lighting | Easily navigable | Opportunity for humour | Sense of theatre| Emotions and expression | Potential to change temporalities|

*71 Sans Façon (2011)*



**Other key features:**
Temporary Installation| Encourages humour | Performance | Touring installation | Encourages creativity

*Figures 15.1 - Figure 15.5: Interactions ranged from group play to solos; humorous to tender and romantic*

### *16. Off-Ground by Jair Straschnow and Gitte Nygaard, Touring Installation*

**Description:**
Off-ground is, in short, a series of playful seating elements. The project takes on a sustainable perspective by using reclaimed items as raw materials such as fire hoses and cargo nets to make the seats, that can be easily altered and shifted by the user between low and high elevations, a hammock and a swing and be manipulated according to the needs of the user. The installation shows a novel approach to the way in which people perceive recycled materials and to the way public space is used and perceived. It bases its design on the very real need to sit and relax within the urban environment whilst implementing something that is also playful as well as functional. The project was first introduced in Copenhagen, Denmark, using fire hoses and a metal frame, but has since been replicated using various recycled materials and in multiple cities worldwide.

**Design Principles:**
The designers recognise the essential nature of play to our wellbeing and addresses the monotony and predictability of regular public space, responding to these themes by creating up-scaled child-inspired playing elements and combining them with seating alternatives; "hanging, floating, swinging, laying- one size fits all" [72]. The designers worked under three main assumptions. Number one, that public seating facilities – normally benches – are designed such that comfort is not a priority, without flexibility of seating posture, and no real alternative ways of sitting in leisure areas such as parks, where the user may wish to sit more comfortably or even recline. The second assumption is that play is not only free to the individual but is also a symbol of our freedom, that is essential to our mental and physical wellbeing. The designers noted that play is consistently associated with children, meaning that public play elements are almost always scaled down to the ergonomic requirements of children. The 'adult' facilities sum up as benches. The third and final assumption was that "placing things in the public realm is the most democratic incarnation of design: it's free and accessible for all"[73].

72 *Straschow and Nygaard (2019)*
73 *Archilovers (2013)*



**Tactics:**
Vertigo | Ability to control | Bold colours | Intergenerational appeal | Opportunity for escape | Play | Sense of Ownership | Self-direction | Choice of activity (Active or idol) |Use of props to alter movement | Intergenerational appeal | Delight|

**Other key features:**
Recycled materials | User adjustable | Temporary installation| Meant particularly for adults

*Figure 16.1: The intervention looks to engourage adult to sit and play in different ways*
*Figure 16.2: Seats could be altered to suit various needs can can become swings, hammocks and deck chairs*
*Figure 16.3: In later interactions the project made use of other recicled materials besides fire hoses such as cargo nets*

### *17. Piano Staircase by The Fun Theory (an initiative of Volkswagen) Stockholm, Sweden*

**Description:**
The Fun Theory is an initiative sponsored by the car manufacturer Volkswagen, basing its principle on the idea that 'something as simple as fun is the easiest way to change people's behavior for the better'[74]. A staircase located next to an escalator at the entrance to a Stockholm underground station was retrofitted with an electronic actuator intervention, transforming them into a functioning piano keyboard. Each stair tread was rigged to play a separate note and the result was recorded on a video that was later posted to the video hosting site Youtube. It received over thirteen million views worldwide, which spurred a series of replica piano stair projects to be created, appearing in Milan, Istanbul, Melbourne, Aukland and Colombia. The video shows that initially, travellers and commuters were almost exclusively using the adjacent escalator to exit the station, however after the new piano stairs were noticed as actually functional, most pedestrians enjoyed taking the stairs instead.

**Design principles:**
The piano staircase was a temporary instillation intended to establish if there was a way to actively encourage people to be more physically active and healthy by taking the stairs by making it a fun alternative to being lazy.

**Tactics:**
Auditory stimulation | Self-direction | Route choice | Use of props to alter movement | Ability to control/see cause and effect | Creative play | Simulation | Unique path of unusual ground covering | Environmental mastery | Intergenerational appeal | Opportunity to observe others| Opportunity to see past boundaries | Choice of activity | Solitary play or group play | Opportunity for humour | Separate from everyday experience| Change in temporalities | Active health | Delight | Reinterpreting the familiar | Element of surprise |

**Other key features:**
Funded by large corporation, Volkswagen | Temporary Installation| Use of existing infrastructure | Encourages physical activity | Fun motivation | Reinterprets banal act of walking up stairs| Reinvigorates commuters|

74 *Design of the World | Online Magazine (2009)*



*Figure 17.1: The intervention encourages people to take the stairs rather than using the escalator to exit the station*

### *18. Playground by The Wa, Marseille, France*

**Description:**
In 2011, The Wa implemented a temporary, tongue-in-cheek guerrilla art installation in Marseille, France, in which a 'no entry' street sign and a rubbish bin were converted into a basketball hoop. This piece remained for nine months and was aimed at encouraging pedestrians to dunk or 'shoot' their rubbish into the bin.

**Design Principles:**
The rebellious artwork was an attempt to highlight and truly evoke the function of the bin and its relationship to the road sign. It drew attention to the function of the bin and actively encouraged people to participate in good behaviour by being a little actively rebellious. The Wa works alongside a plethora of artists and creatives, allowing them to adopt visual and political landscapes into their numerous installations with incredible fluency.

**Tactics:**
Self-direction | Use of props to alter movement | Ability to control | Acting contrary to social convention | Intergenerational appeal | Developmental play | Use of existing infrastructure | Encouraging physical play | Humour | Element of surprise | Scale manipulation | Incongruity | Sense of theatre|

**Other key features:**
Encouraging good behaviour through rebellious behaviour| Temporary installation| Guerrilla installation | Reference to existing sport (basketball) |



*Figure 18.1: The Wa's guerilla intetvention promoted good behaviour by encouraging people to dunk their waste*
*Figure 18.2 & 18.3: The intervention site before and after it was adapted by the artists*

### *19. Pulse of the City by George Zisiadis Boston, United States of America*

**Description:**
Pulse of the City was a temporary art installation that turned people's heartbeats into music. The idea was conceived as part of San Francisco's Urban Prototype Festival in 2012 which spurned a commission for five of the hearts to be placed in various locations around the city of Boston in September 2013. Plastic hearts mounted on metal pillars at chest height invited passersby to hold the handles on either side of the body of the object, which would measure the heartbeat of the user. A song would then be played through a speaker in the center of the heart that would match the tempo of their pulse.

**Design principles:**
"Amidst the chaotic rhythms of the city, it helps pedestrians playfully reconnect with the rhythm of their bodies. It combines art, design, and technology to promote the use and celebration of public space in an uplifting and imaginative way"[75]. The installation truly shows the incredible power of making public spaces fun, engaging and playful to manifest joy in people.

**Tactics:**
Highlights relationship to the user's own body| Auditory stimulation | Ability to see cause and effect | Opportunity to increase social contact | Opportunity to observe others |Bold colours| Sense of belonging | Intergenerational appeal | Celebrate community | Sense of theatre | Delight | Element of surprise | Emotions and expression | Human scale | Sense of narrative|

**Other key features:**
Multiple locations citywide| Music/auditory | Art installation | Collaborative project with musicians and sound designers| Temporary Installation | Use of science/bio mimicry |

75 *Zisiadis, G. (2012a)*



*Figure 19.1 : Interacting with the object produced music that mirrored the user's pulse*
*Figure 19.2: Pulse of the city comprised of a plastic heart body with central speaker and handles mounted on a metal pole*

***20. Rainworks art projects by Peregrine Church, Xack Fischer and multiple contributors, Numerous locations***

**Description:**
In these projects super-hydrophobic paint is used to draw and write messages on the street, only revealing themselves in rainy conditions. Following development of the medium, Church and Fischer spent ten months secretly creating the secret messages in the streets at night and it was during this time that the name "Rainwork" was coined by Church, as a combination of 'rain' and 'artwork', as a simple way to refer to the new medium. At this point, Church and Fischer launched the website www.rain.works where people can gain access to an official map explaining what and where the artworks are. The official map now has over two hundred works marked on it from dozens of contributors worldwide. In 2018, a mobile application was launched in order for people to easily locate Rainworks and share the location of their own contributions online.

