A Study of the Relevance of Environmental Art to Landscape Architecture in the Context of the United Kingdom

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ABSTRACT

Landscape architecture and environmental art are concerned with shaping the environment, and their outcomes share similar physical appearances. Formally established after Frederick Law Olmsted designed Central Park, New York, in 1858, landscape architecture intervenes in the environment for a variety of social, aesthetic and environmental motives (Thompson, 1998). Environmental art, which emerged in the 1960s, initially in rejection of gallery and museum culture, is also associated with the environment, and includes a wide range of artworks from small sculptural objects to large interventions, and from temporary works to permanent ones (Andrews, 1999). A large amount of literature (for example, Weilacher, 1996; Beardsley, 1998, 2000; Balmori, 2010, 2011, etc.) has reviewed the relevance of environmental art to several eminent landscape architects such as Peter Walker, Kathryn Gustafson and George Hargreaves. 'History cannot give us a program for the future, but it can give us a fuller understanding of ourselves, so that we can better face the future' (Warren, 1929, p.100). By exploring this aspect of landscape history, the research aims to show how landscape architecture has been impacted by environmental art in three ways, comprising: 1) forms and styles; 2) significant thoughts and ideas; and 3) practices of the two disciplines.

The investigation of the research covers practices of landscape architecture and environmental art in various contexts, including Europe and North America. However, the research's fieldwork, which includes semi-structured interviews and focus group, are based in the United Kingdom. The two research methods brought together specialists from the two disciplines, were conducted by the researcher. The semi-structured interviews gained first-hand and insightful information for the research, while the focus group was intended to produce in-depth analysis of themes deriving from the interviews. Discourses representing a synthesis of the thinking reflected in the findings of the two research data collections were triangulated with the literature reviews. Reflecting on the research objectives, the empirical study of the research identifies how environmental art affects landscape architecture in three themes. The

first theme discusses variations of forms and styles, in which the research suggests that the pure and simplified forms of Modernism and experimental aspect of Postmodernism make an impact on landscape architecture through its connection with environmental art. The second theme investigates significant thoughts and ideas, in which the research highlights four theoretical connections, interchanging between the two disciplines comprising the concept of the spirit of the site, the three eighteenth-century aesthetics concepts, Environmentalism, and the passage of time. Aspects of the creativity and experimentation in environmental art, which transform these four thoughts and ideas into artworks, have had an effect upon landscape architecture. The final theme explores the professional practices of the two disciplines. The research confirms that the two practices work across discipline boundaries, even though they have different agendas in professional practice. The research also identifies that this may be because environmental art is not bound by any professional institution, so that it is able to reposition and reframe itself through time. Even though environmental art today has different approaches from its first emergence in the 1960s, contemporary landscape architecture remains affected by the art. A number of significant underlying issues within the theories and practices of landscape architecture are also addressed. The findings of the research also suggest that landscape architecture is relevant to environmental art. Consequently, the conceptual guidelines proposed in this research are hoped to be one stage towards paving the way for the future development of landscape architecture.

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CHAPTER 1 | ENVIRONMENTAL ART AND LANDSCAPE **ARCHITECTURE IN THE 1960s**

1.1 BACKGROUND OF THE RESEARCH

Historically, landscape has always been a theme of art (Andrews, 1999). According to Lailach and Grosenick (2007), in the fourteenth century, landscape sceneries were typically captured in paintings, drawings and prints. In the eighteenth century, illustrations of landscapes served to describe the feelings of the Beautiful, Sublime and Picturesque in paintings (Bearsley, 1998). Two centuries later, landscape images became critical themes in the manifestations of Modern art such as Surrealism, ¹ Expressionism² and Futurism³ (Lailach and Grosenick, 2007). In the 1960s, the theme of landscape in art took a radical turn. Initially developed as a rejection of the traditional art gallery, in which works of art were typically protected in a controlled environment, landscape became a means of art seeking intervention to redefine the connection between the human and the natural world. Rather than simply placing the artworks on or in landscapes as in traditional paintings or sculptures, environmental art was formulated into unique forms, integrating with landscapes using natural materials, such as earth, stone, water and other materials, as the means of art creation (Weilacher, 1996). Kastner (1998) remarked that, in its early development, environmental art primarily aimed at natural phenomena and artistic expression. This could be found in artworks such as James Turrell's Roden Crater (1977) in Arizona, which was presented as a pathway to experiencing the contemplation of illumination and landscape (Rodencrater, 2015), and Robert Morris's Observatory (1971) in the Netherlands, which aimed to explore the passage of time in monumental earthworks (Kastner, 1998). Both artworks are presented in Figures 1.1–1.3. At a similar time to the evolution of environmental art,

¹ Surrealism was an art expression in the beginning of the twentieth century which explored ways to unleash the subconscious vision (Tate, 2015).

² Expressionism was an artistic style in the early years of the twentieth century that attempted to depict the subjective feelings rather than its reality (Art Movements, 2015).

³ Futurism was a style of art in the early 1920s, which embraced popular media and new technologies in the art expression (The Art Story, 2015)

there emerged the modern or second wave of the environmental movement,⁴ which was concerned with the rapid destruction of natural habitats and environments as a result of fast-growing urbanisation (Matilsky, 1992). Responding to the environmental movement, environmental art expanded its boundaries from its early development, becoming a platform for expressing concerns and educating audiences about environmental issues (Lailach and Grosenick, 2007). Some of the iconic environmental artworks in this regard include Smithson's Spiral Jetty (1970), a massive spiral roadway of rock and earth extending into the Great Salt Lake of Utah (Tiberghien, 1993), and Herbert Bayer's Mill Creek Canyon (1982) in Washington state, in which its mounds functioned as drainage basins to control flooding (Matilsky, 1992). Both of these are illustrated in Figures 1.4–1.5. Since their first emergence in the 1960s, environmental artists have explored a range of techniques and materials covering vast scopes, approaches and issues. While some environmental artists focused on addressing environmental issues, the others aimed at worshipping the greatness of nature and artistic expressions. Nevertheless, the most compelling form of environmental art, in general, stood out as those exceptional and noteworthy examples that reconciled humanity and nature (Weilacher, 1996).

The discipline of landscape architecture, on the other hand, which is devoted to understanding and shaping the land, was first officially established in 1858, yet its historical development may be traced as far as the development of outdoor spaces in the origin of human civilisation (Jellicoe and Jellicoe, 1995). Throughout its long history, landscape architecture has provided advice to planning and design services concerning the modification of landscapes to improve their utility and values (Murphy, 2005). According to Weilacher (1996), in the second half of the twentieth century there had been dissatisfaction with the lack of avant-garde design in favour of functional, environmental and sociological considerations. A number of landscape architectural projects of the period were criticised as being monotonous and lifeless (ibid). The intrinsic values of landscape architecture were not appreciated by the general public

⁴ The modern or second wave of the environmental movement was a social, political and ethical movement in the 1960s, which was concerned about improving and protecting the quality of the natural environment through the embracement of political, economic and social organisation, and through the revision of humanity's relationship with nature (*Encyclopaedia Britannica*, 2015).

and other built environment disciplines. At the end of the 1960s, how environmental art innovatively integrated with the land became the front line of debate, with various viewpoints among landscape designers (Balmori, 2010). Weilacher (1996) remarked that landscape architects began to reconfigure the land in the manner of environmental art, which was neither in the classical vocabularies of French or English gardens, nor in the purely functional terms of Modernist landscapes. Formation of distinct landscape architecture forms and styles in the manner of environmental art could be seen in the works of several eminent landscape architects. For example, George Hargreaves' Candlestick Point Cultural Park (1993), in San Francisco, California, and Michael Van Valkenburg's Mill Race Park (1989–93) in Indiana (as illustrated in Figures 1.6–1.9) were early examples of industrial landscape reclamation that used striking landforms. Weilacher (1996) identifies strong affiliations of forms between Peter Walker's Tanner Fountain (1984) on Harvard campus in Massachusetts, and the environmental artist Carl Andre's Stone Field (1977) in Connecticut (Figures 1.10–1.12). The correlations of the forms, styles and underlying thoughts of these artworks and landscape architectural projects implied a strong connection between landscape architecture and environmental art, the young sub-discipline; yet, its underlying thoughts lie within the realm of visual art, which is eventually noticeable. Landscape architecture projects in the manner of environmental art were praised by various landscape critics such as Howett (1985), Beardsley (1998), Balmori (2000) and so on. Crossing landscape architecture with environmental art may assist in rekindling a vibrant and forwardlooking architecture and regaining its essential values. 'History cannot give us a program for the future, but it can give us a fuller understanding of ourselves, so that we can better face the future' (Warren, 1929, p.100). By exploring the past-to-current associations between the two disciplines, this research aims to understand how environmental art is relevant to landscape architecture in three aspects, including forms and styles; significant thoughts and ideas; and the practices of the two disciplines. The research is also interested in examining the proposition of landscape architecture theoretically and in practice after its association with environmental art from the 1960s onwards. The investigation of the research will cover practices by the two disciplines in multiple geographical contexts, including Europe and North America. However, the fieldwork of the research is based in the United Kingdom. By rigorous examination of the research,

it is hoped that the study will assist in guiding means for decisive contributions to future landscape architecture.



Figure 1.1: Robert Morris's Observatory (1971)





Figures 1.2 -1.3: James Turrell's Roden Crater (1977)





From left to right: Figure 1.4: Robert Smithson's *Spiral Jetty* (1970) Figure 1.5: Herbert Meyer's *Mill Creek Canyon* (1982)





Figures 1.6-1.7: George Hargreaves' Candlestick Point Cultural Park (1993)





Figures 1.8-1.9: Michael Van Valkenburgh's Mill Race Park (1989-93)



Figure 1.10: Peter Walker's the Tanner fountain (1984)





Figures 1.11-1.12 Carl Andre's Stone Field (1977)

1.2 RESEARCH QUESTION AND RESEARCH OBJECTIVES

This study explores links between environmental art and landscape architecture. The research question can be expressed as:

'What is the relevance of environmental art to landscape architecture in theory and in practice?'

In order to answer this question, the study focuses on issues associated with landscape architecture and environmental art including forms, styles, thoughts, ideas and practice. The objectives of the research can be articulated as follows;

- 1. To explore whether environmental art is relevant to landscape architecture in terms of forms and styles.
- 2. To investigate the relevance, in terms of thoughts and ideas, of environmental art to landscape architecture.
- 3. To investigate how environmental art practice is relevant to landscape architecture.
- 4. To investigate how landscape architecture stands theoretically and in practice after being associated with environmental art from the 1960s onwards.

1.3 TRACING THE RELEVANCE OF ENVIRONMENTAL ART TO LANDSCAPE ARCHITECTURE

Ideas about the design of landscape architecture can be derived from various sources, such as site location, the built or natural environment, culture, society, books and magazines. Belden and Fessard (2001) remarked that artists create artworks to communicate or express their thoughts and ideas, to provide their audiences with a cooperative learning experience that can motivate people to express their ideas in a variety of shapes and means. Art thus has 'the capacity to trigger reflection, generate empathy, create dialogue and foster new ideas and relationships and offers ways of

expressing, sharing and shaping ideas' (Wright, 2013, p. 4). All types of art, including environmental art, can thus serve as a source of ideas and inspiration for landscape architectural design. Through all artworks, designers are enabled to learn complex thinking and cultivate innovative ideas (Belden and Fessard, 2001).

Landscape designers themselves may directly or indirectly express ideas and acknowledge the sources of ideas in designing landscapes, in the form of a landscape project statement or interviews in magazines, or presentations for academic events. However, there is no obligation upon artists or designers to identify their precedents or sources of inspiration. In the absence of such direct acknowledgement, the researcher must rely upon the identification of traces and similarities. It is a matter of interpretation. Reviews of the relevance of art, in general, in fostering new ideas are much written about; however, there is no detailed study of how ideas about art encourage or influence critical thinking in landscape architecture. In the discipline of architecture, Alfirevic (2011) remarked that sources of inspiration in architectural design, such as cultural context, or different social, political or economic conditions, can be reflected through architectural forms, which may include overall physical appearances, component elements and architectural specifications. For example, the history of architecture reveals that changes in construction technology brought very radical changes to architecture and physical appearances. The dome, the arch and the vault were partly results of the technology of their time. These architectural forms, in turn, changed with the advent of reinforced concrete or when other marked changes in construction - for example, various innovative modern materials such as aluminium, steel or plastics – came about. In landscape architecture itself, the influence of classical ideals and the principles of order and beauty of Renaissance art were perceived through the form and style of the gardens. Jellicoe (1959) noted that even though the gardens of the time may not have been praised as highly as painting, sculpture and architecture, the principles of Renaissance art were probably illustrated through landscape architecture more clearly than in any other art of the same period. At various times in history, societal changes and scientific advances did change landscape architecture, such as the influence of plant collecting and advances in horticulture upon nineteenthcentury park and garden design, which led to the birth of the Gardenesque.⁵

Drawing from such viewpoints, it may be possible to trace the relevance of environmental artworks on landscape architecture through critical analysis of the correlations in terms of principles of landscape design, forms, styles and ideas expressed by environmental artists and landscape architects and their works. If any visual resemblances in overall appearances or any ornaments or motifs between the works of the two disciplines can be found, it could be inferred that there has been a crossfertilisation of ideas. Traces of the relevance of environmental art to landscape architecture may also be discovered by studying the information provided about the projects, which may include the process used in design or analysis, the intellectual or knowledge base, the ethical approach, and so on.

Central to the thesis is a significant remark by Geoffrey Jellicoe (1959), who said that the process of art-making differs from the landscape architectural design process. He remarked that artists did not have to concern themselves with living materials and that the art creation process could be relatively fast, which was dissimilar to the landscape design process. According to Crewe and Forsyth (2003), landscape design is a collaborative endeavour, gathering data and information in the search for forms and design solutions that satisfy a programme. Landscape architects must understand the issues of the site on a deeper level through the different analyses executed as part of landscape design process (Steinitz, 1995). After the landscape programme and site analyses are finalised, the landscape architect can conceptualise the project (Crewe and Forsyth, 2003). The implication of this difference in the creation process is that, unlike art, landscape architectural forms need to correspond not only with innovative ideas but also with various factors deriving from the programme and the site. Thus, to be able to trace how environmental art is relevant to landscape architecture, critical analysis of the background provided and information about both environmental artworks and landscape architecture projects is necessary. The thesis will also discuss whether the relevance of environmental art is direct or indirect.

⁵ The Gardenesque movement, introduced by John Claudius Loudon (1783–1843) in the nineteenth century, aimed to create artistically composed landscape representation (Thompson, 2014).

1.4 TERMINOLOGIES OF THE RESEARCH: ITS DEVELOPMENT AND CONTEXT

Four terminologies – 'environmental art', 'landscape architecture', 'environment' and 'nature' – applied in this research can take different meanings, depending on how they are defined or who defines them. Different institutions have been related to different interpretations of these terms. A brief development of the terms and of their meanings are subsequently described.

1.4.1 THE TERM 'ENVIRONMENTAL ART'

The term 'environmental art' is interconnected with other conceptual terms. According to Weilacher (1996), the term 'land art' was initially coined to describe the movement of avant-garde art on the land, rising against the traditional gallery and museum culture in the United States in the late 1960s. Later, the term 'environmental art' was introduced in response to the modern environmental movement in the same decade. Maltilsky (1992) noted that both environmental art and land art are designed for a particular site and are expressed in similar manner, using elements of nature taken in various forms, including intervention in the site, large sculptural artworks and, also, the installation in art galleries of natural materials. Much environmental art interprets the concept of nature and processes, or educates its audiences about the environmental issues of the site settings; while land art is not necessarily concerned with environmental problems, but is much more amenably socialised and integrated into the dominant culture than the earlier earthworks (Boettger, 2002).

The term 'earthwork', or 'earth art', was originally derived from a military engineering register and was taken as the title of the novel *Earthworks* by Brian Aldiss in 1966 (Tiberghien, 1993). Robert Smithson is credited for the first use in his artworks. Earthwork, or earth art, is described as art which is created in the landscape and built with the local materials of the site (Maltilsky, 1992). Maltilsky (1992) noted that the earthworks, or earth art, are not truly site specific, and several of the works disregard the need for problem-solving and the understanding of how nature works. Along with

environmental art, the term 'earthwork' is used in a rather limited fashion (Weilacher, 1996).

Two terms, 'site-specific art' and 'ecological art', were later applied in the art world. According to Kaye (2000), 'site-specific art' is defined in relation to its place and position. The art might articulate and define itself through properties, qualities or meaning produced in specific relationships between the art and a position it occupies (Lailach and Grosenick, 2007). The artist conceives the work for a particular site location and creates the art especially for the site. Thereby, the location's surface, structure and materiality are altered and inscribe themselves into the site. Site-specific art may or may not express concern over environmental issues or its site location. On the other hand, 'ecological art', which is an expansion of environmental art (Maltilsky, 1992), usually attempts to address environmental problems and revitalise the ecosystem and human interactions with nature. Ecological art is also referred to as *Naturkunst* in Germany. *Naturkunst*, meaning nature art, emerged in connection with the growing ecological awareness in Europe in the early 1970s (Lailach and Grosenick, 2007).

These terms dominate variously in different regions. Weilacher (1998) remarked that the terms 'environmental art' is common in the UK, referring to all environmental works, while 'land art' is prevalent in Europe. In the United States, 'earthworks' or 'earth art' is more common. Both 'site-specific art' and 'ecological art' are applied in both the North American and European regions. Artists working with the land often collaborate with scientists and engineers (Maltilsky, 1992). To prevent confusion of terminologies, this thesis solely uses the term 'environmental art' to describe art that uses elements of nature in various forms – including intervention in the site, large sculptural artworks and, also, the installation in an art gallery of natural materials – which foster respect for nature and also express concerns over environmental issues through their median artworks. With artworks similar in visual appearance but different in approach, classifying the various typologies of outdoor environmental artworks is complex. Therefore, critical consideration of the outdoor interventions is necessary.

1.4.2 THE TERM 'LANDSCAPE ARCHITECTURE'

The term 'landscape', first used in English in 1598, originates from two terms, German Landschaft and Dutch landschap, meaning 'a picture representing natural inland scenery as distinguished from a sea picture or portrait' (Soanes et al., 2006, p.628). According to Thompson (2014), William Andrews Nesfield, who refined the gardens of Buckingham Palace, first introduced the term 'landscape architecture'. Frederick Law Olmsted and Calvert Vaux adopted the term in 1863 to describe the professional task of designing, planting, creating landforms, paving and other structures (Motloch, 2001). The term 'landscape architecture' in earlier times was interpreted variously. Theodora Kimball Hubbard (1887-1935) referred to landscape architecture as 'a fine art whose most important function is to create and preserve beauty in the surroundings of human habitations and in the broader natural scenery of the country: but it is also concerned with promoting the comfort, convenience and health of urban populations' (Laurie, 1986, p.9). Brian Hackett pointed to another essential difference between landscape architecture and other design professions, which is the medium of the landscape, subject to change and growth (ibid). According to Motloch (2001), in a contemporary context, definitions of landscape architecture are concerned with aspects of art, science and management of landscape. Garett Eckbo's definition of landscape architecture is related to the concept expressed by others that landscape architecture is an extension of architecture (Laurie, 1986).

In the UK, the Landscape Institute (LI) (2012) describes the profession as 'a blend of science and art, vision and thought. It is a creative profession skilled in strategic planning, delivery and management. All aspects of the science, planning, design, implementation and management of landscapes and their environment in urban and rural areas and the assessment, conservation, development, creation and sustainability of landscapes'.

In the United States, the American Society of Landscape Architects (ASLA) (2015) defines landscape architecture as a profession which 'encompasses the analysis, planning, design, management, and stewardship of the natural and built environment'.

Stewardship is specified in addition to management, since it suggests a more comprehensive approach.

In Europe, the International Federation of Landscape Architects (IFLA) (2015) defines landscape architecture as the fields of the profession that 'conduct research and advise on planning, design and management of the outdoor environment and spaces, both within and beyond the built environment, and its conservation and sustainability of development'.

Germany's Bund Deutscher Landschaftsarchitekten (BDLA) (2015), the oldest such professional body in Europe, founded in 1913, states landscape architecture to be a cultural expression that 'combine[s] ecological awareness and expertise with planning competence and prove[s] the feasibility of plans and realize[s] projects'. The significant point about the BDLA definition is that it refers to landscape as a cultural construct and includes an ecological awareness.

Though they are described differently, the definitions by the LI, ASLA and IFLA seem to share a focus on providing advice on planning, design and management of the outdoor environment. On the other hand, Germany's BDLA seems to emphasise the combination of an aspect of ecological awareness with landscape architecture.

These definitions of landscape architecture encompass multiple scales, ranging from individual sites to neighbourhoods and districts, corridors and networks, and cities and regions. The large scale is concerned with strategy and planning, while the medium scale and small scale are concerned with details of design. These variations in the scales of landscape architecture lead to overlaps of professional boundaries with other built environmental designers such as those in environmental art, architecture and urban design. To allow a compatible measurement with environmental art, the focus of the thesis will be on small-scale and medium-scale landscapes, which emphasise design rather than planning. The context of the research will be bounded in the European and the United States region, in which the discipline of environmental art originated and retains its relevance.

1.4.3 THE TERMS 'ENVIRONMENT' AND 'NATURE'

The two terms 'environment' and 'nature' are sometimes thought of as synonymous. The term 'environment' is rooted in the French word 'environ' – which means to surround, to envelop, to enclose – and the closer term, 'milieu', which is often taken to mean the same as 'environment'. Typically, the environment refers to the physical world which surrounds something (Barry, 1999). Understanding the term 'environment' involves recognising that human life is a part of a physical and cultural medium through which people and places join together.

On the other hand, the term 'nature' comes from the old French word *nature* and Latin word *natura*, meaning to be born (William, 1988). Nature is usually defined as being contrasted with the artificial. The terminology is often understood as referring to the conditions of life and all that exists on this planet as a whole.

Barry (1999) noted that both 'nature' and 'environment' can have various interpretations; they are not entirely coherent. While the term 'environment' is considered as a concrete concept, 'nature' is often accounted as an abstract, universal sense of the non-human world, referring to the totality of the latter. The two terms are viewed in opposition to human society and culture, but this separation does not mean that humans do not have a relationship with their environment.

1.5 ITALICISATION OF ENVIRONMENTAL ARTWORKS AND LANDSCAPE ARCHITECTURAL WORKS

Titles of environmental art and landscape architectural works are mentioned throughout the thesis. According to the *University of Oxford Style Guide* (2016), the titles of works of art should be italicised, while the titles of landscape architectural works should be roman. In this thesis, these guidelines are generally applied to most cases of environmental art and landscape architectural works. However, three eminent figures, Charles Jencks, Maya Lin and Martha Schwartz, make exceptional cases. Both Charles Jencks and Maya Lin have educational backgrounds in architecture. Martha Schwartz, on the other hand, obtained her degrees in both art and landscape architecture. Based on their physical appearances, works by these three figures can be classified as both

environmental art and landscape architectural works. The criterion for italicisation in this thesis is the objective of the particular work. If works aim mainly to provide uses and functions, their titles are roman. The titles of works are italicised when their main objective is primarily to provide artistic expression, and uses and functions are a secondary purpose. Using this guideline, all works by Maya Lin presented in this thesis are italicised; for example, the Vietnam Veterans' Memorial (1982), The Wave Field (1995) and A Fold in the Field (2013). However, titles of works by Charles Jencks and Martha Schwartz may be either italicised or roman. Concerning Jencks, the title of Northumberlandia (2012), which aims to be a land sculpture, is italicised, while that of his private garden, the Symmetry Break Terrace (1994), is roman. With the same logic, titles of art installations by Martha Schwartz such as The Bagel Garden (1979) or The Splice Garden (1986), are italicised, while the titles of her landscape architectural works such as the Jacob Javits Plaza (1992) and the Fryston Village Green project (2005) are roman. According to the above review, these landscape architectural projects must have been well recognised in the manner of environmental art, so that the italicisations of their titles are widely presented in various publications, implying difficulties in drawing disciplinary boundaries, which is one of the research's main focuses.

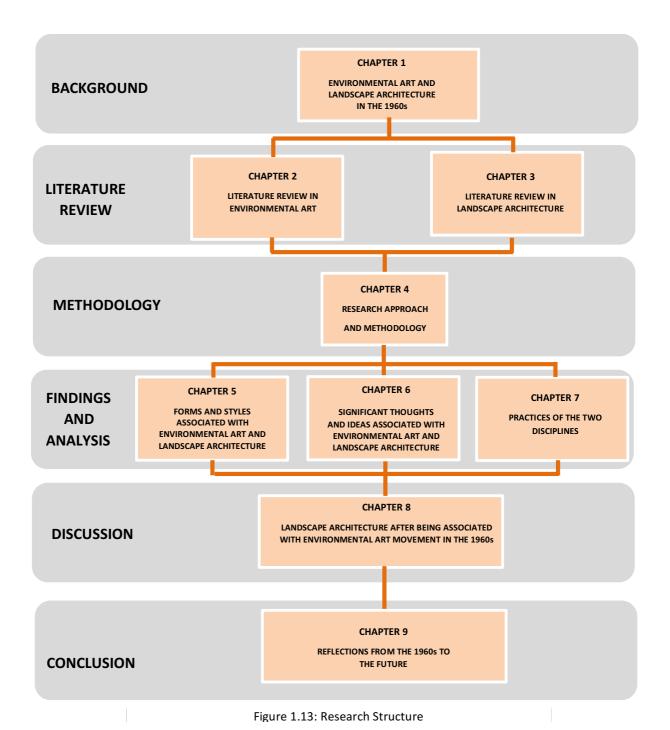
1.6 METHODOLOGICAL APPROACH

This study draws on a qualitative approach, which helps understanding of the experiences and attitudes towards particular issues in certain contexts (Creswell, 2003). By using a qualitative approach, the investigation of the relevance of environmental art to landscape architecture is possible. The literature reviews in Chapters Two and Three help to form an understanding of issues relating to the research questions and gain an insight into current debates, thoughts and ideas in environmental art and landscape architecture. A conceptual framework was developed and informed by reviews of the literature related to environmental art and landscape architecture; the empirical part of the research was informed by data gathered through semi-structured interviews and focus groups. Semi-structured interviews with specialists were conducted to provide insight into how the two disciplines were associated and influenced each other. The semi-structured interviews were piloted with specialists from Newcastle University in

order to understand whether the way in which the questions were framed was clear, and to highlight particular areas of interest that were not apparent in the research planning stages. The focus groups were intended to provide in-depth analysis of themes deriving from the interviews. Discourses representing a synthesis of the thinking reflected in the findings of the two sets of primary data were triangulated with the literature reviews. Subsequently, the current position of landscape architecture, after being associated with environmental art, could be deduced. The guidelines for a future landscape architecture associated with environmental art could be developed.

1.7 RESEARCH STRUCTURE

The title of the thesis is 'A Study of the Relevance of Environmental Art to Landscape Architecture in the Context of the United Kingdom'. The structure of the thesis is as illustrated in Figure 1.13.



CHAPTER 1: ENVIRONMENTAL ART AND LANDSCAPE ARCHITECTURE IN THE 1960s

The introductory chapter includes the background of the research, the research question and objectives of the research. The chapter also discusses how the relevance of environmental art to landscape architecture may be traced. There are several terminologies used in this research, including 'environmental art', 'landscape architecture', 'nature' and 'environment'. The chapter briefly discusses the development of the terminologies and provides definitions for the research. The overall thesis outline is also included in the chapter.

CHAPTER 2: LITERATURE REVIEW IN ENVIRONMENTAL ART

Chapter Two reviews literature related to environmental art. It aims to understand the historical background, development and underlying issues within the realm of environmental art from the 1960s onwards. The setting and reproduction of the artworks are also reviewed in the chapter. With the aim of reflecting upon the research objectives, the chapter includes three sections comprising 1) forms and styles; 2) significant theories, movements and thoughts; and 3) practices of environmental art. A section on art critique is also contained in the chapter.

CHAPTER 3: LITERATURE REVIEW IN LANDSCAPE ARCHITECTURE

Chapter Three reviews the literature associated with landscape architecture. It aims to understand the historical background, development and underlying issues within the discipline landscape architecture from the 1960s onwards. The chapter reviews the three themes, which correspond with the reviews of environmental art in Chapter Two. A conceptual framework representing the areas of fieldwork investigation on the relevance of environmental art to landscape architecture is also included in the chapter.

CHAPTER 4: RESEARCH APPROACH AND METHODOLOGY

Chapter Four is the research design and methodology chapter. It discusses the qualitative approach and the inductive and deductive models employed in the research. It also discusses how the investigation is conducted in order to answer the research questions highlighted. It covers the framework for data collections, which are semi-structured interviews with specialists and focus groups. The chapter also discusses the

thematic analysis adopted for this thesis. In addition, the chapter also provides strategies for the analysis of findings acquired from the two methods of the research – semi-structured interviews with specialists and focus groups. In accordance with the research objectives, the findings of the research are framed in three themes, including 1) forms and styles; 2) significant thoughts and ideas; and 3) practices of the two disciplines. Each of these is discussed in Chapters Five, Six and Seven respectively.

CHAPTER 5: FORMS AND STYLES

This chapter analyses the findings from the semi-structured interviews with specialists and focus groups exploring different ideas regarding the first theme: forms, styles and works of landscape architecture and environmental art. The chapter also highlights similarities of and differences in various aspects of forms and styles of landscape architecture and environmental art.

CHAPTER 6: SIGNIFICANT THOUGHTS AND IDEAS

This chapter continues to present the findings from the two data collections used in the research. The chapter deliberates the analysis of the second theme: significant thoughts and ideas associated with landscape architecture and environmental art. The chapter highlights common and contrasting thoughts and ideas between the two disciplines.

CHAPTER 7: PRACTICES OF THE TWO DISCIPLINES

This chapter continues to present the findings of the research. It examines the analysis of the third theme: the practices of landscape architecture and environmental art. The chapter also highlights issues regarding institutionalised professional divisions between environmental art and landscape architecture. Perceptions, current practices of the two disciplines and future practices of landscape architecture are also presented in the chapter.

CHAPTER 8: LANDSCAPE ARCHITECTURE AFTER BEING ASSOCIATED WITH ENVIRONMENTAL ART IN THE 1960s

Chapter Eight begins with the identification of overarching themes that emerged from the findings of the research, which represent a synthesis of the thinking reflected in the findings of the two data collection methods. The overarching themes are then discussed against the literature review findings in Chapters Two and Three, reflecting the theoretical and professional positions of landscape architecture that have been associated with environmental art since the 1960s. The summary of the chapter is presented according to the three main themes.

CHAPTER 9: REFLECTIONS FROM THE 1960s TO THE FUTURE

The chapter draws conclusions from the findings and evidence presented throughout the research. It addresses how environmental art has reflected upon landscape architecture from the 1960s to the present, and provides guidelines of how landscape architecture should be developed in the future.



CHAPTER 2 LITERATURE REVIEW IN ENVIRONMENTAL ART

INTRODUCTION

In reflecting on the research objectives, this chapter reviews the literature on environmental art, which includes books, publications, and academic articles from artists' accounts, critics' accounts, art catalogues, and digital information deriving from websites and social networking sites (SNS) of environmental art organisations. The review will consist of three categories, including 1) forms and styles, 2) significant thoughts and ideas, and 3) practice of art. In addition, it also reviews issues related to environmental art.

2.1 BRIEF HISTORICAL DEVELOPMENT OF THE ENVIRONMENTAL ART MOVEMENT

In the 1960s, environmental art emerged in the United States and in Europe as a reaction against gallery or museum culture, 6 moving art exhibitions into outdoor locations (Lailach and Grosenick, 2007). No longer depicted in paintings, landscapes became the medium of the artist's creation in starting a dialogue between humans and nature. The interventions of environmental art were mostly on massive scales, employing unconventional techniques and natural materials, and restructuring particular landscapes. In attempting to clarify whether environmental artworks were sculptures, architecture or landscape design, the American art critic Rosalind Krauss wrote *Sculpture in the Expanded Field* (1979), which laid out a a diagram⁷ (Figure 2.1) providing the structural parameters of sculpture, architecture, and landscape. Krauss (1979) identified environmental artwork as 'mark-site', which is considered to be

An art gallery, or art museum, in which art objects such as paintings, sculptures, decorative art, art installations, etc. are displayed, can be either public or private. The private art gallery is usually a commercial enterprise for the sale of art. The art gallery and art museum typically justify the values and merits of the art objects to be displayed in their art exhibition spaces. In the 1960s, the neutrality of galleries and museums and their affiliation with commercialization were called into question (Hoeveler, 1996).

⁷ See Appendix A

neither 'landscape' nor 'non-landscape'. The diagram also offered an alternate way of viewing what environmental artworks could become if they were combined with architecture and landscape architecture (Papapetros and Rose, 2014). The artworks, for the first time, situated themselves on a new boundary.

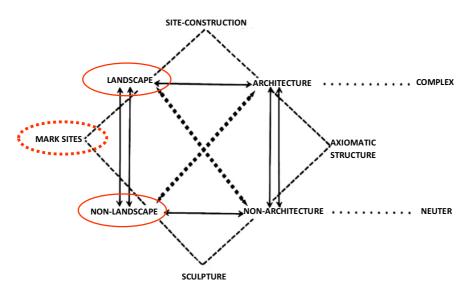


Figure 2.1: Rosalind Krauss's diagram of Postmodern Sculpture.

The galleries and museums subsequently opened up to environmental art by providing opportunities for its development, giving shape to the environmental art movement (Beardsley, 1998). Many environmental artists became established figures and gallery representatives, and were able to access the resources of the contemporary art world. In the late 1960s, the destruction of habitats and the deterioration of urban life worldwide prompted modern environmentalism (Maltisky, 1992). Many practitioners from various disciplines, including environmental artists, were in the vanguard of raising awareness of environmental issues (ibid). In response to the environmental movement, American environmental artworks became platforms for the artists to express their concern and educate their audiences on environmental issues. The artworks were mostly presented in the form of reclamation and remediation of damaged environments, restoring ecosystems in artistic ways. Pioneer American artists included Robert Smithson, Nancy Holt, Herbert Bayer, Walter De Maria, Carl Andre, Michael Heizer, Robert Morris and Dennis Oppenheim. Some eminent American artists and examples of their artworks are illustrated in Figure 2.2. According to Kastner (1998), environmental movement was also felt in Europe, although it was taken to a different shape and form. The environmental issues in Europe seemed to be

less striking. Therefore, although there was a tendency of artists in Europe to follow developments of environmental art in America, most of the environmental artworks in Europe were presented in the form of interpretation of nature and its processes to reenvision their relationship to nature and propose ways for humankind to co-exist with nature. Such artworks were created to prompt the experience and appreciation of art and nature. This art appeared in the works and thinking of many other artists, particularly the avant-garde European artists, including Andy Goldsworthy, Richard Long, Joseph Beuys, Ian Hamilton Finlay, Chris Drury and Christo Javacheff. Figure 2.3 presents some prominent European artists and examples of their artworks. Although different in approach, both traditions of environmental artworks re-envision and reinterpret the complex conception of nature. Robert Smithson, the American environmental artist, most obviously transitioned to a view of nature as multifaceted and changing. In his interview in 1972, Smithson made a clear statement: 'We have to develop a different sense of nature; we have to develop a dialectic of nature that includes man' (Boettge, 2002, p.218).

In recent years, although monumental environmental artworks, similar to those of the 1960s, could still be seen, for example, in Charles Jencks's *Northumberlandia* (2012) in Northumberland, environmental art also takes various forms. Through collaborations with scientists and multidisciplinary teams, environmental art has advanced, allowing the artists to work freely in investigating nature. Artists such as Tim Collins and Reiko Goto, Mel Chin, and Peter Fend, often created their artworks based on a collaboration with a scientist (Matilsky, 1992). In addition, an act of guerrilla gardening, first formed in the 1970s by a diverse range of people, including gardeners, could be considered as one of contemporary environmental arts (Lamborn and Weinberg). The Guerrilla Gardens or sometimes called street arts were aimed to apply an artistic aspect on landscape design of abandoned urban sites, neglected areas, or, in some cases, on private property in various countries across the world (ibid). The expansion of environmental art today has been radically transformed since its first emergence in the 1960s. Environmental artists continue to reflect the evolution of an environmental movement. The following section reviews the background in the setting of artworks

and the reproduction of environmental art. Figures 2.4–2.9 depict some examples of recent environmental artworks.



Figure 2.2: Some eminent American environmental artists and their artworks.



Figure 2.3: Some prominent European environmental artists and their artworks.

Figure 2.2: Key Images

1	2	3	4	5
6	7	8	9	10

1) Michael Heizer, 2) James Turrell, 3) Robert Smithson, 4) Nancy Holt, 5) Walter De Maria, 6) Heizer's *Double Negative* (1970), 7) Turrell's *Roden Crator* (1977), 8) Smithson's *Amrillo ramp* (1973), 9) Holt's *Sun Tunnels* (1976), and 10) De Maria's *Lightening Field* (1977)

Figure 2.3: Key Images

1	2	3	4	5
6	7	8	9	10

1) Andy Goldsworthy, 2) Richard Long, 3) Joseph Beuys, 4) Ian Hamilton Finlay, 5) Chris Drury, 6) Goldsworthy's *Yellow Elm Leaves Laid over a Rock* (1991), 7) Long's *Cornwall Slate Line* (1990), 8) Beuys's *7000 Oaks* (1987), 9) Finlay's part of the series *Stonypaths* (beginning in 1967), and 10) Drury's *Rhine Mosel Slate Whirlpool* (2012)











From top to bottom and from left to right: Figure 2.4: Charles Jencks's *Northumberlandia* (2012), Figure 2.5 Tim Collins and Reiko Goto-Collins's *Nine Mile Run*: (Community Dialogues) (1997-2000), Figure 2.6 Mel Chin's *Revival Field* (1993), Figures 2.7 Peter Fend's *Ocean Earth: Europa* (1991) Figures 2.8-2.9: Guerrilla Gardens in London (2012)

2.1.2 SETTINGS OF ARTWORKS

The importance of site location has been stressed as a part of environmental art creation. According to Kastner (1998), in the early years of development, the selection of site location usually was usually remote from cities and suburban areas, or distant from municipal utilities, such as in canyons or deserts. This was to emphasise the simplicity and pure forms of the artworks. Examples include Michael Heizer's Isolated Mass/Circumflex (1968) in Nevada; Robert Smithson's Bingham Copper Mining Pit (1973), Utah; and Richard Long's A Line in Ireland (1974) in Ireland, as illustrated in Figures 2.10-2.12. Most early works of pioneers among environmental artists are found to be of this manner (Lailach and Grosenick, 2007). However, in later years, there was a paradigmatic shift in the attitudes of artists towards the site location of the artworks. Many environmental artists became interested in contributing to cultural and social change in developed urban areas and inner city locations (Maltisky, 1992). Examples include Alan Sonfist's Time Landscape (1978) in New York, Agnes Denes's Wheatfield (1982) in New York, and Nancy Holt's Dark Star Park (1984) in Virginia, as presented in Figures 2.13-2.15. Kastner (1998) noted that several cities in the United States and various countries in Europe have passed ordinances that allocate for art. There are many rationales offered for these programmes. They are educational, as they bring an awareness of contemporary art to a wider audience (Moyer and Harper, 2012); they provide opportunities for artists; they stimulate tourism and economic development, and promote civic identification.