**Design Principles:**
The goal of the project is to "give people a reason to smile on rainy days"[76]. The hydrophobic paint prevents the surface underneath the paint from getting wet, allowing it to retain its original dry-state colour in the rain whilst surrounding surfaces change. The initiative has expanded since its inception in 2013 and it is now possible for anybody to visit the official tutorial page online and learn how to create their own rainworks.

**Tactics:**
Incongruity| Element of surprise | Humour | Emotions and expression | Sense of theatre | Creativity | Intergenerational appeal | Ability to see cause and effect | Intuitive play (for creators) |

**Other key features:**
Multiple locations worldwide| Art installation | Collaborative worldwide| Use of science | Can be permanent or temporary (easily removable)| Outsourcing| Nanotechnology|

76 *RainWorks (2018)*






*Figure 20.1 - Figure 20.3: People can become part of the worldwide scheme by purchasing the hydrophobic paint and stencil kit and uploading their additions to the app. This form of guerilla intervention allows people to encounter humorous messages, images and even games which are revealed when it rains*
*Figure 20.3: "Stay Dry Out There" - The first rainwork even produced by Church and Fischer*

***21. Roombeek The Brook by Buro Sant en Co, Enschede, The Netherlands***

**Description:**
"Climate-Active City" is a program that focuses on livable cities that handle water and climate well and the Roombeek redevelopment masterplan (realized in 2008) proves to be a great example of this. The project, designed by Buro Sant en Co, was a regeneration of the area following a disastrous firework accident in the district. The Brook, that forms only a part of this masterplan, creates alternative routes for pedestrians along Roombeek, a commercial street in the city of Enschede. The project restored a small stream, which formerly was flowed underground as a result of industrial developments. After industry that utilized the stream has stopped, the groundwater level became dangerously high. Bringing the stream back it to the surface allows for regulation of the groundwater level, collection and drainage of excess rainwater and also provides cooling in the summer.

**Design principles:**
The landscape architects explain that the water has become the new central point of the district. The asymmetrical design widens and narrows along the length of the street, accentuating various spatial features. The brook is unexpectedly wide, meaning that the amount of water is surprisingly low but has a stylized relief treatment on its 'bed', reducing the speed of the water flow, allowing more water retention within the piece and enabling the current to be both seen and heard continuously. It also helps creates a constant reflective pattern on the water's surface. The brook is designed with a pattern of shard-like stepping-stones for pedestrians to jump across and create alternative and explorative routes through the space. These stepping-stones act as a reference to both nature and to the firework disaster itself.

**Tactics:**
Reflection and memory | Quietude| Ability to move beyond boundaries | Imageability| Use of props to alter movement | Exploratory play | Fluidity of space| Route choice| Environmental mastery | Pedestrian connections | Reflects the natural environment | Unusual path | Connection to community ecosystem | Human scale | Intergenerational appeal | Opportunity to observe others | Reduce travel distances | Biophilic design | Biomimicry |



**Other key features:**
Permanent intervention | Urban landscape design | Part of an overall masterplan| Improves infrastructure| Alternate paths | Local ecology | Memorial to past disaster |

*Figure 21.1: The intervention has a positive impact on local ecology and shard-like stepping stone allow people to playfully interact with the brook and move through the space in explorative, fluid ways.*
*Figure 21.2 : The element of water has now become a central part of the area, helping define its identity*

***22. Sea Organ ( Morske Orgulje) by Nikola Bašić , Zadar, Croatia***

**Description:**
The Sea organ is an experimental musical instrument and an architectural sound object located in the coastal town of Zadar, Croatia, which uses the force and natural ebb and flow of the sea to produce sound by pushing air through tubes and a resonating cavity underneath a set of marble steps. The waves interact with the organ produce a series of fairly random yet harmonic sounds. The device was made as part of a redesign of the new city coast (Nova Riva) and was completed in April 2005, attracting tourists and locals alike. The sea organ was awarded the prize ex-aequo of the fourth edition of the European Prize for Urban Public Space a year later, in 2006.

**Design Principles:**
Movement of waves pushes air through polyethylene pipes and into a resonance chamber, making them whistle, hum and groan in a soothing and gentle way. Thirty-five pipes are concealed within the marble staircase and the space around it acts as a pier or leisure front. The sounds that emanate from the sea organ can range from rather soft to very loud depending on the frequency of the waves and the size of forces produced by them. The space provides a unique opportunity along the waterfront to easily access the sea and is designed as a place here people can easily relax and meditate on the sounds being produced by nature. Children and adults alike can also explore how the organ works, being able to see where the sound escapes from on the surface, being able to put their ears to the ground and listen in a form of exploratory play.

**Tactics:**
Reflection and memory | Quietude| Ability to see beyond boundaries | Imageability| Exploratory play | Pedestrian connections | Reflects the natural environment | Connection to nature | Use of science | Connection to community ecosystem | Intergenerational appeal | Opportunity to observe others | Sense of theatre | Active mind | Opportunity to escape | Delight | New perspective| Biophilic design |

**Other Key Features:**
Permanent installation | Uses the forces of nature | Quality of sound changes with nature | Unique object | Connects the manmade urban realm to the sea| Helps create a meditative state |



*Figure 22.1: The steps of the waterfront conceal the organ pipes and also help provide direct access to the water level*
*Figure 22.2: People can sit on the steps and meditate over the sounds produced by the waves, hang out or investigate the function of the organ*
*Figure 22.3: Children find the intervention particularly engaging and intriguing*

***23. Shadowing by Jonathan Chomko and Matthew Rosier, Travelling installation***

**Description:**
A winner of the 2014 Playable City Award, Shadowing premiered in Bristol in eight separate location over a period of six weeks in the autumn of that year. It is an interactive public artwork that utilizes smart technology of infrared cameras, sensors, actuators and computer vision algorithms(CVAs) inside a modified streetlamp. The CVAs isolate and capture the physical contours of people who pass underneath the glow of the streetlight, whilst replaying the contour of the member of the public that last passed beneath it. When there is no interaction with the streetlight and the system is idol for a prolonged period, it will enter into a so-called "dream state", in which it will loop through previous 'shadows' and recordings that have already been stored until it is re-triggered by a passerby and new material is captured. The installation later appeared in York, London, Austin Texas, Tel Aviv and Tokyo.