Top: From left to right: Figure 2.10-2.12: Michael Heizer's *Isolated Mass/ Circumflex* (1968), Robert Smithson's *Bingham Copper Mining Pit* (1973), Richard Long's *A Line in Ireland* (1974)



Top: From left to right: Figure 2.13-2.15: Alan Sonfist's *Time Landscape* (1978), Agnes Denes's *Wheatfield* (1982), and Nancy Holt's *Dark Star Park* (1984)

2.1.2 REPRODUCTION AND PROTOGRAPHY

Photographic technology was first invented during the nineteenth century (Maltisky, 1992). Prior to the development of environmental art in the 1960s, the technology in developing photographs was already rapidly advanced, reproducing any scenery with image accuracy. Therefore, photography became increasingly accessible to the general public. Environmental artworks were captured through photography for two main reasons. The first was the grand scale of the art, as artists were developing a sense of territorial expansion. Art turned into spacious landscapes, allowing massive terrestrial rearrangements, which could best be appreciated from the air (Boettger, 2002). The second was the art's aspect of transience, disappearing or transforming over time, or designed as temporary interventions for particular issues or locations. Photography became the primary way to capture environmental artworks permanently. Kastner

(1998) noted that the environmental art could also be merchandised through the reproduction of photography. In the reproduction process, size of the artwork's photography can be enlarged, minified, reorganised or recombined with other artworks and images. The artwork itself, which was once original and authentic, becomes much less important (Berrett, 1997).

The following sections review environmental art using the three primary themes embedded in the research objectives as a framework: 1) forms and styles associated with environmental art, 2) significant thoughts and ideas of environmental art, and 3) practice of environmental art.

2.2 FORMS AND STYLES ASSOCIATED WITH ENVIRONMENTAL ART

The investigation of relevance of environmental art upon landscape architecture in terms of form and styles is one primary objective of the research. In response to the research objectives, the chapter reviews the forms and styles associated in environmental art. According to Kastner (1998), environmental art is associated with two movements comprising Modernism and Postmodernism.

2.2.1 MODERNISM

In general, Modernism was a broad collection of ideas and cultural trends in literature, art, architecture, philosophy, history, and literary criticism (Atkins, 1993). Its origin can be traced back to the Industrial Revolution in the nineteenth century, whereby rapid transformations in manufacturing and technology profoundly impacted the social, economic and cultural conditions of life in Western Europe (Barrett, 1997).

In the discipline of art, prior to the arrival of Modernism, artists served wealthy individuals and the powerful institutions such as church or political parties that had commissioned their paintings and sculptures (Crouch, 1999). Many of the artworks depicted religion or mythology as themes. By the early twentieth century, Modernism came to dominate the discipline of art referred to as Modern Art. Artists signified

themselves as 'avant-garde', being rebellious against historical limitations and restrictions imposed by the art academy and conservative juries. Modern Artists were free in expressing their perspectives of the world around them using visual media. 'Art for the sake of art', was a slogan of the era (Barrett, 1997). Modern artists experimented with fresh ideas and expressive uses of colour, non-traditional materials, new techniques and media. Though covering several genres of art, the tendency of Modern Art is generally towards the formal, purity, universality, medium specificity, and the revolutionary (Krauss, 1986).

Modern Art was influential across Europe and the North American continent roughly from the 1860s through to the 1970s (Atkins, 1993). Barrett (1997) noted the decline of its popularity due to being heavily criticised by art critics and historians beginning in the late 1960s. Most Modern Art is no longer relevant in the twentieth-century realm of art. Modernism is now part of art history and still influential in the art world (Crouch, 1999). Weilacher (1996) noted that environmental art is associated with three major genres of Modern Art, namely Minimalism, Conceptual Art and Process Art, all of which emerged at around the end of the 1960s. Several environmental artists such as Robert Morris, Robert Smithson, Walter De Maria, Richard Long, are impacted by more than one movement in Modern Art (Kastner, 1998). How each Modern Art movement is related to environmental art is subsequently reviewed.

1) MINIMALISM

Minimalism emerged during the 1960s in response to over-decorated works and the commercialisation of art in the previous period (Meyer, 2010). Minimalism challenged the idealism of the art object by reflecting its meaning to the space of art (Kwon, 2004). Any trace of emotion in traditional conventions were removed to render its audience conscious with its art (Meyer, 2010). Its characteristics were geometric pure forms, orders and colours. Osborne (2002) noted that Minimalism is also concerned with the role of discourses in the production as well as the experience of art. Like its other characteristics, its objective approach is also pure: only a single dominant message is usually shared within Minimalist artworks. There are many Minimalist

artists in the United States such as Carl Andre, Robert Morris, Dan Flavin, Donald Judd, Sol Le Witt and others. In the European context, Minimalism was also associated with the works of the Bauhaus, Kazimir Malevich, Piet Mondrian, and De Stijl. Kastner (1998) noted that aspects and characteristics of Minimalism were passed on to some environmental art in its early development. This includes the monumental size of artworks (Boettger, 2002). Bold simplified artworks, eliminating secondary elements or detail, created a sense of monumentality, which described its form as open and extended to be more or less environmental. The artworks thus extended the environmental focus resulting from the broad transition in spatial orientation across twentieth-century sculpture from the vertical to the horizontal (Boettger, 2002). With the influence of Minimalism, the art expresses its indifference to the site, rendering itself autonomous and self-referential (Kwon, 2004). Therefore, the art becomes transportable, placeless, and nomadic (ibid). Examples of Minimal art are illustrated in Figures 2.16–2.18.

2) CONCEPTUAL ART

Conceptual Art, sometimes also called Conceptualism, is an art which emphasises the concept or idea involved in the work (Osborne, 2002). Conceptual Art is less concerned with aesthetics and materials, but focuses on the number, formula and geometry of its components. The experiences of its audiences through the ideal systems of spatio-temporal relations are considered radically challenged for Conceptual Art (ibid). Often, the art also presents its audiences with a series of questions about itself in the large scale of the artworks. Walter De Maria is an eminent environmental artist, whose works tie in with Conceptual Art (Kastner, 1998). His *Vertical Earth Kilometer* (1977) is located in the Friedrichsplatz Park in Kassel, Germany. The art consists of one-kilometer-long solid brass round rod, five centimeters in diameter, surrounded by a

⁸ Bauhaus was one of the most influential modernist art schools in the early twentieth century. It aimed to understand the relationship between art and society and technology. Even when the Bauhaus school closed, its impact both in Europe and the United States remained long after (The Art Story, 2015).

⁹ De Stijl was a group of Dutch abstract artists in the early twentieth century, who created art style based on a rigid geometry of horizontals and verticals (Tate, 2015).

two meters by two meters square red sandstone plate (Dia Art, 2016). The rod and the sandstone plate are sunk into the ground. Only the end of the rod, centrally placed, flush with the surface, and about the size of a coin, can be seen. Therefore, the large size of the artwork exists only in the viewer's mind (ibid). In front of the museum, Fridericianum, are four footpaths whose intersection marks the sculpture's location. According to Godfrey (1998), although its moment has passed, its critical challenge remains. The impact of Conceptual Art continues to be felt across the whole field of current art practice (ibid). Figures 2.19–2.21 present examples of Conceptual Art.

3) PROCESS ART

Wheeler (1991) commented that Process Art places its emphasis on the initiation of actions and process within the artworks. Process Art is concerned with how actions can be defined and entails the motivation and intentionality of the art creation process. Robert Morris, an eminent environmental artist, also famously wrote an essay about anti-form as a theme in Process Art (The Art Story, 2015). Therefore, forms of Process Art are the results of specific materials of the art creation process justified by the artists (Tate, 2015). In other words, pure human expression is perceived as an art. For Process Art, nature itself can be perceived as art; however, the symbolisation and representation of nature is omitted (Wheeler, 1991). The materials of Process Art are usually left exposed to natural phenomena, such as time, weather, temperature and gravity. Like Minimal Art and Conceptual Art, Process Art explicitly presents in the way that viewers interact with the artworks and on a large scale; therefore, its audiences are able to walk around, inside and through the artworks to obtain the art's visual experiences of physical spaces. The Process Art and environmental art movements are directly related. Process Art is elaborated in the works of environmental artists such as Richard Serra and Robert Smithson. Examples of Process Art are illustrated in Figures 2.22 - 2.23.



From left to right: Figures 2.16-2.18: Michael Heizer's Isolated Mass / Circumflex (1968)



From left to right: Figures 2.19-2.21: Walter De Maria's Vertical Earth Kilometer (1977)



From left to right: Figures 2.22-2.23: Eva Hesse's Expanded Expansion (1969) and Richard Serra's Belts (1966–67)

According to a review in the Art Encyclopedia (2015), environmental art is also associated with a number of other Modern Art forms, including traditional sculpture, De Stijl, Cubism, Assemblage, ¹⁰ as well as the work of the Romanian sculptor Constantin Brancusi (1876–1957). However, these items are not within the

¹⁰ Assemblage is a form of art that is made by 'assembling disparate elements which are often scavenged by the artist, or sometimes bought specially' (Tate, 2015).

mainstream of the practice (Weilacher, 1996), and will therefore not be explored in this research.

2.2.2 POSTMODERNISM

According to Barrett (2007), Postmodernism emerged around the 1960s, arising as a reaction to Modernism. It referred to a broad collection of ideas and cultural trends in literature, art, philosophy, history, economics, architecture, fiction and literary criticism. Rather than a total rejection of Modernism, Postmodernism is often perceived as a fracture of Modernist ideas, which accommodate various viewpoints and histories (Adamson et al., 2011). Over the past decades, critics and theorists have offered differing views on Postmodernism. In general, Postmodernism involves sensitivity to context and history (Barrett, 2007). It seeks a more pluralistic approach that embraces contexts of a given site with multiple interpretations and uses (ibid). The meaning of Postmodernism is gained through ongoing experiment, re-examination and re-interpretation of history, site location and surroundings (Hargreaves, 1983). However, in the realm of Postmodernism, there is no such thing as the way to do anything; each individual artist constructs their own truth in ways that are significant to them (Barrett, 2007). Thus, Postmodernism cannot be confined to a fixed set of theories.

Postmodern Art is characterised by layers of meanings, content, subject matter and symbolism in artworks (Raaij, 1993). Postmodern Art shows an unrestrained use of colour, forms, shapes and styles with a high imagination and a carelessness towards conventional artistic conformity (Adamson et al., 2011). Postmodern Art is interested in the process of art creation, which overlaps with the two Modernist movements, Conceptual Art and Process Art. The art is also concerned about the exploration of culture and issues of site location and surroundings; meanings are socially constructed and as such can be read as text (Kastner, 1998). This contextualist framework of Postmodernism matches with the agenda of environmental art, which involves intense re-exploration of the existing surroundings and sets out consciously to address issues in each particular site location. Thus, even though impacted by several Modern

artworks, as reviewed in the previous section, environmental art itself is often categorised as Postmodernist Art. Using models of spatial and environmental engagement, environmental artists critically analyse public issues and redefine cultural production. Postmodern spaces in environmental art thus are typically complex and fragmented.

2.3 SIGNIFICANT THOUGHTS AND IDEAS ASSOCIATED WITH ENVIRONMENTAL ART

According to Weilacher (1996), there are no particular rules or general agreement within environmental art in terms of the approach to exploring landscapes. In terms of theory applying environmental art, Kwon (2004) remarked that there is no specific theory environmental art, but general theory of visual art, philosophy of art¹¹ and aesthetic, which entangled with art discipline and its sub-disciplines for many centuries (Scruton, 1998). Within the realm of theory and philosophy applying in art discipline, the environmental art artists uniquely developed a series of different creative approaches and diverse ideas, all of which attempted to explore new strategies for art creation (Weilacher, 1996). The social and cultural ambiences of each art project are also influential factors. However, drawing on various literature, environmental art is associated with four thoughts and ideas, comprising 1) genius loci or spirit of place, 2) concepts of eighteenth-century aesthetics, 3) environmentalism and 4) passage of time.

¹¹ Philosophy of art was rooted in Theory of Forms by Plato (427—347 B.C.E.), which laid the foundations of Western philosophy and science along with his teacher Socrates (469 – 399 BC) and his most famous student, Aristotle (384—322 B.C.E.) (Kivy, 1997). It is the study of the nature of art, and is concerned with the analysis and evaluation of particular works of art including the interpretation, representation and expression, and form of art (Encyclopaedia Britannica, 2015). Philosophy of art is closely related to aesthetics. Scruton (1998) noted that historically, many philosophers discussed in philosophy of art are also great contributors to aesthetics and claims that the aesthetic is also the key to answer all our questions about art.

2.3.1 GENIUS LOCI OR SPIRIT OF PLACE

The genius loci or spirit of place, one of the core concepts of environmental art (Patterson, 2005), originated in Egypt during the Pre-Dynastic period (Gardenvisit, 2014). Norberg-Schulz (1980) noted that

According to ancient Roman belief every independent being has its genius, its guardian spirit. This spirit gives life to people and places, accompanies them from birth to death, and determines their character or essence. (p.18)

The concept aims toward having a good relationship with their natural environment (Norberg-Schulz, 1980), which is manifested as spatial configuration, site location and characterising expression (Shirazi, 2008). To preserve the genius loci is to actually respect these factors.

The artists are interested in the exploration of what is happening and what has happened in the site for their art creation process (McIver, 2015). In that process, artists consider not only physical compositions, geography, locality, topography, community and history, but also the art's sensuous qualities, which are investigated through local history and interaction with local people. Artists respond to both the physical and sensuous qualities of the site in their individual ways. The site location and its investigation process profoundly influence the forms, materials and concept of environmental artworks (Maltisky, 1992).

In environmental artworks, site location seems to be treated in two different approaches. The first is an aspect of Postmodernism. The art is resistant to the characteristics of the art but gives itself up to its context at the site, being formally determined or directed by it. The art may not be directly about the site, but it brings viewers closer to it through illustrations of landscapes and having direct experience of the artworks (Boettger, 2002). The artworks focus on establishing a relationship between the work and its site by framing their artworks against the characteristics of the site contexts (Kwon, 2004). Meanings of the site context are relocated within the art object. When placed in urban space, the art is regarded as 'art as public spaces' (p.95), seeking integration between art, architecture, and the landscape (Kwon, 1997).

An example of environmental art in Postmodernism is Robert Smithson's Spiral Jetty (1970), in which the artwork is created against the character of the site context, the Great Salt Lake, Utah (Balmori, 2010) (as presented in Figures 2.24–2.25). Other works are those such as Christo and Jeanne-Claude's Running Fence (1976) and the rolling hills of Sonoma, California, or Nils Udo's 80 Ton Birds Nest (2005) and woodland of Clemson University's Botanical Garden, South Carolina (as illustrated in Figures 2.26– 2.29). The second approach in environmental art is in the realm of Modernism, in which the site is perceived as an actual location and a tangible reality, in which its identity derived from a combination of physical elements of the site (Kwon, 2004). In this approach, the conception of genius loci or spirit of the site of environmental art is disregarded. The art is not truly site-specific; the understanding of the natural environments is ignored (Weilacher, 1996). The space, form and expression of the art in Modernism is then uncontaminated and is pure idealism. Balmori (2010) noted that examples of environmental artworks in the regard of Modernism include those such as Walter de Maria's Mile Long Drawing (1968) in the context of the Mojave Desert, Carl Andre's Secant (1977) in the context of a meadow background, Robert Morris's Steam (1974) in the forest background of Washington University, and Christo's Running Fence (1970) in the rolling hills of California.



Figure 2.24-2.25: Robert Smithson's Spiral Jetty (1970) and Great Salt Lake, Utah



Figure 2.26-2.27: Christo and Jeanne-Claude's *Running Fence* (1976) and rolling hills of Sonoma, California



Figure 2.28-2.29: Nils Udo's 80 Ton Birds Nest (2005) and woodland of Clemson University's Botanical Garden, South Carolina.

2.3.2 CONCEPTS OF EIGHTEENTH CENTURY AESTHETICS

1) HISTORICAL BACKGROUND

In the seventeenth century, Jean-Jacques Rousseau's sentimental ideas of nature and Romantic attitudes had a profound influence across Europe (Batey, 1994). Beauty and sensibility were also seen as parts of the canons of taste, which Rousseau's ideas challenged. William Hogarth (1697–1764)¹² differentiated the appreciation of beauty from rationality in his 1753 book The Analysis of Beauty (Thompson, 1999). The two aesthetic categories received further analysis by Edmund Burke (1729–1797). ¹³ In his famous essay, Philosophical Enguiry into the Origin of Our ideas of the Sublime and Beautiful (1757), Burke examined how sensation, imagination and judgement are interrelated in the experience of art, and how pleasure and pain are represented by the aesthetic concepts of the sublime and the beautiful (Kelly, 1998). Burke described the sublime as being the cause of strong emotions such as pain, fear or terror, which the individual is capable of feeling (Moore, 1990). Therefore, for Burke, the sublime represents feelings of solitude, vastness, terror, or the power of the instinct of selfpreservation (Strelow and David, 2004). The beautiful, on the other hand, is defined as a quality, which inspires the individual to feel affection towards it (Moore, 1990). For Burke, the beautiful may not be caused by symmetry, or by balanced scale and proportion. Any objects that differ in their degree of balance and proportion could also be described as beautiful. Thus, the beautiful aesthetic stands for the quality of smoothness, gentleness, and delicacy (Strelow and David, 2004).

In his *Critique of Judgment* (1790), Immanuel Kant (1704–1824)¹⁴ subsequently argued against Burke by identifying the differences between the sublime and the beautiful (Kelly, 1998). Kant's sublime was determined by a subjective judgment, but removed

¹² William Hogarth (1697–1764) was an eminent English painter, social critic printmaker and pictorial satirist, in the eighteenth century (Paulson, 1991).

¹³ Edmund Burke (1729–1797) was a significant Irish statesman, author, orator, political theorist and philosopher in the eighteenth century (Dreyer, 1978).

¹⁴ Immanuel Kant (1704–1824) was a German philosopher in the eighteenth century who is praised as the eminent figure of modern philosophy (Westphal, 2010).

the original intent of an author or artist as a factor in judging the aesthetic power or value of the object (ibid). However, Kant applied the sublime solely to nature because, in his view, there was no artist of nature. Therefore, the natural sublime provided a pure aesthetic judgment. As for the beautiful, Kant generally agreed with Burke's notion of truth, goodness and taste. The sublime and the beautiful were interpreted variously by several eighteenth-century thinkers. However, Burke's interpretation of the two aesthetic categories remains relevant in the eighteenth-century philosophical currency (Strelow and David, 2004).

The third aesthetic category, the picturesque – which is neither serene, like the beautiful, nor awe-inspiring, like the sublime - was later introduced by William Gilpin (1724–1804)¹⁵ to describe the missing characters of roughness and sudden variation joined to irregularity appearing in landscape paintings, especially those of landscape painters Jan van Goyen (1596-1656), Claude Lorrain (1600-1682), Salvator Rosa (1615–1673), Gaspard Dughet (1615–1675) and Jacob van Ruisdael (1629–1682) (Thompson, 2014). The interpretation of picturesque was a major subject of debate among scholars, who were particularly interested in landscapes at that time (Batey, 1994). Uvedale Price (1747–1829)¹⁶ literally described the picturesque as like a picture in his essay The Picturesque (1794). Price found a supporter in Richard Payne Knight (1750–1824), 17 who depicted a competing view of the Picturesque in The Landscape: A Didactic Poem (1794); and An Analytical Inquiry into the Principles of Taste (1805) (Strelow and David, 2004). Although he agreed with Price that it was largely aesthetic or objective qualities that created an effect of the picturesque, Knight pointed out that there were also contributions of non-aesthetic elements. These elements functioned psychologically, arousing multiple ideas and associations. The picturesque was later generally accepted as being essentially an aesthetic concerned with sensibility, linked to notions of pleasing the eyes with compositions reminiscent of those in paintings

¹⁵ William Gilpin (1724–1804) was an English artist, and writer, who coined the term Picturesque in the eighteen century as an additional aesthetic category beyond the Beautiful and the Sublime (Thompson, 2014).

¹⁶ Uvedale Price (1747–1829) was an English writer and landowner in the eighteenth century, who was at the centre of debates on the concept of the Picturesque (Amherst, 2006).

¹⁷ Richard Payne Knight (1750–1824) was a scholar in the eighteenth century, who was best known as for his debates on picturesque beauty (Amherst, 2006).

(Herrington, 2006). Both Price and Knight, however, excluded the philosophical psychology underlying Edmund Burke's the sublime and the beautiful, which is the relation of pleasure to fundamental individual and social human desires (Strelow and David, 2004).

2) ASSOCIATIONS WITH ENVIRONMENTAL ART

Eighteenth-century aesthetics, the beautiful, the sublime and the picturesque, reconnected with art again in works of environmental artists including Robert Smithson, James Pierce and Walter De Maria. According to Martin (2011), Robert Smithson was so deeply sympathetic to aesthetic investigation in the eighteenth century that he travelled to England in 1969 to visit the English landscape and make a study of the work of Price and Gilpin in Britain and the extension of their ideas to Olmsted in America. In his article "Frederick Law Olmsted and the Dialectical Landscape" (1979), Smithson placed environmental art in the context of eighteenth century English and French landscape. In Smithson's view, environmental art was a continuation of landscape design, which could act to resolve social conflict (Martin, 2011). His essay also discussed the notions of Price's idea of the picturesque, which accepted the ongoing changes of nature and attempted to develop pragmatic views of the landscapes based on actual experience and real land (Graziani, 2004). According to Martin (2011), Smithson saw Olmsted's Central Park as 'a product of phenomenological intervention on a site' (p.169). Olmsted cooperated with the natural processes of the centre of Manhattan Island, including its sedimentation, deposition and erosion, in his Central Park design (Martin, 2011). Smithson took Olmsted's phenomenological method further in his series of Site and Non-Site artworks. The art slipped into an undifferentiated state, which allows the materials of the site to structure the sensing experience of sight (Commandeur and Riemsdijk-Zandee, 2012). Kastner (1998) noted that Smithson also expanded on this idea in his masterpiece Spiral Jetty (1970), which is located in the Great Salt Lake. The Spiral Jetty is a 5-meterwide coil of black basalt rocks gathered from the site that stretches more than approximately 460 meters into the lake (ibid). Walking on the eroded path and physical disorder between the Spiral Jetty and the condensed saline water of the Great Salt Lake creates the experience of a collapse between subject and object consciousness (Martin 2011). The aspect of the picturesque which impels its audience to view the site from certain points of view is also included in the *Spiral Jetty* (ibid). Beardsley (1998) remarked that Smithson later recognized the limitations of the picturesque and replaced the idea with the post-industrial style, which accepted human disruption of the landscape and celebrated its renewal though reclamation works. Smithson's *Spiral Jetty* are as presented in Figures 2.30–2.32.

Beardsley (1998) noted that the picturesque aesthetic finds its strongest expression in the works of environmental artist James Pierce, who attempted to combine the visual values of the picturesque with its associative elements. Between 1970 and 1982, James Pierce created Pratt Farm as a garden of history containing approximately twenty distinct pieces of environmental artworks on the seventeen acres of meadow and woodland in Central Maine (Center for Land Use Interpretation, 2015). According to Beardsley (1998), the first piece was the triangular and circular turf mounds named 'the British' and 'the French', created in similar fashion to the crude fortifications used in North America by the British and French in the eighteenth century. Pratt Farm is referred to as a garden of history referenced in forms which range from the prehistoric, such as tombs and burial mounds, to more recent historical representations. Kastner (1998) noted that between 1976 and 1978, Pierce created Earthwoman, inspired by the prehistoric Venus of Willendorf, 18 in the central area of the garden (Beardsley, 1998). The Earthwoman, lying face down and thirty feet long and five feet high, is orientated to the sunrise on the summer solstice, in such a way that the sun rises through her body in a symbolic fertilisation (ibid). Pierce's Pratt Farm and *Earthwoman* are as presented in Figures 2.33–2.35.

Manifestation of the sublime could be experienced in Walter De Maria's the *Lightning Field* (1977) (Figures 2.36–2.38), in New Mexico (Beardsley, 1998). The *Lightning Field* is composed of 400 stainless steel poles at a height of 20 feet, precisely arranged in a

¹⁸ The Venus of Willendorf is a small prehistoric carving of a woman, which was found in 1908 by an archeologist near the town of Willendorf in Austria. It was estimated to be 30,000 years old (World History Chronology, 2015).

grid of 16 rows of 25 poles (ibid). Kastner (1998) remarked that it was originally built as a lightning conductor during storms, and audiences could capture and experience the feeling of the sublime, a heightened romantic perception of nature, when the natural lightning phenomenon appeared at the field of the *Lightning Field*. Beardsley (1998) commented that the *Lightning Field* is intended to be viewed by no more than six people at one time. Thus, few are fortunate to witness and experience the natural lightning phenomenon.



Figures 2.30-2.32: Robert Smithson's Spiral Jetty (1970)



Figures 2.33-2.35: James Pierce's *Pratt Farm* (1970-1982) and *Earthwoman* (1976-1978)



Figures 2.36-2.38: Walter De Maria's Lightning Field (1977)

2.3.3 ENVIRONMENTALISM

1) HISTORICAL BACKGROUND

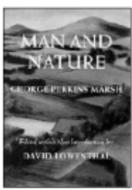
According to Belshaw (2001), environmentalism is an area of concern within the discipline of environmental philosophy, which encompasses a set of vital issues regarding the relationship between humans and nature, such as environmental ethics, environmental aesthetics and the restoration of nature. Since the nineteenth century, concerns over protecting the environment from harm caused by human actions have been raised (Dobson, 1995). Several environmental movements are apparent, leading to consistent re-examination of interpretation and perception in environmental thought, its relations to man and human values (Milton, 1993). The first environmental movement can be traced to the emergence of notions in conservation and protection of wildlife, wilderness and natural resources, which spanned from the late nineteenth century to the 1950s (Lowe and Goyder, 1983). In western culture, this was a period of growing economic, political and environmental dominance, and a time of growing ideas on environments and the people who inhabited them. The environmental movement in this period owes a great deal to George Perkins Marsh, who published Man and Nature (or Physical Geography as Modified by Human Action) in 1864, which inspired generations of environmentalists (Figures 2.39-2.40). Marsh is acknowledged to be the first American environmentalist, in the sense that he raised concerns about the destructive impact of human activity on the environment, and argued for development to be assessed for its potential disruption of nature (Barry, 1999). Buckingham and Turner (2008) state that Marsh was also linked to Transcendentalism, 19 along with Ralph Waldo Emerson, Henry David Thoreau and others, which brought together poets, intellectuals, environmentalists and political activists. The environmental movement in this period focused on conservation and preservation, which established a firm base through the twentieth century (Eckersley, 1992). A number of countries saw a gradual accumulation of policies responding to

¹⁹ Transcendentalism is an idealistic philosophical and social movement in the United States from the early nineteenth century. The movement was influenced by Romanticism, Platonism and Kantian philosophy, which stated that divinity pervades all elements of nature and humanity. Eminent transcendentalists were such as Ralph Waldo Emerson and Henry David Thoreau (Oxford Dictionary, 2015).

various environmental issues, ranging from the regulation of industrial pollution to the creation of national parks (Buckingham and Turner, 2008).

However, it was not until the emergence of modern environmentalism in the 1960s that concerns in environment became widespread (Cronon, 1996). Buckingham and Turner (2008) states that, in many respects, the 1960s represented a period of material security in which economic wealth was increasing and yet the environment was being destroyed. A number of seminal books on environmental issues published during this period propelled environmental concerns considerably. Rachel Carson's *Silent Spring* (1962) (Figures 2.41–2.42) alerted the world to the effect of pesticides on animal life and human well-being, contributing to the subsequent growth of environmental awareness in North America and Western Europe (Carter, 2001). Advanced studies in science and technology also assisted humans and society to understand environmental issues.









From left to right: Figure 2.39-2.40: George Perkins Marsh and his *Man and Nature* (1864) Figures 2.41-2.42: Rachel Carson and her *Silent Spring* (1962)

National Geographic (2015) noted that the photograph of Earth, as a single planet in the universe, taken from Apollo 17, was first published in 1972 (as illustrated in Figure 2.43). Many believe that this image, which is also called the Blue Marble, profoundly hit consciousness in the collective worldview and helped spark the modern environmental movement (Buckingham and Turner, 2008). The photo also came to

symbolize Earth Day²⁰ and it propelled the work of environmental non-profit-making concerns, such as the Natural Resources Defense Council and the Environmental Defense Fund (Earthday Network, 2015). Buckingham and Turner (2008) remarked that the photograph of Earth brought a new appreciation of the connectedness of all things terrestrial, and of the need for interdisciplinary study of the Earth from a worldwide perspective.



Figure 2.43: Photograph of Earth or the Blue Marble taken by Apollo 17

2) ASSOCIATIONS WITH ENVIRONMENTAL ART

Chameides (2013) noted that the artists of the Hudson River School,²¹ such as Thomas Cole (1801–1848) and Asher Durand (1796–1886), and their spectacular landscape paintings, were also given credit for inspiring the American preservation movement in the late 1800s, along with the transcendentalists Marsh, Thoreau and Emerson. Separated by more than one century of environmental thought, transcendentalist Henry Thoreau and his deep affinity with nature profoundly impacted on several 1960s environmental artists such as Richard Long, Robert Smithson, Andy Goldsworthy and Robert Morris (Albu, 2009).

For Richard Long, the landscape is a medium of his work representing his direct engagement with nature. Inspired by Henry David Thoreau's ideal image of walking in

²⁰ Earth Day marks as the annual celebration of what many consider the birth of the modern environmentalism movement in 1970 (Earthday Network, 2015).

²¹ The Hudson River School was a group of New York City-based landscape painters, who were under the influence of the English Thomas Cole (1801–1848) in the mid-nineteenth century (Avery, 2015).

the forest (Kastner, 1998), Long travelled across the English landscape to challenge remote terrains and document long walks with text and photographs, while creating his artworks (Beardsley, 1998). His *A Line Made by Walking* (1967) (Figures 2.44–2.46) was created by placing small stones or other ephemeral installations along arbitrarily formed straight lines across the landscape. Through the long length of the pathways, Long never made alterations on the landscapes that his art passed through (Tate, 2015). These solitary pathways were represented either as books of photographs or as individual photographs with captions recording the time and place. Long's *A Line Made by Walking* became a milestone of environmental art in Europe (ibid). Many other environmental artists also have expressed their appreciation for the beauty and intrinsic values of nature through their artworks in similar fashion to Thoreau. Interpretations of nature are taken in many forms of environmental arts through study, observation, and contemplation of natural phenomena. This type of art offers an entirely new way of interacting with nature and truly does create a relationship between the artist and nature.

Zella (2014) noted that not only is art something that is pleasing to the eyes and serves as an object of beauty, it can also be something that conveys an important message. With its ability to interact with and educate the viewers, art can address or emphasise environmental issues spreading awareness about important topics. The early wilderness-colonising efforts of the first generation of environmental artists paralleled the ideas of conquest and exploitation that characterised the industrial era. However, Beardsley (1998) stated, 'Many environmental artists desire not merely an audience for their work but a public with whom they can correspond about the meaning and purpose of their art' (p.127).

With the rise of modern environmentalism in the 1960s, the publication of Rachel Carson's *Silent Spring* (1962) and the first Earth Day celebration in 1970, environmental consciousness was radically changed. Within the movement's range of attitudes and diversity of approaches, environmental issues were variously interpreted. Solutions to restore nature and revitalise cities were proposed or implemented. Some were more environmentally conscious than others. Some of these

approaches involved spatial practices in the city rather than in distant landscapes, but the conceptual approaches were similar.

Helen Mayer Harrison and Newton Harrison's *Survival Pieces* (1971) (as shown in Figures 2.47–2.49) is a series of artworks focused on growing plants, farming shrimps and catfish, installed between 1970 and 1973 at various art exhibitions, including sites in London, Boston, and Los Angeles (Matilsky, 1992). Recognising the ignorance of how food is produced, the Harrisons sought to create a model of self-sufficiency (The Harrison Studio, 2016). Their work attempted to remind people that their survival depends upon plants and the death of other animals. The exhibition space was transformed into a field of growth, where the audiences could speculate on the processes governing life (ibid). Each exhibition was accompanied by a performance that featured the artists harvesting food, which was served to guests at the receptions. In essence, the Harrisons enacted the complete cycle of sustenance (Matilsky, 1992).

According to Cuddy (2015), the works of Joseph Beuys, a German artist, are based in concepts of humanism and social philosophy. In 1982, for the exhibition Documenta 7, Beuys proposed a plan for 7000 Oaks, each of which was to be paired with a columnar basalt stone approximately four feet high above ground, piling up on the lawn in front of the Museum Fridericianum and throughout the greater city of Kassel (as depicted in Figures 2.50–2.53). The column stones would be shrunk every time a tree was planted (ibid). By inviting the public to participate in the planting of the trees and installing the paired column, Beuys intended for his 7000 Oaks to be both an artistic and social act (Tate, 2015). Taking five years to complete, the 7000 Oaks remains as a benchmark urban renewal project of how such an endeavour can transcend art discourse to become a social action (ibid). The project was carried forward to other cities around the world as part of a global mission to effect environmental and social change (Cuddy, 2015).

According to King (2011), many environmental artists aligned themselves with non-profit-making organisations dedicated to art and environmental issues, such as *ecoartspace* in New York. There have been curated exhibitions and programmes,

providing a platform for artists who are working with scientists to address our global environmental issues; for example, Lucy Lippard's *Weather Report: Art And Climate Change* (2007), and *Criteria* (2009), an art exhibition curated by Jimena Acosta and Emiliano Godoy, at Chicago's Columbia College Art Gallery (ibid). The investigations of the environmental artists cover various techniques tackling different issues at macroand microscales. Though the artists uniquely explore diverse territories, they are in the same realm as environmentalists, sharing similar aims about balancing nature and civilisation.



Figures 2.44-2.46: Richard Long's A Line Made by Walking (1967)



Figures 2.47-2.49: Helen Mayer Harrisonn and Newton Harrison's Survival Piece (1971)



Figures 2.50-2.53: Joseph Beuys's 7000 Oaks (1987)

2.3.4 PASSAGE OF TIME

Corresponding to natural living substances, which have a life cycle, environmental art associates with the attribute of time. The life spans of these natural elements are vastly diverse. Some elements such as soils and geomorphology have a long life span, while the others, such as shrubs and cover ground plants, are completely the opposite (Swaffield and Bowring, 2013). Some of the elements are well anticipated; however, most of them are not particularly easy to foresee. This open approach to transience is embodied within environmental art in multiple senses. It not only helps to heighten perception, but often creates new space for the spontaneous, the unexpected and the experimental.

Kastner (1998) noted that experiencing art in nature is provided through a phenomenological synthesis of anticipation, perception and memory. Thus, experience in exploring the artworks and surrounding landscapes is an essential dimension of environmental artworks; for example, travelling to the site, the duration of the visit, the hour of the day, the season of the year, and so on. Time and changes become intrinsic parts of experience. Weilacher (1996) commented that appreciation of the artwork could be created through this natural phenomenon; the colour of the earth or vegetation, the position of the sun in the sky and qualities of light create meaning. Some artworks may be sustained over a long period of time, the same as traditional sculpture. However, many artworks only survive for a brief period of time: a few months, days, hours or less, due to effect of the decomposition of the art's natural materials. Thus, the aspect of temporal process as a means of experiencing nature is a significant element of environmental art. Weilacher (1996) also noted that rather than relying upon the photograph taken on completion, some environmental artists also document this process as a part of the work.

Though many materials of environmental art have a brief lifespan as a finished object, Goldsworthy's precious ice sculpture seems to best represent the theme of the passage of time (Binkly, 2010). In his ephemeral *Ice Pieces* (1982) in Cumbria (Figures 2.54–2.56), Goldsworthy placed icicles on a rock in the middle of a river. The smallest

temperature and light changes may cause his *Ice Pieces* to collapse, repeatedly, which is all part of Goldsworthy's process. Through his ephemeral *Ice Pieces*, Goldsworthy makes his audience realise the power of time and the truth of nature (Beardsley, 1998). Goldsworthy takes a series of pictures that capture their transformations due to the changing of seasons and time (Binkly, 2010). Goldsworthy's interpretation of the passage of time adds to the deep symbolic meanings of his works and the different perspective of nature. Through his extraordinary works, he inspires thoughts of how we interact with the environment and how time affects living on earth (Beardsley, 1998).

Alan Sonfist created his *Time Landscape* (Figures 2.57–2.59) for Manhattan, the heart of New York, in 1978 as the first work of environmental art in a public space. The *Time Landscape* (1978) portrays the three stages of forest growth from grasses to grown trees (The New York City Department of Parks and Recreation, 2015). Sonfist's efforts result in a slowly developing forest that functions as a time capsule representing the Manhattan landscape inhabited by the seventeenth-century, pre-colonial landscape (ibid). Sonfist strives to convey a symbolic message that encourages future generations to restore the natural microclimate of their habitat. He also created artworks in the manner of the *Time Landscapes* in other cities, such as *Circles of Time* in Florence, Italy, documenting the historical usage of the land (Kastner, 1998). This emblematic work of art is celebrating its fiftieth birthday in 2015, and the exhibition at the Museum of Fine Arts, Budapest, is the first to commemorate this momentous anniversary (The New York City Department of Parks and Recreation, 2015).

Robert Morris evokes the spirituality and mystery of Stonehenge by creating its modern version in his Observatory (1971) located in Flevoland, in the Netherlands (Figures 2.60–2.61). The Observatory consists of two concentric earth mounds crossed by three V-shaped openings and separated by a ditch (Boettger, 2002). The interior circle mound is made by a wood structure to support earth covered in grass. The three openings in the central circle are oriented in order to frame the sunrise at some specific times of the year (Kastner, 1998). The middle steel visor shows the sunrise at the equinoxes. On the northwest and southwest sides of the circles are two stone

wedges, through which the sunrise on 21 June and 21 December are visible (ibid). Although relatively little time has passed on the land, the subject of Morris' environmental art project is the passage of time (Boettger, 2002).



Figures 2.54-2.56: Andy Goldsworthy's Ice Pieces (1987)



Figures 2.57-2.59: Alan Sonfist's *Time Landscape* (1978)



Figures 2.60-2.61: Robert Morris' Observatory (1971)

2.4 PRACTICE OF ENVIRONMENTAL ART

This section reviews the practice of environmental art. Hamilton (2010) remarked that no regulatory authority or institute is required for the practice of art, either in Europe or the United States. To practice art, it may be helpful to have been trained in an art school, yet it is not necessary to have a degree in art. As a result, the literature on the practice of art is scarce.

2.4.1 SCOPE OF WORKS

As reviewed in Section 2.1, in the 1960s environmental artworks were usually monumental, employing unique techniques and natural materials in restructuring particular landscapes. In the United States, environmental artworks were mostly in the form of reclamation and remediation of damaged environments as a response to the environmental movement. In Europe, environmental artworks focused on expressing the interpretation of nature and its processes to re-envision the relationship between humanity and nature. Moyer and Harper (2012) remarked that the artworks of the 1960s were clearly not for today's context. Contemporary environmental art has been radically transformed since its first emergence in the 1960s (Kastner, 1998). Most environmental art practice today encompasses a vast scope of territory and issues with a wide range of individual approaches that are undergoing rapid change. Environmental artists today mostly collaborate with scientists and multidisciplinary teams, allowing the artists to express their investigations into nature more freely. Contemporary environmental art tends to be in smaller scales in a variety of media including performance, videos, and films (Moyer and Harper, 2012). Techniques in art creation and materials of art have changed; for example, in contemporary art workshops, audiences are able to experience and interact with the artwork, which helps the audience to gain a wider perspective and deeper understanding of nature (Medhurst, 2012).

According to Howett (1985), a number of environmental artists pursued opportunities to create a public art that served functional as well as aesthetic purposes. There are a

number of environmental art projects reviewed in the literature that seem to cross boundaries with landscape architecture, such as Patricia Johnson's *Fair Park Lagoon* (1981) in Texas, Herbert Mayor's *Mill Creek Canyon* (1982) in Washington, and Nancy Holt's *Dark Star Park* (1984) in Virginia, (as illustrated in Figures 2.62–2.64), in all of which the artists took over positions usually occupied by landscape architects. Beardsley (1998) noted that, when the two professions worked across their boundaries, the avant-garde environmental artist was chosen over the landscape architect, such as Robert Irwin's the *Central Garden* (1997) at the Getty Center in Los Angeles (Figures 2.65–2.67). Beardsley (1998) remarked that:

In hiring me (an artist) rather than a landscape architect, the Getty Center made an adventurous choice that most supposedly avant-garde places are not willing to make. (p.189)

A recent cross-boundary work is *Northala Fields* (Figures 2.68-2.69), a contemporary park collaborative design by artist Peter Fink and landscape architect Igor Marko of FoRM Associates, completed in 2008. A large amount of spoiled soils from a construction site was utilised to create the four hills, while a long length of gabion wall made with crushed concrete was built, providing a spiral path up the tallest hill (London Parks and Gardens Trust, 2016). Other materials such as the hardwood timber on the gabion seats, bin tops, and path edgings are also recycled. The creation of the *Northala Fields* (2008) turns waste material into a valuable community space, providing a solution to a number of site and development issues (Summers, 2008). Many environmental artworks in this manner make the professional boundaries become more blurry.



From left to right: Figures 2.62-2.64: Patricia Johnson's Fair Park Lagoon (1981), Nancy Holt's Dark Star Park (1984), and Herbert Mayor's Mill Creek Canyon (1982)



Figures 2.65-2.67: Robert Irwin's the Central Garden (1997)





Figures 2.68-2.69: Peter Fink and Igor Marko's Northala Fields (2008)

2.4.2 ART CRITIQUE

In the discipline of art, there is a tradition of art criticism, which involves analysing and evaluating all types of art (Elkins, 1996). Fishman (1963) remarked that it is plausible that art criticism was presented in the earliest days of the origin of art, as evidenced in the works of Plato and St. Augustine. In the nineteenth century, art criticism was developed into a profession with formalised methods (ibid). From the 1990s onwards, art criticism discussions by curators became regular at art galleries and museums (Tate, 2015). Elkins (1996) noted that with various art movements in different periods, art criticism was divided into different disciplines which may use different criteria for analysing and evaluating of art. However, the analysis and evaluation of art are generally based on criteria such as aesthetics or the theory of beauty. Art critics provide audiences with information about artworks, describe these artworks from a theoretical perspective, and establish the significance of the artworks in art history

(Charlesworth, 2013). Like artists, a professional art critic does not need to have a degree in art. Scholar-critics may be college and university professors or museum curators, often with particular knowledge about a style, period, medium or artist. Critiques or reviews of artworks are published in exhibition brochures and catalogues, magazines, books, newspapers and on websites. Charlesworth (2013) remarked that the art criticism process enables the art historian to precisely map the historical status of an art practice.

In the 1960s, environmental art took an unexpected turn, as an act against gallery or museum culture employing new and unconventional techniques and materials and different locations and dimensions (Lailach and Grosenick, 2007). Thornes (2008) noted that the large monumental works of environmental art, which were often impermanent and not transportable, were not without their critics. The movement received strong criticism from traditional art critics. In his book *A Sense of Place: Artists and the American Land*, Gussow (1997) provocatively asked, 'Not like the earth works artists, who cut and gouge the land like Army engineers? (Smithson, 1972, p.163)' Lailach and Grosenick (2007) remarked there was a sense of irritation in an interview by John Anthony Thwaites, an American art critic, for the television film *Land Art* (1969):

They go out into the deserts and onto the oceans. There, where it is loneliest, they engage in their games with the elements. Generally, only a camera observes their activities. ... A new myth of nature has infected the fine arts. (p.6)

Questions regarding artistic categories also arose. Were these works sculptures, architecture or landscape architecture? These questions eventually prompted the American art critic Rosalind Krauss to write her famous article *Sculpture in the Expanded Field* (1979) laying out structural parameters of sculpture, architecture, and landscape as referred in Section 2.1.

In the early 1970s, the art gallery and museum culture was called into question and criticised as being too limited and too involved in its own business interests (ibid).

When the economy of the period weakened, alternative spaces in art galleries and museums became available in urban locales. Emerging in the same period, the Postmodern movements, such as Process Art and Conceptual Art, translated well into gallery settings and were strongly connected to environmental art, especially in terms of unconventional notions of transitory nature (Gussow, 1997). Many artists working between the movements would shift towards the art gallery and museum (Thornes, 2008). Artists of the era began to share ideas and worked in multiple institutional frameworks. The organic materials of Process Art and Conceptual Art were utilised within the gallery space, and an emphasis on the ephemeral was understood through site-specific and temporary installations. The art world thus subsequently opened up to environmental art and the tenets of environmental art eventually became dominant. Matilsky (1992) remarked that during these formative years of environmental art, critics and curators often lumped different genres of art closely together, which caused a confusion of different terminologies and tendencies which continues to this day. Gaynor and McLean (2005) remarked that artists, critics and audiences then continue in shaping the cultural and communities of environmental art by participating in the ongoing critical and evaluative dialogue regarding environmental artworks and the values they instantiate.

2.5 SUMMARY

This chapter explored issues relevant to environmental art through an extensive literature review. It first outlined a number of attributes that have been associated with the development of environmental art since it emerged in the 1960s. In addition, the chapter also highlighted a number of specific features which were especially relevant to the development of environmental art, including site settings and the reproduction of environmental art. In order to achieve the research objectives, the chapter explored three primary themes relevant in environmental art comprising 1) form and styles associated with environmental art, 2) significant thoughts and ideas within environmental art, and 3) practice of environmental art and art critics.

The first theme is form and style, in which the chapter reviewed the association between environmental art and two dominant movements, Modernism and Postmodernism. The chapter revealed that, even though categorised as Postmodernist Art, environmental art is directly associated with the three Modernist Arts of Minimalism, Conceptual Art and Process Art.

Secondly, the chapter explored significant thoughts and ideas associated with environmental art. What this chapter suggests is that, through its historical development, environmental art has been associated with four primary features comprising 1) genius loci or spirit of place, 2) concepts of eighteenth-century aesthetics, 3) environmentalism and 4) the passage of time. The chapter examines the range of ideas and thoughts underpinning environmental art and investigates how they are interpreted and transformed in environmental artworks.

Thirdly, the chapter explored the practice of environmental art and the art critic. The researcher finds that literature on the practice of environmental art is scarce. The subject, therefore, needs to be further investigated empirically. In addition, the chapter also explored the significance of art criticism in environmental art. To establish the link between environmental art and landscape architecture, the next chapter explores relevant issues in relation to landscape architecture.



CHAPTER 3 LITERATURE REVIEW IN LANDSCAPE ARCHITECTURE

INTRODUCTION

The research aims to identify the influences of environmental art upon landscape architecture. To achieve this aim, this chapter reviews the literature on landscape architecture, which includes books, publications, and academic articles from landscape architects' accounts and landscape critiques, and digital information deriving from websites and Social Networking Sites (SNS) of landscape architectural organisations.

3.1 BRIEF HISTORICAL DEVELOPMENT OF LANDSCAPE ARCHITECTURE

According to Murphy (2005), landscape architecture was first rooted in the development of outdoor spaces in medieval Europe. The Renaissance Italian villa gardens in the fifteenth century were aimed at creating an ideal model of nature with extensive, formal and perfect symmetry in a revival of classical Rome. In the seventeenth century, the French formal garden was developed based on the principle of imposing order on nature (ibid). Rising against the French formal gardens, the eighteenth-century English landscapes co-operated with nature as a major influence in designing landscape (Motloch, 2001). In the nineteenth century, several municipal parks, particularly in the English Picturesque²² and the Gardenesque style²³ were created across Europe. The term 'landscape architecture' was first introduced in 1849 by William Andrews Nesfield, who refined the gardens of Buckingham Palace (Thompson, 2014). In the United States, Frederick Law Olmsted and Calvert Vaux winning the competition to design Central Park in New York in 1858 was a major paradigm shift, turning from the discipline of landscape garden design to that of modern landscape architecture (Pregill and Volkman, 1993).

²² The English Picturesque landscape was a landscape design style widely practised in the eighteenth century. The landscape was designed to be a suitable subject for a painting (Thompson, 2014).

²³ Gardenesque style was a garden style introduced by John Claudius Loudon in the early nineteenth century. The style tended to focus on the botanical approach to garden design (Newton, 1971).

Newton (1971) described modern landscape architecture as:

the art – or the science if preferred – of arranging land, together with the spaces and objects upon it, for safe, efficient, healthful, pleasant human use (p.xxi).

Olmsted and Vaux went on to design parks, campuses and housing estates in several cities across the United States. The American Society of Landscape Architects (ASLA) and the UK's Landscape Institute (LI), professional bodies for landscape architects, were founded in 1899 and 1929 respectively (Pregill and Volkman, 1993). In both North America and Europe, landscape designers were applying private park and garden design ideas to public projects, incorporating concepts of utility or public health. Newton (1971) noted that, in the last half of the nineteenth century, the scope of the discipline had broadened significantly from garden design to complex landscape design projects such as the national parks service, site planning for housing and schools, regional landscape analysis and planning, urban design and large-scale industrial plants. In the 1950s, the discipline of landscape architecture aligned itself with Modernism in architecture through the works of the Harvard Rebels, Garrett Eckbo, Dan Kiley, James Rose and others (Hohmann and Langhorst, 2005). Landscape Modernism agendas were grounded in Architectural Modernism, particularly functionalism, as well as in science, technology and utility.

In the 1960s, the discourse between science and art, in the form of Ian McHarg's ecological design and environmental art, emerged in the discipline of landscape architecture. McHarg developed the map-overlay method,²⁴ which later became an application of systems thinking for landscape architecture called Geographic Information Systems (GIS). His famous publication *Design with Nature* (1969) set out the principles of ecological design and planning, and established him as an important figure in shaping environmental policy (Conon, 2000). Around the same period of time, the creation of distinct landscape forms in the manner of environmental art were seen in works of several renowned landscape architects, such as George Hargreaves'

²⁴ The map-overlay method integrates scientific data such as geomorphology, hydrology, soils, vegetation and wildlife to provide synthesis and interpretation of suitability for land use (Spirn, 2000).

Candlestick Point Cultural Park (1985–93) and Peter Walker's Tanner Fountain (1984). Both Ian McHarg's ecological design and environmental art were important approaches in the development of landscape architecture. Figure 3.1 illustrates the development of the landscape architecture discipline.

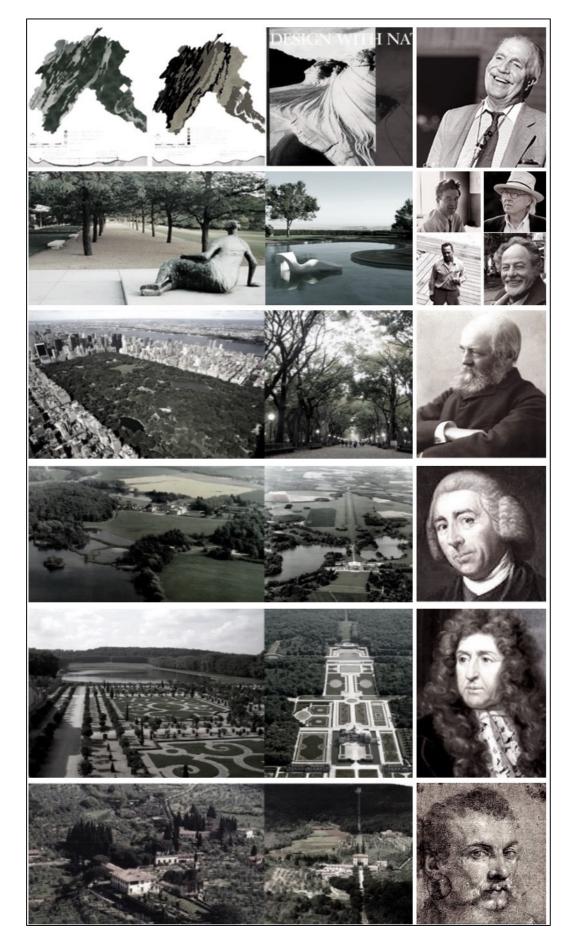


Figure 3.1: Development of Landscape Architecture

Figure 3.1's Key Image

21	20	19
18	17	13- 16
12	11	10
9	8	7
6	5	4
3	2	1

The fifteenth century Italian villa gardens: 1) Pirro Ligorio (1513-1583), 2) Villa Cetinale Garden (1655-1667), 3) Villa Gamberais Garden (1624-1635)

The seventeenth century French formal gardens: 4) André Le Nôtre (1613-1700), 5) Garden of Vaux le Vicomte (1656-1661), 6) Garden of Versailles Palace (1661-1704)

The eighteenth century English landscapes: 7) Capability Brown (1716-1783), 8) Garden of Blenheim (1764), 9) Garden of Castle Howard (1701-1853)

Establishment of the new profession in 1858: 10) Frederick Law Olmsted (1822-1903), 11 and 12) Central Park (1857)

Landscape Modernism in the 1950s: From top to bottom and from left to right: 13) Garrett Eckbo (1910-2000), 14) Dan Kiley (1912-2004), 15) Thomas Church (1902-1978), 16) Lawrence Halprin (1916-2009), 17) Donnell Garden (1948), 18) Miller Garden (1955)

Ecological Design in the 1960s: 19) Ian McHarg (1920-2001), 20) *Design with Nature* (1969), 21) Potomac River's environmental analysis map published in McHarg's *Design with nature*.

3.2 FORMS AND STYLES ASSOCIATED WITH LANDSCAPE ARCHITECTURE

The research aims to investigate relevance of environmental art upon landscape in terms of form and styles. This section reviews forms and styles of landscape architecture, which are associated with environmental art, comprising Modernism and Postmodernism, whose historical background are reviewed in Section 2.2. The association between environmental art and landscape architecture, in terms of forms and styles, is reviewed in some of the literature. This section reflects upon the ways in which forms and styles converge between the works of the two disciplines.

3.2.1 MODERNISM AND ITS ASSOCATION WITH LANDSCAPE ARCHITECTURE

According to Treib (1994), landscape architecture is associated with Modernism through connections with Modern Art and Architectural Modernism, as subsequently reviewed.

1) LANDSCAPE AS ART

Landscape architecture and art were intertwined at various points in history (Birksted, 2004). Following Geoffrey Jellicoe (1959), Thompson (2014) remarked that in the eighteenth century the landscape designers had paid close attention to works of art, drawing their ideas from paintings by such artists as Nicolas Poussin (1594-1665), Claude Lorrain (c.1604–82), and Salvator Rosa (1615–73). The aesthetic of smoothness and gentleness from the Arcadian landscape paintings were directly transformed into landscape design of the period (ibid). This subject is further discussed in Section 3.4.2. In the nineteenth century, the connection between landscape architecture and art had been interrupted by an enthusiasm for horticulture, with the stream of new species and varieties from overseas, as well technological advances like the steam-heated glasshouse, which encouraged a competitive attitude in landscape design towards horticultural display (ibid). At the beginning of the twentieth century, landscape architecture was closely related with several genres of Modern Art, including Abstract Art, 25 Cubism 26, Surrealism 27 and Minimalism (Walker, 1998). According to Howett (1985), Gabrield Guévrékian, an Armenian architect, was credited as the first to explore Modernism in landscape architecture in his Garden of Water and Light for the 1925 Paris Exposition Internationale des Arts Décoratifs et Industriels Modernes.²⁸ Impacted by Abstract Art, the Garden of Water and Light (1925) (Figures 3.2–3.3) was designed with unconventional uses of concrete, geometrical patterns and sparse planting (Thompson, 2014), which led to criticism as breaking traditions of both horticultural and naturalistic

²⁵ Abstract Art is a type of art that uses shapes, colours, forms and gestural marks to achieve its effect rather than an accurate depiction of a visual reality (Tate, 2016).

²⁶ Cubism was an avant-garde art movement pioneered by Pablo Picasso and Georges Braque (Treib, 1994). According to Howett (2002), objects in Cubism are analysed, broken up and reassembled in an abstracted form. Instead of depicting objects from one viewpoint, Cubist artists depict their subjects from a multitude of viewpoints to represent them in a greater context.

²⁷ Surrealism was founded in early 1920s Europe (Treib, 1994). Disdaining rationalism and literary realism, the Surrealists believed that the power of the imagination was repressed by the conscious mind (Art Story, 2015). Surrealism art concerned the depths or heights of the human mind, featuring the elements of surprise and unexpected juxtapositions (ibid).

²⁸ The 1925 Paris *Exposition Internationale des Arts Décoratifs et Industriels Modernes* was the first exposition where decorative and applied arts held centre stage (McGill Library Bibliotheque, 2015). The significant criterion for the exhibits was to be modern (ibid).

traditions. Yet the garden was eventually admired for its style and remembered as a representative of Art Deco (ibid). *Guévrékian's Garden of Water and Light* (1925) prompted Fletcher Steele (1885–1971), an American landscape architect, to write of Modernist ideas in landscape design in his article, *'New Pioneering in Garden Design'* (1930). Steele eventually experimented his own Modernist idea in the Blue Stairs (1938) (Figures 3.4–3.5), a series of steps with elegant white-painted metal handrails rising through woodland at Naumkeag, Stockbridge, Massachusetts (Birksted, 2004). In the Blue Stairs (1938), Steele successfully created a Modernist version of Italianate formality (ibid).

Regarding himself as a painter, the avant-garde Brazillian, Roberto Burle Marx, literally treated his landscape design as an extension of his art practice (Vaccarino, 2000). Both soft and hard landscape elements in his gardens were patterned in bold biomorphic shapes and bright colours according to aesthetic principles of Abstract Art and Cubism, as well as Brazillian folk art (ibid). In addition, lighting ,reflection ponds and simplified architectural forms also dominate in his gardens. All elements of his gardens provide a dynamic walking experience and sensation of mobility (Thompson, 2014). Besides aesthetic qualities, Marx was also concerned about the ecological aspect of his garden design. Using Brazilian native plants, Marx sought to understand how each plant bloomed among other plants, what effect each of the plants has on the whole garden, and how animals interacted with plants. Since the 1930s, Marx has completed more than 3,000 private and public gardens worldwide, leading him to be widely recognised as the father of modern landscape architecture (Vaccarino, 2000). Some of his works are presented in Figures 3.6–3.7.

Isamu Noguchi (1904–1988), a Japanese-American sculptor and designer, spent over six decades producing more than 2,500 works of sculpture, designed furniture, lamps, and stage sets, and created dramatic public gardens all over the world (Weilacher, 1996). Based on the principles of Abstract Art and Surrealism, his conception of a 'sculpture of space', fundamental to these designs, was considered his most significant contribution to modern sculpture. Spaces and elements in his gardens were subtle and bold, yet they are meant to bring out the beauty their locations. He also integrated the materials and art forms of both heritages into his innovative creations (Art Story, 2016). Noguchi's

works were remarked upon as pioneering the development of environmental art (Duus, 2006). Examples of his works are illustrated in Figures 3.8–3.9.



Figure 3.2-3.3: Gabriel Guévrékian's Garden of Water and Light (1925)



Figure 3.4-3.5: Fletcher Steele's Blue Stairs (1938)



Figure 3.6-3.7: A rooftop garden for the Ministry of Education and Health by Burle Marx $\,$



Figure 3.8-3.9: Isamu Noguchi's Garden of Peace (1958) and Isamu Noguchi Garden Museum

2) LANDSCAPE MODERNISM

Notwithstanding its links with Modern Art, landscape architecture also found a connection with Modernism via Architectural Modernism. According to Crouch (1999), in the early twentieth century the discipline of architecture was associated with the Arts and Crafts movement, which experimented with new forms and ideas, advocating the reform of art at every level and across a broad social spectrum. Shaped by thoughts and ideas deriving from the Arts and Crafts movement, Walter Gropius, a German architect, founded the Bauhaus school in 1919 (Henket, 2002). The Bauhaus revolutionised art and design education by uniting elements of art and design with industrial technology (Rowe, 2011). Principles of Bauhaus design had a major impact both in Europe and the United States (Henket, 2002).

In the United States, the American architect Louis Sullivan coined the phrase 'form ever follows function', which became the principle of Architectural Modernism; this meant the elimination of decorative ornaments, so the building purely expressed its purpose (Rowland, 1973). The principles led to the idea of designing buildings from the inside outwards, letting the essential structure dictate the form and external appearance (Crouch, 1999). Architectural Modernism also upholds the values of truth to materials, logical consistency, straightforwardness, and simplicity (Raaij, 1993). After the Second World War, Architectural Modernism gained its mass popularity; the practice of Modernism became widespread. Besides Gropius, other prominent figures of the movement include Frank Lloyd Wright, Le Corbusier and Ludwig Mies van der Rohe.

Christopher Tunnard sought to align the discipline of landscape architecture with Modernist architecture. His series of articles in *The Architectural Review*, collected in the book *Gardens in the Modern Landscape* in 1938, combined history and criticism to invoke functionalism and the writings of Le Corbusier and Adolf Loos (Imbert, 2007). According to Treib (1994), Tunnard attempted to codify landscape Modernism by proposing four approaches.

- 1. The functional approach. Functions determine forms. Aesthetic values lie in economical means of expression, and in discarding the styles.
- 2. The empathic approach. Nature is regarded as an invigorator of it and a stimulus to body and mind. Nature is therefore not to be copied or sentimentalized and neither to be overridden (Tunnard, 1948). A recognition of the value of plant material, with rhythm and accent, contributes to the supple and fluid adaptation of the site, which is the landscape architect's chief arbiter of design.
- 3. The artistic approach. An appreciation of the interrelationship of all forms of art results in a broadening of the power of expression for the making of the garden scene. Decoration and ornament, and pattern become integral factors in the plan.
- 4. Systems of aesthetics and formulas of design make way from the experimental technique, resulting in new expressive form.

In 1938, Gropius went to the United States and became chairman at Harvard Graduate School of Design (GSD) (Imbert, 2007). What also came with Gropius was the Architecture Modernism agenda and the Bauhaus's views of society and art, which attracted the attention of the three Harvard Rebels, Garrett Eckbo, James Rose and Dan Kiley. The discipline of landscape architecture aligned itself with Modernism in architecture. In general, the Landscape Modernism agenda is grounded in Architectural Modernism, particularly functionalism, as well as science, technology, and human use (Eckbo, 1997). Space becomes a unifying medium in expressing ideas; people become actors in the modern landscape; honest materials are used in the landscape; water, plants, and such architectural elements are treated as the material for art creation in a similar way that the materials of art or craft are transformed into an art object (Walker, 1998). Plants are used for their individual qualities as botanical entities and sculpture,

which represents a scientific and economical use of plants within the garden (Treib, 1994). The design places more emphasis on the visual effects of colour, light, and perspective than on the aesthetic experience of space (Howett, 2002). Treib (1994) remarked that Landscape Modernism also attempted to bridge the functionalism of Architecture Modernism with art. In England, Geoffrey Jellicoe, a self-claimed Modernist, developed a theory of landscape design through his three volumes of *Studies in Landscape Design* (1956, 1966, 1970) (Thompson, 1995). Jellicoe's belief was that landscape architecture is most efficient when it has a strong connection with fine art, especially painting (Thompson, 2014). For Jellicoe, landscape design should be as 'as meaningful as painting' (Thompson, 2014, p.65).

Landscape Modernists from the California landscape school, ²⁹ such as Thomas Church and Lawrence Halprin, were also associated with aspects of Modern Art particularly with Minimalism and Cubism. Perhaps the most resolved example of this approach is Thomas Church's Donnell Garden (1948) (Figures 3.10-3.12). In the garden, Church explored Modernist landscape forms while responding to the particular characteristics of California living style. Aiming for an outdoor living space, the focal point of the garden was the biomorphic kidney-shaped pool, placing with an abstract sculpture by artist Adaline Kent at the center (Walker, 1998). The pool was embraced by floating wooden deck intended to preserve existing trees. Today, Church's Donnell Garden is a Modernist icon and one of the best preserved examples of its time (ibid). According to Balmori (2010), Thomas Church was also inspired by the works of Architectural Modernists such as Frank Lloyd Wright, Rudolph Schindler and Richard Neutra. Aspects of Cubism can also be found in the works of the prominent Landscape Modernist, Lawrence Halprin, whose primary source of inspiration for most of his work is nature (Condon, 1988). Halprin's imitation of nature in his work is remarkably similar to Cubist space: the freeflowing interpenetration of space, and the environmental change of experience and space over time (ibid). These principles are made manifest in Halprin's Nicollet Mall (1967) in Minneapolis (as presented in Figure 3.8). The design creates no clear legible spaces; rather, it is a fluid continuous space influenced by surrounding objects and

²⁹ The California landscape school referred to Landscape Modernist style in the mid twentieth century, which integrated the Californian pattern of indoor-outdoor living in landscape design. (Eckbo, 1950).

people. The design intentionally disrupts the clarity of the pre-existing street space by the addition of elements that are placed without relationship to the spatial container. The sinuous curve of the bus station is intentionally at variance with the containing space. Nicollet Mall is therefore a Cubist space paragon that represents the replacement of pre-existing geometric space with fluid Cubist space. Condon (1988) remarked that this approach to design was also pervasive in many other works of Halprin, such as Seattle's Freeway Park (1976) (Figures 3.13–3.15). Balmori noted that in projects like the Martin Garden (1948) and the Zwell Garden (1950), Garrett Eckbo explored two signature Modernist motifs, the Cubist zigzag and the biomorphic forms.

Martha Schwartz was an important figure who straddled the line between artist and landscape architect. According to Treib (1994), Schwartz's works were influenced by Pop Art, which challenges the traditions of fine art by including illustrations and imageries from popular culture such as news, advertising, etc. (Livingstone, 1990). The concept of Pop Art mainly aims at the attitudes that led to the creation of art. The material of Pop Art is sometimes visually removed from the context, separated, and/or combined with unrelated material (ibid). Though primarily known as a landscape designer, Schwartz has received a number of public art commissions. Gagnon (2013) remarked that this interdisciplinary approach to landscape design was evidenced in Schwartz's *Bagel Garden* (1979), in which she transformed her 5-square meter front yard into a parterre of edible bagels. Inside the inner boxwood hedge, Schwartz laid down a 0.75-metre wide strip of purple aquarium gravels, over which she carefully aligned a double row of eight dozen bagels. Although Schwartz represents a different aspect of landscape design, most of her projects reconcile sculptural ambitions with the social requirements of civic space (ibid). Figures 3.16–3.18 present works by Martha Schwartz.

Concerning Minimalism, whose principles are associated with many works of environmental art, the best examples are found in works of Peter Walker, who also embraced French formalist André Le Nôtre and works of environmental artists such as Donald Judd and Carl Andre. According to Zell (2007), Walker's works involved strict control of natural forms and a diagonal axis, coupled with a commitment to order and geometry. Many of Walker's works are in the Minimalist genre, such as the grounds of

the Toyota Municipal Museum of Art (1995) in Aichi Prefecture, Japan (as presented in Figures 3.19–3.21), in which Walker presented the entire landscape with simplicity, clarity and purity of form and materials (ibid). In the garden, Walker confronted a much larger site and a more complex programme that involved level changes with design that incorporates a variety of themes and episodes such as an air fountain, iris garden and sculpture gardens. The linear arrangement of planting is unchallenged by cross axes. Only the fountain, with its bubbling colonnades and planted berm, impose the terminus that subtly directs the visitors to traverse the garden (Amidon, 2006). The diagonal shallow pool is reflected in the diagonal bands of turf and ground cover (Zell, 2007).

Walker (1998) noted that, during the late 1940s and the 1950s, small-scale residential projects in the Landscape Modernist agenda were widely popular. Later, several prominent landscape architects such as Garrett Eckbo and James Rose shifted their focus to large-scale commissions such as university campuses, corporate office parks, and suburban subdivisions (ibid). Modelling their practices on such architectural firms as HOK and SOM, Eckbo and his colleagues joined the ranks of a generation of corporate landscape firms that would dominate the profession for years to come. Though the identity of landscape architectural work as art is confirmed, it is important to regard landscape architecture as a cultural as well as an environmental practice.

Landscape Modernism received various kinds of criticism. Treib (1994) criticised Landscape Modernism as having been behind other artists in adopting new ideas. He remarked that, 'It has been said that the ideas in architecture follow about 15 years after those in art, while landscape architecture are 15 years further behind' (p.ix). The reason may be related to biophysical components of landscape architecture, such as the fact that plants take time to grow. Hunt (1994) pointed out that the modern landscape should foster an atmosphere of growth by questioning and challenging the established standards in landscape design. Walker (1998) also remarked that Modernist landscape architects tended to focus on practical works rather than responding to critics or philosophers. Landscape Modernism was also criticised, mainly for its denials of history (Hunt, 1994). Since modernists believed in a new age, they rejected the heritage of neoclassical and naturalistic landscapes and distorted the past in order to clear a space

for landscape design. Modernists insisted on a complete break with the past. The most criticised principle is centred around the aspect of universalism, which is preferred to localism (national, regional and vernacular styles), favouring the 'International style' and arguing that the tenets of Modernism were universally applicable. Walker (1998) also remarked that Modernist landscape architects tended to focus on practical works rather than responding to critics or philosophers. With the passage of time, all Modernist built environments are now considered to be historic heritage. Schwartz (1994) remarked that despite the rejection of Modernist principles, several of its aspects retain its ties to contemporary landscape discourses. Treib (1994) noted the following ideas, and forms of contemporary landscape were built upon them:

- Rationality and functionality. The Modernist landscapes are derived from a rational approach to the conditions created by site, surroundings and programme. This principle of design, which is based on particular uses and purposes, remains at the foundation of contemporary landscape design.
- A concern for space rather than pattern. Underlying the modern approach was
 an interest in discovering a new simplified geometry or biomorphic forms of
 spaces employing modern materials and techniques. Decoration and
 sentimentality of elements are avoided.
- Landscapes are for people. Although concerned with a variety of purposes,
 Modernist landscapes ultimately focus on making outdoor places for human use.
- Plants are used for their individual qualities as botanical entities and sculpture.
 This aspect represents a scientific and economical use of plants within the garden. The sculptural forms of plants are utilised to define space.
- Integration of outdoor and indoor spaces.

Schwartz (1994) remarked that a new generation of landscape architects retains its connection with the art world, which always creates discussion and critical self-reflection in order to bring out new ideas. Several aspects of contemporary landscape architecture are inherited from Modern Art, including revolutionary and experimental innovative ideas, materials, construction techniques, and expressive uses of colour. Treib (1994) also remarked that the destruction of axis in Modernist landscapes was directly influenced by Cubist spaces. With the axis removed, the restricted view of linear

perspective expands. Additionally, Waldhiem (1999) remarked that recent debates on inheritances from Modern Art of landscape architecture include the pictorial tradition to the Modernist category of space; codependence between spatial design and picturing; and composition. Over the past decade or so, a number of art historians have been engaged in the critical re-evaluation of the picture-making tradition within painting, along with a contemporary understanding of relationship between the picture-making tradition and perception in the making of visual presentations (ibid). The revolutionary environmental art, which has gone beyond Modern Art and has reinstated its predecessor by redefining art that was situated in the environment, being neither painting nor conventional studio installation, yet principles of visual art, which include the picture-making tradition and visual presentations remain as underlying fundamentals in creations of environmental art.



Figures 3.10-3.12: Thomas Church's Donnell Garden (1948)



From left to right: Figure 3.13-3.15: Works by Lawrence Halprin. Figure 3.8: Nicollet Mall (1967)
Figures 3.9-3.10: Seattle Freeway Park (1976)



From left to right: Figures 3.16-3.18: Works of Martha Schwartz: *Bagel Garden* (1979), *Splice garden* (1986), Jacob Javits Plaza (1992)



Figures 3.19-3.21: Peter Walker's Toyota Municipal Museum of Art (1995)

3.2.2 POSTMODERNISM AND ITS ASSOCATION WITH LANDSCAPE ARCHITECTURE

The researcher found that the literature for Postmodern Landscape Architecture is limited. Only a few scholars, such as Jencks (1977 and 2011), Hargreaves (1983), Ley (1987), and Ley and Mills (1993) have explored the subject. Furthermore, the reviews mostly concerned other related disciplines, in particular architecture. In his influential publication 'Postmodern Architecture,' from the Language of Postmodern Architecture (1977), Jencks noted that in contrast to Modernist architecture, which seeks to create the perfect form on an empty or open site with a fixed programme, Postmodern Architecture embraced a wide range of social, economic, cultural, ecological and historical aspects of a site with the diverse needs of potential users. Jencks (1977) remarked that Postmodern Architecture, which aimed at plurality, was influenced by the environmental movement, which changed the way the architecture project was conceived by utilising a multidisciplinary consultant team and engaging local citizens in the design process. According to Jencks (1977), Postmodern Architecture can also include ugliness, decay, banality and austerity without becoming depressing and without consideration of any particular motivation of humans.

Bernard Tschumi was a prominent Postmodern architect, who totally rejected Modernist principles such as rationality, function and problem solving, and pursued a 'madness and folly agenda,'³⁰ which was an extension of the idea in the 'madness and civilisation' that began in the Age of Enlightenment³¹ (Tayler, 2003). Tschumi designed Parc de La Villette (1987) (Figures 3.22–3.23), which was regarded as a symbol of Postmodernist landscape architecture. Parc de La Villette was based upon three organising elements: surfaces, lines and points (Hardingham and Rattenbury, 2011). According to Tayler (2003), Tschumi referred to a grid as the 'order in the disorder reality' (p. 426), which had 'the point of no return' that was considered to be folly. The

³⁰ Folly derives from the term 'beu' meaning swelling, flowing and flowering. Historically, folly has been associated with gardens and parks for Arcadian retreats, which provide senses of pleasure, excess and transgression (Tayler, 2003).

³¹ The Age of Enlightenment or the Age of Reason referred to an intellectual movement that advocated reason as a means to establishing systems such as ethics, politics and aesthetics, as well as religion (Jacob, 2000).

use of a strong axis along the side of the park provides for a continuous walk and connects with the city of Paris. This axis also boasts a long elevated walkway with a canopy running along its entire length. Activities such as game playing, exercising, entertainment and markets are included in the surfaces of the park.

Koh (1982) explored philosophical and ethical propositions of ecological design in environmental design disciplines including architecture, landscape architecture, urban design and interior design. According to Koh (1982), ecological design is concerned with the interrelationship between humans and the environment, and the evolving process of the human–environment system. Koh (1982) remarked, 'Human behavior and experience, including the very act of designing-and-building, cannot be designed without reference to physical, biological, cultural, and psychological environmentalism' (p.80). Koh (1982) classified these focuses of ecological design as contextualism or environmentalism and considered them to be an aspect of Postmodernism. However, Koh (1982) also remarked that in ecological design, there is an aspect of determinism, in which decisions upon design or development are based on determination of environmental evaluation. If one follows the guidelines of ecological design on the same site location, the outcomes of design should be identical or similar with others. Koh (1982) placed the deterministic aspect of ecological design within the approach of Modernism.

Soja (1987) and Gregory (1989) examined what each referred to as the 'post-modernization of geography', analysing the impact of theories in political economy, social theory and cultural studies on the field of human or cultural geography. Landscape architecture and human geography are closely related fields; therefore, Soja (1987) and Gregory (1989) have made an impact on the exploration of the Postmodernism of landscape architecture (Harris, 1999). These aspects of Postmodernism from other disciplines were subsequently transferred into the discipline of landscape architecture (Lister, 1987). Generally, the physical characteristics of Landscape Postmodernism are

combined with conceptual characteristics of meaning, including pluralism³² and contextualism³³ (Lister, 1987).

In the article, 'Postmodernism Looks Beyond Itself' (1983), Hargreaves examined a wide range of disciplines including architecture, landscape architecture, and environmental art, with a recognition of diverse trends in each field, quoting the attitudes of a range of commentators. According to Hargreaves (1983), Postmodernism can be perceived as a cultural attitude, from which has developed a diversity of styles. His central idea was concerned with orientating the external space rather than the internal space. Hargreaves (1983) also remarked that Postmodernism gains the meaning of its works from its site surroundings, and provides a re-examination of these surroundings. He included works such as Richard Haag's Gas Work Park (1975) in Seattle, Smithson's *Spiral Jetty* (1970), Heizer's *City Complex*, etc., as examples of Postmodernist works. Even though the review of Postmodernism by Hargreaves may be the closest in relation to landscape architecture, its theoretical foundation was not clearly developed.

Thompson (2009) considered Peter Latz's Duisburg-Nord (1991) (Figures 3.24–3.26) in the Ruhr Valley, Germany, as being one of eminent examples of Landscape Postmodernism. Rather than trying to demolish existing elements of the site, the post-industrial landscape was designed with the intention of being closely associated with the industrial history of the site. Thompson (2009) noted that Peter Latz attempted to preserve the existing elements of the site and sought to co-operate with them in the development of new park programmes. For example, the existing concrete bunkers were modified to be a space for a series of intimate gardens, the old tall concrete walls were used for rock climbing, and the centre of the old factory was transformed into a multi-purposed piazza.

 $^{^{32}}$ According to Merriam Webster (2016), pluralism is 'the holding of two or more positions (as benefices) at the same time."

³³ Contextualism means "the aesthetic position that a building or the like should be designed for harmony or a meaningful relationship with other such elements already existing in its vicinity (Dictionary Online, 2016)."

Several landscape scholars, such as Eastman (1982) and Krog (1985), criticised the transference of aspects of Postmodernism from other disciplines, such as architecture and human geography, as unsuitable and misleading. Krog (1985) also claimed that contextualism and historical references had already been explored in Landscape Modernism. In his article, 'Postmodernism: Questions Not to Ask' (1982), Johnson claimed that landscape architecture itself had already been considered to be Postmodern. Johnson (1982) took this idea as the basis of his argument; the discussion of other disciplines that focuses on the context of environment and history. Although Johnson's claim may be relevant as landscape architecture is indeed always concerned with site surroundings, his interpretation may be lacking theoretical investigation. Home-grown Postmodernist theory needs to be further examined and developed. Motloch (2001) noted that, since the 1980s, Postmodern Landscape Architecture has been discussed in relation to landscape and urban design.



Figures 3.22-3.23: Bernard Tschumi's Parc De La Villette (1987)



Figures 3.24-3.26: Peter Latz's Duisburg-Nord (1991)

3.2.3 CONVERGENCE OF FORMS AND STYLES BETWEEN ENVIRONMENTAL ART AND LANDSCAPE ARCHITECTURE

Though different in agenda, both environmental art and landscape architecture are devoted to understanding the connections between nature and humankind and shaping the land. Convergence between landscape architecture and environmental art in expressions of forms and styles is found in several sources, such as John Beardsley's *Earthworks and Beyond* (1998) and Udo Weilacher's *Between Landscape Architecture* and Land Art (1996).

Beardsley (1998) remarked that Walker's Tanner Fountain (1984) at Harvard had similar form configurations as Carl Andre's Stone Field (1977) in Hartford, Connecticut, which was created in 1977, and consisted of eight rows of boulders in a triangular shape. The local stone and their composition was aimed to reflect the characteristics of Hartford, in which the artwork is located (ibid). For example, the proportion of basalt to gneiss in the sculpture is the same as that in the Hartford area. The rows of stone are reminiscent of tombstones, a comparison made clear because Hartford's ancient burial ground is adjacent to the sculpture (ASLA, 2016). While Andre placed a range of stone types as the basic material of the installation, Walker's boulders are not placed in a classical way, but are arranged in concentric but irregular circles that create an open geometric form. Incorporating a mist fountain, designed by the artist Joan Brigham, the boulders overlap with the asphalt path pavement and the existing grass and trees (Beardsley, 2010). At the centre of the circle, where the stones appear to be most dense, the water mist produces a scrim that visually dematerialises the stones (ASLA, 2016). Balmori (2010) remarked that Walker's Tanner Fountain (1984) also reflected Ian Hamilton Finlay's ideas in the recurrence of history and classical art. The redevelopment of classical art also gives form to the human discovery of an essential aspect of nature, making it subsequently accessible to people as long as the art form endures. Since 1984, the Tanner Fountain has become a cherished place on the Harvard University campus and an icon of the movement that interlinks environmental art and landscape architecture (ASLA, 2016). Peter Walker's Tanner Fountain (1984), Carl Andre's Stone Field (1977) and works by Ian Hamilton Finlay are as presented in Figures 3.27–3.35.