**Design Principles:**
The designers initially originated the idea of an interactive streetlight as part of the Playable City Award – "an annual commission granted by local arts organisation Watershed that aims to promote ideas for making cities more enjoyable."[77] The installation utilised existing infrastructure in the form of the streetlight housing, provided by the local council. It is typically installed for periods of between one and three months, thus allowing for the work to become well known and become a utility. As it becomes a part of the urban fabric over time, it creates an area for experimentation, exploration, messaging and play. "It creates pockets of memory in the street; capturing your shadow as you pass underneath the streetlight and echoing it back to accompany the next person who passes by… ['Shadowing']compresses time within a single space to form a connection between those who inhabit the same urban environment,"[78]

**Tactics:**
Opportunity to observe others | Imaginary play | Solitary play | Separate from everyday experience | Self- direction | Use of props to alter movement | Creative play | Unique path texture (illuminated) | Opportunity to increase social contact| Imageability | Intergenerational appeal | Potential to celebrate community history and culture | Pedestrian lighting | Easily navigable | Opportunity for humour | Sense of theatre| Emotions and expression | Potential to change temporalities| Sense of belonging | Reinterpreting a familiar object | Smart intervention | Element of surprise | Experimental play | Intuitive play |

**Other key features:**
Temporary Installation| Encourages humour | Performance | Touring installation | Encourages creativity | Creates sense of connection to others |

77 *Dezeen (2015)*
78 *Ibid.*



*Figure 23.1 - Figure 23.3: Shadowing makes the city lights alive by giving them memory or passersby. Interactions sparked various scenes of play, humour, surprise, confusion, investigation and enquiry*

***24. Sonus Loci by Stantec and Leanne Zacharias Winnipeg, Canada***

**Description:**
Sonus Loci was a site-specific work that was located at the convergence of the Red and Assiniboine rivers. It naturally magnifies and converts wind into sound. It was one of the winning warming hut designs for Manitoba's 2013 competition for warming huts to line the city's river skating trail. A series of vertical 'sonical tubes' were embedded in the thick skating ice in a scattered pattern. This design allowed skaters to skate between the tubes, creating a more immersive and tactile experience. Each tube or chime harnessed the wind's energy to create a unique tone, and at the centre of the formation was a shelter.

**Design philosophy:**
The artists themselves best describe the design philosophy behind this project:
"Quieted by shelter, wind continues to sing, howl, and moan, making its presence known. Slowly populating the landscape, first one, then two, clusters of five, seven, and then many, increasing like a crescendo of voices in a choir; a landscape of white phosphorescent sounding tubes emerge from the scored ice of the Red River Mutual Trail. Each sonical tube harnesses the energy of the wind to create a unique tone, and at the center of this polyphonic chorus, the Sonus Loci- offering shelter to those who encounter it, passing through along their course. The anthem of this melodic garden of sounding tubes, a chorus of timbres and textures, strikes a cord- balancing the power of this ephemeral landscape's sound of silence"

**Tactics:**
Auditory simulation | Connection to nature | Connection to natural elements | Celebration of climate| Auditory stimulation| Intergenerational appeal | Celebrate community culture| Sense of identity | Imageability | Sense of theatre | Fluidity and freedom of movement | Encourages active health | Choice of activity (active or idol)| New perspective | Opportunity to escape | Opportunity to observe |

**Other key features:**
Temporary, could be seasonal | Collaboration: musician and designers | Wind as positive |Ice as positive | celebration of the winter season



*Figure 24.1 & Figure 24.2: Sonuc Loci took advantage of the winter climate to create an intervention that harnesses the power of the wind and elevated it to an immersive, tangible sound with which people could interact by skating in and around the installation*

## *25. Singing Road, Friesland, Holland*

**Description:**
The regional government of Friesland, Holland, launched the Singing Road and consisted of a pattern of rumble strips that played the Frisian anthem as cars drove over it. This served as a road safety feature intended to alert inattentive drivers of their arrival into a residential zone. However, the regional government opted to take on a more playful approach to the initiative by including the funny intervention. Despite the efficacy of the intervention and the clever inclusion of regional branding, the rumble strips were removed after a mere week of their implementation following a series of complaints from local residents who were affected by the noise.

**Design Principles:**
Friesland is known for its own traditions and strong local cultural heritage and the government intended the Singing Road intervention to serve as both a playful addition to the local infrastructure whilst enforcing a security measure on the road. Drivers could hear the tune of the rumble strips as long as they were driving below 60km/h and then the slower you drove, the slower the anthem would play and vice versa.

**Tactics:**
Humour| Auditory simulation | Auditory stimulation| Celebrate community culture| Sense of identity | Sense of theatre | Encourages good behaviour| Element of surprise | Physical Sensation| Reinterpreting the familiar |

**Other Key Elements:**
Road safety infrastructure | Intended as permanent intervention but removed due to irritation caused to neighbours | Local government investment|





*Figure 25.1: Rumble strips recreated the Frisian anthem, welcoming people into the town whilst making them aware of their speed*
*Figure 25.2: The mayor of Frisand inaugurates the new intervention. It was sadly removed only one week later following local complaints*

***26. The rocker, the slider & the wobbler by Beatriz Peró Giannini, no previous or current implementation***

**Description:**
The rocker, the slider & the wobbler by Beatriz Peró Giannini in collaboration with HR Groep was created as part of Ulterior, an exhibition that explores a variety of contemporary themes to do with design and human interaction. Giannini's project is a selection of furniture add-ons, which have been designed to attach to typical steel street bollards used to separate the pavement from the road in Amsterdam, also known as Amsterdammertjes. They are supposed to encourage playful interactions between people while fostering trust.

**Design Principles:**
Giannini's aim was to explore how people interact and behave with one another in public urban spaces by appropriating the Amsterdammertjes and employing them to encourage friends and strangers alike to interact with one another through the playful additions. They create moments of play through a combination of balance and cooperation, only fully functioning when two people are interacting. With the contextual socio-political atmosphere surrounding a series of vehicle ramming terrorist attacks throughout European cities in 2017 and 2018, progressively more security bollards have been appearing in various high-risk locations such as capital cities. The project looks to emphasise the importance of interpersonal unity and inclusion over division and divisiveness.

**Tactics:**
Intuitive Play |Collaboration| Cooperation| Separate from everyday experience | Use of props to alter movement| Developmental play | Ability to control/see cause and effect | Opportunity to increase social contact| Opportunity to observe others | Bold colours | Intergenerational appeal | Celebration of community | Multifunctional | Delight | Potential for humour |

**Other Key Elements:**
Designed as part of exhibition | Utilises existing infrastructure |Could be implemented as temporary or permanent installations |



*Figure 26.1: The series of design objects designed to inspire ludic interaction and cooperation of strangers on the streets of Amsterdam*
*Figure 26.2: The slider being demonstrated*
*Figure 26.3: The rocker relies on trust and cooperation to function like a see-saw*

## *27. Triumfalnaya Square by Buromoscow, Moscow, Russia*

**Description:**
The re-imagination and rejuvenation project of the Triumfalnaya square (originally designed and built by Soviet architect Chechulin in 1958) was given to Buromoscow following their 2013 win in an open competition for a public square in Moscow. The square is located at the crossing of Moscow's main street Tverskaya with the Garden Ring and in the recent years preceding its delivered transformation in 2015, it had become nothing more than a transitional space, with half of the square occupied by parking facilities. The area now consists of a main central pedestrian surface of the square and a lilac garden, enclosed by walls. The main square has 3 lightweight pavilions housing cafes and shops. Flowerbeds and linden trees in planters also mark and subdivide zones within the pedestrian square and help to give it a classical feel. The main square allows for public evens, functions and activities to be held from markets to concerts and also allows for outdoor seating for cafes. The most prominent and popular feature of the project is a large shelter that houses a number of swings as opposed to generic benches or seats. This adds a sense of romance and playful delight into the space.