Beardsley (1998) commented that works by George Hargreaves also have affiliations with the works of several environmental artists such as Robert Smithson, Walter De Maria, Richard Serra and Robert Irwin. According to Weilacher (1996), the idea of presenting nature through art form in Smithson's Spiral Jetty (1973), which was reviewed in Section 2.3.1, was referenced in Hargreaves's design for Guadalupe River (1990) Park in San Jose, California. The first level of the river park underlay consists of the topography for the flood-control channel to encourage floodwater to spread out and slow down, in emulation of a natural river system (Hargreaves, 2016). Topographic landforms with pointed ends, which became Hargreaves's 'signature', were also placed in the river (Beardsley, 1998). Ruffling terraced banks and landforms create the manmade and river-influenced natural structure for the riverbank native plants and landscape (Hargreaves, 2016). The second level of the river park overlay is composed of areas for open spaces, events and habitat restoration along the channel, with clear lines dividing humans and nature (ibid). Beardsley (1998) noted that Hargreaves described these dynamic landforms as a place for visitors to observe the natural processes of the river and its surrounding elements. Hargreaves's Guadalupe River Park (1990) and Smithson's Spiral Jetty (1973) are illustrated in Figures 3.36–3.40.

In collaboration with two environmental artists, Peter Richards and Michael Oppenheimer, Hargreaves designed Byxbee Park (1991), a former landfill at the edge of the San Francisco Bay (Beardsley, 1998). On three feet of soil topped with clay cap, the park rests over as much as sixty feet of garbage. At the crest of the site, Hargreaves's signature topographic landforms were formed as marks of the transition from the windward to the leeward side of the park. The clusters of low hillocks, which are intended to be shaped by the wind, are nearby. The park was designed to not only provide recreational areas for the city of Palo Alto and contemplation of the bay marshes, birds and wildlife, but also to respond to the conditions of the landfill below within the context of the surrounding confluence of complex ecosystems (Hargreaves, 2016). There were also compositions of prefabricated elements with a grid of telephone pole sets in a similar manner to Walter De Maria's *Lightning Field* (1977) extending the park into the surrounding landscapes (Weilacher, 1996). Figures 3.41–3.45 present Hargreaves's Byxbee Park (1991) and De Maria's *Lightning Field* (1977).

The form of environmental art is also evident in works of two architects, Maya Lin and Charles Jencks, both of whom turned to landscape design to express ideas about the dynamic character of nature. In 1981, Richard Serra created Tilted Arc, a 4 meter-tall, 40-metre-long, 15-ton steel slab that cut across Federal Plaza in Lower Manhattan, New York. Instead of focusing on sculpture by looking at it from a distance, Serra wanted his audiences to experience the sculpture by encompassing them in the long, curving metal sheet (Veterans Memorial Park Foundation, 2016). Inspired by the Tilted Arc (1981), Lin created a syntax of sculpture that revealed shifting topographies in the Vietnam Veterans' Memorial (1982) (Beardsley, 1998). The V-shaped granite slab seemingly rises from the ground, contrasting with the softness of the grass, and brings a balance to both nature and architecture. The granite bears the names of over 58,000 Americans who were killed or went missing in the Vietnam War (Veterans Memorial Park Foundation, 2016). Lin's Wave Field (1995) for the Aerospace Engineering Building at the University of Michigan, Ann Arbor, and A Fold in the Field (2013) at Gibbs Farm in North Auckland, New Zealand, were also created in the form of environmental art. Richard Serra's Tilted Arc (1981) and works by Maya Lin are illustrated in Figures 3.46–3.52.

Thompson (1997) remarked that besides cosmology, the sciences of complexity, and chaos theory, Jencks's inspirations also derived from traditions of environmental art and land modelling. His Symmetry Break Terrace (1994) in Scotland is composed of two sinuous hills in animal morphology overlooking a pair of serpentine lakes. In Symmetry Break Terrace, Jencks also represented the actions of soliton waves – the pulses of energy that underlie phenomena such as tidal waves, nerve impulses, and superconductors – in a number of the garden gates. Both smaller garden features, such as gravel beds colliding with bands of turf, are interlocked with curving rock walls. Two spiral topographical forms aimed to recall the notion in complexity theory. Thompson (1997) noted that it was Jencks's intention to reinforce an image of nature as unpredictable, creative and dynamic. Examples of Jencks' works are presented in Figures 3.53–3.55. Other common forms between works of the two disciplines were also reviewed; for example, the proposed Sky Garden feature in the plan of Dallas, Texas, by Jones and Jones, a renowned landscape architectural firm in Seattle, was compared with the plan of Robert Morris' *Observatory* (1971) in the Netherlands. Conon (2010) noted

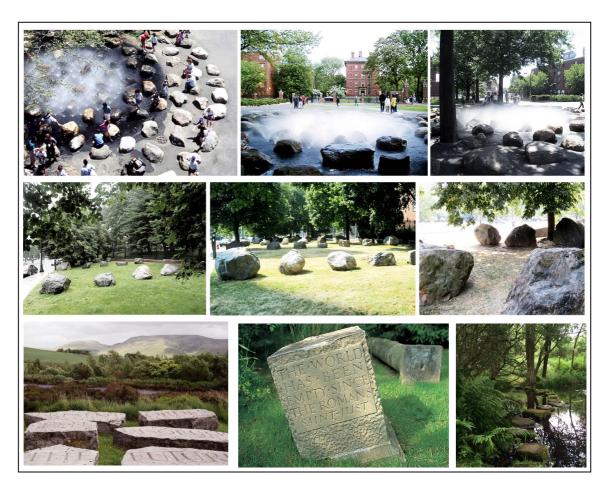
that the large S-shaped berm that Balmori proposed for the site of the Equestrian Games and Robert Smithson's *Spiral Jetty* (1970) in Utah also shared common forms.

Relevance of the environmental art upon landscape architectural works seem to be obvious in the above reviews. However, there are also a few reviews regarding the impact of landscape architecture upon the form of environmental art creation. Weilacher (1996) noted that the artist Dani Karavan mentioned that he learnt the interpretation of landscape and nature from his father, a landscape architect working in Tel Aviv, Israel. In his interview for Weilacher (1996), Karavan stated that some of the principles of André Le Nôtre's Baroque garden were applied in one of his works – *the Axe Majeur* or *Great Axis* (1980) in Paris. Karavan learnt about Le Nôtre's philosophy of creativity and found that several sections of the project could be referenced to the works of Le Nôtre (ibid). Karavan corrected certain points and details of his works to match Le Nôtre's. Works by Dani Karavan and André Le Nôtre are presented in Figures 3.56–3.61. Beardsley (1998) also noted that Ian Hamilton Finley's *Stoney Paths* (1984) was inspired by the Italian Renaissance landscape of the Villa d'Este, Tivoli.

The convergence in terms of forms and styles between environmental art and landscape architecture in the literature seems to be obvious. As discussed in Section 1.3, the convergence of forms and styles offer proof that there are direct exchanges of ideas between the two disciplines. However, sources featuring environmental art and landscape architectural projects are not limited to literature. In today's modern digital world, there are various other sources such as websites of landscape architecture publications or organisations, which provide up-to-date landscape architectural projects, including the Landscape Institute (LI), the American Society of Landscape Architects (ASLA), the International Federation of Landscape Architects (IFLA) and other internet resources. If a number of environmental art projects appeared in these landscape architecture publications or organisations, it could be implied that there has been a cross-fertilisation of ideas. As the critical reviews on these websites demonstrate, the researcher found that the results are various. On the websites of the LI, ASLA and IFLA, only a few landscape architectural projects in the manner of environmental art are featured. Considering this result, environmental art does not seem to be a major design

aspect in landscape architecture. However, the LI, ASLA and IFLA are professional bodies of the landscape architecture discipline, which mainly aim to promote the work of their members, i.e. landscape architects. Therefore, we may not be able to expect the digital publications of works by non-members, i.e. non-landscape architects and environmental artists on their websites. Moreover, the Social Network Service (SNS) of landscape architectural organisations, such as the Facebook pages of the Landscape Architects Network, or Twitter accounts of landscape architecture organisations such as Dezeen and Wallpaper, all of which promote contemporary landscape architectural projects with members ranging from 440,000 to 1.3 million people, continuously publish works of environmental art and landscape architectural projects with strong artistic expression. With these contrary findings, one may not be able to conclude that the environmental art is or is not a mainstream aspect of landscape architecture practice. The field study of the research will verify the contradiction between the sources.

The association of environmental art and landscape architecture seems to continue in the present day. Both environmental artists and landscape architects have proved that the landscape is one primary forum of cultural expression in which social and environmental as well as aesthetic values are articulated.



From top to bottom and from left to right: Figures 3.27-3.29:

Peter Walker's Tanner Fountain (1984), Figures 3.30-3.32 Carl Andre's Stone Field (1977), Figures 3.33-3.35:

Works by Ian Hamilton Finlay. Figure 3.33: Stoney Paths (1984), Figures 3.34-3.35: Little Sparta (1983)



From top to bottom and from left to right: Figures 3.36-3.37: George Hargreaves's Guadalupe River Park (1990), Figures 3.38-3.40: Robert Smithson's *Spiral Jetty* (1970)



From top to bottom and from left to right: Figures 3.41-3.42: George Hargreaves's Byxbee Park (1991), Figures 3.43-3.45: Walter De Maria's *Lightning Field* (1977).



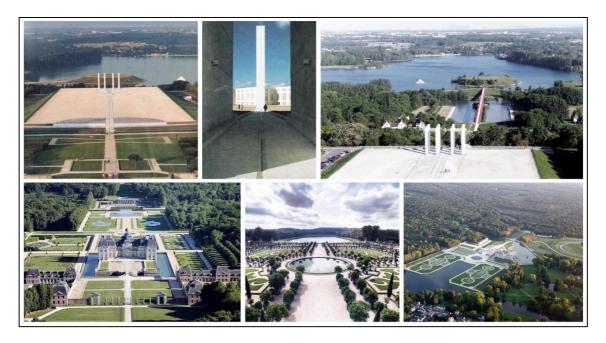
From top to bottom and from left to right: Figures 3.46-3.48: Maya Lin's *Vietnam Veterans' Memorial* (1982), Figures 3.49-3.50: Richard Serra's *Tilted Arc* (1981)



From left to right: Figures 3.51-3.52: Maya Lin's A Fold in the Field (2013) and Wave Field (1995)



From left to right: Figures 3.53-3.55: Works by Charles Jencks. : Figures 3.53-3.54: Symmetry Break Terrace (1994), Figure 3.55: Spirals of Time (2012)



From top to bottom and from left to right: Figures 3.56-3.58: Dani Karavan's Axe majeur (1980),
Figure 3.59: André Le Nôtre's Garden of Vaux le Vicomte (1656-1661), and
Figures 3.60-3.61: André Le Nôtre's Garden of Versailles (1661-1704)

3.3 THEORY IN LANDSCAPE ARCHITECTURE

3.3.1 DISCOURSES IN LANDSCAPE ARCHITECTURAL THEORY

According to Corner (1999), theory always involves some degree of generalisation. However, in a design discipline, theory should be constructed and continually reconstructed from particular experiences, case studies and events (Francis, 2001). In return, theory can provoke changes in thinking and challenge assumptions on the practice of design discipline (Deming and Swaffield, 2011). Formally established in 1858,

landscape architecture is considered a relatively new profession. The formation of theory in landscape architecture was considered from its early development stages (Murphy, 2005). There have been a diversity of discussions on landscape architectural theory. In the early years, some contributors focused upon renewing and broadening the basis for teaching and practice in landscape architecture (Swaffield, 2002). In recent years, landscape scholars have attempted to reorientate the landscape theory to be more open-ended, creative, environmentally and socially responsive (Deming and Swaffield, 2011). Swaffield (2002) proposed three approaches to theory in the discipline of landscape architecture.

- Firstly, theory can be instrumental when it generalises and codifies knowledge as a basis for landscape architectural practice. Instrumental theory can be derived from empirical observation, but also evolve from practical experiences. Theories following this approach include those by Garrett Eckbo portrayed in *Landscape for Living* (1950) and a set of principles by Kevin Lynch (1960 and 1962) and John Ormsbee Simonds (1961). However, recently, instrumental knowledge has been contested. In this regard, Swaffield (2002) discussed that landscape theory is specific, not general; its thoughts are situational, which is explicitly historical, contingent and pragmatic. Therefore, landscape theory should not be an idealist absolute universal.
- Secondly, landscape theory can be critical (Swaffield, 2002). Critical theory resists and challenges current knowledge, and stimulates a search for alternative forms of knowledge and/or ways of working. According to Corner (2002), testing of critical theories is undertaken by reflection, argument and design exploration. A more critical approach to theory typically adopts a historical perspective, highlighting the evolution of a current position, and then offering new directions.
- Finally, Swaffield (2002) stated that landscape theory can be interpretive, which lies between the two previous approaches. Interpretive theory is not applied in the same way as instrumental theory, and it is not critical. The theory is in the hermeneutic tradition of interpretation, recognised in related disciplines as a form of knowledge. Interpretative theory helps us understand a situation, without necessarily revising it.

These approaches affect the way the current state of theory in landscape architecture is evaluated. However, Swaffield (2002) also stated that the three approaches are not mutually exclusive, as new knowledge can challenge existing theories and disrupt conventions.

There is also considerable diversity in the substantive focus of theory in the discipline (Corner, 1991). Laurie (1986) identified landscape theory as comprising five major components, including natural process, human factors, methodology, technology and value; while Howett (2002) argued that the three central areas of knowledge in landscape architecture are systems ecology, semiotics and environmental psychology. In a review of theoretical writing in recent literature, Swaffield (2002) also proposed five core themes including design process, the interpretation of meaningful form and process, landscape representations, ecological design and aesthetics, and the integration of site, place and region. Whatever the scale or emphasis of operation, these five components are consistently relevant. They span many realms of knowledge and connect with a diverse range of other disciplines. Swaffield (2002) remarked that the various approaches in landscape theory are due to many reasons such as differences in belief about the nature of the discipline, over forms of knowledge, or over strategies, methods, and tactics that might be used for investigating. Based on the review by Swaffield (2002), the development of contemporary landscape theory can be viewed as follows:

- The modern approach to landscape architecture was developed before the 1950s by Christopher Tunnard, Garrett Eckbo, Dan Kiley and James Rose. Landscape Modernism arose as a challenge to the conventions of the Beaux-Arts tradition. The interactions between different roles of theory over time illustrates the fundamentally historical and social nature of theory.
- During the 1950s and the early 1960s, much attention focused upon the development of theories of process, as a counterweight to the previous dominance of formal principles. Eckbo's *Modern Landscape For Living*, which demonstrated innovative landscape design in a social setting, was published in 1950.
- 3. During the 1960s and 1970s, the focus was on ecological landscape design and planning. The impact of the environmental movement became significant, as

attention shifted to the development of ecological design and planning. This was also the decade of community design, as the design process was opened to include a wider range of participants. In this period, Ian McHarg published his *Design with Nature* in 1969, which was based on positivist ecological science³⁴ (Thompson, 1999). During this period, Geoffrey Jellicoe was also active, publishing numerous essays based on Jungian psychology³⁵ (ibid).

- 4. The 1980s were characterised by a renewed search for theories of meaning, drawing both upon existing development of the period such as ecological design, and upon related fields, particularly environmental art. Meyer (1992) and Walker (1998) remarked that during this period, landscape architects focused on practical works. As a result, there was no significant attempt at constructing landscape theories.
- 5. During the 1990s, there were investigations of diverse issues including languages and representation in landscape design, the aesthetics of ecological design, regionalism and infrastructure, as well as renewed interest in the nature and the role of theory in landscape architecture.

Swaffield (2002) noted that, basically, the diversities in approaches of landscape architectural theories resulted from differences in belief over the forms of knowledge, strategies, methods and tactics. Each approach carries different results of how knowledge in landscape architecture should be codified and validated, and each sees different implications for the way theory should be approached and constructed (ibid).

3.3.2 LANDSCAPE ARCHITECTURAL THEORIES AND RELATED DISCIPLINES

According to Murphy (2005), many landscape theories have been inherited from the two disciplines of art and architecture. Some landscape theory commentators attempted to substantiate the content of theory, proposing different agendas for further development and typically drawing upon emerging movements in related disciplines. Sa

³⁴ Positivist ecology has its own value assumption, which symbolises man's dominion over nature (Berkes, 2012).

³⁵ Jungian psychology refers to a school of psychology developed by Swiss psychiatrist and psychotherapist Carl Gustav Jung. Jungian psychology is concerned with the importance of the individual psyche and recognises the significance of the symbolic in human life (Stevens, 1994).

Ode (2008) noted that besides art and architecture, several theories that are applied in landscape architecture are also derived from various related disciplines such as geography, environmental psychology, etc., as presented in Table 3.1. In being associated with several related disciplines, landscape architectural theory receives criticism. Riley (1990) remarked that landscape theory 'frequently plagiarized from other disciplines' (Deming and Swaffield, 2011, p.48). Krog (1983) also criticised that landscape architectural theory was 'lacking of originality' (p.74). However, many other disciplines also adopted thoughts and ideas from other related disciplines. Treib (1994) remarked that, in any design profession, two basic sources for new ideas derive from those that develop from the particularities and history of the profession, and those that are adapted from other fields and disciplines from the social milieu. Thus, sharing thoughts and ideas among disciplines should be acceptable, as long as landscape architecture recognises that its own values are quite different and its design does not result in the same kind of product. The disciplines of art and architecture, for example, orientate primarily towards the creation of formal and static artefacts, while the landscape is not static and changes according to natural forces (Murphy, 2005). If landscape fails to be understood as process, landscape designs cannot contribute to the evolution of the built landscape as a systemic process. While it is useful to understand and respect the values and theories of closely allied disciplines, it is also relevant to know where to draw distinctions, so that the selected thoughts and ideas underlying these theories are applicable and suitable to the context of landscape architecture.

Table 3.1: Landscape Theories, and its Relation to the Concept of Landscape.

Adapted from Sa Ode (2008)

Disciplines	Theories applied in landscape design	Concept	References
1. Geography	Biophilia ³⁶	Complexity and disturbance	Kellert & Wilson (1993)
	Topophilia ³⁷	Imageability, spirit of place/genius loci/vividness, historicity	Lynch (1960); Litton (1972); Tuan (1974); Bell (1999)
2. Environmental Psychology	Information processing theory ³⁸	Coherence	Kaplan & Kaplan (1982, 1989)
	Restorative landscapes ³⁹	Naturalness, Ephemera	Ulrich (1979, 1984), Kaplan & Kaplan (1989), Kellert & Wilson (1993)
3. Urban Design	Aesthetic of care ⁴⁰	Stewardship	Nassauer (1995)
	Prospect-refuge theory ⁴¹	Visual scale	Appleton (1975) Information Processing Theory by Kaplan & Kaplan (1982, 1989).
4. Social Science	Landscape heritage ⁴²	Historicity	Lowenthal (1979, 1985)
5. Archaeology	Historic landscape ⁴³	Historicity	Fairclough <i>et al.</i> (1999)

³⁶ Biophilia is the term that describes humanity's innate affinity for the natural world (Kellert and Wilson, 1995).

³⁷ Topophilia is defined as 'the affective bond between people and place' (Tuan, 1974, p.4).

³⁸ Information processing theory is the theory that 'analyzes landscape perception in terms of complexity, mystery, coherence, and legibility' (Kaplan and Kaplan, 1989, p.52).

³⁹ Restorative environment is defined as 'an environment that is beneficial in restoring mental resources that were spent on previous activities' (Staats, 2012, p.446).

⁴⁰ Aesthetic of care suggests that things could be found beautiful when they exhibit thought and maintenance (Framing a Modern Mess, 2010).

⁴¹ Prospect-refuge theory argues that an environment could be considered pleasurable for people when it allows one to be see (prospect) without being seen (refuge) (Hildebrand, 1991).

⁴² Landscape heritage is a landscape, which is seen as a culture, which requires the vision of a constituent element of heritage (Council of Europe, 1992).

⁴³ Historic landscape is a spatial and temporal entity, which is dynamic and reflects a number of factors such as the physical evidence of human interaction with nature, the role of the prehistoric, and the interrelationship and distribution of features within the landscape (Fairclough et al., 1999).

3.4 SIGNIFICANT THOUGHTS AND IDEAS ASSOCIATED WITH ENVIRONMENTAL ART AND LANDSCAPE ARCHITECTURE

The research aims to explore how environmental art affects landscape architecture theoretically. In order to achieve the aim of reflecting the relevance of environmental art upon landscape architecture, the research examines how the thoughts and ideas, which are associated with environmental art, reviewed in Section 2.3, were viewed in landscape architecture. The historical backgrounds of these thoughts and ideas were reviewed in Chapter Two.

3.4.1 SPIRIT OF PLACE AND CONCEPTIONS OF PLACE IN LANDSCAPE ARCHITECTURE

According to Motloch (2001), before beginning the design process, landscape designers must employ a site inventory process, which usually includes the process of understanding all the physical elements existing on the site and its surroundings. Depending on site scale, complexity and location, the site inventory records data, including geological substrata, topography or landform, subsurface and surface water, soils, vegetation, wildlife, and spatial and considerations of visularity (Laurie, 2001). LaGro (2007) noted that landscape designers analyse the explored data, examine interrelationships of the data, interpret the data and identify the essences of the site (Laurie, 1986). To develop an appropriate design, a landscape designer must also think beyond these physical elements to explore the spirit of place, and the unique and distinctive aspects of a place in this site inventory process.

Motloch (2001) remarked that the spirit of place or genius loci is a significant principle of landscape architectural design, as Alexander Pope advised in his *Epistle to Lord Burlington* (1751) to 'consult the genius of the place in all;' (p.273). In his *Genius Loci: Towards a Phenomenology of Architecture* (1980), Christian Norberg-Schulz wrote:

Architecture means to visualize the genius loci, and the task of the architect is to create meaningful places ... [where] he can orient himself within and identify himself with an environment (Motloch, 2001, p.57).

John Motloch continued Pope and Norberg-Schulz's investigation of the concept in his *Introduction to Landscape Design* (2001). Without exception, landscape practitioners should be responsive to enhancing both the tangible and non-tangible characteristics of the site. Thompson (2009) also remarked that it also depended on the designer to decide and make appropriate decisions on land development.

When referring to site location, landscape design not only considers the concept of genius loci, but also the concepts of place called identity of place, placeness and placelessness. Brueggemann (1982) remarked on the distinction between space and place:

Place is space which has historical meanings where some things have happened which are now remembered and which provide continuity and identity across generations. Place and space in which important words has been spoken which have established identity, defined vocation, envisioned destiny. (p.5)

Beyond the physical characteristics of each site location, the concept of place includes consideration of activities on the site location and takes man's experience into consideration. Motloch (2001) remarked that Norberg-Schulz defined a place 'in the true sense of the word; a space that has a distinct character' (p.57). Each place has its unique identity. Relph (1976) defined identity of a place as 'persistent sameness and unity which allows that [place] to be differentiated from others' (p. 45). All concepts regarding site location are significant for landscape architectural design and environmental art creation.

Motloch (2001) noted that the significant elements of place identity and spirit of place are their physical characteristics or settings, which include aspects of the existing natural environment such as landform and topography, vegetation, climate, the presence of water and built environments. The place identity and spirit of place also comprise two more main components, which are: 1) activities, situations and events; and 2) the individual and group meanings created through people's experiences and intentions with regard to that place. Place can be identified in two senses: 'placeness' and 'placelessness' (Relph, 1976). Norberg-Schulz defined 'placeness' as 'the cognitive effect when characteristics convey a distinctive character, and communicate a specific location as an

image that endures long after the eye has moved on to other settings' (Motloch, 2001, p.57). In contrast with 'placeness', 'placelessness' occurs when a location lacks the ability to establish distinctive character or to endure in the mind (ibid). Motloch (2001) remarked that all built environmental designers, including landscape designers, should capture genius loci and place identity and embrace them in the design and creation process.

3.4.2 CONCEPTS OF EIGHTEENTH-CENTURY AESTHETICS AND THEIR ASSOCIATIONS WITH LANDSCAPE ARCHITECTURE

The eighteenth-century English landscapes were developed in reaction to the rational geometry and formality of French landscapes (Thompson, 2014). The characteristics of the English Landscape School were generally of naturalistic irregularity representing its creations as a close approximation to nature (ibid). The two aesthetic categories, the Beautiful and the Picturesque, were related to widespread practice in landscape design. The first practice was the 'Beautiful landscape', which is also known as 'Brownian landscape' in honour of its best-remembered practitioner, Lancelot 'Capability' Brown, who was praised for his great ability in reading and transforming the land. According to Birksted (2004), Brown was inspired by the Arcadian landscape paintings of Claude Lorrain and Nicolas Poussin. The naturalistic smoothness and gentleness of the Beautiful aesthetic were transformed into landscape design (Thompson, 2014). The Beautiful landscapes were presented in the form of a large smooth open grassy area with a small constructed river running through the landscapes, a river dam, and individual trees or clumps of trees scattered in the parkland (Thompson, 2014). Brown was responsible for over 200 gardens surrounding the finest country estates in Britain (Birksted, 2004). Brown's landscapes were criticised, both for destroying formal gardens, and in other instances, for not going far enough towards nature. Picturesque theorists thought Brown's work was too smooth and vapid. Nevertheless, Brown was recognised as a genius of English garden design. Humphrey Repton was the last great English landscape designer of the eighteenth century and was often regarded as the successor to Brown (Sweeting, 1996). The Beautiful landscapes are as presented in Figures 3.62–3.67.

The second practice is the Picturesque landscape, which was designed and constructed to look like Picturesque paintings and scenery (Tatum, 1951). In Picturesque paintings, certain views and landscape scenery must be viewed and observed from certain privileged vantage points. Comparable to Picturesque paintings, Picturesque landscapes were metaphorically constructed as a series of framed static compositions and scenery viewed from specific vantage points in the actual landscapes. The Picturesque designers composed elements in nature as if they were artworks (Birksted, 2004). As a final product, Picturesque landscapes usually look rough, with an irregular resemblance to nature. Townsend (1997) noted that the distinction between the existing natural element and the designed landscape was blurry. Its signature includes the construction of amphitheatres, curving paths through grass hills, and the arrangement of trees into clumps to frame natural scenes (Townsend, 1997). The artist-trained William Kent was among the first to practice Picturesque landscaping. Kent created gardens at Rousham Hall in Oxfordshire, and Stowe House in Buckinghamshire, where pathway opening vistas lead to small classical temples in informal wooded areas (ibid). However, the Stourhead garden in Wiltshire, which was considered as an icon of the eighteenthcentury Picturesque gardens, was designed by Henry Hoare. Picturesque paintings and landscapes are as illustrated in Figures 3.68–3.72.

Hunt and Willis (1988) remarked that although the landscape design was English's creation, it became an international style, widely applied extensively in Europe. In the nineteenth century, the Beautiful and the Picturesque were conveyed to the United States, but with different manifestations and interpretations from those in the UK (Sweeting, 1996). Tatum (1951) noted that Robert Downing Jr. recharacterised the two British aesthetics as essentially the opposite of each other. Inspired by Greek architectural style, Downing redefined the Beautiful as symmetry, balance, and order. The Beautiful landscapes were thus expressed in perfection of form with balance or symmetrical groups of trees such as elm and ash. On the other hand, the Picturesque, usually represented as the British countryside, was replaced with the cultural pastoral view and American wilderness, which embodied national aspirations and represented democratic values in the United States. Thus, Picturesque landscapes were achieved through the use of groups of rock and a great variety of shapes and species of

planted trees and pines (Tatum, 1951). In this way, a Picturesque effect would be wilder, less well trimmed, and not as frequently maintained as in a Beautiful landscape. Pregill and Volkman (1993) noted that both the adapted English landscapes were carried through the works of Frederick Law Olmsted and his partner Calvert Vaux, including their masterpiece, Central Park, New York, which became the template for design in western culture. The traditions of the Beautiful and Picturesque landscape were hugely influential throughout Europe and North America in the nineteenth and twentieth centuries (ibid).

In the contemporary context, the meaning and interpretations of the Beautiful, the Sublime and the Picturesque are slippery and the terms are often used interchangeably in everyday language (Thompson, 1999). In the past three decades, the English landscape school style has received strong criticism. Adriaan Gueze, a prominent landscape architect, referred to the English landscape school as a 'worn-out cliché' (p.36), burdening both in design expression and in the recreational functions of the park (Herrington, 2006). However, its principles remain as a foundation of the conventions of landscape design, particularly for park and recreation facilities throughout western culture (Hohmann and Langhorst, 2005). The school's impacts are still substantial in contemporary landscape architectural design. Recently, there have been attempts to renew the Picturesque aesthetic, but with different approaches and interpretations. Landscape theorist James Corner recently coined the term 'eidetic landscape'. According to the Oxford Dictionary (2015), the term eidetic means 'relating to or denoting mental images having unusual vividness and detail, as if actually visible'. Corner referred to the 'eidetic landscape' as a conception of landscapes, which seizes upon the persuasive power of imagery over audiences' perception in landscape spaces (Herrington, 2006). The concept of the 'eidetic landscape' tries to embrace human understanding and interpretation as integral to the design process. Though the terms are different, the way 'eidetic landscape' is applied is very similar to the imaginative aspect of the Picturesque (ibid).



From top to bottom and from left to right: The Beautiful Landscapes: Figures 3.62-3.66: Castle Howard garden (1701-1853), Figure 3.67: Castle Braham garden (around 1698)



From top to bottom and from left to right: The Picturesque Landscapes: Figures 3.68: Claude Laurren's *Pastoral Landscape* (1645), Figures: 3.69: Chatsworth garden (around 1840), Figure 3.70: Rousham garden (1715-1726), Figure 3.71-3.72: Stourhead Garden (around 1740)

1) ASSOCIATION BETWEEN EIGHTEENTH-CENTURY AESTHETICS AND McHARG'S ECOLOGICAL DESIGN

Balmori and Sanders (2011) noted that Ian McHarg's ecological design was connected with the eighteenth-century aesthetics through the tradition of English landscape. In claiming that nature itself produced the aesthetic, McHarg disregarded André Le Nôtre and the French formal school, and praised the tradition of English landscape as a precursor of his own ecological approach (Ellison, 2013). To McHarg, the English landscape tradition represents a revolutionary transformation, in which humans and nature are moving towards a more harmonious relationship (Balmori, 2010). In a recent article, 'The Suffocating Embrace of Landscape and the Picturesque Conditioning of Ecology' (2013), Aaron M. Ellison remarked that Brownian landscape required a certain degree of maintenance and did not have ecological values, when compared to the Picturesque landscape. The Picturesque landscape had rough, messy and less maintained features, which were considered to be of more ecological value than the neatly grazed pastures of a Brownian landscape (Ellison, 2013). The idea of Picturesque landscape seems to be renewed in current trends of landscape design, however, with the integration of ecological design as well as art application. This includes, for example, the works of Diana Balmori, who turns the flow of nature and natural process into models to imitate. Balmori (2010) states that landscape design should support the long-term development of mutual interactions between humans and nature. One of her main landscape design agendas is that 'they must be strikingly different from existing environments, signifying a new engagement with nature' (Balmori, 2010, p.xv).

2) THE CONCEPTION OF NATURE, ITS ASSOCIATION WITH THE EIGHTEENTH CENTURY AESTHETICS, AND ITS DEVELOPMENT WITHIN THE DISCIPLINE OF LANDSCAPE ARCHITECTURE

The concept of nature, and its relations with humankind, has been explored along with the development of the landscape architecture discipline. According to Balmori (2010), nature was an important concept in the eighteenth-century English landscape tradition interpreted as the countryside, unspoiled places and plants, which were not altered by human hands. It was also seen as fixed and unchangeable. The untamed view of nature of the eighteenth-century English landscape prevailed until the late nineteenth century, in which Darwin's theory of evolution led to the understanding that nature was dynamic and changed over time (ibid). In the 1960s, the concept of ecology, which put humankind as a part of nature, merged with the discipline of landscape architecture when lan McHarg published his *Design with Nature* (1969). McHarg's ecological sensibility sought to design human environments to be in concert with the conditions of setting, climate and environment (Spirn, 2000). In perceiving conception of nature, McHarg (1969) wrote:

Nature is process, that is interacting, that is responds to laws, representing values and opportunities for human use with certain limitations and even prohibitions (p.7).

According to McAllister (1982), McHarg also viewed the relationship between humans and nature as follows:

Man and nature should not be viewed as separate – that man is dependent upon nature for his own survival and well-being (p.187).

In the contemporary context, the conception of nature was reinterpreted for Landscape Urbanism,⁴⁴ which emerged in the 1990s. In opposition to the Picturesque, Landscape Urbanism dispensed with binary oppositions, such as nature—culture, town—country, changing the relationship between the contemporary city and the country and forming a homogeneous continuum in landscape architecture (Gray, 2011). Maltisky (1992) noted that our view of nature is currently perceived as multifaceted, changing over the centuries along with actions and thoughts of people in society. Issues concerning

⁴⁴ Landscape Urbanism is a relatively new theory in landscape architecture that offers a way to consider the complex urban condition; one that is capable of tackling infrastructure, water management, biodiversity and human activity; and one that asks about and examines the implications of the city in the landscape and landscape in the city (Gray, 2011).

humanity and nature are debated within the modern field of environmental philosophy, which includes subjects such as environmental ethics, defining environment and nature, how to value the environment, environmental aesthetics, restoration of nature, and consideration of future generations (Belshaw, 2001). Landscape architecture aims to create order and harmony in relationships with the environment (Laurie, 1986). To achieve this goal, designers need a clear understanding of humans and nature and the ways in which they mutually interact with each other. However, little of a philosophical nature has been published by landscape architects. Thompson (2000) noted that environmental ethics in landscape architecture, which is related to environmental philosophy, received 'little in the way of serious philosophical investigation' (p.175). The concept of nature within the discipline should constantly be explored and re-examined, so that landscape architectural work may be rich in intellectual ideas regarding the relationship between humanity and nature.

3.4.3 ENVIRONMENTALISM AND ITS ASSOCIATION WITH LANDSCAPE ARCHITECTURE

Hohmann and Langhorst (2005) noted that the landscape architecture of the nineteenth century was tied to ideas of the first wave of environmentalism led by George Perkins Marsh and the Transcendentalists (see Section 2.3.3). Landscape practitioners such as Frederick Law Olmsted and Mary Cleveland Perkins worked alongside the Transcendentalist pioneers such as Ralph Waldo Emerson, Henry Wadsworth Longfellow and Henry David Thoreau, transferring the philosophy of the first environmentalism into landscape design. Best known for New York's Central Park in making nature accessible to urban citizens, Olmsted was associated with the first wave of environmentalists in his project for the Back Bay Fens (1887), part of the 'Emerald Necklace', the park system situated in the metropolitan area of Boston, Massachusetts (Newton, 1971). The Back Bay Fens (1887) and Frederick Law Olmsted's 1887 Plan for the Back Bay Fens are as shown in Figures 3.73-3.76. In the Back Bay Fens, Olmsted purified the water polluted by sewage and industrial effluent and recycled it back to the park. The park also functioned as protection for the adjacent land area from flooding (Spirn, 2000). Olmsted also incorporated a sewer system, a parkway, and vehicular circulation to form a landscape system that performed environmental functions for the city of Boston. The park network system also brought immense social benefits and controlled urban sprawl (Horayangkura, 2011). Spirn (2000) remarked that the Back Bay Fens was one of the first American active wetlands restorations. The park also ignited the concept of landscape ecology, which rapidly flourished and became one of the profession's major challenges in the days after Olmsted (ibid).

With his partner, Calvert Vaux, Olmsted also outlined the preliminary report called 'Yosemite and the Mariposa Grove: A Preliminary Report,' which offered one of the first systematic expositions in the history of the western world of the importance of wilderness for human well-being, the effect of beautiful scenery on human perception, and the moral responsibility of democratic governments for natural preservation for the benefit of the whole people (Yosemite, 2014). The report envisioned Yosemite becoming a natural resource conservation and preservation land for plants and animals (ibid). Though Olmsted's vision for the park was not fully perceived, his work has marked him as one of the 'pioneering environmentalists' (Martin, 2011). The park eventually became a National Park in 1890 and received federal protection. Olmsted and Calvert Vaux were involved in planning parks and green open spaces in numerous U.S. cities between the mid-nineteenth and early twentieth centuries.

The second environmentalist movement of the 1960s ran in parallel to the paradigm shift of landscape architecture. At the turn of the decade, landscape architects such as lan McHarg and Brian Hackett, ⁴⁶ along with practitioners from other built environment disciplines, expressed concerns over environmental quality, and reconsidered the role of landscape designers in reshaping environments. Among several landscape architects, McHarg (as shown in Figure 3.77), stands out as a leader who merged the practice of

⁴⁵ Landscape ecology is the study of spatial variation in landscapes at various scales, which include considerations of the biophysical and societal causes and consequences of landscape heterogeneity. Landscape ecology is associated with natural sciences with related human disciplines (International Association for Landscape Ecology, 2015).

⁴⁶ Brian Hackett was an eminent landscape architects who played a significant part in the development of regional planning and environmental conservation. His two publications, *Man, Society and Environment* (1950) and *Landscape Planning: An Introduction to Theory and Practice* (1971), explore impacts of human on the environment through farming, forestry, water supply, new towns and transport systems (Brenikov, 1998).

landscape architecture with the principle of ecological science (Spirn, 2000). As did Olmsted, McHarg integrated scientific information and method with landscape design agenda in scales as large as metropolitan regions. McHarg (1996) noted that 'Scientific expositions amplified the understanding of the miraculous in nature' (p.161). His famous *Design with Nature* (1969) (Figure 3.78), set out the principles of ecological design and planning and established him as an important figure in shaping national environmental policy (Conon, 2000).

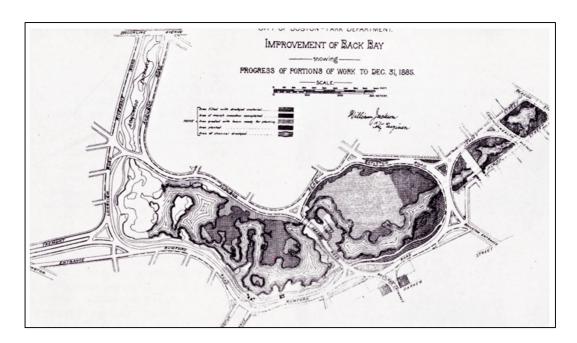
McHarg's ecological methodology integrated an assortment of scientific data such as meteorology, geology, geomorphology, hydrology, soils, vegetation and wildlife to provide synthesis and interpretation of suitability in land use (Balmori and Sanders, 2011) (as shown in Figures 3.79–3.82). Through numerous projects, McHarg illustrated how this process can identify environmental impacts of proposed projects and determine the suitability of various land uses (Spirn, 2000). For McHarg, the planning study was an expansion of professional responsibility that established his ecological planning method (McHarg, 1996). John Lyle built on McHarg's ecological advocacy by proposing a regenerative approach for design. Regenerative design is based on knowledge of ecosystems and on using that understanding to create healthy places (Lyle, 1994). Meanwhile, Kevin Lynch codified the approach that most landscape architects, architects and planners use for site planning and design. Landscape architects became increasingly knowledgeable about ecological principles and systems and continue to address ecological issues in their design and planning. Ultimately, principles of ecological design are continually revised, and these changes are incorporated into the body of knowledge in the discipline of landscape architecture. However, Balmori and Sanders (2011) noted that during the flourishing of landscape ecological design, the aesthetics factor was omitted in the design agenda. Balmori and Sanders's (2011) comments were consistent with Treib (2011), who remarked that McHargian landscapes have no design. Any artistic expression was not considered in McHargian landscape design. Howett (1985), Spirn (1988) and Meyer (2008), along with several other scholars, examined how crucial aesthetics values were to landscape architectural design. Howett (1985) remarked that works of landscape architecture disregarding the scale domain of aesthetic values should not be isolated from considerations of ecosystems.

In the 1990s, several prominent landscape architects such as Richard T. Forman⁴⁷ and John T. Lyle⁴⁸ explored how environmental science could integrate with landscape architecture. In the contemporary context, ecological design has been expressed variously. Beardsley (1998) noted that both Guadalupe River Park and Byxbee Park, which were designed by George Hargreaves, are dynamic with riparian ecological design: California sycamores grow near the water, with oaks and native, droughtresistant species of grasses and wildflowers on the adjacent slopes. Plants are allowed to migrate, establishing their own communities (ibid). The waterway is reshaped in dramatic and subtle ways: floods have already inundated Guadalupe River Park, while at Byxbee moisture is collecting in low places and establishing colonies of damp-loving plants. The results of this approach are landscapes that are paradoxically natural, but not natural looking. This dynamic approach to landscape is radically different from conventional design (Weilacher, 1996). Though the principles of environmental science have already been embedded in the discipline of landscape architecture, thoughts and issues generated by environmentalism continue. Landscape architecture continues to strengthen its connection with environmentalist networks.

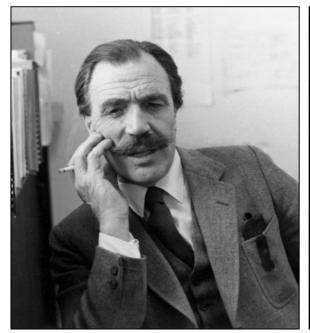
⁴⁷ Richard T. Forman is a landscape scholar who has a primary interest in linking science with spatial pattern to interlink nature and people (Harvard University Graduate School of Design, 2016). His significant publications are *Landscape Ecology* (1986) and *Land Mosaics: the Ecology of Landscapes and Regions* (1995).

⁴⁸ John T. Lyle was a landscape architect who weighted the value of living within available renewable resources without degradation of the environment. Lyle's *Regenerative Design for Sustainable Development* (1994) integrated the principles of ecological design with landscape practice (Lyle Center for Regenerative Design, 2016).



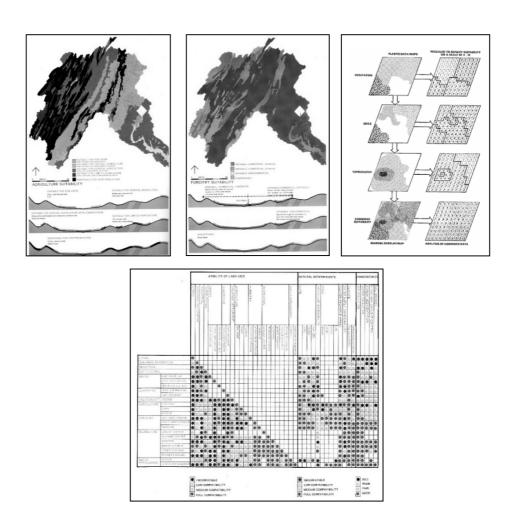


From left to right: Figures 3.73-3.75: Back Bay Fens, Boston, USA and Figure 3.76: Frederick Law Olmsted's 1887 Plan for the Back Bay Fens





From left to right: Figure 3.77: Ian McHarg (1920-2001), and Figure 3.78: *Design with nature* (1969)



Figures 3.79-3.82: Map-overlay method for Potomac River project published in McHarg's *Design with nature* (1969)

3.4.4 THE PASSAGE OF TIME AND ITS ASSOCIATION WITH LANDSCAPE ARCHITECTURE

This section reviews the importance of time for landscape architecture. According to Laurie (1986), Olmsted remarked on the significance of time, 'a picture so great that nature shall be employed upon it for generations, before the work he has arranged for her shall realize his intentions' (p.8). Beardsley (2000) remarked that in some ways, most designed landscapes can be perceived as expressions of the entropic passage of time. Swaffield and Bowring (2013) noted that the significance of time seems to have already been well perceived by landscape practitioners through their training in landscape architecture programmes, both in the landscape design studio and teaching courses. In creating landscape design, Valkenburgh and Saunders (2013) noted that landscape

designers can take advantage of seasonal climatic conditions; for example, by using plants effectively for their seasonal behaviour, thereby expressing the unique character of each season and the unique sense of each place. Landscapes can be designed spaces that change in scale, character and mood according to sunlight or seasons (ibid). Laurie (1986) noted that it should be remembered that landscape work, unlike architecture, does not always have an immediately perceptible impact and the effectiveness of planting and land use decisions or policies may not be appreciable for twenty to thirty years. Motloch (2001) commented that landscape architects should consider the relevance of time beyond the landscape design process. Landscape designers should fully understand all elements and work out how to deal with each element of landscape in the full process. Landscape design should address the present and the future both in short- and long-term time frames, and be designed to address succession, natural rhythms, movement, changes over time, aesthetics and the design process. It must satisfy immediate needs and contribute to the long-term health and sustainability of the landscapes. Laurie (1986) remarked that unlike architecture, landscape work does not always have an immediately perceptible impact when handing over landscape projects to the clients. Landscape designs are never complete (ibid). Or rather, the finished landscape of today is not the finished landscape of many years from now. Yet few landscape professionals continue to be involved in their built works beyond the handover. Valkenburgh and Saunders (2013) noted that the need arises for designers' involvement over time. Landscape architects should more deliberately include in their work predictions of how the landscape architecture design will change. The reviews suggest that the passage of time seems to be relevant to landscape architecture, particularly in terms of the design process as well as landscape management.

3.5 PRACTICE OF LANDSCAPE ARCHITECTURE

3.5.1 SCOPE OF WORKS

Weilacher (1996) remarked that, in a contemporary context, the scope of works for landscape architecture covers a wide range of territory, from providing advice in the form of strategic planning of regional sites to the design service of public plazas and

private gardens. Landscape architects also provide services for ecological recovery and historical reconstruction of period designs. Motloch (2001) also noted that landscape architects also function in a range of relationships with other professionals. Depending on project scope and contractual relations, landscape architects might be responsible for the development of an entire site, including building location, form, and exterior imagery; landform reshaping; storm-water management; site infrastructural system design; site construction; and landscape planting. Landscape architects might also organise and lead interdisciplinary planning and design teams.

According to Laurie (1986), landscape design professionals practise in two models: private and public. The first is private practice, in which the majority of landscape architects operate. Individuals and firms pursue physical planning and design, often at a range of scales and project types. Many private-practice firms specialise in specific project types, within a more general overall practice (Motloch, 2001). The second is public practice, in which most practitioners focus on landscape management and planning. Public practitioners work closely with the public and tend to spend less time designing projects and more time facilitating and overseeing the activity of others to promote effective landscape management, planning and design.

3.5.2 PROFESSIONAL ORGANIZATION AND LICENSURE

There are professional landscape organisations such as the LI, ASLA, the Bund Deutscher Landschaftsarchitekten (BDLA), etc. The roles of these organisations typically include 1) providing standards of practice, 2) accrediting university courses, 3) promoting professional development, 4) informing the public of what landscape architects are capable of doing and 5) increasing the public's awareness and appreciation of the profession of landscape architecture. Professional landscape institutions also legitimise landscape practitioners. The title 'landscape architect' in general is usually provided by the professional organisation. To be qualified as a landscape architect, one must undergo a registration process. According to Laurie (1986), there are two types of registration comprising 1) no state registration, no protection of title, but recognition and acceptance by government and other professions; and 2) state registration or licensure.

The first model is termed as the Scandinavian or north-west European, in which state registration is not required (Laurie, 1986). The profession of landscape architecture is well established and represented on government commissions and advisory boards. One has to study a landscape programme accredited by a professional body relating to the field of landscape architecture, to obtain a Bachelor's degree in Landscape Architecture or a similar field (Be a Landscape Architect, 2014). In the UK, after graduating from university, one will practise as a landscape trainee (ibid). There is no set length of time for this; however, it typically takes about 1–2 years. Following this, one is awarded a full landscape architect title, which is called a Chartered Member of the Landscape Institute (CMLI) in the UK (Laurie, 1986). This model of practice is applicable in the UK and Scandinavian countries (Laurie, 1986).

The second model is called state registration or licensure, which is applicable in the United States, the founding country of landscape architecture (Laurie, 1986). The licensure requires education and also work experience and the passing of the Landscape Architect Registration Examination (LARE), based on the Council of Landscape Architectural Registration Board's guidelines. Laurie (1986) further noted that the state registration or licensure model is also applied in several European countries such as Germany, the Netherlands, Austria, Hungary, the Czech Republic, Slovakia and Italy.

The title 'landscape architect' is applied differently in each country (Laurie, 1986). Holden and Liversedge (2014) noted that, in some countries, the title of 'landscape architect' is little used: in Russia, for instance, landscape architects often graduate in green engineering, while in France and Spain landscape architects are not allowed to use the professionally protected word 'architect' in their titles and so call themselves 'paysagistes' or 'paisajistas' instead. In Germany, landscape planning is very important and many government landscape architects are planners. In the UK, the distinct profession of town planning is well established, so there are far fewer landscape architects engaged in town and country planning than in Germany. In the United States, landscape architects often undertake plot layouts for housing estates or the design of

road layouts; in some other countries, these tasks would be undertaken by surveyors or civil engineers (Motloch, 2001).

Even though it is not officially stated, professional landscape organisations also aim to protect areas of expertise from other disciplines such as architecture, urban design and environmental art. However, the professional legitimation process does not seem to prevent interlopers from practising landscape architecture. Practitioners from other disciplines may be not able to legitimise their works, yet they are able to practise landscape architecture. In Section 2.4.1, it was mentioned that environmental artist Robert Irwin designed a landscape project at the Getty Center. Many landscape projects are also designed by architects and urban designers, including Parc de La Villette, which was designed by eminent architect Bernard Tschumi (Section 3.2.2). Working across boundaries leads to professional boundaries becoming blurred.

3.5.3 PERCEPTION OF LANDSCAPE ARCHITECTURE

It can be remarked that, in general, the perception of the profession of the landscape architect is not well understood by the general public (Motloch, 2001). Among various scales of landscape design, landscape practitioners undertake small landscape designs such as gardens. This identification of garden design with decoration taps into deeprooted disciplinary assumptions tinged by prejudices (Balmori and Sanders, 2011). In lay people's perspective, the primary focus of landscape architecture is believed to be residential garden design and estate planning, in which plant material is one of the critical design elements. Furthermore, plant and horticulture technology has linked horticulture with landscape architecture since the nineteenth century. Planting design during the period was accompanied by horticultural discoveries, as Europeans explored the regions of the Americas, Africa, India, China and the Pacific (Motloch, 2001). Landscape designers have been perceived to be very knowledgeable about plant material and horticulture.

Booth (1990) noted that, commonly, when a person is identified as a landscape architect, the response is to request an opinion on plants. The landscape architect is

mistakenly believed to be an expert on all matters related to plants, including their propagation, growth requirements, plant specifications, and their uses as beautification elements in the landscape. Plant material is indeed a valuable aspect of landscape architectural design. Indeed, the landscape architect should possess a thorough knowledge of its functions and a skilled ability to utilise it in landscape design, which includes an understanding of its design characteristics such as size, form, colour, and texture, and a knowledge of its growth habits and requirements (ibid). The landscape architect should also have an understanding of the overall visual characteristics of a plant, its growth requirements, and its environmental impact (Motloch, 2001). However, landscape architects do not need a thorough knowledge of plants and horticultural technology (Laurie, 1986). Motloch (2001) remarked that such knowledge of plants is rightly held by nurserymen and horticulturalists.

The cause of the misperception may derive from terminology. According to Booth (1990), the term 'landscaping' is misused as a substitute for the title 'landscape architecture'. Booth (1990) stated that in 1972, Albert Fein submitted a report to ASLA suggesting the profession consider changing its name in an attempt to change the misperception of 'landscaping'. The report also suggested that a new name should imply a broader professional expertise and would more truly represent the profession (ibid). Although the idea of a new name has been dropped, its essence seems to be substantial. With all the above reviews, the misperception of landscape architects as landscape gardeners has remained over time.

3.6 SUMMARY

After the extensive literature review in both environmental art and landscape architecture (in Chapters Two and Three), it is possible to summarise issues deriving from reviewing literature within the three research objectives, comprising 1) forms and styles, 2) significant thoughts and ideas and 3) the practices of the two disciplines, as follows.

1) Building on the literature review, there are two main issues related to the first aspect of forms and styles between environmental art and landscape

architecture. The first is in regard to the two schools of design of Modernism and Postmodernism, which have been well established in both disciplines. Concerning Modernism, it is clear from the literature that the simplicity of Modernism impacts landscape architecture through the disciplines of architecture and art. However, the literature does not confirm that the impact of the Modernism is derived from a connection with environmental art. With respect to Postmodernist art, the review indirectly implies the relevance of environmental art in Postmodernism's impact upon landscape architecture. However, there is no concrete confirmation in the literature. Secondly, it is apparent that there are common shared forms and styles, which are evident in numerous works of the two disciplines. However, there is no information to specify that the coherence of the forms and styles are the effect of environmental art upon landscape architecture.

- 2) In the aspect of significant thoughts and ideas, there are two issues. Firstly, the review presents four primary features comprising: 1) the conception of spirit of the site, 2) concepts of eighteenth-century aesthetics, 3) environmentalism and 4) passage of time. These are identified as theoretical connections between environmental art and landscape architecture. Nonetheless, as with forms and styles, there is no confirmation as to whether these four features have impacted landscape architecture through environmental art. The researcher also questions whether there are other thoughts and ideas of environmental art influencing landscape architecture that are yet to be explored in the literature, beyond these four features. Secondly, the review explores theory in landscape architecture in order to achieve the research objective of identifying how landscape architecture stands in practice after being associated with environmental art since the 1960s. On the basis of the review, there is no evidence identifying that landscape theory is associated with environmental art. The issue is further explored in the empirical study.
- 3) Finally, there are two issues relevant in various aspects of the professional practice of landscape architecture and environmental art. The first is in regard to the professional institutions of the two disciplines. The review demonstrates that each discipline works within a range of activities with its own rules and

regulations, and the two disciplines work across boundaries. How each discipline affects the other in practice is not confirmed by the literature. In addition, while landscape architecture has professional institutions such as the LI to provide guidelines, environmental art only has the art criticism process, interpreting and evaluating artworks. How the professional institution of landscape architecture and the art criticism process of environmental art affect the practices of the two disciplines is yet to be revealed in the literature and can be considered as a gap in the literature. Secondly, the field study also covers the current practice of landscape architecture and environmental art. This is to respond directly to the research objective of exploring how landscape architecture stands in practice after being associated with environmental art since the 1960s.

These issues within the three aspects of the research reviewed above are further explored in the empirical study. Based on the literature review findings, a conceptual framework representing the areas for further investigation on the relevance of environmental art upon landscape architecture has been developed in Figure 3.83.

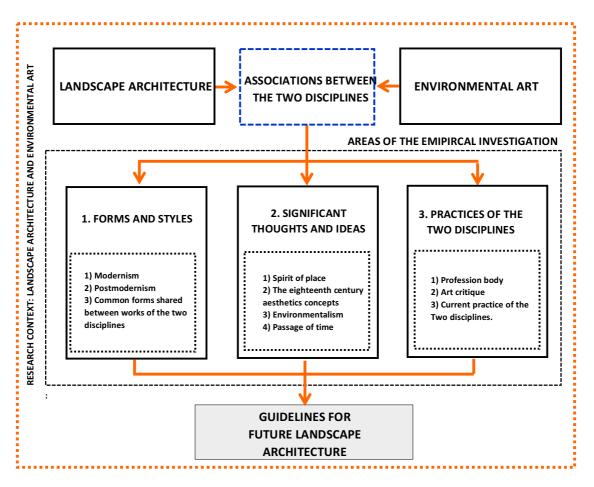


Figure 3.83: Conceptual framework built upon literature review and their interrelations with objective of the research



CHAPTER 4 RESEARCH APPROACH AND METHODOLOGY

INTRODUCTION

The previous chapter developed a conceptual framework for understanding the relevance of environmental art upon landscape. This chapter explores the methodological approach adopted in this study. The chapter discusses methodological tools used to collect data and analyse the required data during the fieldwork.

4.1 RESEARCH APPROACH

According to Gaber (1993), the selection of a research approach is a matter of determining which research method is the most suitable for capturing particular information. There are three research approaches, comprising qualitative, quantitative, and mixed-methods approaches. Each research approach has different ways of dealing with information; therefore, each one reveals different aspects and configurations within the information. A quantitative approach employs statistical, mathematical, or computational techniques (Aliaga and Gunderson, 2002). This thesis applied a mixed-method approach using strategies of enquiries that involve collecting data, either simultaneously or sequentially, to best understand the research problem (Creswell, 2003). A qualitative approach, on the other hand, answers questions about human behaviours and experiences that are difficult to obtain through a quantitatively orientated approach (Guest et al., 2013). Arora and Stoner (2009) remarked that the qualitative approach is effective in obtaining specific information about the values, opinions and social contexts of particular populations. It helps in understanding experiences and attitudes towards particular issues in certain contexts (Creswell, 2003). In reflecting views upon relevance of environmental art on landscape architecture and vice versa, descriptive information deriving from literature reviews and perspectives of specialists from both disciplines are necessary. Therefore, for this research, a qualitative approach is more appropriate than a quantitative approach and a mixed-methods approach.

4.2 DATA COLLECTION

According to Denscombe (2007), appropriate data gathering methods help to improve the credibility, validity and reliability of the research findings. In this research, the two data collection methods were semi-structured interviews and focus groups, which provided descriptive, explanatory and exploratory data and were conducted with specialists in landscape architecture and environmental art. A level of complementarity could therefore be said to exist between the data gathered from these two methods. Each method is subsequently presented in more detail.

4.2.1 SEMI-STRUCTURED INTERVIEWS WITH SPECIALISTS

The semi-structured interview is most commonly associated with qualitative research (Mason, 2004). The semi-structured interview is usually conducted with a fairly open framework, which allows focused, conversational, two-way communication between the researcher and the interviewees (Bernard, 1988). The aim is usually to ensure flexibility in how and in what sequence questions are asked, and to indicate how particular topics or issues might be followed up and developed (Mason, 2004). The interviewees usually follow the guidelines provided by the researcher, however, they are also free to express their views in their own terms when appropriate. The semi-structured interview is also less prone to time and response constraints, as individual interviews can be scheduled more easily.

In this research, the interviewees were specialists from academia and practitioners from the disciplines of environmental art and landscape architecture. The specialists were interviewed to explore the evolving linkages between the two disciplines that have been developed in the past and how they have evolved in recent times, by also making use of specialists' understanding of landscape architecture and environmental art theory and practice. Questions for the interviews, which were framed by the literature review, are discussed in the following sections. Since semi-structured interviews often contain open-ended questions and discussions may diverge from the

interview guide, it is generally best to record the interviews and transcribe them later for the analysis process. This practice was also adopted in this research.

1) PILOT STUDY

A pilot study is a small experiment designed to test logistics and gather information prior to a larger study, in order to improve the quality and efficiency of the study (Lancaster et al., 2004). It can reveal deficiencies in the design of a proposed procedure, and these can then be amended before time and resources are expended on large-scale studies. The decision to use a pilot study in this research was to help frame questions for the semi-structured interviews and enable the production of preliminary research outputs and results, which could influence the direction of the fieldwork and highlight particular areas of interest that were not apparent in the research planning stages. The results of the pilot study were very helpful and made a valuable contribution to the full study. Following on from the pilot study, these modifications were made to the field study:

- Confusion and misunderstanding regarding the wording of some questions was considered. The questions were refined.
- The number of questions was reduced from 20 to 14. The design, form and structure of some questions were also changed.
- Possible gaps in the questions were highlighted.
- The required time for each question and interview was tested; the interview was found to take about 90–120 minutes.

In summary, the pilot study was a useful tool in this study and gave more knowledge and information about the time involved and the way the questions for the semistructured interviews should be conducted.

2) QUESTIONS FOR THE SEMI-STRUCTURED INTERVIEWS WITH SPECIALISTS

The semi-structured interview is usually conducted with questions mixed between structured and open-ended ones, contributing to a good interaction between the researcher and the interviewees (Kvale, 1996). Within the framework set by the research questions, some of the questions for the semi-structured interview were predetermined and some were additional questions created during the interview process. The aim of asking a combination of focused and more open questions is to obtain a deeper understanding of the main issues. The use of a range of questions also prompts further discussion if an initial response does not appear to develop fully the concepts being debated (Mason, 2004). By allowing the focus of each interview to flow from the questions asked, more diverse and contextualised discussions are developed. The researcher makes sure that all interview questions and topics are covered, albeit not necessarily in the same order or with the same formulations (Jorgensen and Phillips, 2002). Building on many of the ideas deriving from the literature review and based on the research objectives, the questions for the semi-structured interviews conducted in this research aimed to explore further the three main themes of the research:

- 1. Forms and styles
- 2. Significant thoughts and ideas
- 3. Practices of the two disciplines

Table 4.1: Questions for the Semi-Structured Interviews with Specialists in Relation to the Research Objectives

Research Objectives	Questions for the Semi-Structured Interviews with Specialists		
(Introduction)	Q1. Are there any landscape architects/environment art artists and their		
	works you think particularly highly of? If so, how and why?		
	Q2. Please define landscape architecture/environmental art.		
(1) To explore if environmental art	Q3. Was landscape architecture impacted by Modernism/Postmodernism		
is relevant to landscape	through environmental art?		
architecture in terms of forms and	Q4. Is there any convergence in terms of forms and style in works of		
styles.	landscape architecture and environmental art? Please give examples.		
(2) To investigate the relevance, in	Q5. What were particular influences on landscape architecture/		
term of thoughts and ideas, of	environmental art in the 1960s?		
environmental art for landscape	Q6. Was landscape architecture impacted by the thoughts of the genius		
architecture.	loci, the eighteenth-century aesthetics concept, environmentalism, and		
	passage of time? Please give examples.		
	Q7. Are there any other thoughts and ideas of environmental art/		
	landscape architecture, which have impacted on landscape architecture?		
	If so, what are they? Please give examples.		
	Q8. How is site context important to the work of landscape architecture/		
	environmental art? How do landscape architects/environmental artists		
	approach or deal with the site?		
	Q9. How would you describe the relationship between landscape		
	architecture/environmental art?		
(3) To investigate how	Q10. Is there any collaboration between landscape architects/		
environmental art practice is	environmental artists and practitioners from other disciplines? Please		
relevant to landscape architecture. (4) To investigate how landscape	give examples.		
architecture stands theoretically	Q11. Are there any associations in the practice of the two disciplines?		
and in practice after being	Q12. How do you perceive landscape architecture/environmental art		
associated with environmental art	today?		
from the 1960s.	Q.13 Do you think landscape architecture/environmental art is perceived		
	precisely in terms of practice?		
	Q14. Please define your vision of the future approach of landscape		
	architecture, which is intertwined with environmental art.		

3) CRITERIA FOR SELECTION OF INTERVIEWEES

According to Adams and Schvaneveldt (1991), the number of interviewees should not be too large or too small, because too many interviewees may affect the use of resources such as the time for conducting the interview and the process of transcribing. In contrast, too few interviewees might affect the quality of the results gained from the interviews. The selection criteria of the participants from the two disciplines are:

Landscape Architecture:

- Landscape architects/practitioners
 - Integrating environmental concerns in their concept design.
 - Located within the United Kingdom, in close proximity to Newcastle.
- Lecturers and/or researchers in Landscape Architecture
 - Research area in history and theory of landscape architecture from Modern movement to present.
 - Located within the United Kingdom in close proximity to Newcastle or in accessible countries such as France or the Netherlands.

Environmental art:

- Environmental art artists
 - o Integrating environmental concerns in their concept design.
 - Located within the United Kingdom in close proximity to Newcastle.
- Lecturers and/or researchers in environmental art
 - Research area in history and theory of environmental art and related concepts.
 - Located within the United Kingdom in favourably close proximity to Newcastle or accessible countries such as France or the Netherlands.

The semi-structured interviews took place in various locations as requested by the specialists. In cases where the specialists needed to commute for the interview, the researcher provided travelling expenses. The specialists participating in the semi-structured interviews are listed in Appendix A.2.

4.2.2 FOCUS GROUP

A focus group is an organised group of individuals selected and assembled by researchers to discuss their views, attitudes, reactions and experiences on particular topics of the research (Powell et al., 1996). Focus groups can provide information about a range of ideas that individuals have about certain issues, as well as highlight the differences in perspective between groups of individuals (Gibbs, 1997). The type and range of data generated through the social interaction of the group are often deeper and richer than those obtained from one-to-one interviews (Rabiee, 2004). The use of focus groups, therefore, was deemed to be an appropriate method for developing a set of qualitative data for this research.

The focus group investigated how the two disciplines mutually affected each other from the 1960s to the present day, and highlighted synergies and tensions between the views of landscape architects and environmental artists. With the distinct aspects of the focus group in gaining insight and data produced through group dynamics and the interaction between the researcher and participating specialists, the researcher was able to explore in-depth information and a range of ideas of how environmental art is relevant to landscape architecture and vice versa. The focus group was intended to be not only the way of validating the findings of the semi-structured interviews, but also of filling the potential gaps in the semi-structured interview findings, or clarifying findings. As a result, some themes, topics or issues that were related to the research objectives, but were not explored to a great extent in the semi-structured interviews, were then investigated in the focus group discussion. Therefore, it is appropriate to conduct focus groups after semi-structured interviews. Themes derived for the focus group are further discussed in Section 4.4.2.

In regard to the formation of focus groups, Krueger (1994) noted that rich data from a focus group can be generated when individuals in the group fully engage in the discussion. Therefore, participants in focus groups are selected on the criteria that they are within the age range, have similar social characteristics and would be comfortable talking to the interviewer and each other (Rabiee, 2004). Although homogeneity is discouraged, most scholars recommend that participants should not know one other personally. This also prevents set behaviours relating to pre-existing relationships and patterns of leadership in the group. In the case of this research, numbers of specialists in both landscape architecture and environmental art are rather limited. Most specialists in each group discussion came from different institutions and did not know each other; however, some specialists in all group discussions seemed to be quite familiar with the works of each other. Kitzinger (1994) remarked that the use of groups of specialists who are acquainted means they can relate to each other's comments and may be better placed to challenge one another, as in the case of this research. Most specialists responded to questions in a spontaneous way, contributing with their views to the group discussion. They were able to exchange their thoughts

and ideas among each other. All three focus groups progressed fluently and successfully.

Rabiee (2004) suggested that the number of participants in a focus group should be manageable, ranging between three and ten people, which is a number large enough to gain a variety of perspectives and small enough to not become disorderly or fragmented. In this research, three focus groups comprised of four to five specialists were conducted. One of the focus groups was a group with specialists from environmental art, while one was a group with specialists from landscape architecture. The aim was to enable specialists within the same discipline to openly discuss points of view, challenging each other's motives and actions on the themes within the discipline. The scope of the discussion, which was related to diverse contemporary issues and ideas within the discipline, could fully be explored. The third focus group was a mixed group drawn from the two disciplines, so that intersections of thoughts and ideas between environmental art and landscape architecture could be explored.

The number of specialists in each group discussion ranged between three and five. The selection criteria for the specialists from landscape architecture and environmental art were the same as those for the semi-structured interviews. However, owing to the restriction in numbers of specialists in both disciplines, some specialists were reinvited. To enable investigation of the in-depth information and range of ideas from the semi-structured interviews, the themes that initiated the discussion for the focus groups were derived from the analysis of the findings of the semi-structured interviews. However, reliance on fixed questions may undermine the ability of the moderator to listen analytically to the content of the discussion, thereby overlooking the implications of what is said. The theme should therefore be suggestive, giving the moderator latitude to improvise fruitful questions and pursue unanticipated lines of inquiries. An example of themes discussed in this research was 'the association between practice of landscape architecture and environmental art'. The themes to explore in the focus group were sent to the landscape architects and the artists, along with invitations and consent letters. The focus groups took place on the Newcastle University campus and the Office of Educational Affairs, the Royal Thai Embassy in

London. Each focus group lasted approximately one to two hours in order to allow sufficient time for the participants to explore the complexity of the topic. The participating specialists in the focus group are listed in Appendix A.3.

4.2.3 ETHICS AND CONSIDERATIONS IN CONDUCTING SEMI-STRUCTURED INTERVIEWS AND FOCUS GROUPS

The invitation letters were sent to the participants in the semi-structured interviews and focus groups covering the following issues: the purpose and scope of the study, and the questions of the interviews or themes for the focus groups. Participants were given ample time to consider their participation and seek clarifications. After the interviewees had consented, the appointments could be made. The researcher recorded all the conversations that took place for both semi-structured interviews and focus groups. Along with the invitation letters, consent letters were provided explaining the use of any gathered information. The researcher gave assurances on the issue of confidentiality to the participants, in that it required the confidant not to disclose information unless authorised to do so. The researcher also needed to be assured that the participants understood the extent to which confidentiality would have been maintained, and were aware of the potential uses to which the data might be put (Corti et al., 2000). Permission to publish the research findings was also addressed in the consent letter and was sought from all participants. All of the research participants agreed that their names could be identified in this thesis, in potential journal articles and conference proceedings.

4.3 THEMATIC ANALYSIS AND TRIANGULATION

According to Attride-Stirling (2001), thematic analysis aims to explore the understanding of issues or signification ideas of the research in rich detail interpreting various aspects of the research topic. The analysis also intends to organise and structure the research data by identifying, analysing and reporting patterns or themes within the data (Braun and Clarke, 2006). It organises and describes the data in rich detail interpreting various aspects of the research. According to Braun and Clarke

(2006) and Guest and MacQueen (2012), the process of the thematic analysis can be classified into following stages.

- 1) Collecting data and coding data. The descriptive research data is gathered from various sources such as interviews or focus groups, etc. Prior to coding themes, the researcher needs to familiarise themselves with the data. Then, the coding process can begin. The coding is an explicit and iterative process that captures the qualitative richness of the research data (Boyatzis, 1988) by identifying key words, concepts, and reflections underlying the texts. The coded texts should be clear and concise, clearly stating what it is, its boundaries and how to know it when it occurs. Thus, the coding process typically includes reduction of data or data simplification for a more manageable texts. To ensure the integrity of the codes, the researcher read and reread the data, double-checking the codes for consistency and validation. The integration of the codes became the foundation for the themes of the research.
- 2) Identifying themes and arranging themes. The researcher, then identifies themes and sub-themes: patterns that have emerged from the coded data. The themes enhance the meaning and significance underlying the topic (Braun and Clarke, 2006). Some themes may be derived from frequency of occurrence. The researcher needs to be able to define theme sufficiently in both major and minor topics so that it covers relevance of the data. After identifying themes, the process of arranging themes into similar and coherent groups can begin. Criteria on grouping themes is based on contents, which reflect the research question and objectives.
- 3) Critically analyzed data of the themes. After all themes are identified, the next stage is to analyze themes by critically interpreting data. A clear, concise, and straightforward content in each basic theme is important. Extracts should be included in the process to capture the full meaning of the points in analysis. The result of analysis of each theme will then be interpreted within the wider context of the research.

In this research, the thematic analysis of the research findings was applied to correspond with the conceptual framework and the three primary themes of the research comprising of 1) forms and styles, 2) significant thoughts and ideas, and 3) practices of the two disciplines. Findings from the semi-structured interviews with specialists was firstly analyzed. Each of the examined areas was critically analyzed to highlight where similarities and differences lay. All transcribed data from the semi-structured interviews with specialists was eventually coded. A set of themes, which underlined the relevance of environmental art upon landscape architecture in three aspects, was identified. These themes were subsequently analyzed against the research question and objectives of the research. Linkages between different ideas could be identified. Consequently, narratives of critical discourses of the relevance of environmental art on landscape architecture and vice versa could be developed.

Thematic analysis was also applied to to the findings from focus groups. Agreements or disagreements are fundamental processes that influence the contents of the responses as the group progresses (Kidd and Parshall, 2000). The researcher needs to identify these agreements and disagreements in order to understand how perspectives of the participating specialists are modified in the group (Sim, 1998). The researcher also needs to discriminate different levels or different points of view in the disagreement. Another important issue in analysis of the focus group is to examine whether an issue constitutes a theme for the groups' viewpoint or of a few members. Attempts to domineer should be identified; appropriate adjustments may be made during data analysis (Kidd and Parshall, 2000).

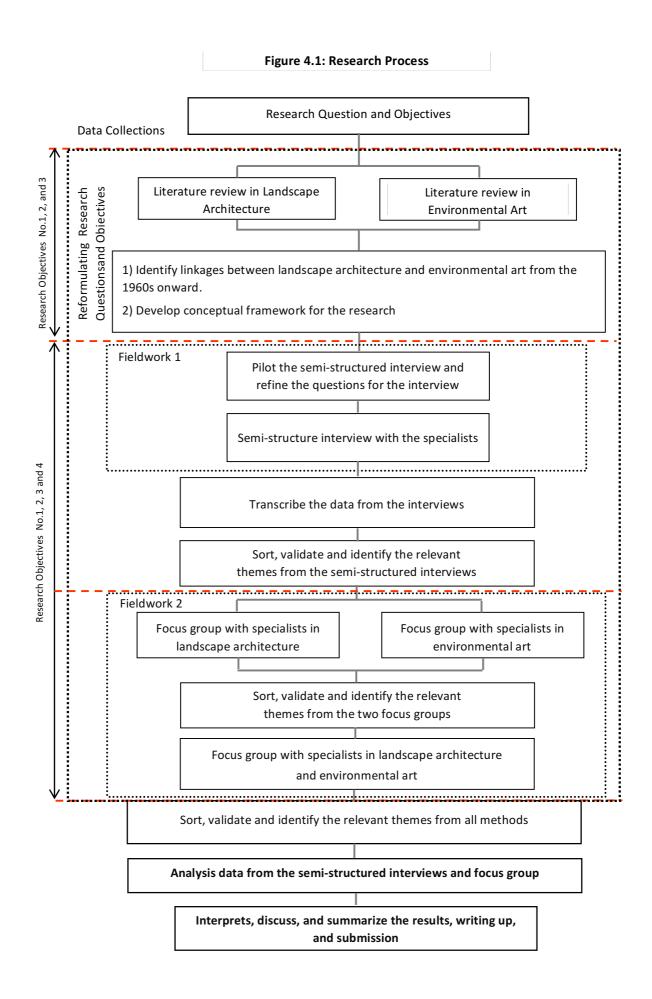
As reviewed in section 4.2.2, the three focus groups comprised of two groups with specialists from environmental art and landscape architecture, respectively, and a group with mixture of specialists from the two disciplines. The themes discussed in the three focus groups derived from the thematic analysis of the semi-structured interviews but were also influenced by an examination of the conceptual framework outlined in the literature as discussed in section 3.6. However, there was a gap regarding topic of eighteenth century aesthetics concepts, which was presented in the literature. This topic should have been examined; however, the researcher missed asking the specialists about the topic and the topic did not come up in the interviews. The topic is significant for the research as identified in the literature. Therefore, the

researcher thought it was proper to introduce the topic at the focus group. By undertaking this process, the analysis provided a contextual examination of a number of thoughts, ideas and factors of environmental art that are relevant to landscape architecture. After analysing findings from the two methods, overarching themes, (which represented a synthesis of the thinking reflected in the findings of the two data collection methods), were identified. Subsequently, the overarching themes were triangulated with the literature review, which functioned as a reference point for interpretation of the findings. The narrative of the discussions of these overarching themes is presented in Chapter Eight.

Table 4.2 presents a flow chart of research design, illustrating relations of research objectives, data collected, nature of data, methods of data collection, methods of data analysis and outcomes of the research. Figure 4.2 presents the overall process of how the research is conducted from initiating to finalising the research.

Table 4.2: Research Design

Research Objectives	Data to be Collected	Methods of Data Collection	Methods of Analysis	Outcomes
1. To explore if environmental art is relevant to landscape architecture in terms of forms and styles.	Forms and styles in landscape architecture and environmental art. Relevance of environmental art on landscape architecture in forms and styles	1.Literature 2. Semi-structured interviews with experts in the two disciplines 3. Focus Groups	1. Thematic Analysis 2. Triangulation of findings from the two methods with literature	1.To understand interrelation and association between landscape architecture and environmental art in terms of forms and styles
2. To investigate the relevance, in term of thoughts and ideas, of environmental art for landscape architecture. 3. To investigate how environmental art practice is relevant to landscape architecture.	1. Thoughts, movements, and ideas in landscape architecture and environmental art. 2. Thoughts, movements, and ideas in environmental art, which are relevant to landscape architecture 1. Landscape architectural works, which are associated with environmental art. 2. Environmental artworks, which are associated with landscape architecture	1.Literature 2. Semi-structured interviews with experts in the two disciplines 3. Focus Groups 1. Literature review 2. Semi-structured interviews with experts from the two disciplines 3. Focus Groups	1. Thematic Analysis 2. Triangulation of findings from the two methods with literature 1.Thematic Analysis 2. Triangulation of findings from the two methods with literature	1.To understand interrelation and association between landscape architecture and environmental art in terms of thoughts and ideas 1.To understand interrelation and association between practices of landscape architecture and environmental art.
4. To investigate how landscape architecture stands theoretically and in practice after being associated with environmental art from the 1960s.	Prediction on how landscape architecture should approach environmental art and the future. Conceptual guidelines of how landscape architecture, which is associated with environmental art, should be developed in the future	1.Conclusion of finding s from research question no.1 and 2 2. Semi-structured interviews with experts from the two disciplines 3.Focus Groups	Thematic Analysis Triangulation of findings from the two methods with literature	To explore how landscape architecture should approach toward environmental art in the future.



4.4 STRATEGIES OF ANALYSIS: SEMI-STRUCTURED INTERVIEWS AND FOCUS GROUPS

Thematic analysis, the main method applied in this process, involves combination of findings from both semi-structured interviews and focus groups. The objectives of combining findings from the semi-structured interviews and focus groups are as follows:

- To avoid replication of analysis from the semi-structured interview and focus group findings.
- To maintain continuity of discussion of particular themes discussed in both the semi-structured interviews and focus groups.
- To provide in-depth and comprehensive analysis of particular themes.

4.4.1 THEMES DERIVING FROM SEMI-STRUCTURED INTERVIEWS

A total of twenty themes emerged from the semi-structured interviews with the specialists. Based on the three objectives of the research, the themes were classified into three primary categories comprising 1) forms and styles 2) significant thoughts and ideas, and 3) the practice of the two disciplines. How the themes are related to the two research objectives is illustrated in Table 4.3.