**Design Principles:**
Buromoscow came up with a series of implementations that allowed them to bring life back into the forgotten urban space. Firstly, they divided the competition plot into two main zones: a square and a garden. The walls of the enclosed lilac garden aided in shaping the traversing street. Flattening the surface of the square, which previously had a steep incline allowed the site to become more navigable to pedestrians whilst relevating the edges meant that the pedestrian zone became pleasantly detached from the busy traffic of the perimeter roads. Historically a rendezvous spot, Triumfalnaya Square was intended to be a romantic part of the city, and this inspired the design of the long row of two-man swings which replaced benches in that part of the site. In addition the secondary space was given more of an inner courtyard-feel in the creation of the lilac garden, which also added to the romance of the space whilst adding a splash of colour in spring and summer.
"From a space of transit, it turned into a space of stay, being always full of people – meeting up, having coffee, concert goers, skateboarders, vapers, musicians. It immediately became very popular with Muscovites queuing any time of the day, in summer or winter to use the swings"[79]

**Tactics:**
Sense of romance | Reflection and memory | Imageability | Sense of identity | Quietude | Fluidity and freedom of movement | Contrast and dynamic movement | Choice of activity (active or idol) | Ability to observe | Sense of ownership | sense of belonging | Use of props to alter movement | Use of greenery to add colour | Use of props to alter movement | Intergenerational appeal | Celebrate community culture | Opportunity for social interaction | Celebrates local history | Solitary or couples play |

**Other Key Elements:**
Urban regeneration project | New local image | Large-scale intervention | Alternate paths | Local ecology | Improves infrastructure | Urban landscape design|

*Figure 27.1-Figure 27.3: The designers reimagine the russian pulic square, elevating classical elements, creating accessible and flexible open space to foster various ludic activity and adding an air of romanticism by creating a line of two-seater swings instead of benches*

79 *Archdaily (2017)*

***28. 'UpSwing' Jump Rope Stations by Soprts Backers, Richmond, United States of America***

**Description:**
A collaboration between the Davinci Center of Virginia Commonwealth University, the city of Richmond and the non-profit organisation Sports Backers saw the realisation of a series of five jump rope stations located across the city at bus stops and station areas. Sports Backers, an initiative that centres on reconsidering the nature of neighbourhoods and the purposes of our city streets, introduced the jump rope stations as part of a larger program to improve low-income areas. The UpSwing stations reconstituted street objects that were once used to dispose of cigarette butts and ashes into upright objects that housed retractable jump ropes, where kids could jump rope while their parent or caregiver was taking care of business in nearby shops, barbers and salons.

**Design Principles:**
There is a guiding belief in the city of Richmond that play need not be confined to the boundaries of the playground and the introduction of these the UpSwing stations offers an easily accessible play moment for people on the move. Their carefully selected locations at transport stops aim to increase physical activity in people for at least a couple of minutes more than they would otherwise. The retractable ropes allow children, families and even adults to play and connect with each other. By intertwining play with the city infrastructure of Richmond, healthy, fun recreation and youth and family engagement greatly increases. Additionally, it visually further transforms the low-income neighbourhoods into safer and positive communities. Similarly, other such initiatives aim to activate citizens within the local community of Richmond to collaboratively redesign and reconsider their local areas in favour of play, interaction, fun and spontenaety; be it through creating 'pavements for the people' or ping-pong.

**Tactics:**
Ability to observe | Reinterpreting the familiar | Group/ couples play | Encourages social interaction | Reflection and memory | Freedom of choice to participate | Promotes active health | Bright colours | Intergenerational appeal | Delight | Sense of ownership | Physical play | Use of props to alter movement | Celebrate community culture | Enriches local community | Celebrates local community |



**Other Key Elements:**
Funded by grant warded by non-profit KaBoom| Intervention as part of larger-scale overall scheme | Temporary installation | Collaborative project |


*Figure 28.1: UpSwing helps bring people together and create a safer, happier and moreactive community by supporting the idea of bringing play into the streets with the creation of a series of retractable skipping rope stations at bus stops and stations*

### *29. Whoopdeedoo by Greg Papove Vancouver, Canada*

**Description:**
The Whoopdeedoo was a feature implemented as part of Bike to Work Week in Vancouver and was designed to make the journey to work a little more fun for urban commuters. Targeting cycling specifically, the project marginally varied the terrain on an otherwise level-grade cycling path by introducing brightly coloured subtly sloping ramps. The design is bright and friendly to better catch the eye of passersby and was also accompanied by a series of flags, safety signage, and posters saying “have fun at your own risk”.

**Design Principles:**
The ramp was intended to be suitable for cyclists and pedestrians of all ages and comfort levels. The existence of a large cycling community in the city of Vancouver meant that these additions were happily received and allowed things to be mixed up a little within the regularity of the daily commute, breaking out of the monotony of routine in fun and unexpected ways.

**Tactics:**
Use of props to alter movement | Risk | Choice of route/path | Vertigo | Self-direction | Unique path | Easily navigable | Opportunity to observe others or participate | Environmental mastery | Bold colours| Intergenerational appeal | Contrast and dynamic movement | Delight | Humour | Potential to alter temporalities | Promotes active health | Sense of choice (to participate or not) | Separate from everyday experience | Opportunity to break routine |

**Other key features:**
Safety notices as part of intervention design | Primarily for cyclists | Funded by grants from Penny Smash and Vancouver is Awesome |

*Figure 29.1 - Figure 29.3: Whoopdeedoo is a brightly-coloured ramp that encourages cyclists and pedestrians of all ages and comfort levels to break the daily routine on their commute*

***30. Zet die knop om!/Switch that button! by HIK Ontwerpers Amsterdam, The Netherlands***

**Description:**
HIK Ontwerpers designed a playful bench that imitates a classic red switch Functional but enlarged to one hundred times its usual scale. The piece functions as either a one or two-person seat and becomes illuminated with LED light when the user sits on one side and turns the switch "on". In this way, the user is able to manipulate the illumination of the public urban space in a novel and playful way. When being used at night, the switch is supposed to be turned off in order to conserve energy, adding to the playful humour of the piece, whilst also referencing real sustainable life habits that should be adopted within the home and rest of the public realm in order to reduce environmental impact.

**Design philosophy:**
Our urban designs are both functional and innovative by giving urbanites a platform for interaction and dialogue. Designing a site-specific public art installation requires a flexible attitude towards the current situation and the demands for change. It is key that throughout the design process both general interests and aesthetics are cherished[80].

**Tactics:**
Humour | Reflection and memory| Uses elements of active mind | Self-direction | Use of props to alter movement | Ability to control/see cause and effect | Bold colour | Safety and security (through nighttime illumination)| Intergenerational appeal | Pedestrian lighting | Sense of Theatre | Incongruity | Delight | Element of surprise | Freedom of choice (to illuminate or not) | Sense of ownership | Humorous scale enlargement |

**Other key features:**
Promotes good habits (energy conservation) | Unique seating idea |

80 *(HIK Ontwerpers, 2014b)*



*Figure 30.1: A person can choose which side of the bench to sit on, determining whether they switch the light on of off*
*Figure 30.2: The intervention creates extra pedestrian lighting at night whist encouraging people to remember to conserve energy by switching it off when they leave*

### *5.2 A BRIEF Discussion*

Architectural acupuncture references a creative approach towards urban regeneration, based on the activation of small interventions and local processes, aimed at rapidly energising a single point in the city. The idea is that the positive effects of one corrected or regenerated zone have the ability to also spread to a larger scale as a kind of chain reaction. It may not be necessary to renew the city as a whole, but by improving one damaged or tired part of the city, the idea is that it will improve the overall wellbeing of the residents whilst also inspiring local investment and further regeneration plans.[81] At a micro level, urban ludic interventions are examples of architectural acupuncture, adding a miniscule dose of humour and playfulness to benefit the grander scheme of urban life. It influences not only people who live close by, but also travellers, other locals and commuters who pass by, allowing the positive and playful vibes to spread, like a form of radiotherapy.

However, on the macro scale, how does architectural acupuncture function citywide? The implications of spatial quality and connections between environmental design and physical/mental health and wellbeing is well recognised. In particular, links to urban space and overall happiness have been under examination since the early sixties. From the work of Goffman in 1963 which explores how human behaviours is affected and influenced by public urban space up until the much more recent publication of Ellard's complicated exploration and cutting-edge measurement of psychological reaction to place, it is very obvious that our happiness and mental health is profoundly linked to the quality of our built environments. Although there appears to be a causal link between income and overall happiness, it is clear the factors that influence people's mental wellbeing is actually much more complex than this factor alone. Rather, it becomes clear that upbringings and environments that support a high quality of social engagement, interpersonal connection, sense of identity and overall autonomy foster a happier population. It is a sense of community and feeling of support and connection from our physical and social infrastructure that creates an overall sense of happiness.