Table 4.3: All Themes Deriving from Interviews with Specialists and the Relationship of these Themes with Research Objectives

DECEARCH ODJECTIVES	THEMES		
RESEARCH OBJECTIVES	PRIMARY CATEGORIES	THEMES	
1. To explore if environmental art	1. Forms and styles associated with	1. Uses and functions	
is relevant to landscape	environmental art and landscape	2. Permanent or temporary	
·	architecture	installation	
architecture in terms of forms and		3. Modernism	
styles.		1) Modern Arts	
		2) Landscape Modernism	
		4. Postmodernism	
		5. Attitudes of Practitioners towards aesthetics values	
		6. Forms and styles shared	
		between works of the two	
		disciplines	
2. To investigate the relevance, in	2. Significant thoughts and ideas	Meaning and interpretations	
term of thoughts and ideas, of	associated with environmental art	2. Expressing creative concepts and	
term of thoughts and ideas, of	and landscape architecture	ideas	
environmental art for landscape		3. Significances of the 1960s	
architecture.		4. Responses to the Site and Spirit	
diomeestare.		of the Site	
		5. Environmentalism	
		6. Passage of time	
		7. Landscape architectural theory	
3. To investigate how	3. Practices of the two disciplines	1. Professional practice, licensure	
environmental art practice is		and art critique	
'		2. Scales and scopes of practice	
relevant to landscape architecture.		3. Public perceptions of	
4. To investigate how landscape		environmental art and	
·		terminologies	
architecture stands theoretically		4. Current environmental art	
and in practice after being		practice	
associated with environmental art		5. Public perceptions of landscape	
associated with environmental dit		architecture	
from the 1960s.		6. Current practice of landscape	
		architecture	
		7. Future approach of landscape architecture	
		architecture	

4.4.2 THEMES DERIVING FROM FOCUS GROUP DISCUSSION

There were twenty themes which emerged from the semi-structured interviews with specialists. Owing to the nature of the focus group method and limitations of time, all twenty themes could not be explored in the focus groups. After analysing the findings from the semi-structured interviews with specialists, the researcher went through the analysis of the interview findings and decided the themes to be discussed in focus groups. The researcher found that there were thirteen themes which were significant

through lack of consensus or significant obscurity in the interview findings and should be further explored in the focus group. The themes are shown in Table 4.4.

Table 4.4 Theme Deriving from the Interview Findings, which were Lack of Consensus or Significant Obscurity

PRIMARY CATEGORIES	THEMES	
1) Forms and styles associated with environmental art	1) Modernism	
and landscape architecture	2) Postmodernism	
	3) Attitudes of practitioners towards aesthetics values	
	4) Forms and styles shared between works of the two	
	disciplines	
2) Significant thoughts and ideas associated with	1) Expressing creative concepts and ideas	
environmental art and landscape architecture	2) Environmentalism	
	3) Passage of time	
	4) Landscape architectural theory	
3) Practices of the two disciplines	1) Public perceptions of environmental art	
	2) Current practices of environmental art	
	3) Public perceptions of landscape architecture	
	4) Current practices of landscape architecture	
	5) Future approach of landscape architecture	

As briefly referred to in Section 4.3, when the interview findings were analysed, it was observed that there were no references to the theme of eighteenth-century aesthetic concepts. This was surprising, because such thoughts and ideas are prominent in the literature and relevant to the research. Owing to the constraint of time for the interviews, the researcher missed asking the specialists direct questions in regard to these concepts. They also did not emerge in the conversations between the researcher and the specialists. As a result, the researcher decided to further explore the theme in the focus group discussions. Therefore, the focus groups were not only a way to validate the findings deriving from the semi-structured interviews, but also helped the researcher to catch things that were missed in the process of the semi-structured interviews.

A total of twenty-one themes were derived from both semi-structured interviews and focus groups. How all themes from both methods are related to the research objectives is illustrated in Table 4.5. The following Chapter Five explores and investigates the findings of the first theme, forms and styles; while Chapters Six and Seven investigate two themes: significant thoughts and ideas, and practices of the two

disciplines, respectively. The overall process of the thesis, which combines findings from both semi-structured interviews and focus groups, is shown in Figure 4.3.

Table 4.5: All Themes Deriving from Interviews with Specialists and Focus Groups

And the Relationship of these Themes with Research Objectives

DESCRIPCIA ODJECTIVES	THEMES		
RESEARCH OBJECTIVES	PRIMARY CATEGORIES	THEMES	
1. To explore if environmental art	1. Forms and styles associated with	1. Uses and functions	
is relevant to landscape	environmental art and landscape	2. Permanent or temporary	
architecture in terms of forms and	architecture	installation	
styles.		3. Modernism	
		1) Modern Arts	
		2) Landscape Modernism	
		4. Postmodernism	
		5. Attitudes of Practitioners	
		towards aesthetics values	
		6. Forms and styles shared	
		between works of the two	
		disciplines	
2. To investigate the relevance, in	2. Significant thoughts and ideas	1. Meaning and interpretations	
term of thoughts and ideas, of	associated with environmental art	2. Expressing creative concepts and	
environmental art for landscape	and landscape architecture	ideas	
architecture.		3. Significances of the 1960s	
		4. Responses to the site and spirit	
		of the site	
		5. The eighteenth century aesthetic	
		concepts	
		6. Environmentalism	
		7. Passage of time	
		8. Landscape architectural theory	
3. To investigate how	3. Practices of the two disciplines	1. Professional practice, licensure	
environmental art practice is		and art critique	
relevant to landscape architecture.		2. Scopes an scales of practice	
4. To investigate how landscape		3. Public perceptions of	
architecture stands theoretically		environmental art and	
and in practice after being		terminologies	
associated with environmental art		4. Current environmental art	
from the 1960s.		practice	
		5. Public perceptions of landscape	
		architecture	
		6. Current practices of landscape	
		architecture	
		7. Future approach of landscape	
		architecture	

4.6 CONSTRAINTS IN LITERATURE REVIEW AND IN APPLYING METHODOLOGY

The research found that the academic literature in both disciplines of landscape architecture and environmental art is fairly limited. In the discipline of landscape architecture, academic literature, including landscape architectural journals such as JoLA, Topos and the Landscape Journal barely published landscape architecture in the manner of environmental art. Likewise, art journals such as the Art Bulletin and the Oxford Journal have hardly have any content regarding environmental art. In today's digital modernisation, most organisations and institutions of environmental art and landscape architecture provide various information via their websites, or social networking sites (SNS) such as Facebook or Twitter accounts. The selective digital sources, which hold academic rigour, assisted the researcher in searching for information on contemporary projects by the two disciplines. Data from websites or SNS could also be used as a means of inferring cross-disciplinary exchange of ideas. For example, the literature review in Section 3.2.3 demonstrates that there may have been a cross-fertilisation of ideas between works of environmental art and landscape architecture. Yet, the websites of environmental art and professional bodies of landscape architecture such as the American Society of Landscape Architects (ASLA), the Landscape Institutes (LI), the European Foundation for Landscape Architecture (EFLA) and the International Federation of Landscape Architects (IFLA), which provide updates on contemporary projects, illustrate information variously. Some websites or SNS confirm the findings of the literature, while others provide contrasting findings. With the contradictory results of the digital data, the field of study of the research is required to infer the exchange of ideas between the two disciplines.

There were a few methods that were originally considered as research methods for the thesis. The first was a case study method in response to one of the research objectives in investigating how the environmental art and landscape architecture addressed environmental issues in their works. However, no case study in the UK matched the research context perfectly. The researcher found that there was no case study in the UK that strongly expressed concerns about environmental issues. The case study method thus had to be rejected in favour of the focus group. Such an approach would have depended too much on the researcher's subjective evaluation, and so it was not

pursued. Additionally, there was a consideration of using the questionnaire as the thesis's research method. However, the method constrains the possible responses of respondents and is therefore unsuitable for in-depth investigations.

The numbers of specialists from both disciplines in the UK are fairly limited. Therefore, the re-invitation of some specialists, who had already participated in the semi-structured interview, was unavoidable. However, with differences in the nature of conducting the semi-structured interviews and focus groups, especially in terms of exchanging ideas among group participants, the researcher decided to proceed with the method. Five specialists were re-invited for the focus group. The result shows that the findings of the semi-structured interviews were found to be divergent from the findings of the focus group. Conclusively, a total of twenty-two specialists from eight academic institutions, five professional companies and five individual practitioners participated in the research.

There were also restrictions in terms of time. Some focus group themes were discussed more than others, which were discussed briefly or not mentioned at all. It is possible that some focus group themes were more interesting to the specialists than the others. After the focus group discussion, the researcher emails the participants for clarifications on the themes discussed briefly.

As an international student, the researcher is aware of the difficulty in chairing and facilitating focus group discussions. Therefore, before conducting the three focus groups, the researcher practised with colleagues a number of times.

Both the semi-structured interviews and the focus groups were recorded digitally. Some segments of data gathered were excessive. The researcher needed to carefully edit out sections that were not relevant to the research. The transcriptions of all interviews took longer than the researcher anticipated because of the difficulty of transcribing when working in the English language; this impacted on the overall timetable of the research.

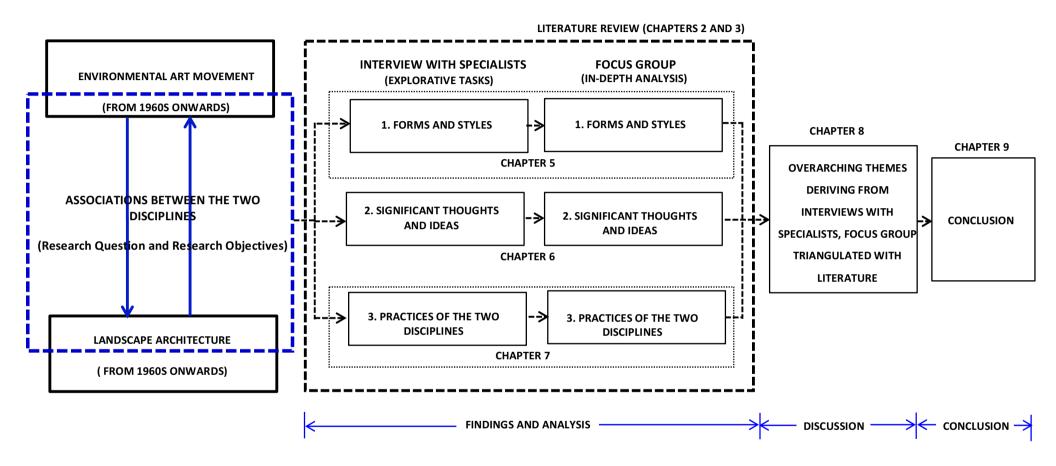


Figure 4.2: Diagram presents the analysis of the semi-structured interviews and focus group findings and their interrelations with overall processes

4.7 SUMMARY

This chapter gave an overview of the research approach and the methods of data collection and analysis. The chapter outlined the methodological techniques and the justification of their uses. In addition, the chapter reviewed how the semi-structured interviews were designed and developed, and illustrated the process of conducting interviews. The reliability and validity of the semi-structured interview methods was tested using a pilot study. The results of the pilot study led the researcher to modify the questions used in the semi-structured interviews with specialists. The chapter reviewed how the focus groups, which were intended to provide in-depth analysis of themes deriving from the interviews, were conducted. The combined use of the two methods supported the discussions presented in this thesis and provided layered data which allowed deeper understanding of how the two disciplines are associated. In the final part of the chapter, the approach to data analysis was reviewed.



CHAPTER 5 FORMS AND STYLES ASSOCIATED WITH ENVIRONMENTAL ART AND LANDSCAPE ARCHITECTURE

INTRODUCTION

This chapter presents and analyses data from the semi-structured interviews and focus groups in terms of form and styles of works from the two disciplines. Six themes are presented in this chapter; 1) Uses and functions, 2) Permanent or temporary installation, 3) Modernism, 4) Postmodernism, 5) Attitudes of practitioners towards aesthetics values, and 6) Forms and styles shared between the works of the two disciplines.

5.1 USES AND FUNCTIONS

All specialists concurred that uses and functions were one of the key differences between the two disciplines. In general, uses and functions were not included in the art creation process. An environmental artist Trudi Entwistle commented that:

I don't start out from the function. I start from the open mind and the brief is open and it doesn't include function. I don't consider the function.

The function was not necessary for art; however, in some pieces of environmental art, utilising spaces in an artistic manner was possible. The purposes of creating art were various and subject to artists' aims and commissions. Craig Richardson, a specialist in environmental art, argued that:

although the art is not there to perform many functions, it is not there to be only a decorative object as well. Art could do its best in catching people's imagination, engaging people with the art, or questioning how we relate to that natural environment in the particular issues.

Richardson may have been right. Most, although not all, artworks' aims go beyond being decorative and engaging audiences. In respect of uses and functions, Emily Brady, a specialist in environmental art, added that some arts were accessible for audiences to walk inside them. This accessibility or circulation in the artworks that Brady referred to may be similar to corridors or the path circulation of landscape architecture, which make environmental art and landscape architecture more alike.

While not considered in environmental artworks, function was mandatory for all landscape architectural projects. As landscape architect Ian Wales noted, 'landscape architecture is there to perform functions for various purposes'. Users can choose to use the space or simply look at the landscapes. The importance of function in landscape architecture seems to be well acknowledged by artists. Craig Richardson, a specialist in environmental art, commented that, for artists, landscape architecture is to serve diverse groups of users for various purposes. Thus, the disciplines of landscape architecture and environmental art seem to be at opposing positions regarding the place of functionality in the creative process. While the uses and functions are necessities, and mandatory in landscape architectural processes, formation of creative forms and styles may be limited by them. In outdoor recreational areas, for example, landscape designers need to provide sitting areas for recreational uses that fit human scales, instead of freely designing an expressive form of the areas. This is in contrast to environmental art, in which the uses and functions are not considered in the art creation process, and the creative forms and styles of the art are expressed without restraint.

5.2 PERMANENT OR TEMPORARY INSTALLATION

Generally, works of landscape architecture and environmental art could involve either permanent or temporary installation. Landscape architecture is typically comprised of two elements – hardscape and softscape. While hardscape is composed of the inanimate elements of landscaping, such as masonry, concrete or woodwork, softscape comprises horticultural elements. Constructions of large-scale or hardscape landscapes were mostly permanent or sustained over a long period, whereas small-

scale and soft landscape construction could have been either permanent or temporary. Similarly, environmental art works could have also been either a temporary installation or permanent. In this regard, Kathy Hyde, a specialist in environmental art, commented that some artists, such as Robert Smithson, worked only on permanent installations, whereas others focused specifically on temporary works. Hyde also noted that some artists produce temporary works, as well as permanent works. On the face of it, that sounded like a contradiction, though one could perhaps imagine a piece which degraded very slowly over time being described that way. The issues or ideas from permanent and temporary installations from both professions could have remained in photographic reproduction or through books, magazines and postcards.

Dave Pritchard, an environmental artist, remarked that temporary work could create interesting questions for the audience. Sequences in creating temporary art works could be as follows:

You're framing something. You're fixing it. You're positioning it. You're telling stories about your systems or rules about it and passing them on to somebody else. You arrange the land itself physically in a particular way. There's a lot of fixing and static sort of positioning involved in that, which is interesting to set against.

All specialists in landscape architecture from the focus group seem to agree that temporary art work could have been created in the direct relation to the most current issues at the particular time; therefore, the temporary art could have been highly anticipated by large numbers among the audience. However, its existence may no longer be relevant at a later time. Landscape architect Ian Thompson remarked that installation art was a part of art work, or a certain way of art practice, at one moment in time. The art may have made a statement for a certain period of time and did not aim to last long. After making the statement, the art vanished. The art in this case included the works of Goldsworthy (though the temporary nature of his work was limited through photographic reproduction).

To sum up, permanent works of both landscape architecture and environmental art run the risk of becoming out of date or irrelevant in the future. Part of the purpose of temporary work is to create discussion and debate.

5.3 MODERNISM

According to Atkins (1993), Modernism was a broad collection of ideas and cultural trends in literature, art, architecture, philosophy, history, economics, fiction and literary criticism. This section reviews how Modernism was related to the disciplines of environmental art and landscape architecture.

5.3.1 MODERN ARTS

For environmental art, the specialists interviewed strongly agreed that the emergence of environmental art in the 1960s had been greatly influenced by the three Modernist types of art: Minimalism, Conceptual Art and Process Art. Regarding common ideas between these three types of art, Venda Pollock, a specialist in environmental art, remarked that they shared four main common ideas. Firstly, Minimalism, Conceptual Art and Process Art all value spaces within the artworks. Artists practising in the three Modernist types of art were concerned with how to deal with space and appreciate the value of space within them. Spaces within Minimalism, Conceptual Art and Process Art were usually defined as pure space. Secondly, the three modern art theories also shared common aspects in terms of taking things away from places rather than putting things into places, or, in other words, minimising the compositional objects of the artwork. Thirdly, they encouraged artists to think beyond the visual appearances of objects, instead focusing on their concepts and ideas, and their perception of the artworks. Finally, they were also concerned with the viewers' perspective. The art usually encouraged audiences to reflect upon their position and their relationship to the artworks. According to all the specialists interviewed, environmental art seemed to inherit both general thoughts and characteristics of Minimalism, Conceptual Art and Process Art, especially how to deal with space and the appreciation of values of pure space within the art.

There was general agreement among the specialists interviewed that landscape architecture was associated with Minimal Art. On this topic, Thompson noted that:

It was well acknowledged that high profile landscape architects such as Peter Walker were influenced by Minimal Art.

However, Kevin Thwaites, a landscape architect, remarked that Minimal Art's bold, simplified form directly impacted upon landscape architecture through association with the Minimal Art itself, not via a connection with environmental art. According to that interview, landscape architecture seems to be unfamiliar with the two other categories of modern art, which are Conceptual Art and Process Art. In this regard, Tim Waterman, a landscape architect, stated that Conceptualism or Process Art did not seem to be associated with works of landscape architects. Waterman also remarked that other Modern Arts such as Surrealism, Cubism and Pop Art impacted on landscape architectural works more than Conceptual Art and Process Art. Landscape architecture may have not been connected with Conceptual Art or Process Art, as suggested by Waterman. Considering that landscape architecture needs to be concerned with uses and functions, aspects of Conceptual Art and Process Art, such as the visual experiment of the art in taking things away, may not be applicable in landscape architectural design. On the other hand, how the art treats spaces preciously and meaningfully may have been fulfilled by Architectural Modernism instead. In terms of Surrealism, Cubism and Pop Art, the connections with landscape architecture have been made through the works of landscape architects such as Robert Burle Marx, Thomas Church and Martha Schwartz.

5.3.2 LANDSCAPE MODERNISM

In the opinion of the specialists, it was clear that landscape architecture had direct connections with Modernism. Thwaites remarked that the discipline of landscape architecture was very close to architecture and was formally established at approximately the same time as the Modernism movement; therefore, as a young profession, landscape architecture had been greatly impacted by Modernism. As a

result, principles and theories of landscape architecture, such as functionalism, became closely allied with Modernism and architectural principles. According to all the specialists interviewed, Landscape Modernism had been widely accepted in disciplines of landscape architecture for a long time. Many renowned landscape designers, such as Garrett Eckbo, James Rose and Dan Kiley, had applied principles of Landscape Modernism in their work.

Waterman articulated that:

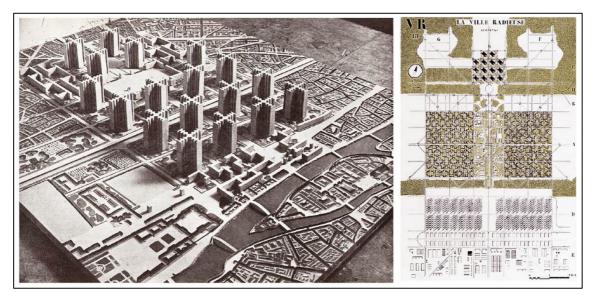
Modernism and often Postmodernism were interesting in concrete relationship with the actual space. They also seek to find an abstract truth [of space].

In the researcher's perspective, Waterman may have referred to the 'abstract truth of space' as the conceptual idea of a particular designed space. Waterman continued the discussion that

One area to witness is the rediscovery of psycho-geography – both in art and across landscape architecture. That thinking about the relationship of space is becoming more of a driver in those areas as well. So, those are the places where real exploration is to be done.

Although Modernism and architectural principles seemed to have strong associations with landscape architecture, the specialists interviewed also pointed out that they had generated several intellectual and theoretical difficulties for landscape architecture. The specialists did not refer to examples of the 'intellectual and theoretical difficulties' that landscape architecture had when associated with Modernism and architectural principles. However, in the researcher's view, the example that the specialists had in mind might have been the International Style in Architectural Modernism, which disregarded considerations of site history, site character and site identity – all important principles of landscape design. All existing natural and built elements on site location would have completely been wiped out if landscape architecture had followed this aspect of the International Style.

Thwaites further observed that, because one of the fundamental ideas of Architectural Modernism was that a building and the city were living machines, the aspects of intrinsic natural values and adaptability and connection to the natural world in landscape architecture were taken away by Modernism. Thwaites may have been referring to the concept of the 'city as a living machine', in the proposed masterplan for La Ville Radieuse (Radiant City) (1924) (as illustrated in Figures 5.1 and 5.2) by the French architect and Modernist pioneer Le Corbusier. In Le Corbusier's proposed masterplan, the city was designed to contain effective means of transportation. Although landscape architecture, referred to as 'green space' in the plan, was situated as an important element of the city, the main idea of the Radiant City circulated around architecture and the city. The landscape design for the Radiant City was plainly presented as a supporting part to architecture and the city; the consideration of the existing context was ignored. This was perhaps why Thwaites meant that 'the intrinsic natural values and adaptability and connection to the natural world aspect of landscape architecture were taken away'. Thwaites' comment on Modernism was confirmed by Kim Wilkie, a landscape architect, who stated that Landscape Modernism was an architectural movement primarily concerned with quality of construction and prefabrication and aimed to entirely separate landscape architecture from the place and nature, which were considered as the primary concerns for the discipline.



Figures 5.1-5.2: Le Corbusier's proposed masterplan for La Ville Radieuse (Radiant City) (1924)

Drawing from the above discussion, Modernism seems to be neither suitable nor appropriate for landscape architecture. Wilkie also added that

Landscape Modernism could have been considered as a completely unfortunate time for landscape architecture; the discipline has lost its direction.

Wilkie did not explain in the focus group why he mentioned an 'unfortunate time for landscape architecture' and that 'the discipline of landscape architecture has lost its direction'. From the researcher's perspective, this may be because he firmly disapproved of Landscape Modernism. Principles of Landscape Modernism had been explored and practised by many renowned landscape architects for approximately fifty years, counting from 1919, the year in which the German Bauhaus architect, Walter Gropius, arrived at Harvard's GSD, to the year 1969, in which lan McHarg published his Design with Nature in disapproval of the Modernist agenda. Fifty years of practice in Landscape Modernism could be considered a long time, especially for a young profession such as landscape architecture.

Wilkie further stated that the connection between landscape architecture and Modernism had already been changed. Contemporary landscape architecture was no longer directly attached to Modernism. Wilkie remarked that, 'Actually what happens is that architecture is being absorbed into landscape architecture, rather than the other way around. The one thing you cannot do without is real understanding of the site and all those factors. So, actually the architects will have to get absorbed into that process'. In the researcher's view, Wilkie did not literally mean that all aspects within landscape architecture were being absorbed. What Wilkie was saying, from the researcher's perspective, was that architecture has to familiarise itself with the process of design and site analysis, in which landscape architecture claims to possess speciality and knowledge. Therefore, architecture is able to employ special knowledge and techniques related to the process of design and site analysis, the same as landscape architecture. In addition, architecture also has its own knowledge and specialties such as building façades and building technology, which are not at all related to landscape architecture. The disciplines of landscape architecture and architecture could still

maintain their own specificities without being absorbed into the other. Wilkie also stated that, although the discipline of landscape architecture was not recognised in terms of taking a stand in understanding site process, it may have been acceptable if society overall received a benefit. Wilkie certainly had a point. Working for better living and society should be the primary consideration for all built environmental designers, including landscape architects. However, landscape architecture has always been overshadowed by related disciplines such as architecture and urban design. Acknowledging site process could help landscape architecture gain recognition. Regarding Modernism, Thwaites added that a formal axis landscape plan actually already existed in the nineteenth-century English park, long before Modernist landscape in the twentieth century. A lot of environmental artists were interested in the principles of Architectural Modernism, particularly the truth of light, volume and space; therefore, their environmental arts resembled works of Landscape Modernism. Entwistle commented that a part of her inspiration derived explicitly from the works of Lawrence Halprin, one of the dominant figures in Landscape Modernism.

5.4 POSTMODERNISM

According to most of the specialists interviewed, both disciplines were related to Postmodernism. Regarding environmental art, the specialists classified it as Postmodernist even though it was associated with many Modernist thoughts and ideas. David Haley, a specialist in environmental art, noted that:

Environmental art is an art of Postmodernism. But what environmental artists were doing when they engaged with the landscape feels more like Modernism than Postmodernism.

Haley may have meant that most creations of environmental art were in simplified pure form, in the manner of Modernism, rather than a pluralistic expression of Postmodernism.

Concerning landscape architecture, all specialists of the research remarked that, in the 1960s to 1970s, the discipline had been associated with Postmodernism through the

connection between environmental art and architecture. However, Thwaites remarked that the line between Modernism and Postmodernism in landscape architecture was obscure, as the ethos of Postmodernism in landscape architecture was relatively new. This boundary might be more apparent in the future. Waterman agreed and stated that:

Perhaps Modernism and Postmodernism are two sides of the same coin. They are so reactionary to one another that they almost form the same movement. Even though people try very hard to separate the two.

Waterman further added that Postmodernism in other disciplines, including landscape architecture, was poignant:

One of the problems of Postmodernism is we don't have the discipline yet in order to understand its relationship, we cannot see it entirely because we are not far away from it. But I think in the future we will probably draw the boundary between Modernism and Postmodernism quite differently than what we do now.

Moore said,

I think James Corner dealt with it [Postmodernism] precisely in the early nineties and of course it depends on how Postmodernism is defined. I don't think there's a cohesive body of works, nor would I expect these to be. I think it's very interesting. But I think there's room for something that is more useful if you want to learn how to design. But that's just one area of work. I think there are other areas of work that are also interesting to be discussed.

This issue will be further discussed in Section 8.2.2.

5.5 ATTITUDES OF PRACTITIONERS TOWARDS AESTHETIC VALUES

When designing landscape architecture or creating environmental art, there are typically several factors such as social or environmental values. However, in the

research interview, aesthetic values within works of landscape architecture and environmental art were the focus. According to Soanes et al. (2006), aesthetics is 'the branch of philosophy that deals with questions of beauty and artistic taste' (p.11). In this regard, the specialists from the two disciplines had different views about how aesthetic values should be considered in their works. On environmental art, the specialists interviewed had two perspectives. On the one hand, they strongly agreed that the artwork did not only aim for aesthetic values. Richardson remarked that several pioneers in environmental art, such as Robert Smithson, Richard Long and other renowned artists, had not only emphasised the value of aesthetics, but they had brought new aesthetic values to built environments. Richardson did not explain what he meant by the 'new aesthetic values'. In the interpretation of the researcher, Richardson may have meant that what the newly emerged environmental art of the 1960s brought was a new type of art appreciation, which had never before been expressed. This new type of art appreciation that created 'new aesthetic values' for the artworks. In this regard, Pritchard pointed out that environmental art and art in general did not always achieve aesthetic values; therefore, aesthetic values were not a requirement or a necessity for environmental art. Although Pritchard's thought may have been right, this was quite a deep philosophical question and there was no general agreement. Reiko Goto-Collins, an environmental artist, strongly agreed with Pritchard and added that most environmental artists concentrated on expressing their ideas and thinking in more than aesthetic quality or beauty of the art. For environmental artists, aesthetics were perceived as a currency of language and meant to be sensitive to the look of the art. It was only one dimension of constructing an overall image of the art and capturing the positions of the artists, not literally, but metaphorically.

On the other hand, some specialists in environmental art, such as David Haley, stated that aesthetic value was important to environmental art. Haley remarked in the interview that, when working in a co-operative team, environmental artists seemed to be in a relevant position, especially concerning adding aesthetic quality and particularly to engineering projects. Haley commented

I read 98 pages of Environmental Agency report of flood mediation for Shrewsbury back in 2002. It put forward different possible solutions to the problem that they had. All were written by environmental engineers The idea that artists would be employed to increase the aesthetic experience of the project. So, that's the cultural assumption when it comes to dealing with something called landscape.

What Haley was trying to say, in the researcher's view, was that ideas underpinning environmental art were important. Yet, the aesthetic experience of the project, or in other words the aesthetic value of the artworks, should not have been ignored because it could have helped the audience better understand the ideas or concept of the artworks underpinning the artworks.

Regarding landscape architecture, the opinions of the specialists interviewed in this regard were also divided. On one side, some suggested that aesthetic values should have been an important consideration in designing landscape, while others recommended the opposite. Eelco Hooftman, a landscape architect, stated that if aesthetic values were emphasised in landscape design, the works could have been well recognised by their users and the general public overall. This view also matched with how landscape architectural works were perceived by environmental artists. Chris Fremantle, an environmental artist, remarked that, in the perspectives of most artists, aesthetic quality is mandatory for landscape architectural works. However, on the other side, some specialists had opposing ideas: landscape architects should not primarily consider aesthetic values in their works. They should not emphasise aesthetic value, but stress other values and factors such as social values, social consequences and environmental issues. Concerning this, Thwaites made a firm statement, mentioning:

When aims of works are purely for visual reward, there's a danger in there. And I would go as far as it is actually dangerous to prioritise the approach as an artistic device. They may be very pretty, but they are socially useless.

Thwaites's 'socially useless' may have meant that generally there was no useful function that the artworks with strong artistic expression could have provided for people within the city. Thwaites continued with this firm statement:

If you are going to start knocking on someone's doors and build something different, then you'd better know what you are doing. Because you're not just knocking on the door, you're dealing with human life. If you got it wrong, the social consequences are dire in the very long term.

Thwaites did not literally mean knocking on the door *per se*. What he may have referred to, in the researcher's view, is that the artworks were typically placed in communities or city centres. As a result, the artworks could have brought about strong effects on people who lived in close proximity to the artworks. If the artworks were installed for a long period of time, it would be unpleasant for people in the community. From the researcher's perspective, this unpleasant effect on people in the community may have been the 'social consequence' that Thwaites referred to. Thwaites also commented that 'there were many great examples of that as well'. Although he did not specify cases in the interview, there are a number of landscape designers who emphasised artistic expression; for example, Roberto Burle Marx and Martha Schwartz. Some of their works are shown in Figures 5.3–5.7.

Specialists in the group discussions concluded that works of landscape architecture should have been well blended or consistent with their context or community. A few artworks were mentioned in the discussion; the Fryston Village Green project (2005) (Figures 5.8–5.11), which was the installation of landscape art by Martha Schwartz. The project was a part of the urban renaissance of Castleford, West Yorkshire, in the early nineties. It was highly criticised because of its detachment from its context and its having no relation or connection to local people or community. On the other hand, Guy Denton, a landscape architect, stated that the project was also perceived as an iconic signature of the town as well. Similar types of project became trendy in many cities and towns across the country during the past decades.

Thompson commented that

One critic said that we are filling up the country with low-grade art litter. There is too much of it, everywhere.

Wilkie pointed out that if the projects were temporary and would not stay long, they seemed to be acceptable for people in the community or public in general. He remarked that

The real disaster is where you get something like the Eiffel Tower, which carries on ... for several centuries. It was a great idea at that time, but it should have gone It has kind of defined Paris back in the 19th century. The trouble is that the image becomes so widely spread and actually becomes like a word, it loses its meaning. It becomes very hard to see past that image to see the city itself.

The specialists interviewed also concluded that landscape architecture could be art; however, it did not have to be art. In this regard, Wilkie remarked that landscape designers should not have concentrated on designing forms. Rather, the focus should be on the surrounding elements of landscape. The issue of landscape design with strong artistic expression and site context is further discussed in Section 8.3.1.



From top to Bottom and from left to right: Figures 5.3-5.4: Works by Roberto Burle Marx. Miami for his Streetscape Design (1988), Edmundo Cavanellas Residence (1954) Figures 5.5-5.7: Works by Martha Schwartz. Splice Garden (1986), Sound Wall (1996), Belgium Garden Game (2009)



Figures 5.8-5.11: Martha Schwartz's Fryston Village Green project (2005)

Thwaites also added that the current approach of landscape architectural design was dominated by strong artistic form. He remarked that

Landscape architects focused on the values attached to consideration of aesthetics to a very large extent so that other values such as social or cultural values had been overlooked.

However, Kathryn Moore, a landscape architect, strongly disagreed with Thwaites's idea of landscape form. She remarked that

All built environments possess various forms from the most beautiful to the most unpleasant forms. However, form is an important part of landscape design. The landscape architectural design process could not have been progressed without consideration of form.

In consideration of other values, Moore seemed to agree with Thwaites. She remarked that

... landscape architectural practitioners should have focused on designing built environments aesthetically and visually, however, in proper forms for their site location and context.

Moore's objection seems reasonable. Form is indeed an important consideration in landscape design. Instead of weighing one aspect over another, landscape designers should have considered environmental, aesthetical, and visual aspects in order to create landscape design that is suitable for their site location and context. Moore also recommended that the idea of creating proper forms in landscape architecture should have been well recognised and encouraged, so that landscape architectural works could create appropriate experience for people and the works could have also been suitable for their contexts.

Thwaites also remarked that all environmental design professions, including landscape architecture and environmental art, had responsibilities because the budget of most landscape projects was considered high and the effects of the works upon the surrounding environment were long term. Thwaites's robust statement made landscape architects more cautious concerning the aesthetics values in their works. Although the thought was aimed directly at landscape architectural works, it could have been an applicable idea for environmental artworks as well. Thwaites also referred to John Kelsey's article, 'A Design Method', published in *Landscape Architecture Magazine* in 1970, which mainly discussed a systematic design process as an example of giving consideration to social values and social consequences in landscape works. Thwaites remarked that Kelsey's systematic design process suggested that many built landscapes should have not depended on the artistic subjectivity of the designer; instead, Kelsey encouraged a rational response to the problem and opportunities that were existing there at that time.

5.6 FORMS AND STYLES SHARED BETWEEN WORKS OF THE TWO DISCIPLINES

According to the specialists interviewed, environmental art and landscape architectural works resemble one another. Entwistle remarked that:

I spend a lot of my days arguing and finding a decent distinction between the two.... They can get re-fit when circumstances revolve around them. Landscape architecture and environmental art do the same.

Entwistle's remarks were supported by Thompson and Haley. Thompson noted that 'Landscape architecture and environmental art are the best of friends. ... They can be happily side by side.' Fremantle remarked that resemblances between the works of the two disciplines was evident through numerous publications. He remarked that:

If you got issues of *Sculpture* magazine from the International Sculpture Centre in America, and looked through the projects that were highlighted, you would see many projects; large-scale art projects, which look like landscape architecture very clearly. There were artists who actually worked as landscape architects. In a way, it is very clear, particularly in America, around urban site and suburban sites. And you would see exactly the point where what you described are absolutely overlapped. But, in a sense, a lot of different positions did exist, and I think, you flesh out where some of the gaps are as well. ... I cannot point to evidence for this, but I guess the proposition would be testable by literature review, for example.

The researcher undertook such investigation in Section 3.2.3. Indeed, there are strong resemblances between the environmental artworks and landscape architectural projects. However, Section 3.2.3 also demonstrates that the relevance of environmental artist on landscape architects such as Peter Walker and George Hargreaves was reviewed in several studies such as Weilacher (1996) and Beardsley (1998), etc. On the other hand, the researcher found that the relevance of landscape architecture to environmental artists such as Robert Smithson and Danni Karavan seems to be scarce. This subject will be further discussed in Section 8.2.3.

In regard to matters of form between the two disciplines, an environmental artist, Kevin Theaker, remarked that, when it is being more scientific than artistic, the outcomes of landscape design could be considered bad. He stated:

Landscape architecture is both a science and an art. When it's very good, it goes to the art side. But when it is bad, it is like plainly putting a picture up on the wall because it could become superficial and formulaic, which means that it doesn't connect to the place. This also goes for bad artworks.

There was substance in Theaker's interpretation of landscape not having a connection with its site location as if it were a still picture, and not considered as art in this context. Landscape architecture works with no connection to place could be meaningless. This subject is further discussed in Sections 6.4 and 8.3.1. Theaker's statement implied that landscape architectural works and environmental art resembled each other in terms of form.

Overall, specialists interviewed seemed to generally agree that there were common forms of design or creation shared between landscape architectural design and environmental art creation, particularly earthworks, such as Charles Jencks's Garden of Cosmic Speculation (1988) (Figures 5.12–5.16).



Figures 5.12-5.16: Charles Jenck's Garden of Cosmic Speculation (1988)

As discussed in Section 1.3, if there are any visual resemblances in overall appearances, or any ornaments or motifs between the works of landscape architecture and environmental art, it could be inferred that there has been a cross-fertilisation of ideas in works of the two disciplines. However, the opinions of the specialists interviewed on relevance of environmental art on landscape architecture were divided. According to some, landscape architecture was highly affected by environmental art; others argued the opposite. From the first perspective, lan Thompson, landscape architect, remarked that:

Landscape architects saw land art and environmental art and thought we can do something like that. We can probably think of particular projects or schemes that show the influences [of environmental art]. There are people practising, like George Hargreaves, Peter Walker, who were definitely influenced by environmental artists. And Martha Schwartz. What Peter Walker does is Minimalism and Formalism. And yes, it's still going on [the influence of the environmental art upon landscape architecture].

Moore and Hooftman had opinions consistent with Thompson. Moore commented that:

I think the environmental art is absolutely a vital influence on landscape architecture especially through Martha Schwartz and other practitioners who are artists and move into the profession. Schwartz's is the most direct influence. She was an artist and very much influenced by environmental artists. She said that when she came into landscape architecture, she thought it was an ambulance profession, it was a sleep walker.

Moore did not explain directly what she meant by the 'ambulance profession'. In the researcher's opinion, the 'ambulance profession' probably meant that landscape architect was a stewardship profession, and tended to solve certain problems of the project rather than bringing out new ideas. Her 'sleep walker' could mean that the profession was lacking energy in creative design. Moore continued,

What she (Martha Schwartz) did (was) that she blasted it to the conformity of the standard approach through her works and she used the material that's never been used before. Materials and conceptual palettes that are very different and very striking. And a lot of people were really offended. So, that is a very striking influence on landscape architecture.

Hooftman noted that,

You can analyse the history of the two professions, you can definitely find traces of interrelationship between the two professions. ... There are always questions of how landscape architecture can become more exciting. It is for us to deliberate. We (landscape architects) are definitely aware of the world of art Those artists could do things and how could we make our profession like that.

Statements by Thompson, Moore and Hooftman implied that landscape architecture may have been looking towards environmental art as inspirations for their works.

Thwaites made an interesting remark regarding the impact of environmental art upon landscape architecture. Thwaites noted that:

There might be examples where there is a strong influence of environmental art into landscape design. Because there is George Hargreaves, as one, Kathryn Gustafson, and Martha Schwartz, maybe others ... I could recall those landscape people as landscape architectural personalities because they have developed a particular style. And I guess that style has at least been in part influenced by appreciation and enthusiasm for deliberating landscape which has artistic merit as well as functional value. But I do not think it has penetrated the mainstream of what landscape architecture does.

Indeed, there were various aspects in contemporary landscape architectural practice like Thwaites's suggestion. The number of landscape architects practising in an environmental art manner may not be high, but there are also not so few. Therefore, because of these, it may have been hard to decide which aspects of landscape architectural practice were considered to be mainstream. Thwaites later suggested:

I think landscape architecture should be influenced by environmental art. ... I think environmental art has the potential to provide extremely intense understanding of a sense of place and I think that aspect and that contribution of environmental art should be much more influential on the way that we design landscape, but I don't think it has been.

Drawing from the discussion above, it seems relevant that forms, style and expressions of environmental art have impacted upon landscape architectural design.

On the impact of landscape architecture on environmental art, in terms of forms and styles, the views of the specialists were divided. On the one hand, some of the specialists, most of whom were landscape architects, suggested that landscape architecture was also relevant to environmental art in terms of forms and styles. Thompson mentioned that practitioners from both disciplines are 'influenced by the other'. Hooftman agreed with Thompson and noted that:

... [in the past] Robert Smithson's writing about Olmsted, that is an example in the past. I think many artists still have something to say about the Picturesque. ... Do we have that at the moment? [the current influence of landscape architecture on environmental art] I think to a certain extent yes. To give some example of my own practice, at a small scale, sometimes we are asked to participate in art installation. We do quite a lot in Germany at Emscherkunst. All of the other products were art products, and we are the only landscape or plant people who are asked to do the product. So, at least we are kind of invited into the world of art. We won an art competition in Glasgow for the Glass House. So, we are the landscape architects who won the art competition.

Grossmax's *Theater der Pflanzen* (2010), garden art in the Berne Park, Emscherkunst, Germany are illustrated in Figures 5.17–5.21.



Figures 5.17-5.21: Grossmax's Theater der Pflanzen (2010)

Opposing views on landscape architecture and environmental art in terms of forms and styles came from specialists in environmental art. They argued that not all environmental artists were familiar with landscape architecture. Haley remarked in this regard that:

Landscape architects are not well known to artists. It depends on the artists. It think the artists who work outside of the gallery system will be familiar with landscape architects.

When asked whether artists were familiar with landscape architecture, Entwistle replied that, 'I say no. But if they find out what it is, they get quite excited'. Most of the specialists from environmental art strongly agreed that landscape architecture does not have any impact on environmental art. Pritchard commented that:

I do not think environmental art got influences from landscape architecture ... The artists imagine that landscape architecture is about spaces interacting with surroundings. All those things can apply to environmental art of course. But I think the art didn't get affected by any of these.

Entwistle had similar opinions to Pritchard. She mentioned that:

In my experience, [there's] not so much [influence of environmental art] on landscape. I can certainly think of situations in which there would be art installations putting into open space settings, but not so much so. It seems to me the purposes of landscape architecture are much more utilitarian.

Although most specialist interviewed seemed to agree that almost all environmental artists were familiar with landscape architecture, there was a conflicting view, such as that of Fremantle, who remarked in the interview that:

Environmental artists may know about works of landscape architecture, more than landscape architects know about environmental art.

Besides the remarks of Fremantle, there were also perspectives shared by the specialists interviewed that the role of landscape architects for making decisions on public art installation was widely noticed by artists. The specialists interviewed strongly encouraged the artists to become more familiar with the profession of landscape architecture. In this regard, Theaker remarked that:

Artists need to be aware of the role of landscape architects and of the potential to work with landscape architects Landscape architects can determine whether an artwork looks good or not. So, artists should be familiar with landscape architects to make sure that the two things (landscape architecture and environmental artworks) are complementary.

Theaker meant that the two disciplines should have been complementary in the forms of the works, when both works were situated in the same location. In conclusion, the opinions of specialists from the two disciplines on the impact of landscape architecture on environmental art seemed to be contradictory. From the discussion, we may not be able to conclude that landscape architecture does impact environmental art. Yet it may not be correct either to calculate that landscape architecture is not relevant to environmental art.

Thompson pointed out that all disciplines had their own specialities. Many closely allied disciplines could have shared similar specialities. In the case of the disciplines of landscape architecture and environmental art, some specialities of the two disciplines could have been similar or have crossed over. Entwistle had an opinion similar to that of Thompson, remarking that:

Landscape architecture and environmental art may do the same. While I recognise, there is distinction to be made, I do not put much weight on it. I do not hang on it because it can be re-arranged. What is interesting is the motives, outcomes, and consequences. But I am not sure that's such a robust way of distinguishing either. Maybe what we have left are the consequences, which are limited within the boundary of what professions decide to call themselves or what the university department decides to call themselves.

Thompson and Entwistle may have been right. Most disciplines, particularly in the built environment field, have their own specialities. Architects specialise in building; the speciality of the landscape architect is in outdoor areas; urban designers focus primarily on an urban context. Yet, the three built environmental design disciplines of architecture, landscape architecture and urban design seem to always work across boundaries. On this subject, Moore pointed out that there may have been work across boundaries in some areas because the skills of the two professions were widely ranged. However, Moore remarked that some skills were not common for all practitioners, such as construction techniques, etc. Moore said further that instead of looking at skills of practice and seizing the opportunity to merge them, each profession should rather develop its own professional expertise and distance themselves from one another. Moore's suggestion may sound helpful, but it seems not to be applicable in real practice, where collaborations of multidisciplinary teams are common. Haley added that forms of design or creation shared between the two disciplines should not be identified because, if they were, some barrier may have been built. Some audiences or clients or art commissioners, in the case of environmental art, may have predetermined ideas regarding forms; for example, the predetermination of environmental art in topographic form, which could be positive or negative. In some cases, the negative perception or misperception could turn out to be a 'barrier'

blocking the actual thoughts and ideas underpinning the artworks. Furthermore, forms of landscape design or art creation should be freely justified by each individual artist and landscape designer. Haley suggested that:

Everyone works differently, has different intentions, different ways and applies different methods. Instead of finding the common form of design, it is better to look at the form of design for a landscape or place, which designers or artists are actually working with. Designers and artists should have landscapes or places or site locations which informing forms of design or creation, and therefore every project should have a common form of the place.

Haley's idea of having the site lead the way in creating form was consistent with the principle of spirit of place and applicable to practice in both landscape architecture and environmental art, which is discussed in Section 6.4.

5.7 SUMMARY

This chapter analysed the findings of the research from semi-structured interviews and focus groups, examining different ideas regarding forms and works by the landscape architecture and environmental art. The chapter highlighted similarities and differences in many aspects of forms and styles of landscape architecture and environmental art; for example, duration of installation, uses and functions, and attitudes of practitioners towards aesthetic values. In addition, the chapter discussed underlying issues within the two styles of Modernism and Postmodernism. The chapter also confirmed the common forms shared in works of the two disciplines, which implied influences in terms of forms and styles of environmental art upon landscape architecture. Forms and styles are only two dimensions of the research investigation. The next two chapters explore whether environmental art influences landscape architecture in thoughts and ideas, and practice, respectively.



CHAPTER 6 SIGNIFICANT THOUGHTS AND IDEAS
ASSOCIATED WITH ENVIRONMENTAL ART AND
LANDSCAPE ARCHITECTURE

INTRODUCTION

This chapter presents the findings of the research discussing significant thoughts and ideas. As identified in Tables 4.3 and 4.5, this primary category covers eight themes: 1) meaning and interpretation; 2) expressing creative concepts and ideas; 3) significance of the 1960s; 4) responses to the site and spirit of the site; 5) eighteenth-century aesthetic concepts; 6) environmentalism; 7) passage of time; and 8) landscape architectural theory.

6.1 MEANING AND INTERPRETATION

Most environmental artists strongly approved of the idea that landscape architectural works and environmental artworks should provide meanings. Theaker commented that such works should always provide some meanings or messages to their audiences, even though the meanings and the messages may be brief. These messages should be contained within the core concept of each artwork. However, if the artworks failed to express meanings, there could be no engagement between the art and the audiences, and eventually the place could become meaningless and flat. Theaker made the following example:

There is a village in the countryside of Scotland. It's developed as a marina. Part of it built in some traditional style buildings. And I look at them, but I cannot figure out what really does not work. Because the scale of the building and the landscape is not right. What it is, is that the design [of the buildings and landscapes] did not fit with the Scottish countryside context. Overall, the

buildings and landscapes around the marina works could not work out well. I think it is bad landscape architecture, it uses the wrong materials or material that is not sympathetic to the place. People do not know what is wrong, but they do know something is not right.

This example is illustrated in Figures 6.1–6.3. Theaker added that the way in which the audiences perceived and interpreted the meaning of the art should have been open to multiple interpretations. Richardson concurred with Theaker and added that most artworks should be open to multiple interpretations. Audiences always engage and interact with the works in different ways. The reaction of the audience is affected by other factors, such as culture and social experience.

Landscape architects, on the other hand, received strong criticism from environmental artists for not seizing the opportunity to make their works more interesting and not providing particular meaning in their works. As a result, works of landscape architects were generally considered dull. For landscape architecture, the meaning or message in the work seemed to be less significant than the functions of the work. It was well understood among landscape practitioners that providing functions and uses in landscape architectural works was necessary. The specialists interviewed suggested that besides having functionality, there should be meaning within landscape architectural works, so that the works are more valuable. Thompson's opinion in this regard was the same as Theaker's. Thompson stated that landscape designers should attempt to communicate, generate ideas or provide meaning such as metaphor or symbolism through their works. There is a philosophical discussion about whether designers put in the meaning, or whether it is something which audiences (users) bring to the work. It is perhaps something which accrues over time. Works of landscape architecture should indeed provide meanings rather than focusing on providing functions and uses. Figures 6.4-6.11 illustrate the works of landscape architects that aim to provide meanings, and those works which mainly focus on functions and uses. Figures 6.4–6.7 illustrate Crissy Field Park, works of the renowned landscape architect, George Hargreaves. Conversion of the U.S. Army's installation into a national park, the Crissy Field Park, integrates a diversity of recreational uses while encompassing the

restoration and rehabilitation of the existing natural landscape of wetlands and dune fields. With a vigorous and dynamic landscape design reflecting characteristics of San Francisco Bay waterfront in the designed topographic landform, Crissy Field Park may be considered meaningful. On the other hand, Figures 6.8–6.11 depict typical parks with emphasis on providing functional uses for recreational purposes. The meaning of the parks does not seem to be emphasised.



Figures 6.1 - 6.3: Largs Yacht Haven in Scotland



Figures 6.4 -6.7: George Hargreaves's Crissy Field (1996-2001)



Figures 6.8-6.11: General public parks, which fulfill recreational uses.

In summary, practitioners of the two disciplines seem to have similar perspectives and aims in terms of providing meaning in their works. The opinion of participants from both disciplines is that environmental art should be praised for providing meaning, while landscape architectural works received criticism.

6.2 EXPRESSING CREATIVE CONCEPTS AND IDEAS

According to specialists from both disciplines, landscape architects and environmental artists expressed their creative concepts and ideas in different ways. Environmental artists were highly recognised among built environment designers, especially in terms of their abilities to express or articulate ideas. Rather than plainly presenting their ideas, most artists creatively expressed or articulated their ideas through various techniques and media. Their concepts and ideas made a great impact on their audiences. The artworks were able to captures people's imaginations and, in some cases, they were capable of making the audiences think, encouraging action or interaction between the artworks and audiences, as well as raising questions, which were contained within the concepts of each artwork. This interaction between environmental art and audiences can be seen in several artworks: for example, Organic Highway (1995) at Langeland, Denmark by Mikael Hansen; After the Chaos (2010) at Arte Sella, Malga Costa, Italy by Bob Verschueren; or The Ash Dome (1977) at Cae'n-y-Coed in Wales by David Nash (illustrated in Figures 6.12-6.14). These three environmental artworks share the idea of blending with nature. Generally, architecture provides shelter from nature, e.g. a roof to keep out the rain, walls to keep out the wind, etc. Instead, the structures of the artworks deliberately exposed the natural materials used in the building process. All the materials would deteriorate over time.

These features intentionally provoked viewers into questioning the conventions of the built environment. The artists intended their works to inspire the audience to rethink the relationship between nature and the built environment. Theaker commented that the best work did not try to tell you something; it just raised questions and awareness, and connected you more with the landscape in that environment. Theaker also added: 'The art should have a message, even it is simple, [such as] why is it here?'



From left to right: Figures 6.12-6.14: Mikael Hansen's Organic Highway (1995), Bob Verschueren's After the Chaos (2010), David Nash's The Ash Dome (1977)

Artists in the group discussion commented that ideas and concepts expressed and articulated in artworks were diverse and subject to the individuality of each environmental artist. Pritchard pointed out that in the creation process of artworks, some environmental artists might have intended to solve problems of existing context or location of the art; however, some may have had different aims. Instead of solving problems of existing context or location, they may have aimed to address issues which had yet to be defined or questions which had not yet been framed. The issues could have been various, such as environmental issues related to the site, or other issues.

Chris Fremantle stated that environmental artists may have put more focus on raising questions and framing values. Therefore, when seeing the artworks, this is a particular way of visualising things to raise questions and offer alternatives. Many traditional artworks may have been mainly presented in gallery exhibitions. However, in the past decades, some artists have expanded the realm of practice to include the dialogues, negotiations, partnerships and collaborations that lead to an installation, a sculpture, a performance, etc. Some media artists, as mentioned by Fremantle, have produced such works; for example, Alis Cambol, Lau Hochi and Jia Hua-Zhan, etc. (as illustrated in Figures 6.15–6.17). These media artists were influenced by technology and applied

new materials to extend the imagination of the audiences. Their artworks also allowed interaction with their audience. For some artists, these were not merely procedures that led to a work being exhibited. However, this art creation process was inherent in the work as a whole; a process that necessarily involved audiences other than artists. These conversational processes composed part of the work, conceptually, aesthetically and ethically. In this regard, Reiko Goto-Collins agreed with both Pritchard and Fremantle and added that there were two pathways in practising or creating art in general. The first was through knowledge based understanding or science; the other was through empathy, which relies on a different kind of mental activity. This opinion is exemplified by her works (Figures 6.18–6.22). An artist could set up a particular situation for audiences through their artworks. Creativity could be applied to creating the interface between people and the things that made up the landscape and the environment. Artists could use one or both pathways for their art. Regarding environmental art, Goto-Collins suggested that the arts could be embedded in both pathways to gain recognition, experiences and understanding of nature.



From left to right: Figures 6.15-6.17: Ana Mendieta's *Tree of Life* (1976), Mathilde Roussel's *Lives of Grass* (2010), and Otto Piene's *The Robotic Light Ballet* (2014)



From top to bottom and from left to right: Figures 6.18 – 6.22: Work of Tim Collins, Reiko Goto-Collins, and corporate artists: *Nine Mile Run: Community Dialogues* (1997-2000), *Nine Mile Run* (2002), *Rivers 2nd Nature Mandala* (2002), *Tricycle Pictures* (2002), and *Leading through practice* (2007).

In terms of responses from the audiences of the artworks, all specialists agreed that the creative processes of artworks were open to audiences for criticism. Entwistle stated:

When creating my art, I would think of the perception of the audiences. Does my message reach the audience? How could my message be delivered to the audience?

In this regard, Fremantle added that, usually, the artists would have been interested in receiving responses from the audiences informing their various experiences of the artworks. Pritchard remarked that the responses of audiences may have been revealed when the audiences encountered spaces within the artwork and had an interaction with the spaces; for example, in the works of Trudi Entwistle, as illustrated in Figures 6.1–6.3. According to Entwistle (2015), the creation of *Fold* (2003) was inspired by an exploration of plant material and geomorphology of the site location. For *Eel Retreat* (2008), the art creation was inspired by the tradition of eel fishing along the shores of Lough Neagh. This form was repeated to create a similar rhythm to the line of hooks in the box and the rippling of water along the edge of the lough. The artwork aimed to raise awareness of a declining industry which has an important place in the culture and

current life of Lough Neagh. Entwistle created the unique and geometric in both *Fold* (2003) and *Eel Retreat* (2008), providing audiences with a place to nestle and to spend time in the meadow.



From left to right: Figure 6.23-6.25: Works by Trudi Entwistle. Figure 6.23: *Fold* (2003), and Figures 6.24-6.25: *Eel Retreat* (2008)

Fremantle noted that how the issues or messages of the artworks were perceived and interpreted was also important for the artists. The issues or messages raised or addressed may not have been related to environmental awareness; instead they may have been about the qualities of the experiences. The audiences could also have shown their support, appreciation and suggestion for imagining possible futures. Fremantle further stated that the audiences of the artworks could have been lay people with no knowledge of the issues addressed in the art. The audience did not have to be a particular group of people; they could have been persons off the street. Their backgrounds, such as their address, class, race, gender, ethnicity and education, could have been disregarded. Therefore, the responses of the audiences could have been diverse.

Based on interviews with specialists, how landscape architects have expressed their ideas in recent landscape architectural works have been viewed in two ways. Firstly, the expressions of ideas and concepts of landscape architecture were very well acknowledged. In this regard, Entwistle stated that expressing ideas in recent landscape architectural works was recognised in the art world and even entered the perimeter of the art world. These works are recognised by artists and critics as having artistic merit; for example, Tanner Fountain (1984), at Harvard University by Peter Walker (as illustrated in Figures 6.26–6.29). However, Entwistle also noted that many landscape architects also received criticism from artists in terms of expressing their

concepts and ideas through their works. According to Entwistle, landscape architects did not seem to be as innovative in their works as artists; therefore, works of landscape architecture in general are dull and 'samey'. Hooftman also remarked:

I learn a lesson if I collaborated like artists. I learn to be articulate about the essence of ideas. And if you cannot realise the essence, then maybe you should not do the product. It's more or less realistic. You have to be more selective with works.

Hooftman implied that the way environmental artists articulated the essence of ideas in the artworks seemed to have an impact on landscape architectural works.



Figures 6.26-6.29: Peter Walker's Tanner Fountain (1984)

Secondly, many specialists interviewed strongly agreed that the design ideas or design concepts of works by landscape architects did not seem to be well expressed and presented in the works. This could be because some landscape architects may not set out to express ideas in their work. But the ones who try to do so may articulate their ideas through their works poorly. Hooftman remarked, 'I am often envious of the artist – how much they're pure to the ideas'. In group discussion, Moore added that landscape architects should have learned how artists express their ideas. Moore commented:

I think artists tend to have a different approach to their works People who come straight to school or through a more traditional degree. But people who have more artistic background. ... They always tried to find things in different angles. They were also more provocative about the way they talk about the ideas

or places. I think it's a very healthy thing to add in the team somebody who is looking at things from a slightly different perspective.

Moore concluded, 'I think perhaps it is what we [landscape architects] can learn'.

According to the interviews, works by landscape architects were restricted by two limitations. Firstly, landscape architecture is a problem-solving or stewardship profession. Hooftman remarked, 'We are landscape designers. We have to explain to the client how to use landscape design. We have to please clients'. Wale concurred and added that people would have been more likely to come to the landscape spaces for uses, rather than to come to the place and look at the place. This was, however, very different from the way artists work. Artists create their artwork independently. Haley commented that, 'Most artists work for themselves'.

The creative ideas by landscape architects are also confined by functions and uses. Thwaites commented on this subject, observing that the purposes of landscape architecture often seemed to be much more utilitarian. Performing functions is a primary objective of the profession. However, artworks do not have limitations from providing function; they do not need to have functions. Thus, artists could have freely expressed and presented their concepts and ideas through their works without consideration of functions. The specialists interviewed also listed other limitations of landscape architecture in expressing their creative ideas, such as client expectations, community, budget, environmental needs, etc.

In conclusion, landscape architects generally seemed to be criticised by other landscape architects, and also by artists expressing creative ideas in their works. Environmental artworks, on the other hand, were able to capture people's imagination and encourage interaction between the artworks and their audiences. This ability of artworks also has an impact on landscape architectural design.

6.3 SIGNIFICANCE OF THE 1960s

Regarding environmental art, all specialists interviewed concurred that the 1960s was the most significant period for that discipline, as it was considered to be its period of origination. In this regard, Haley stated that environmental art emerged under the influence of the environmental movement and publication of Rachel Carlson's *Silent Spring* (1962). However, in the mid-1970s, ecological science had a great impact on environmental art, and from the late 1980s onwards environmental art was influenced by media and digital technology. Therefore, as a result, from the 1960s, environmental art evolved into different forms from its origin, such as Performance Art and Media Art. Many environmental artworks remained expressions of environmental concerns. On landscape architectural design during this period, Hooftman stated that:

I would like to make a bold statement that I think landscape architecture of the 1960s, 70s, and maybe early 80s was not that interesting. I think it was very boring. Of course, there are exceptions. But I think this is kind of general statement that during that period, landscape architecture was very commercial, the Lovejoy commercial enterprise. And then, it became landscape modernity.

Hooftman further stated that:

To give some examples, when I was a student, it was very clear that there was a Danish landscape architecture style. It was a revolution⁴⁹ that took about 30 years to achieve. The French [designers] were always very interesting; they're always very philosophical. The Dutch [designers] were always very conceptual and very modernistic. The British [designers] were in the dark age at that time – a bit lost. The Americans [designers] were focusing in Modernism, which was often based on the private houses or corporate headquarters, but not so much in the big scale. The Germans [designers] had always been good in planning and ecology, and in that period, design was hardly placed at all.

 $^{^{49}}$ Hoofman did not explain about the revolution any further. It is probably related to Modernism or Minimalism.

In the examples provided, Hooftman may have contradicted himself. His mentions of the Danish, the French and the Dutch landscape architecture styles sounded more interesting than boring, as he first said. Yet, the researcher would assume that Hooftman may have meant that the landscape architecture of the 1960s to 1980s overall was boring. Hooftman further explained that the mainstream of landscape architecture was boring because landscape architecture was not associated with art. In fact, Landscape Modernism, which was directly related to several modern art movements such as Minimalism, Cubism, and Surrealism, was widely practised in the period of the 1950s and the 1980s. The researcher could then assume that his 'boring landscape' may have been related to McHarg's ecological design, because its thoughts and ideas emerged from the period of the 1970s onwards. This issue is further discussed in Section 8.3.2.

Hooftman further commented that

Land artists [referred to as environmental artists in this research] in a later period had opened the eyes for young landscape architects of that generation.

Hooftman did not refer to how land artists 'open the eyes' of landscape architecture. In summary, the 1960s could be regarded as a significant period for both the disciplines of landscape architecture and environmental art. For landscape architecture, with the emergence of the two important approaches of McHarg's ecological design and environmental art, the 1960s could be regarded as a revolutionary period.

The specialists interviewed also pointed out that landscape architecture went through a transitional phase in the 1980s, from being predominantly utilitarian and functional towards being more explicitly artistic. In this regard, Thwaites remarked that, in the mid- 1980s, the functionality of landscape gave way to more explicit artistic presentation. Thwaites noted that:

The 1980s could be marked as time of the Garden Festival. In the Netherlands, there was the floral art festival, or a big garden show, called Bundesgartenschau

in Germany. In the UK, significant events included the first UK Garden Festival at Liverpool.

Thwaites also pointed out that,

I think the mid-1980s was also the first time that landscape had been taken over by artistic landscape design. A lot of landscape design was basically artistic expression and that kind of continued and developed momentum I think it's fair to say that the 1980s was the transition phase to be explicitly artistic for landscape architecture ... it may have paved the way for people like Trudi⁵⁰ and a lot of people that, since then, have worked with the landscape as something that is amenable to artistic expression.

Though Thwaites did not directly point to environmental art, most specialists agreed that the significant momentum in the transformation of landscape architectural design in the mid-1980s belonged to environmental art. Thus, it took approximately twenty years from the origination of environmental art in the 1960s for the art to reach the level of influence on landscape architecture that it retains today.

6.4 RESPONSES TO THE SITE AND SPIRIT OF THE SITE

Both landscape architecture and environmental art place great importance upon the site as a ground upon which creativity is to be articulated, though they approach the site in different ways. According to the interviews, most environmental artists started their artworks by spending a long period of time on the site and trying to capture the spirit of the site. Entwistle stated that:

When I get to the place [site], the only thing I think about is just looking at the place, spending three days, spending time with it – drawing, thinking, looking at the physical landscape.

⁵⁰ Thwaites probably meant landscape architects with an artistic interest, who operate between design and art.

Technical maps are not a necessity for the artists. Entwistle mentioned that most environmental artists tended to look further, beyond the physical and tangible elements of the sites, and aimed to understand the spirit of place: an intangible quality of the site. Entwistle further commented that 'I do not think I had a map [when I walked around the site]. No. I have never had a map'. Maps may have been useful for some artists; however, most artists observed characteristics of the sites with the assistance of media such as notebooks, video or tape recorders. Hyde commented that:

I look into the spirit of the site and highlight things about the site – try to think of the places in different perspectives – its geography, its history or its spirit. I then try to map the site in different ways, thinking to sort of see the interest. How people use the site.

Entwistle also added that:

The ideas [of creating artworks] are somehow connected with my subconscious when I visit the site. Most artists would somehow make the same connection, which is mystical sort of ideas with the site.

In the process of site analysis, the concept of the spirit of the site seemed to be very familiar among the artists.

All specialists interviewed agreed that landscape architects are very responsive to and connected with sites. Thwaites remarked in the interview, 'I think the site context is absolutely vital'. Thwaites's statement was consistent with Hooftman, who noted that 'every landscape product is about the site. And the products should come out of the site'. In order to understand the site, landscape architects take time to explore it and its context, using different ways of approaching and identifying it. However, in contrast to the artists, landscape architects must carry out a site analysis process, which requires various types of technical maps, such as geographical, biological maps, etc. Davis noted that:

Landscape architects go through a process of site analysis on every project. Even at the small scale, micrositing or a pure landscape scheme, generally, we still need to make clients aware of the constraints, so we do a sort of constraint plan, and talk through these constraints.

Wilkie agreed with Davis, remarking that,

When we (landscape designers) analyse the site, we are going through geology and soils, everything else but also the story of the site; all of that culture, history. And there is a sense at some fundamental level that we all are trying to connect with the land, which carries on echoing in the place long after.

Even though not saying so directly, Wilkie may have been referring to the concept of spirit of place, of which the landscape architects were well aware. In regard to the spirit of place, Thwaites remarked that:

Landscape architects also look beyond the boundary for the spirit of the site The site context, the cultural context and the political context, and the other contexts, are also very important and should be investigated when you're working as a landscape architect. How you see the site, how you understand the site, it is shaped by everything you know. And that has many dimensions and can be interpreted very widely in an interesting way. So, it's not just the context. I think it's important not to see the site as bounded by the red line, but instead seeing it as a place in wider interpretation and my duty is to begin to interpret in an interesting way.

A red line identifies the boundaries of the site. Thwaites essentially said that landscape architects need to look beyond the boundaries when analysing the site. Most landscape architects are trained to look beyond physical elements to the spirit of the site. Therefore, this aspect seems to be familiar among landscape architects in general, as suggested by Thwaites.

A After the site exploration and analysis process, both landscape architects and environmental artists transformed ideas and significances of the site into a process of

art creations or landscape design. For environmental artists, most specialists interviewed agreed that they would learn to understand the characteristics of each particular site; however, each artist had their own individual way of expressing their creativity through the medium of art on a specific site, depending on the techniques and style of each individual artist. In this regard, Entwistle stated that:

It's all about places. And I produce the art, which belongs to the site ... and its spirit. The artists also research information about the site to gain knowledge and understanding about the site. But I would interpret the information and express it through my art in my own way. I would have been purely expressive with my own sense; no function, just pure expression in art. ... Should I be doing this? Should I do that? I think it's really nice that I can explore something that I haven't explored before.

Emily Brady, an environmental philosopher, remarked that the site and the art are inseparable. Such artworks were insignificant without their setting. This thought was agreed on by most of the specialists. For most artists, the processes of considering and understanding the site and thinking of the art creation were combined into one. The two processes were considered together when the artists visited the site. Thwaites pointed out that environmental artists did not intend to simply build the art on the site, like site-specific art, or land art; rather, environmental art enhanced the site by highlighting the underlying quality of a particular environment through the medium of art. Thwaites also stated that these qualities differentiated environmental art from other related types of art such as site-specific art and land art. Theaker agreed with Thwaites. Theaker pointed out the way to create art within the site by giving a quotation of an eminent environmental artist, David Nash: 'The art should activate the essence of space rather than overwriting the existing sense of place'.

For landscape architecture, many contemporary renowned landscape designers, such as Michael van Valkenburgh, Kim Wilkie, etc., were well acknowledged in terms of presenting their works, which truly blended with the site (Figures 6.30–6.34). According to the specialists interviewed, however, many landscape architectural works have tended to be criticised for creating designs without being particularly site related

and being about situating a piece of work on the site (as presented in Figures 6.35–6.38). Creativity in landscape architectural design was bounded by more constraints such as functions, client expectations, community, budget, environmental needs, etc. As referred to in Section 6.3, Thwaites pointed out that the aspect and contribution of environmental art in an extremely intense understanding of a sense of place and spirit of place should have influenced landscape architecture so that the landscape design properly fits the site location.



Figures 6.30 – 6.32: Michael Van Valkenburgh's Garden on Turtle Creek (1999)



Figures 6.33 – 6.34 : Kim Wilkie's Boughton House (2009)



Figures 6.35 – 6.38: General landscape works.

Even though many environmental artworks are properly situated within the site as suggested by Thwaites, it is possible to think of environmental artworks which do not

blend well with the site. One example is an environmental art exhibition at Lake Garda, Italy, by an unknown artist, as illustrated in Figure 6.39. According to McGrath (2013), the artwork aims to demonstrate how plastic could harm the environment. It shows an understanding of the site by expressing an environmental concern that is specific to that site through the representation of a fish. It also uses plastics, which are a specific material to that site, as they have been polluting the lake and its surroundings. The artwork succeeds in strengthening the environmental message, as it not only raises concerns about littering and pollution in the area, and the impact that it could have on local species. It also works through a strategy of contrast by giving an idea of the extent of the impact by visually displaying the amount of plastics collected polluting the area. Thus, its materials and colours stand out from its site location and context. There are many cases of environmental artwork that do not blend well with the site.



Figure 6.39: An environmental art exhibition at Lake Garda, Italy.

Created by unknown artist.

In conclusion, even though landscape architects and environmental artists had different approaches to sites, both perceived the site as one of the most important elements in the creation process. However, in terms of design, landscape architects seemed to have more limitations in terms of a rather linear and positivistic approach to the site survey and analysis – a legacy of McHargian thinking as reviewed in Section 3.4.3 – even though landscape architects approach the site in terms of design in a similar manner to environmental artists. Landscape architects could, perhaps, gain a more intense understanding of sense of place from reflecting on the approach of environmental artists.

6.5 THE EIGHTEENTH CENTURY AESTHETIC CONCEPTS

All specialists participating in the research confirmed the connection of the eighteenth-century aesthetic concepts with environmental art and landscape architecture. Thwaites stated:

I think many artists still have something to say about the aesthetic categories.⁵¹ ... You can analyse the history of the profession of landscape architecture, we definitely have the interrelationship between the two professions.

The Picturesque was referred to in the discussion of the research in four aspects. Firstly, according to the specialists, the Picturesque was ultimately a constructive way intended to improve landscapes. Pollock referred to William Gilpin as a great figure in provoking their ideas in this regard. In the interview, Pollock noted that Gilpin literally informed people about how landscapes should be constructed and where the audience should position themselves in order to obtain ideal Picturesque views. Pollock seemed to suggest that Gilpin's thoughts were directly related to landscape design and that his method of constructing landscapes could have been considered as the way to subjectively define things with certain a boundary and scope. In fact, several of Gilpin's writings, such as An Essay on Prints: Containing Remarks upon the Principles of Picturesque Beauty, the Different Kinds of Prints, and the Characters of the Most Noted Masters (1768) and several subsequent publications, provided rules and guidelines for artists painting landscapes. Certain elements of landscape paintings, such as clumps of shrubs and trees, would be required and their positions would be composed as foreground or background of the painting to provide Picturesque views. In this sense, according to Gilpin, this could be considered constructive landscape. What was interesting was that landscape designers such as Uvedale Price, Richard Payne Knight, etc., took Gilpin's ideas and made actual landscapes that were more Picturesque. Lancelot Brown, aka 'Capability' Brown, who designed natural-like landscapes or Beautiful landscapes, was primarily concerned with being aesthetically pleasing. It is argued that Brown constructed landscape in two ways: 1) built

⁵¹ The eighteenth-century aesthetic categories, comprising the Beautiful, the Sublime and the Picturesque, were highly discussed among scholars of the period.

landscape, and 2) constructed landscape according to the way of seeing.⁵² However, Gilpin's landscapes were not constructed in the sense of being built, but rather to improve landscapes aesthetically. Picturesque landscapes and Brown's landscapes are illustrated in Figures 6.40–6.44. Pollock further remarked that the Picturesque landscapes were mainly concerned with constructing the landscapes in a picture-like manner; therefore, to some extent, art or landscape creations, which were concerned with environmental issues, were considered as un-Picturesque. The remark by Pollock was barely noted in landscape literature. Yet there is an essence in the remark as the elements' ecological integrity was not referred to in literary records of the Picturesque landscapes. Examples of the un-Picturesque noted by specialists interviewed included ecological landscapes or wild landscapes, which focus on their living elements and disregard the aesthetics of the landscape.

Secondly, according to Pollock, the Picturesque was directly associated with the ideas of land ownership. Pollock may have meant that the Picturesque paintings celebrated the ownership of land (and were commissioned by landowners). On this subject, Pritchard added that the original land ownership idea in the Picturesque had to do with the place where people belonged; people defined things and where they belonged. The heyday of the Picturesque may have passed; however, there are contemporary examples of the Picturesque ideas still going on; for example, luxury modern houses are still built to command views.

⁵² In contemporary context, the concept of 'constructed landscape according to the way of seeing' is explored in the discipline of Cultural Geography, which 'draw upon range of sources and traditions, ranging from social theory through continental philosophies, for example' (Atkinson et al., 2005, p.xv).



From left to right. Figures 6.40 – 6.41: Picturesque Landscapes: Chatsworth garden (around 1840) and Rousham garden (1715-1726)



From left to right. Figures 6.42 – 6.44: Brown landscapes, Figures 6.42 – 6.43: Castle Howard (1701-1853), Figure 6.44: Blenheim Palace (1764)

Thirdly, the specialists remarked that the Picturesque was directly associated with the concept of nature, which was seen as unspoiled and unchangeable. Pritchard pointed out that the concept of nature in the Picturesque era may no longer be applicable in modern times. Nowadays, we tend to think of 'nature' in terms of ecology or wildness, rather than contrived Picturesque views.

Finally, the specialists also remarked that the Picturesque was directly associated with the idea of landscape architecture as an art form. Thompson pointed out that in the early twentieth century, Jellicoe advocated that the idea of landscape architecture as an art form could have been traced to the Picturesque in the eighteenth century, when the landscape garden was included with paintings and poetry. Thompson referred to Jellicoe's ideas in his *Studies in Landscape Design* Volume I (1959). However,

Thompson remarked that the connection between landscape architecture and art was lost in the nineteenth century, when landscape architectural design became eclectic, and landscape design became heavily influenced by horticulture. Thompson was referring to the emergence of the Gardenesque movement, which was introduced by John Claudius Loudon (1783–1843) in nineteenth century, aiming to create an artistically composed landscape representation of the natural world with high usage of horticulture and exotic plants. Thompson further pointed out that when Jellicoe discovered the connection between landscape architecture and art, Modernism was relevant and linked environmental art and landscape architecture. Therefore, there seems to have been a significant relationship between the eighteenth-century Picturesque and Modernism, in the sense that both movements have had a great influence upon landscape architecture. In this regard, Wilkie strongly disagreed, and commented that the Picturesque was contentious and a strongly criticised movement: 'It went in the wrong direction and seldom represented what exactly went on'. Furthermore, Wilkie added, the three great figures of landscape architecture, Frederick Law Olmsted, 'Capability' Brown and William Kent, were entirely unrelated to pictures. Instead, landscapes designed by the three figures were deeply associated with poetry, philosophy, politics, sheer utility or, in other words, 'the practicality of how to work with landscape'. Wilkie meant that the landscapes by the great figures had little to do with pictures.

Additionally, Thompson remarked that in the UK, there was an attempt to produce places that were Picturesque-like in the landscape reclamation of industrial areas in the 1970s. The traces of the industry that had been there were removed and replaced with Picturesque landscape. Thompson remarked:

It was a smoothing out and erasure of the past. But it remembered the English landscape Nobody has looked at the processes after reclamation was done, and how the communities responded to it, and their attachment to it, or whether they came to be attached to it, or whether they felt something had been erased from their lives, so their heritage has gone.

Thompson further pointed that when the McHargian approach became a significant part of the discipline of landscape architecture in the 1970s, the Picturesque or the English Landscape School was a dominant landscape architectural practice and the Picturesque had become an ossified tradition, which did not give any scope for imaginative new thinking in design. Thompson noted that this was the reason why the combination between the Picturesque landscape practice and the McHargian was often said to produce 'really dull landscapes'.

It is generally recognised that eighteenth-century aesthetic theories, although very influential, were a bit of a muddle. Moore remarked that these concepts had been variously interpreted. Some of the interpretations were no longer acceptable or applicable in the modern context; however, some eighteenth-century approaches, in terms of the ideas and some landscape design principles, might need re-interpretation to be applicable in the contemporary context. The confusion of the aesthetics had to be accepted because it was inherited. It depends on how one considers the ideas and takes them forward. Moore also added:

I think the point is not so much about what theories we use, but it is about how our ideas are used that is significant. So, it does not matter that those ideas came from which period of time. The point is, if it helps you make decisions, and it helps you to create the place excellently, I don't think it's a question of going backwards, but a question of interpreting the ideas in different contexts. Certainly, Picturesque ideas are very interesting and work very well, so for people to be skilful in that and to be able to use them in the appropriate way now, that would be great.

In conclusion, the eighteenth-century aesthetic concepts have been interpreted in different ways. They have been overused and lost their actual roots. Therefore, many aspects of the eighteenth-century aesthetics have become ambiguous. Their concepts may have been appropriate at that time, but most of the ideas may no longer be applicable in the current context. However, some key ideas of the Picturesque could still be considered and examined in a contemporary context.

6.6 ENVIRONMENTALISM

According to the specialists interviewed from both disciplines, environmental artists and landscape architects proposed various solutions to environmental issues. For environmental art, during the early period of the 1960s, the artworks could be classified into two kinds. The first kind of environmental art in this early period bore no relation to environmental concerns, but was solely about the artwork itself, such as works by Michael Heizer, James Turrell and Walter De Maria. During the second kind of development, environmental artists became aware of environmental issues and started to mirror their concerns about such issues and raise environmental consciousness using artworks. Many artists directly mirrored environmental issues and environmental consciousness in the form of the reclamation and remediation of damaged environments, restoring ecosystems in their artworks; for example, Robert Smithson raised awareness of industrial damage to sites, leading him to publish the essay 'A Sedimentation of the Mind: Earth Projects' (1968) in Artforum. Theaker commented on this second kind of environmental art that 'they started to make issues out of the environmental consequence of their works. And take steps to minimise those environmental consequences'. Theaker may have meant that some environmental art artists reflected on what they were doing; for example, Robert Morris, who worked on the site of an old pit in Johnson Pit #30 (1979). The creation of this artwork returned the land to active use. The artists questioned their role in creating art. However, the second kind of environmental artists made art which specifically drew attention to environmental issues; for example, artworks by Jody Pinto's work at Papago Park (1992), which aims to celebrates the basic life forces of the desert and its timeless methods of survival. The specialists interviewed also mentioned that the environmental art in the UK was entirely different. Regarding this, Theaker pointed out that there were no particular environmental damage issues in the UK. The landscapes in the UK were mostly well managed. Thus, it was much harder for environmental artists to make a big statement and a great impact regarding environmental awareness. British environmental artists, such as Andy Goldsworthy, Richard Long and Ian Hamilton Finlay, were usually more concerned with the process of nature and the attempt to merge into the places; or, they simply presented the

existence of the artworks in their natural settings. The works thus had little impact on their settings. In Europe, however, Theaker stated that it is interesting to note that Robert Smithson and Robert Morris both worked in the Netherlands, where they have a long tradition of land reclamation – manipulating and reforming land as part of their culture.