If we come back to the scale of the individual playful intervention, we can see that the relationship between the happiness quotient and the design object is bidirectional.

*81 Corrado and Lambertini (2011)*



Although individual small interventions made on a local scale and some larger scale interventions add a positive contributions to the spirit of the city as a whole, policy decisions and infrastructural reconfiguration planned at the municipal level have the potential to support or undermine their existence. This leads us to a key question in this study: What are the barriers that prevent the successful growth of ludic ideals and humour/play culture becoming more widespread?

It is safe to say that the way in which we encourage play in a safe and predefined way and also how municipalities regulate function of urban space is to the point of discouraging spontaneity. Moreover, the ways in which play is implemented within cities is not nearly diverse enough on a policy level, typically restricting it to childrens' activities and predefined environments. Authorities need to be more open to pushing the envelope and diversifying implementation styles because them way in which people (particularly adults) are typically encouraged to play is too structured. Temporalities are too structured; locations for play have strong boundaries; noise is highly regulated; guerrilla-style creativity is discouraged and even illegal… the list could continue! The small-scale temporary interventions discussed in the case studies above and even some of the larger ones are only a small demonstration of what is possible. We can build on many of the ideas and inspirations that they can provide to designers and even find a place of permanence in public infrastructure. For example, the 21 swings project has been so successful that it returns annually.

Municipalities and local authorities have most of the power to either encourage or discourage ludic intervention, by being open to change, and by being open to ideas that current bylaws to not permit such as extending opening hours of the inner city, making it easier for people to apply for temporary street closures, creating exceptions for noise variances. In short, they would be allowing the people to peacefully take back ownership of parts of the city and this would, over time, allow the playful, creative and spontaneous mindset to thrive.

It is up to designers, creative planners and people who understand the benefits of supporting the ludic city to educate authorities on the health and social benefits of introducing their concepts into planning policy. The architectural profession is dying as a result of many economic and cultural

factors within the building industry, however they can use this opportunity to evolve and take on an advisory role, helping reimagine a new kind of city and think more along the lines of a more idealistic world. In the words of Bjarke Ingels of BIG, "yes is More!" In turn planners could ask designers and architects how urban planning could support them, and vice versa. It is clear that one of the primary barriers to making urban play part of our culture could well be a gap in information sharing between disciplines.

**Precedent themes**

The thirty cases were collected from across Europe and North America and although many different themes were explored, most of the projects seemed to share a common thread of interaction that breaks from the monotony of daily routine and adds a little extra positive to the lives of those who encounter the interventions. Whilst the cases also explored themes discussed in the literature review in Part 1 of this paper, the diverse typology and style of interpretation and implementation of humour and/or play is important when it comes to allowing the intervention to successfully become flush with the existing surrounding urban infrastructure and culture. Each case varies in terms of how they were realized, the length of their implementation, materiality, function and how they were promoted. What remains clear from studying all thirty cases, is that although they span from tiny and seemingly un-influential in the grand scope of the city to large-scale master plan and urban landscape design projects, all encourage users to engage in a more exploratory, adventurous and playful way.

**Object creation**

In the study of these cases, the focus was not on the process of manufacture or on the method by which the element design came to be. In many of the cases, the project is realised through collaboration with a number of specialists, designers, corporations or charitable organisations, allowing for cooporation between designers and musicians, artists, engineers or even scientists. The vast number of the projects were temporary interventions, aimed at prototyping a certain product that has been curated for an exhibition or cultural event within the city. In the case of The rocker,the slider and the wobbler the project has not yet been implemented in the real life urban context. There are examples of installations, such as the Cloud Gate in Chicago, the Transit Accelerator in



Amsterdam, The Brook in Enschede and the Sea Organ in Zadar, that have been incorporated as permanent joyful elements and become a fixture within the urban fabric, attracting tourists and locals alike to engage in playful experiences. The cases even cover the fields of architecture, landscape and urban design interventions that work with the complex strata of the city fabric and create pockets of delight and joy for people to thrive in. The vast array in which play elements have been incorporated into the urban realm is likely linked to the mode of funding through which the project was received. Local grants, covert guerilla operations (such as Rainworks and the Wa's Playground) and corporate marketing campaigns (such as the Duracell Bus Stop, Smart's Dancing Traffic Light and Volkswagen's Piano Stairs) are just a few of the ways the urban intervention concepts were allowed to become reality.

**Design Trends:**

It is possible to identify a number of design trends that arise independently of intervention implantation typology. Notably, some designs hold an emphasis on biomimicry and biophilic design, imitating natural form or harnessing bodily rhythms in order to create a connection to nature and the users own body such as The Brook, Ira Keller Fountain, Pulse of the City and Sea Organ. The idea of softening the harshness of city existence and giving the public a fresh perspective of their environment through humour and playful delight was also a rather dominant trend. Rather than shielding the player from the hardness, interventions such as Limelight, Shadowing, Another Life and Hello Lamp Post utilized smart technology and lighting to alter ground surfaces or transfigure inanimate street furniture through illumination and technology, allowing people to look on their environment with fresh eyes and experience it in a more reflective and playful way. The interventions also allowed people to intuitively play with the interventions and see how their movements and/or interactions caused an affect to the overall experience.

Interventions such as 21 Swings use the expertise of scientists and behavior specialists on order to create an experience that will immerse the players in a wholesome and magnetic way. The embodiment of whimsy and humour was also a common trend in most of the temporary installations, although it can be said that there is nothing to say that this could not be adopted into more permanent fixtures, such as in Another Life. Amager Bakke Waste-to-Energy Plant by BIG and Triumfalnya Square by

Buromoscow are excellent examples of where architecture and landscape can come together in very strategic ways but with an overarching sense of romance and whimsy to create unqiue, diverse and immersive experiences for people, either in the daily arbitrary comings and goings of daily city life or in the more planned days out. They transform regularity of city architecture and elevate it to a new plane, transcending the norm and creating multifaceted and complex choreography of activity.

Humour was also a particular element in the smaller scale designs put forward by the likes of HIK Ontwerpers, and others, embodying much of the surprise, self-expression and general playful humour discussed in the literature review. Cooperation and group play further explores how humour and whimsy can translate into physical interaction, as is seen in 21 Swings, La Musidora The Rocker, The Slider and the Wobbler. These kind of interventions that encourage group play and interpersonal cooperation look to deepen the connection between strangers and friends alike, using elements of humour and play to help break the ice and spark physical interaction with an art piece.

Audio stimulation and audio output is another layer that helps inspire and achieve the playful mindset in multiple cases. It provides the players with a sense of reward or sensory feedback and allows them to experiment through intuitive play, seeing cause and effect (see Piano Stairs, Pulse of the City and 21 Swings). In cases such as Boom Bench, auditory simulation allowed users to assert a sense of control over the space or to express their personalities and individual music tastes in an inclusive way.

Other notable design features include infill space, typified by the likes of NL Architects with their intervention Das Netz, creating approaches towards integrating local ecology in cases such as Sonus Loci by Stantec and Leanne Zacharias or Buro Sant en Co's Roombeck | The Brook and incorporating popular culture.

Physical activity and supporting health and safety are also things to which designers have been able to attach playful elements, affording humour and playful exploration to combat more serious issues and thus fostering good behavior. This can be seen particularly in installations such as the Singing Road, Playground, and UpSwing. Even more serious issues such as sustainability have been addressed through play elements



by using reclaimed materials and reminding people about the importance of saving energy (see Off-Ground and Zet die knop om!).

Although these various design themes are listed as separate elements, it should be noted that all of the cases studied use a combination of many or (in one or two cases) even all of the techniques mentioned, showing just how delightfully layered and immersive urban design implementations can be.

**Urban Play doesn't have to be complicated or expensive**

In most of the cases, playful interventions used easily accessible, inexpensive materials and quite often made use of existing infrastructure, allowing them to weave themselves seamlessly into the urban fabric. In some cases, installations used no infrastructure at all, existing or new, with simple a set of instructions serving as the only necessary addition for a playful activity to take place. Using recycled materials not only adds a sense of intrigue, character and quirkiness to a design object, but it is a sustainably eco-friendly and cost-effective way of constructing playful urban elements. Crowdfunding and outsourcing is also a highly efficient and cost-effective way of building funds to support a new project and also increases interest and knowledge of the future installation, aiding in its future success. In addition, it is also possible to get both the local and external communities more invested and actively involved in the design process through crowd funding method. It allows a more overt public participation element and helps create a sense of ownership and collective accomplishment within the community.

## 6 TACTICS FOR A PLAYFUL FUTURE

Having already read through the rest of this novel of a thesis, it has hopefully become clear that in order to create a playful city, play is only one (albeit very important) piece of the puzzle. When considering how to afford play in an everyday setting, the balance between control and provocation is most important. Creating warm and serene spaces, although cozy, tend to have a tendency to create lethargy whereas a jarring component that contains an element of shock value, although welcome in somewhere like a fun house, could become irritating and even depressing over time. A place or situation that affords play should in some way set itself apart from the immediate context of its surroundings in order to help the player immerse him or herself fully into an alternate world. A sense of balance between safety and risk must also be established so that the player is allowed to temporarily suspend reality to engage fully with the play of humour situation. The appropriate balance is dependent on the function of the design object and the type of play that might occur in engagement with it as well as the number and characteristics of players taking part at once.

With play also being an activity in which people explore and manipulate something, a play place or situation should also entice users to see and touch things from an altered or novel perspective. This is to suggest that in some way the environment should provide an element of risk and provoke participant curiosity, offering elements that both surprise and/or amuse.

Architecture and design are not simply fields of studying and creating isolated buildings and urban areas, rather they are also rather interdisciplinary fields that incorporate the study of the multifaceted nature of life in and around buildings and all the social agents that surround them being



interwoven in the machinations of urban life. Designers and architects must take into account many complex issues and how a project can elevate the human existence to a better, more functional and aesthetically pleasing level.

Therefore, as architects and urban designers who know the benefits of creating playful urban environments, what are the essential qualities of an environment that affords play? How might this kind of space be constructed? We know that play is a voluntary activity where reality is suspended within a given (often figurative) boundary and defined by a series of rules. As such a place of play should enable the player to establish those boundaries and provide them with a sense of control and autonomy, giving them license to feel free to enter into this play 'world'. By looking through the case studies listed in the anthology of the previous chapter, it was observed that each intervention sets itself apart from its surroundings in some way. In doing so, the design element or installation creates a clearly defined boundary or playground in which the various play behavioural norms or rules apply.

However, a solid planning framework that emboldens the latent playfulness of the urban realm and that tackles larger infrastructure and policy issues must support playful urban environment and interventions in order for them to be successful. As a piece of the overall city puzzle, urban play and humour should not be swept under the proverbial carpet. The case study anthology primarily looks at how small-scale and predominantly temporary installation can help afford play. However, we can take the themes and ideas that we gather from studying these in order to generate an overall understanding of how they can be applied to the large scale of the city overall. The overlap among themes found in the literature review demonstrates the suitability of play to address some common urban issues. These, in turn, help to identify a series of tactics – sixteen in this case – that serve as umbrella headings for the patterns identified above. These tactics might be re-used by architects, designers, planners and urban residents to help create a city that harbours humour and play in its culture.

**1. Uncertainty and Risk**

There are a number of things that are essential to know when interacting with the city in order to make sense of it, whether you are a resident, commuter or a tourist. You need to know things like traffic regulations and dangers, where to find a public toilet, where to get a drink of water, locations of landmarks and how to orientate yourself. As a city planner, one needs to understand the water supply, demand for housing, traffic flow and effects as a result of climate change. There are, however, a number of things that we are able to leave to the imagination; things that we can leave as uncertain and unknown. In play, involving oneself in an element of risk helps to elevate the sense of enjoyment one receives from the game or interaction; be is a risk of embarrassment, a minor risk of injury or a risk of failure. As such, city spaces should have a bidirectional character in which one has the ability to encounter the regular and the safe in one moment and then be challenged by uniqueness and strangeness the next. The sense of risk and uncertainty comes from a degree of surprise and the unusual as we go about our everyday lives. This is to say that the creation of public space that is always a surprise helps to create a sense of uniqueness through continuously changing stimulation. This can be achieved through colour-changing landscape elements, greenery, smart technological interventions, changeable lighting and creating spaces that are able to host a plethora of changing activities. By creating urban spaces and larger scale interventions that question what we know about city life and create an air of uncertainty, we can help to create a city that we have not yet encountered; a city that is simultaneously familiar, yet strange and unknown. This is, of course a desirable risk that fuels a sense of excitement and delight at what you are about to experience as you turn the corner.

**2. Contrast, Dynamic Movement and Aggeration**

A number of design principles can be assumed to create the sense of another world or to provide a sense of control or autonomy to the players. When sensory qualities such as light and dark, fast and slow, hot and cold, wet and dry, hard and soft are juxtaposed with one another, they establish extremes in the environment which can be used to differentiate the area of play from the real world. Furthermore, spaces or interventions that utilize this kind of contrast exploit opportunities for people to be



conscious of their immediate environment (see Limelight). They are rich in tactile opportunities, full of pattern, offer many ways to circulate and explore space, and often use dramatic vertical or dynamic diagonal movement to generate excitement or interest. By harnessing these very common design principles and exaggerating them, it is possible to allow them to take on a playful character. Moreover, it becomes easier to create simple yet highly effective spaces for play, where interaction and creative exploration becomes the main activity.

**3. Scale Manipulation**

Scale is the relative measure of a physical object. Our perceptual experiences give us a wealth of information about the relative size of things. When we are confronted with an object that does not match to our expectation of its relative size, the chance for humour or play may arise. Manipulating scale is a useful architectural tool that can serve to relate various parts of a building to each other, to some unified whole, or to some common dimension such as the human body. Take, for example, the Amager Bakke Waste-to-Engery Plant, designed by BIG. It downsizes a mountain or a geographical hill and places it on the top of a building in a humorous manipulation of scale and functions, essentially saying that if the people can’t go to the mountain, bring the mountain to the people. It alters the scale of the city’s horizon and brings the idea of the mountain to a human scale. It also contrasts the lower-rise buildings of the main city centre, marking the boarder of the city. Take also The Cloud by Anish Kapoor that, in a more obvious way, manipulates scale and proximities by distorting reflections of surrounding buildings and pedestrians through its warped mirrored surface. Manipulating scale can result in a building or urban space with a clear message and ordered hierarchy, or a building or urban space full of obvious distortions.

**4. Superadjacencies**

Superadjagencies can be incorporated into the city to provoke interest and fantasy by creating a juxtaposition of contrasting or jarring elements in close proximity to one another. They can also create relationships between contrasting elements and enable people to see multiple facets of significance or meaning within a space by exhibiting familiar objects in a

novel way or from an unexpected point of view. Techniques that fall under the umbrella of superadjacencies include incontruities, enlargement and miniaturisation. Incongruities in a given context create a differentiation between one place or object and its surroundings, thus offering potential for humorous parody. It helps create a contradiction, which can often be amusing, or changing relative size and importance of a design element in the environment helps to provide a sense of control or assertiveness. Buildings and urban spaces that are filled with superadjacencies allow people to envision inhabiting a large number of places, creating fragments of familiarity which can stimulate the recreation of fantasy worlds and stimulate imagination.

**5. A Sense of Theatre**

In film and theater, actors assume new identities and create a new world in which the audience vicariously participates. Within the immersive confines of the theatre auditorium, the film or play becomes a newly perceived, albeit temporary, reality. However, when the show is over, both actor and audience reassume normality and rejoin the outside world. In play, we become the central protagonists of our newly constructed world, guiding the shape and course of events as actors to in a film or play. As such, spaces that afford play should therefore encourage and reinforce the role of the player in their surroundings. Theatre, dance, music and other performance arts tell us that there are many ways of critically evaluating the world around us and of expressing a thought or emotion. Cultural expression and public criticism are things that are often limited to strict confines of certain times, places and media. However, the life of the city should empower people to shift the expression of culture from people and places of authority and incorporate all manner of spaces where people can freely move, climb, jump, dance and rotate. The city is a place where people should feel free to not only speak out their opinions and verbally celebrate culture, but also physically act them out; express them audio-visually. Graffiti, street performers, skateboarders, and flashmobsters already do this, but their actions should be encouraged and celebrated as an integral part of city culture.



**6. Ability to Observe**

Complementing the theatrical side of play is the desire to see others and to be seen. Having achieved the role of the protagonist in the play environment, people may enjoy having the opportunity to share the experience with others, giving them a sense of amplified success or pleasure. Conversely, others may enjoy the opportunity to survey from a given vantage point and revel in noticing somebody engaged in active play. A city that not only allows but promotes the sharing of experience will embolden people and help create a more open platform for self-expression. The ability to observe may help uplift people that need support in flourishing within the urban environment, and the ability to be observed will give the impression that people are being heard and noticed. This enriches their sense of belonging, the overall sense of community and spreads the positive power of interpersonal communication.

**7. Temporalities**

As previously discussed in this work, the insurgence of capitalism and the hurry of the modern city have herded us like cattle into various forms of busied schedule, and hurried routine. The majority of our time as adults is spent in a regimen of linear time, regulated by social convention and management systems. However, breaking this monotony of the daily grind and allowing ourselves to take a step back and recenter and refocus on the self; it allows us to rethink the nature of our existence and reconsider how we treat our minds and our bodies. We are able to realise that by simply taking a moment to do something a little different to break from routine opens us up to a whole number of temporalities, not just the linear one; times of moments, movement, breath, clarity, nature, circularity and indeterminate length. These times become most evident in open spaces and parks, where we become more open to the elements of nature, to social interaction, to serendipity and spontaneity. By creating elements and spaces that afford a slow in the daily rush of linear time, we can help nurture a mindset in which people may begin to live in a more holistic fashion and reconsider their place in the world. By providing experienced and spaces in which people can break from routine, it is possible to help people feel more satisfied with life and create a generally happier and psychologically healthier city.

**8. Imageability and Identity**

The way we perceive ourselves and our place within our surroundings is vital in our overall sense of belonging and wellbeing. Our identity is something that we understand within ourselves and being able to express it and share ourselves with others in an honest and positive way helps to underscore self-confidence and create a cohesive and tolerant environment. Our identity is defined by basic questions such as race, culture, sexuality, orientation, gender, interests, likes, dislikes, political affiliation, nationality and so on and so forth. We do not seek to answer these questions with any direct certainty; rather they serve as nuances that we use to set ourselves apart as individuals within the global community. The way in which western society functions means that we do not tend to have a singular identity, but instead we have multiple, fractured one and provisional identities which shift and evolve according to age, country of residence, role of employment, city of residence, cultural tastes and overall attitude towards the world we inhabit at any given moment. To summarise, our lives shift from hour to hour, week to week and year to year, and so in the same way, our sense of identity shifts accordingly. As such, cities must be designed to evolve from day to day, nurturing personal shifts in identity as well as supporting social and cultural identity and creating a sense of local authenticity. Playful cities should not be predefined for the use of predictable, uniform sectors of the population, but remain open for diversity and competing tastes, opinions and ways of life. The image and identities of our urban spaces should be a reflection of their inhabitants, reflecting their changeability; they should be diverse, energetic, transient, dynamic, hybrid and there should be many of them.

**9. Quietude and Layered Fabric**

Although much of our architecture and urban design is oriented towards landmarks and monuments, urban life is in fact tends to be focused on much of the quieter aspects of the city. The things that make city life worth living and allow us to reconnect with one another are things such as opportunities for relaxed conversation, for strolls in the park, for ice cream on a seaside promenade or a coffee with friends on a coffee bar terrace. Architectural and urban space objects that facilitate such moments are all seemingly supplementary elements; things like walkways, simple squares, benches and meeting places. However, cultural parts of the city fabric



such as a promenade of shops, cafés, libraries, galleries, theatres and museums help create a layered effect, forming a textured backdrop for the monuments and landmarks to stand against and cultivating atmosphere. These spaces for quiet allow the city to breathe and ultimately give it life.

**10. Fluidity and Freedom of Movement**

Boundaries are not only important when it comes to creating play dominions, but they also delineate social categories social categories in space, defining social hierarchy, territory, possession, affiliation and authority. Despite their necessity in terms of marking out private property, visual or physical boundaries need not express cold-faced brutalism or autocracy. Quite often, they can subtly hint or politely indicate the definition of space without overtly challenging those who cross over or challenge them. By using things like texture, greenery, pattern, colour, materiality and other such techniques to create complex, gradual or even invisible boundaries to inform whether people should or should not cross a boundary in question, city dwellers are provided with an urban space that has an air of fluidity and freedom to it. Also, by creating subtler boundaries of space and function, there is more of a sense of trust evoked towards the public, allowing them to choose whether to obey or not. Members of the public are thus asked to regulate themselves in a gentler and more responsible manner, thus giving them a sense of autonomy and environmental mastery. This is preferable to employing the use of a wall, fence, sign or guard.

Open urban space should also offer various options for route choice, providing people with different paths and experiences through the space depending on desire and need. Again, this reinforces a sense of freedom and autonomy within the public realm. It also allows people to explore their personal needs and express their individuality through movement through the space.

**11. Reinterpreting the familiar**

Our cognitive understanding of the world around us is dependent on personal experience and an understanding of given situational cause and effect. This helps us form a basic expectation about what feelings and activities can be afforded within the environment in question. In design

and play, new meaning and significance can be attached to regular objects by using them in novel ways. A playful urban environment should be rich in familiar objects which, at times, can be given fresh meaning and broaden our expectation of their use. This helps curate an atmosphere of playful examination and humour. However, the employment of this tactic should not be exaggerated, since an environment saturated with foreign objects may cause people to lack the sense of security necessary for playful thought and action to take place. This is because play is not usually an exploration of the unknown, but an investigation of something known from a different angle.

**12. Curating a Fresh Perspective**

Another great device related to reinterpreting the familiar is providing people with the ability to see something from a fresh perspective. When we are permitted to move over, around, and through things in new and exciting ways our interest is peaked and allowed us to analyse and understand the world around us in a different way to the way we usually perceive it. Curating fresh perspectives enables people to feel more connected to and immersed part of their city environment, be it through education, re-imagination, through engaging with the environment in a novel way or through open discussion of ideas. It also helps breed more tolerant and open-minded mindsets whilst fostering reinvigorated appreciation for our surroundings and a sense of excitement at being part of the community.

**13. Active Health**

As has been previously established in the earlier chapters of this work, adults typically associate adult play with leisure activities such as sports, going to the gym, going on holiday, or otherwise taking on some other kind of active 'work'. Indeed, it is important to learn from children who see little to no separation between fantasy worlds and the world of routine and daily chores. Play exists everywhere for them; at home, school, in the back of the car on long journeys… By understanding how children associate their worlds with play, we can be provided with a set of clues as to how adults can maintain a healthy and balanced lifestyle in cities, where play activities are very often limited to the self-conscious regimens of sports. Embodying a culture of active health means taking on a holistic approach to the



way in which we live. It mean being energetic in all parts of our lives; in the way we travel, in the way we work, in the way we move through buildings. Being able to engage with the physicality of our existence and making the body work just a tiny bit harder in the spaces that allow it to do so will help us to find what feels good and to maintain a healthy body. This means cycling instead of driving, standing instead of sitting, walking up stairs instead of taking the escalator. In turn, the city should evolve to facilitate this through the inclusion of walkways, skate paths, running routes, stairs and plenty of outdoor city space. In this way, healthy physical activity if seamlessly interwoven into the fabric of city life as opposed to being isolated in certain times and locations.

**14. Active Mind**

Healthy citizens have healthy minds. City life should be endorsed in our minds as well as in our bodies. As previously discussed in the literature review of this thesis, there are four main features which should be interwoven into the urban fabric in order to foster good mental health. These are social spaces, green spaces, safe spaces and active spaces. However, this may not always be enough. The human mind is meant to be active and there are certain kind of play, such as funktionslust, that make use of problem solving and inquisitive brain activity. Therefore, there is a great benefit of having a variety of architectures that probe the mind and encourage citizens to contemplate the world around them in an interactive, provocative way. The actively minded city is a place where the citizens are not served answers and solutions on a proverbial plate. It is a city in which ethics, morality, nature, climate friendship, family and desire are the order of the day. Where people are allowed to challenge their scope and intellect, fostering problem-solving and critical thinking. This should not be achieved in any kind of forceful or challenging way, more it should arise naturally, just as music, art and culture does. The architecture and planning of the urban realm should act as a kind of catalyst to contemplation, a stimulus to brain tease and ponder over the city and its culture. xpanding peoples' propensity to think critically fosters an open-mindedness and inclination to broaden the horizon, making people more open to playful and spontaneous behaviours.

## 15. Emotions and Expression

Although a city that cultivates active minds of its citizens is beneficial to creating a playful city culture, active thought does not always have to be logical, measured or rational. As human beings, we are an intensely sensitive species, holding host to a very complex plethora of feelings, sentiments and emotions. The opportunity to feel and express this emotional range needs to be nurtured and supported, especially inside the chaos and ostensive anonymity of the individual within the city context. Being able to healthily experience and express emotion is something that helps us to connect to people around us. It also empowers us by aiding us in articulating our own personal identities. Hence, there is a call for urban spaces and design interventions to make us feel excitement and calm, delight and disgust, pleasure and rage, intrigue and repel, energy and relaxation, joy and sadness. On balance, it is the quality of emotional life that allows us to feel alive and lies at the heart of urban existence – At least this is what we can assume. If we lack a full range of meaning of what it *FEELS* to be human, the full life of the city cannot be attained or fulfilled.

## 16. Essential Dose of Delight

By studying play behaviour, analysing prominent play-affording parameters and observing where play may be occurring within the urban environment may provide designers with a wonderful recipe for constructing places of play. However, as is the case with many recipes, the correct proportion of ingredients will result in a dish that leaves a bad taste in the mouth. There is no doubt that by painstakingly applying all play design parameters indiscriminately and all at once to a place, an architect or urban designer could design quite a frightening environment. Creating a naturally play-affording environment or playful culture is to build a setting that is little more than a darkened stage set awaiting the actors to emerge with exchanges of vitality and delight. When approaching a design problem with the intention to impart a sense of play humour, a designer may begin by using these previous fifteen tactics and a series of play design parameters as a springboard. They must, however, also consider the basic fact that our propensity to play is related not only to our surroundings, but also to our emotional and physiological state at a given point in time. They must place themselves within the mind-sets of the citizens that will occupy the urban space that they design and realise that the design of its success will be their ability to combine research data, analysis and empathy. In a lot of ways, the delicate reverie bubble of play can be easily burst with too much zeal. It is helpful to bare in mind these tactics and scientific play parameters as means of affording play and play humour, but forceful and heavy-handed application could be a death sentence to the success of a project before it has even been implemented. If designers is themselves playful and approaches their design with a sense of play humour, it becomes easier to develop an empathetic relationship with the people they are designing for. In this way, the designer's result will not only be a more organic answer to the brief, but will also possibly come from a place of delight. By sprinkling an essential dose of delight into the recipe, which is eluded in dry site analysis or scientific research and theorising such as this, the designer can make a place truly wonderful to experience.

# 7 CONCLUSIONS

In the quest for the perfect, ideal utopia of the city, play and humour seem to have been pushed to the periphery and assigned to the children. Adults have been neglected to languish in the seriousness of adult life and forced to limit their play to specific times, activities and locations. The idea of creating a playful city it to create a cultural infrastructure in which people know that it is not only okay to play, but that it is encouraged, and should become an active part of people's everyday. The Playable City movement has brought play into the dialogue of how we understand the city, underlining key factors such as spontaneity, humour and pleasure. This book has looked at ways in which the playable city can transform into the playful; where the marriage of smart, playful and creative allows play to become a continuous process that is seamlessly interwoven into the fabric of the city, creating a new level of infrastructure that freely emboldens enjoyment, expression, discovery, joy and humour.

This study has demonstrated that ludic interventions need not be complicated or expensive in order to foster playful interaction. On the contrary, when supported by fundamental principles such as safety, connectivity and freedom of interaction, even the most basic ideas can create a large impact on the local community. However, as essential as play is to human wellbeing, so it should equally be to city planning. It is beholden upon planners not to ignore how they can help support play and playful design intervention. At the current juncture of architectural design and architectural urban planning research on ludic cities and alongside playful urban interventions spawned from creative artists and innovators, there is a very welcome place for city planners to help develop and promote a more interdisciplinary, flexible approach to urban design to afford urban play behaviour. Context is also an important factor, with the most successful implementations of playful design have been born from a connection to local urban requirements, climate and local culture. Much is known about human motivators and play motivators and city planners and builders alike have, in recent times, shown an increased desire to promote Pedestrianised, human-scale urban environments by increasing walkability. They also see the benefit of creating cleaner, safer and greener space as a means of fostering good mental health.  Uniting these desires and motivators with knowledge of how cities are able to develop a sense of place as opposed to simply space is vital in nurturing happy, healthy, fun and secure urban environments. Our current socio-economic and ecological landscapes challenge our world's planners and designers to come up with the very best solutions to combat the rising crisis we face in health, happiness and the environment.

Undoubtedly, more could be explored in detail about how cities can be made more playable. Local assemblies, flash mobs, urban games and multiplayer mobile city games are just a few examples of ideas that have not been touched on in this paper. However, it has been the aim of this writing to provoke some thought into the design-side of urban intervention and how they can and should affect how policy and daily way of life continues. The concept of the playful city undeniably presents challenges of its own; however, it is a continuous process of slow-enacting change that is more likely to grow generationally, provided that individual interventions grow to many and smaller interventions grow to larger. The feasibility of the generational growth of the playful city culture is also incumbent on more and more people becoming disillusioned by technology (as has already slowly begun to happen) and on them being able to tear themselves away from the screens and technologies that keep them prisoner within their own homes and the daily rituals of routine and schedules that enslave them. As a continuous process, playful city will, over time, become a humorous part of city life full of rich social interaction and delight.

*-END-*

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# APPENDIX

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