In the contemporary context, environmental science is relevant to creations of environmental art. Brady mentioned that in the creation of such art, artists were well aware of contemporary environmental issues, such as global warming, climate change, etc. Scientific knowledge was often emphasised and scientific elements had always been adopted. However, the way environmental artists expressed environmental science in their artworks was diverse, depending on each artist's creativity. In some cases, the science actually became the art itself. Entwistle noted that:

Many artists worked with processes of nature and highlighted them, i.e. the process of nature. Lynne Hull worked in the desert. She chose shape out of the rocks which are nice themselves. Water will come and they catch the water and make them drink the water from them. To me that's the real integrated science with artworks.

Environmental artworks by Lynne Hull and Jody Pinto aim to restore wildlife habitats damaged by human impact while encouraging humans to understand wildlife needs and shift attitudes towards human relationship with other species (Green Museum, 2016). Entwistle continued:

Andy Goldsworthy, Chris Drury, and maybe myself, try to connect with the place Chris Drury created art in landscape ... he created an ecosystem for more weeds and for stopping water directly from water course, aerating it and making it spiral around this water course.

Artworks by Lynne Hull and Chris Drury are illustrated in Figures 6.45–6.49. Haley also remarked on Mel Chin's *Revival Field* (1990) (Figures 6.50–6.52), which integrated knowledge of environmental science into his reclamation project by utilising specific plants to detoxify the soil and hazardous waste landfill. The works of Alan Sonfist were

related to the paleobotanic ecology and history of the sites (Figures 6.53–6.56). This type of environmental artwork, concerned with both artistic expression and exploration of ecological integrity, seem to match with the concept of ecoaesthetics, which was discussed in an interdisciplinary manner with the connection of beauty to the human valuation of our natural environment (Bachman, 2007).

The specialists interviewed also noted that most environmental artists usually cooperated with scientists, engineers or ecologists when creating their artwork. Concerning this, Entwistle noted that:

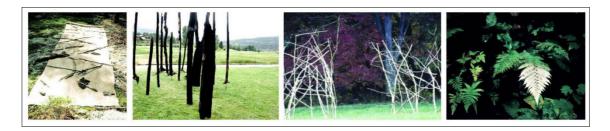
I prefer working with the specialists and naturalists from the research department to create the more sensitive piece [of artwork]. I cooperated with them, got their knowledge and perhaps changed my perspective of place through talking to these scientists and engineers. So, that always excites me, doing that.



From top to bottom and from left to right: Figures 6.45 – 6.47: Works by Lynne Hull. *Flowing Water Moon* (1995), *Goose Nesting Platform* (1992), and *Otter Haven* (1993), Figures 6.48-6.49: Works by Chris Drury. *The Birth of Energy* (2014) and *Waves and time* (2011)



Figures 6.50 – 6.52: Mel Chin's Revival Field (1993)



From left to right: Figures 6.53 – 6.56: Works of Alan Sonfist.: Earth Mapping of Twigs (1969), Trees of Aspen (1969), Walking Limbs (1970), and Trail of Gold #1 (1972)

Pritchard added that many environmental artists may have directly associated with environmental science. Environmental art could be scientific in every way, and analogous to a rigorous research project such as Mel Chin's Revival Field (1993). However, Pritchard further added that even though environmental science was directly involved with environmental art, this did not necessarily mean a scientific method was used or adopted. Rather than being concerned with environmental issues, some environmental artworks could solely have been expressions to alter perceptions about the site, context and surrounding area, bearing no relation to environmental issues at all. Therefore, depending on the context and the artist's approach, environmental artworks may not have had any connection to environmental science at all. The approach may have been the opposite to a scientific one; for example, being purely contemplative, emotional, kinetic and abstract. On this subject, Goto-Collins strongly agreed with Pritchard, and added that it was widely known that artists had been working with science since the Renaissance period. Environmental science and technology were present in all parts of the discourse in art, along with other disciplines, such as philosophy and history. However, it took time before ideas in art could be widely distributed and properly understood. Environmental art has been recognised as the integration of environmental science and art in the art world and in higher education since the 1960s onwards. Goto-Collins further stated that environmental art was integrated into both science and empathy by using the recognition, experience and understanding of nature and the environment. However, artists should continue to be more open to collaborations with scientists, as well as other disciplines, in the future. Pritchard also added that:

There are organisations which bring disciplines together to explore environmental issues. There are hosted by science and technical institutions, which is unusual. Lots of arts and interesting things are happening there. I find most of them are driven from the art side of the equation. So, it is the network that is an exception because it's initiated by science and technology. Those people said they want more of the art-based perspectives.

Concerning the role of environmental artists in raising environmental awareness, Entwistle noted that:

It [art] connects that person to that place and to nature by making them go and look at things with a different perspective and having their own experience with that place.

Hyde's remark added to and complimented Entwistle's. She pointed out that:

I think it's quite important that the awareness is expressed in the most interesting and effective ways. It should also not be overly done. Because I think people can get really sick of artworks that really try to preach to them or try to make them think of something. It is quite a sensitive area. Everyone knows about environmental concerns. A lot of people do not want to feel guilty.

Hyde also proposed how environmental art should be created:

It is quite important that maybe most successful or most interesting and most relevant thing about an environmental artwork is that instead of raising awareness, it actually raises questions about possible solutions to the environmental issues. They are not particularly doable, but they kind of question things in a way that actually kind of turn things in their heads and allows different standpoints. It's something from different points of view. It can be tricky.

Hyde concluded that:

The ideas expressing environmental concerns within the artworks should always have been fresh and new in order to keep the debate going and keep things open; not close it off. Bring in the awareness in the new way that really questions how to really live their life and the relationship between nature and environment.

The environmental artist should explore how to express environmental concerns, as suggested by Hyde. The underlying messages within the artworks should keep encouraging the ongoing debate on environmental issues among artists or scholars in related disciplines.

In terms of constraints in expressing ideas in environmental issues within artworks, the specialists interviewed remarked that environmental messages within artworks would depend on two main things, which were budget and education. Concerning the constraints in budget, Theaker mentioned that:

The [environmental] awareness, as far as I am concerned, is costly in Britain. To be environmentally aware is likely to be presumed as involving increasing costs. There's a cheap way to do this, and there are environmental ways to do this. It is also because our country is small and everything is expensive. We are trying to put the awareness in the practice of daily life.

Concerning limitations deriving from education, Theaker noted that:

I think there is a role for environmental artists in raising environmental awareness. Most of the artists come from educated middle-class people. And the messages [of the artworks] mostly go to educated middle-class people. This

means that we have professionals talking to professionals. So the environmental messages [of the artworks] go to people who already have environmental awareness; whereas ones who do not would persist with their thoughts.

The artworks were not necessarily restricted to educated people, but open to all, regardless of their education. Thus, the lay people should also receive the messages within the artworks.

Landscape architects always have a tendency towards environmental issues. Moore commented that 'It is the heart of the practice'. Davis agreed with Moore and added:

I think the environmental issue is paramount to all of our schemes. Whether it is general growth of environment awareness, global warming, environmental catastrophe, all of these kinds of things, and human impact and human responsibility for behaving in environmentally vulnerable ways. As landscape architects, we need to recognise and work with all environmental issues associated with a particular location. As practitioners, we contribute to environmental assessment. We do visual impact assessment. It is part of our training. But underlying are skills. It is the awareness that we need to take into consideration, so climate, community issues, biodiversity — all those environmental issues, and the visual aspect and so on.

Concerning this, Thompson added that,

Every time landscape architects are involved in the project, people get some benefits. All professions and clients are going to get the benefits. So, I think that subtle and gradual influences are going on all the time.

The issues of the environment are indeed at the heart of the discipline. Landscape architects are trained to be aware of environmental issues and practice in various built environment projects as stated by Davis. This is why, when landscape architects are involved in any project, people tend to receive benefit, as referred to by Thompson.

The specialists interviewed also pointed out that it is very important for landscape architects to understand scientific knowledge. Yet landscape architects do not always have to possess scientific knowledge. Concerning this, Moore noted that:

I have a geographical background, and I understand ecology, hydrology, geology, geomorphology from my education and I think I always assume that landscape architects all have that, but obviously we do not. And I think that geographical sensibility is absolutely vital to the practice, I really do.

Landscape architects usually co-operate with scientists and environmental experts. However, in large-scale landscape projects, it becomes mandatory that landscape practitioners need to comply with planning regulations. Regarding this, Davis stated that:

We work with, for example, the lake specialist, ecologist, arborist, soil scientist, civil engineer and so on. So, you know, if we've got particular problems, particular plant species, if we have planning issues, we need to bring in specialist advisers, we do work with all those sort of professionals. ... They're usually controlled by the planning regulation process.

According to the interviews, it can be concluded that landscape architects have indeed been well aware of environmental issues and have integrated scientific knowledge with their works. However, the specialists interviewed also pointed out that even though they have been working with environmental issues for a relatively long period of time, landscape architects still have not received recognition as environmental specialists among multidisciplinary teams. Thwaites remarked that, 'It has been over 40 years. The professional landscape architecture community didn't gain a good recognition'. Thwaites added:

It has always been very surprising to me that we didn't promote ourselves as the professional body that is particularly capable of responding with solutions that are environmentally benign. ... If there's one profession that should have stood up and shouted it, "Look here guys, we are people who understand the design in an environmental way", it is us. Please look at us. They never did that

Growing, and increasingly necessary, environmental concerns should have been a golden opportunity for landscape architecture to develop significant growth as an academic discipline and professional activity. Unfortunately, judging by the low level of applications to landscape architecture courses, the reverse is the case.

Thwaites also pointed out:

I think it's a catastrophic public relations error And I think this is a massive missed opportunity for landscape architecture to rectify in the interests of its future growth, and possibly even the survival of the profession in this country.

Moore, however, strongly disagreed with Thwaites, and argued that, as a matter of fact, owing to landscape architecture being involved in environmental design and planning for the past several decades, there has actually been a massive shift in terms of the perception of the discipline of landscape architecture. The discipline is, in fact, being reborn, and is being perceived as a discipline with specialities in environmental design and planning.

Thwaites pointed out that, currently, no individual discipline was capable of fully addressing all the complex environmental issues of built environmental projects in the contemporary context, in which there is fragmentation of knowledge among individual disciplines. In order to move forward, Thwaites proposed that a new discipline, which would be a co-operation of existing built environment disciplines, including landscape architecture, architecture and urban design, should be constructed. With the new discipline, the philosophical foundation and practice boundaries of the new discipline could also be renewed. Thwaites stated that this was a 'necessary and mandatory' process. In this regard, Moore strongly disagreed and pointed out that the current disciplines were already sufficient to solve the complex issues of built environmental projects. Nonetheless, Moore admitted that, 'I do think we need to talk about how we can do things in different ways'. Moore also added that,

The reason why the discipline of landscape architecture was perceived as being in such a 'terrible position' was because landscape architects are often regarded

as technicians. Landscape architects should have thought of themselves beyond technicians and should also have been perceived by the general public as more than technicians.

Works of landscape architecture should, in fact, have been explained and discussed in terms of ideas of landscape rather than technology, as suggested by Moore. Therefore, people could begin to make those connections and the discipline could have been in a powerful and provocative position to handle future built environmental projects along with other disciplines.

There was a contrary view concerning the application of scientific knowledge in the discipline of landscape architecture. Thompson pointed out that McHarg's approach to analysis and planning, which was based on science and rational decision making, was a major influence in landscape architecture in the 1970s. After McHarg, Allen Ruff's ecological planting, which was primarily concerned with the integrity of ecology, and practised in the Netherlands, later became the dominant idea in the discipline of landscape architecture. However, McHarg's focus was not mainly concerned with visual qualities, which had dominated the English Picturesque movement. Instead, McHarg saw the English Picturesque tradition as a precursor. McHarg's philosophy was based more broadly in an ecological sensibility that accepted the interrelationship between humans and nature, and sought to design human environments with suitable conditions of setting, climate and environment. Thompson concluded that landscape architectural design during the 1970s could have been considered as 'empty design'. The discipline of landscape architecture seemed to receive both great benefit and strong criticism, especially regarding being 'empty design' when the discipline was linked with environmental science. This is further discussed in Section 8.3.2.

I In terms of the influence of thoughts and ideas within environmentalism, most of the specialists interviewed generally agreed that both landscape architects and environmental artists were well versed in environmental issues and integrated the scientific knowledge into their works, without influences from the other discipline. However, regarding this, Haley stated that:

Most artists I know read McHarg. They also read a lot of philosophy and are very interested in people like Gregory Bateson⁵³ and Abraham Maslow,⁵⁴ and people brought in sociology and science. You will find most ecological artists are not only interested in philosophy, but also in politics, something that many landscape architects are involved with, in my opinion. So in that respect the artists are perhaps influenced by landscape architects. But landscape architecture doesn't have much effect on environmental art. Perhaps landscape architecture helps with the skill – physically to achieve different things. Things in terms of thinking or working, the movement now has a great interest in the work of ecological artist.

McHarg was an eminent landscape architect who initiating ecological design, which is directly connected with environmentalism. If McHarg was well known among artists,⁵⁵ as stated by Haley, presumably the thoughts and ideas of landscape architecture in environmentalism may have impacted environmental art to some extent.

6.7 PASSAGE OF TIME

Both the disciplines of landscape architecture and environmental art work with time and the transformation of the natural materials of their works. According to most specialists interviewed, time and the transformation process could be considered as primary aspects in both disciplines. Concerning landscape architecture, most specialists interviewed strongly agreed that time and the transformation process were very relevant aspects. Working with time could have added an interesting aspect to landscape architectural design, especially in terms of process, transformation and transmutation, which occur through the changes caused by the passage of time.

⁵³ Gregory Bateson (1904–1980) was an eminent anthropologist, who collaborated with Margaret Mead (1901–1978) in the 1930s in developing a new approach to anthropological research by using film and photography to support a new kind of analysis (Institute for Intercultural Studies, 2015).

⁵⁴ Abraham Maslow was an American psychologist, who introduced the hierarchy of needs theory in his *A Theory of Human Motivation* (1943). Maslow proposed that people are motivated to achieve certain needs. When one need is fulfilled, each individual seeks to fulfil the next one (McLeod, 2014).

⁵⁵ Among a number of news and journal articles, the *New York Times* published the article "Ian McHarg, 80, Architect Who Valued a Site's Natural Features" (Revkin, 2001) to celebrate McHarg's eightieth birthday.

However, time and the transformation process did not seem to be well recognised in practice and the academia of landscape architecture. Hooftman stated:

Landscape architects should work with time. The good landscape architect should understand time in the landscape. Working with time and defining a particular moment of time in landscape design is always very interesting. So, landscape architects should be clever and should make time a part of their strategies.

Hooftman implied that good landscape architecture ought to involve thinking about time, but actually some landscape architects are not so good and forget about it.

For environmental art, Hooftman remarked that several environmental artists work with time and process, and their works could be considered as the most interesting ones. Robert Smithson, the eminent environmental artist, also worked with time. In his masterpiece, Spiral Jetty, Smithson foresaw the crystallisation process of the red salt in Great Salt Lake. His Spiral Jetty is completely different from what had been originally installed because of the transformation of the land through time. Transformation of the Spiral Jetty is often invoked as an example of how places and things change over time. Haley also remarked on the relation between landscape architecture and the passage of time. He stated that when other built environment professionals finished their works was when their products were handed on to the clients. This is different from works of landscape architecture and environmental art, as the projects are still ongoing processes. Haley pointed out that working with the aspect of time makes environmental art unique from other arts. Working with living materials, landscape architects should be more conscious of time and process. The principles of the passing of time could distinguish landscape architecture from other built environment professions.

6.8 LANDSCAPE ARCHITECTURAL THEORY

Landscape architecture is a relatively young profession. How landscape architectural theory was established is discussed in this section. According to the interviews with specialists, landscape architectural theory is not well established. Thwaites stated that, based on his experience and exploration in landscape architectural theory, he discovered that

There is not a landscape architectural theory. What there is, is a lot of theoretical positions, often borrowing from other disciplinary areas that are relevant to landscape architecture. And I think you'll find people who will say that this causes the development of landscape architecture as an intellectual discipline quite a lot of problems because it doesn't have a theoretically coherent base.

Thwaites may be right. Many thoughts and theories in landscape architecture have indeed been borrowed from other related disciplines such as architecture, urban design and urban planning. However, this is also the case for several other disciplines. Although there are many disciplines defined by their own theories, several disciplines, such as psychology or astrophysics, are also similar to landscape architecture in terms of borrowing ideas from other related disciplines.

According to the specialists interviewed, landscape architectural theory had not been properly established for two main reasons. The first reason was that landscape architecture was a relatively broad discipline ranging from small-scale design to the town scale. Therefore, to identify a single coherent theory or principle, which embraced different aspects in landscape architecture, was not practicable. Concerning this, Waterman pointed out that:

If there is mention of dialogues between human and environment, then nine times out of ten, we're talking about landscape architecture.

Waterman further stated that the profession of landscape architecture has no definite boundary; therefore, in a sense, landscape architectural theory actually has a rich body of theories, as the discipline could draw theories from all other related theories such as history, sociology and geography to contribute to landscape architectural theory. Moore agreed with Waterman when she commented:

Landscape architecture is an extraordinary discipline; it's very wide ... people are becoming expert in a particular area, they do not have to do everything. I think it has to do with developing theory. We research theory. That is an area within the discipline of landscape architecture.

The second reason, which has caused landscape theory not to be well established, was the origin of the discipline. Thwaites noted that,

Landscape architecture's origins are, in large scale, garden design, estate garden design. And so, what comes from that period are theories to do with aesthetics and fine art and balance and all of these kinds of things. As a young profession, it is difficult for landscape to establish its theory.

Thwaites also pointed out that the discipline of landscape architecture should have been focusing much more on the ideas about human—environment relations in the design decision-making processes. This is because the understanding of what the human—environment relationship actually is, philosophically, theoretically, and practically, is not well understood by most practising landscape architects. Thwaites commented that 'this is a serious weakness of the discipline'. Moore added that there were a lot of arguments regarding the fact that humanity and nature are inseparable. Yet the relationship between people and nature and its values has, in fact, developed over time, and landscape architects have always discussed the relationship between people and nature throughout the creation processes of landscape architectural works. This issue of the relationship between environment and humankind was discussed in the interview. Waterman brought up the idea of the 'corporeal turn' in order to change our understanding of the relationship with the environment. He mentioned that:

The 'corporeal turn' is the idea of embodied knowledge which is opening up a whole new realm of science. But I think maybe that's too much to cover. We

start to understand that what we think is different from what we thought we did, which affects the way we interact with environment. So there'll be a new development particularly that changes the way we think ... it is essentially the science of the way we think and the science of the structure of the brain and function of the mind. So our understanding of the relationship with environment should be changed as well.

The specialists in landscape architecture commented about the philosophical foundations of landscape architectural theory. According to the specialists among landscape architects, the philosophical foundations have, indeed, been not well understood, especially in the work or practices of landscape architecture; however, the philosophical foundations in landscape architectural education are still profoundly rooted in the education system and disciplinary history. In this regard, landscape architect Vera Vicenzotti commented that in Western culture, history and philosophy remain important in studying landscape architecture. History and philosophy courses were important in most traditional landscape architecture programmes. The programmes were also attached or linked to architecture programmes where history and philosophy courses were emphasised. Vicenzotti further stated that the McHargian approach is dominant in the current practice of landscape architecture. Even though this approach was not primarily philosophical, the underlying thoughts were actually serious considerations of people's demand and concerns. The McHargian approach also mirrored different images of social and political values in landscape architectural design. Wilkie agreed with Vicenzotti and also pointed out that:

Philosophy does not have to be Heidegger. People are deeply philosophical; they have to be to live the life that we live There is a philosophical thought that actually does reach across every community.

Wilkie concluded that the philosophical foundation remains strongly solid in landscape architectural education. However, on this subject, Denton strongly disagreed and mentioned that in his view, the philosophical foundation is actually not at all valid in either landscape architecture education or landscape architectural practice. Philosophical thinking is also not at all perceived by the general public. Denton

suggested that many philosophical thoughts are relevant and important in the discipline of landscape architecture; therefore, the discipline should have integrated more philosophical thinking into education as well as into practice. This subject is discussed further in Section 8.2.6.

6.9 SUMMARY

This chapter has discussed the findings of the research, exploring different significant thoughts and ideas that were associated with landscape architecture and environmental art. The chapter highlighted common and contrasting thoughts and ideas between landscape architecture and environmental art, including the meaning and interpretation of their works, and the expression of creative concepts and ideas. Arising from the findings of the study, there was no confirmation that these four primary features impacted landscape architecture through its connection with environmental art. However, the research's investigation suggested that how four of these thoughts were creatively interpreted and generated within environmental arts may have been relevant to landscape architecture. In addition, the chapter highlighted the significance of the 1960s for both disciplines. Furthermore, a variety of perspectives were expressed in relation to four primary features identified as theoretical connections interchanging between the two disciplines. These four features include the concept of the spirit of the site, the three eighteenth-century aesthetic concepts, environmentalism, and the passage of time. The chapter also discussed issues underlying landscape architectural theory. The next chapter explores practices of landscape architecture and environmental art.



CHAPTER 7 PRACTICES OF THE TWO DISCIPLINES

INTRODUCTION

Both landscape architecture and environmental art are concerned with outdoor built environments with similar physical appearances, and their practitioners sometimes work across professional boundaries; nevertheless, the two disciplines differ in numerous ways. This chapter explores findings regarding professional practice, deriving from two methods of investigation comprising semi-structured interviews with specialists and focus groups. The section discusses seven themes comprising: 1) professional practices, licensure and art critique; 2) scales and scopes of practice; 3) public perception of environmental art and terminologies; 4) current environmental art practice; 5) public perception of landscape architecture; 6) current practice of landscape architecture; and 7) future approach of landscape architecture.

7.1 PROFESSIONAL PRACTICE, LICENSURE AND ART CRITIQUE

According to the interviews, the professional practices of the two disciplines are very different. For environmental art, there is no authority or institute required to practice art, neither in Europe nor North America, which have been the two continents where environmental artists have been most active. In this regard, Entwistle stated,

There are no manuals or regulations to become an artist. Artists went through art school and developed their practice. Artists do not need a licence to practice artworks. Clients often employ an agency to select and manage the artists. Depending on the artworks, there might have been particular regulations and guidelines provided by the commissioning agency, art organisations or city that the artists had to follow. However, the regulations the artist has to abide by are determined by the nature of the project, which depends on the nature of each project. For example, if the artist works on a public art project with schoolchildren, then the artist would normally have to check requirements

specific to the schoolchildren's programme to abide by any regulations of the commissioning authority. If they were making a landmark sculpture in a city, the artists would have to comply with health and safety, construction, engineering policies, procedures and standards, as any landscape architect or architect would.

Pollock agreed with Entwistle and remarked:

There are several public art organisations such as IXIA Public Art Think Tank, AN magazine, Arts Council England providing guidance on the role of art in the public realm on their website. However, these are only guidelines, not regulations that the artists need to obey.

In art practice, one would imagine artists are free from all regulations. However, in some cases, the artists are not completely independent. In public commissions, there are art officers in the local authority, who know all standards and regulations that artists need to follow for certain projects; for example, artworks for schoolchildren's programmes, as referred to by Entwistle. Therefore, artists are not totally free from regulations in art practice. This brings the profession of landscape design and the practice of art closer.

According to the interviews, although there is no professional body in the discipline of art, there is a platform for evaluating artworks, called art critique. Fremantle remarked that:

Generally, the art critics view artworks at exhibitions, galleries, museums or artists' studios and make judgements upon them. The process usually involves analysis and interpretation of artworks based upon a context of aesthetics or the theory of art.

Art critique has usually been confined to various resources. Artworks and exhibitions are often widely reviewed, not just in specialist publications which belong to the art world, but also in local and national newspapers. Thus, the standing of the publication and the credentials of the reviewer are also significant here. However, in recent years,

the internet has given art criticism new platforms such as social media for discussing and critiquing artworks. Opinions from art critics have the potential to arouse debate on artworks and art-related topics, which helps the development of the discipline move forwards, both in theory and in practice. It is possible that these the debates and reviews among art critics on environmental art may reach landscape architects who are interested in the art world. Some of them may pick up the ideas in environmental art through the art critics' debates. Therefore, the review of environmental art via art critiques may directly or indirectly make an impact on landscape architectural design.

To become a professional landscape architect is complex. Wales commented that,

There are educational standards that everyone must achieve, a certain regular standard and level of competency to be able to call themselves a landscape architect In the UK, one must obtain a Bachelor's degree in Landscape Architecture and also a Postgraduate Diploma from a program accredited by the Landscape Institute (LI). They must be trained after graduating. Totally, it could take approximately six to seven years to be a professional landscape architect The process is slightly different in other European countries and the United States. But generally, they all went through similar procedures.

Wales also remarked that the professional bodies of landscape architecture also provide a code of conduct⁵⁶, which lays down standards for the practice of landscape architecture.

The differences between the two occupations were greatly recognised by the specialists interviewed. Haley also added that:

Broadly speaking, we're talking about two different occupations. ... The profession of landscape architecture comes out of design, and the profession of environmental art comes out of art creation. Practitioners of landscape design

⁵⁶ Code of conduct or code of ethics is a standard of professional conduct and practice expected of registered landscape architect (Landscape Institute, 2016).

are tackling and doing problem solving. But artists have got into that territory as well. The artists have been hired by cities to solve problems, like landscape architects The two different occupations do work cross boundaries sometimes.

Haley seemed to admit differences between the two occupations. Yet his reply also confirmed that there is an overlap of the professional boundaries of the two disciplines.

The licence requirement for landscape architects and the representative body of the profession such as the Landscape Institute (LI) can actually be considered as a limitation in the scope of landscape architecture, because it engages with rules, regulations and policies shaping profession of landscape architects, which limit the extent to which landscape architects can experiment, evolve or be creative. In contrast, the practice of environmental art does not provide any professional guidelines to the artists, who are freer to work creatively. When liberated from professional licence requirements and a representative professional body, environmental art practitioners may be free to reinvent and reinterpret themselves over time, so that there are vast variations in environmental art in the contemporary context.

7.2 SCALES AND SCOPES OF PRACTICE

There was general agreement among most specialists interviewed that works of both environmental art and landscape architecture are varied, in both scale and scope. Concerning scale, environmental artworks could be at a small scale, while some art installations could be large. The scales of art are also diverse. Theaker noted that:

Most environmental arts in the United States at the end of 1960s were usually gigantic in scale and placed in remote settings. The artwork succeeded in its aim against gallery or museum culture. On such an enormous scale, the artwork would have been unfeasible in a gallery or museum.

Pritchard agreed with Theaker, and added that the large scale of art in the early years was associated with Modernism. With simplicity of forms in large-scale artworks, the messages or concepts of the artwork could be amplified. However, during the later development of environmental art, artists no longer worked on a gigantic scale as in the 1960s or 1970s. Hyde noted that, 'The contemporary environmental works became typically at small or medium scales'. Regarding this, Pritchard commented that the environmental artworks in later periods were linked with the Postmodern approach, which emphasised association with site and the experimental aspect. All specialists supported the idea that works of landscape architecture cover different scales, from small garden installations to large-scale planning. Wales stated that

The arts can be at a small scale, whereby you can hold them in your hand, or else they can be as gigantic as a big earth work.

Regarding this, Hooftman commented that

Landscape architects work on small installations and in collaboration with the world of big-scale planning; zooming out and zooming in from strategic planning down to the landscape detail design.

Concerning the scope of works, there were various forms of artworks. The specialists interviewed did not mention specific case studies. The researcher provided examples of variation of scale and scope of environmental artworks in Figures 7.1–7.6.



From top to bottom, from left to right: Figures 7.1 – 7.2: Works of Andy Goldsworthy: Horse Chestnut Tree Torn Hole (1986) and Yellow Elm Leaves Laid over a Rock (1991), Figure 7.3: Ian Hamilton Finlay's Stoney Paths (1984), Figure 7.4: Chris Drury's Carbon Sink (2011), Figure 7.5: Dani Karavan's Passage or Walter Benjamin Memorial (1994), and Figure 7.6: Christo and Jeanne-Claude's Valley Curtain (1972)

On the other hand, the specialists interviewed concluded that the scope of work of landscape architecture is wide. Concerning this, Moore commented that 'landscape architecture was an extraordinary discipline, covering a wide scope of works'. Davis agreed with Moore, commenting that:

Landscape architects' work includes the design of all outdoor spaces including public parks, plazas, streets and parkways, college campuses, trails and campgrounds, backyards, playgrounds, shopping centres and environmental restoration, to name a few. The scope of work is diverse in form and scale, ranging from residential design to wilderness management. Landscape architects perform professional work in the planning and design of land for human use and enjoyment. They produce overall plans and landscape designs for site improvements based on analyses of environmental, physical and social characteristics, and economic considerations.

With regard to the scale and scope of landscape architecture, responses from the specialists were divided into two groups. Some specialists said that the ability to work across scales was one of the great strengths of landscape architects; landscape architects should be able to work across scales, opening up all opportunities for their works. Others believed that working at broad scales may have caused overlapping of practices, which may have led to misrepresentation of the profession. However, landscape practitioners did not always have to do everything on their own. Each individual practitioner could become expert in particular areas.

7.3 PUBLIC PERCEPTION OF ENVIRONMENTAL ART AND TERMINOLOGIES

In terms of public perception, the environmental artists also speculated on the misperception of their practices. According to the specialists interviewed, there were three main causes. Firstly, the term *environmental art* is conspicuously diverse; there are several closely related terms, such as site-specific, Land Art, earthwork, etc. Hooftman pointed that 'Environmental art as a category sounds really puzzling It's the word of insanity'. Theaker also noted that:

I suppose this [shown in Figures 7.7–7.8] is site specific. I would refer to it as an earthwork. You walk round into the centre, so it is meditative. You walk out on the same route, so it is site specific. It is meditative and it's an earthwork. It may contain an environmental message. So, is it environmental? The working process to make this is not necessary sympathetic to the environment. It is the same as these sculptures in landscape [illustrated in Figures 7.9–7.11].

Thwaites pointed out that:

The terms are distant from people's actual experience and the reality of the world. The term used in the discipline is one of the reasons why the works of the two disciplines are not properly recognised.



Figures 7.7 – 7.8: Longleat Park in Wiltshire, England



From left to right: Figures 7.9 – 7.11: Work of Patrick Dougherty. Figures 7.3-7.4: *Na Hale 'Eo Waiawi* or *Wild Dwellings* (2003), *Around the Corner* (2003) and Figure 7.5: Nils-Udo's *Nest* (1978)

Secondly, the artists themselves were reluctant to be identified in specific terms, e.g. land artists, site-specific artists or ecological artists. Richardson commented that the artists preferred to be avant-garde artists with no exact title. Entwistle shared her view that:

There're lots of artists working in the environment – they call themselves ecological artists, urban artists, public artists, etc. So, it doesn't matter; it depends on your concepts.

She adds that, 'I feel when I say "environmental artist", it restricts people's perception of what you do and how you do it.' Entwistle seemed to share what artists in general commonly do. Artists usually prefer not to have a label in any title as they did not want to be bound by any preconceptions.

Finally, the perception can be blurred by mistranslation. Haley described his view that:

One of the issues that I understand is that ... from the artist's point of view ... they find it's very difficult to understand the environment and the word 'ecology'. What happens over time is that these words start to lose their meanings The old meanings have been lost.

Haley also pointed out that different contexts may provide different meanings to the terminology. He remarked that, 'For example, the conception of "green" in Taiwan is interpreted differently from how it is in the UK'. Haley also provided several examples of words which have been interpreted differently according to the context such as 'green industry', 'ecological issues', 'environmental issues', etc. For example, ecological issues in Taiwan would be very different from ones in the UK. Artworks have not been understood properly owing to this language barrier. If this mistranslation were to persist over a long period, it could eventually result in an overall misunderstanding of the practice of environmental art.

In the artists' group discussion, most specialists concluded that terminologies in the discipline of environmental art were significant, particularly in terms of how the discipline was perceived and understood by the public. Currently, several terminologies in the discipline of environmental art, such as the term 'environmental art' itself, remain loosely applied; their definitions have been ambiguous and have embraced a wide range of practices, including that of landscape architecture. As a result, not only has the discipline of environmental art been not properly understood, the distinction between environmental art and landscape architecture has also been unclear. In this regard, there were two contradictory responses from the specialists interviewed. Firstly, most specialists suggested that, in order to obtain a precise perception of the discipline, it is very important how the terminologies should be

understood, how they should be applied, and how the disciplines of landscape architecture and environmental art should be differentiated. The terminologies should be understood so that the discipline is perceived precisely. Pritchard pointed out that the resolutions for the terminology of environmental art, as well as landscape architecture, have been tightly limited within the boundary of professional institutions, city council commissions, university departments and by individual practitioners. Definitions and terminologies provided by many related institutions often conflict. Therefore, the issue of terminology in the two disciplines is rather difficult to resolve. Pritchard later strongly encouraged all related institutions and practitioners of both environmental art and landscape architecture to continuously make efforts to resolve the issue.

Some specialists suggested that terminologies could be considered as another form of problem or barrier in terms of expressing ideas. Regarding this, Goto-Collins pointed out that there were certain rules or boundaries of terminology, which may not have been precisely absolute. Therefore, Goto-Collins strongly asserted that both the disciplines of environmental art and landscape architecture should not been have bounded by the barrier of terminology. Moore had an opinion consistent with that of Goto-Collins, and noted that it was very important to communicate across different perspectives and different disciplines. In order to assist communication across disciplines, the language of landscape architecture needed to be expanded. Each discipline should have developed a communication framework. In this way, each discipline could have understood the communication network properly.

7.4 CURRENT ENVIRONMENTAL ART PRACTICE

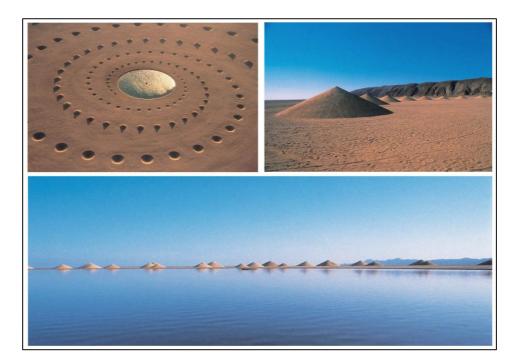
This section discusses the current practice of environmental art. As suggested by the specialists interviewed, when the discipline was established in 1960s, there were two traditional practices of environmental art. The first one stemmed from Heizer to Charles Jencks, which was Land Art; this was primarily about sculpting the land. The other was the practice which expressed concern for environmental issues or environment-related issues, such as works by Mel Chin, Reiko Goto-Collins, Laura

Harrington and organisations such as Platform, Arts Catalyst, etc. However, all specialists in environmental art confirmed that the two traditional practices of environmental art had already changed. The current practice of environmental art is viewed in two different aspects.

In the first view, environmental art is already dead. In this regard, Hooftman stated that,

Environmental art has already died years ago It was a product of the 60s or 70s. It had great influence on all design disciplines. Even though it is dead, it has great offspring and tells a lot about how that generation creates. It is my interpretation There are still fantastic artists who still operate on this intersection between the sciences and arts, and are doing fantastic interesting things.

Hooftman's 'offspring' may have meant the new generation of environmental artists, who were influenced by the art of the 1960s. In this researcher's opinion, the environmental art of the 1960s may have not been dead, as suggested by Hooftman, because the artworks in the grand scale, in the same manner as the environmental art of the 1960s, are still evident in a contemporary context; for example, *Desert Breath* (1997) (Figures 7.12–7.14). Though installed by the Red Sea in El Gouna, Egypt, *Desert Breath* was created by D.A.ST (three Greek artists: Danae Stratou, Alexandra Stratou, and Stella Konstantinidis) (Jobson, 2014). The art extends over an area of 100,000 square metres and its construction required the displacement of 8,000 cubic metres of sand formed to create precise positive and negative conical volumes. Though *Desert Breath* or other environmental arts may have not come as the same surprise as Smithson's *Spiral Jetty* (1970) once did, it is one proof that environmental art may have not died as suspected.



Figures 7.12 - 7.14: D.A.ST's Desert Breath (1997)

In the second view, current environmental art has been transformed into a different type of art, such as media art and performance art. There are various aspects and approaches in the current practice of environmental art. Pollock pointed out that:

Strands of practice differed from what they had been; some of them were diminishing, some of which were gaining increasing strength in current time. There were various different affecting factors, including the development of practices, funding, and aesthetic concerns, etc.

Pritchard commented on current environmental art practice that:

The current practice of environmental art responds more creatively to landscape with more uniqueness than the two traditional practices. The contemporary environmental artists focus on expressing, reflecting, responding, and highlighting characteristics of specific environments or context to their arts. Some current environmental artists respond to and reflect on landscape by mulling over issues of permanence and ephemerality, change and time. An

example is the environmental artist, Matt Baker, whose works are concerned with how people engage with particular landscape.

Pollock agreed with Pritchard and added that, 'The line between contemporary artworks cannot be drawn around conventional ways'. Pollock may have meant that traditions or forms of contemporary environmental art are totally different from the environmental art of the 1960s. Pollock continued:

There is no dominant intellectual thought, and that is a positive thing. Instead we have a creative, intuitive and exploratory practice that responds to the issues presented by the context of the work.

Conclusively, environmental art may no longer be surprising in the way it once was. Yet, environmental art may not be dead, but has continued to grow progressively.

In terms of recommendations for the current practice of environmental art, Pollock remarked that current policies and strategies driving the sustainability agenda were neither relevant for nor compatible with the contemporary practice of environmental art. Individual practitioners and academics have more advanced knowledge of sustainability ideas, standards and techniques applied to the arts than the actual policies and strategies provided by cities and councils. If cities and councils had provided advance knowledge of sustainability standards, and techniques for the arts, this would have assisted in generating environmental art in the long term. Funding and commissioning institutions should have been more supportive to the artists and enabled more works or projects for artists; therefore, future works of environmental art could be more developed.

7.5 PUBLIC PERCEPTION OF LANDSCAPE ARCHITECTURE

Misperceptions of the discipline by the public became strongly evident in discussions between the researcher and the specialists. All specialists from the two disciplines strongly confirmed that public perceptions of landscape architecture have been misinterpreted; however, this occurred in different respects. Most specialists from

both disciplines commented that landscape architecture was not well acknowledged as a profession, and landscape architects were mostly perceived as specialists in plants. Thwaites stated that:

It is a silly example – but you know, I am qualified as a landscape architect and I have a PhD in landscape architecture. But if I say this to people, they would ask me about the diseases on their strawberry plants. I think it is because they assume you know about the garden; they assume you know about plants. And the rest of it ... the 99.9999% of what we know about and do, and what we are interested in, they just do not associate it with landscape architecture.

Thwaites's thoughts on the public perception of landscape architecture seem to be quite provocative, yet substantial. For most people, most landscape architects are indeed perceived as plant experts. This misperception of the profession may impact on how landscape architects convey their creativity in landscape design and the ability of landscape architects to operate landscape design in a more expansive way. It also results in fewer commissions, as clients turn to architects instead, or to commissions where the landscape architect is brought in late to perform a very limited role in planting design. This impacts in a damaging way on the profession, perhaps more so in the UK than in North America. Here are three views that seem to be held by specialists.

Firstly, if compared with other built environment and design disciplines, such as architecture, landscape architecture seems to be relatively new and invisible. Most people in general do not understand what landscape architecture is. Ian Thompson, a specialist in landscape architecture, said:

The profession is both young and old. It goes back to ancient roots. You can talk about it in the Renaissance, in terms of gardens or garden design, but in terms of the landscape architecture profession, it began with Olmsted and Vaux and Central Park, so it is much younger in that sense. So, it is a young profession with old ancestors.

Thwaites also supported Thompson's idea and mentioned that:

Everybody knows what architecture is and most people know what engineering is. I think it is like law, accountancy and medicine, and those sorts of things that have always been there as names that we give to professions and we all know them. Landscape architecture is just another name of a profession, but it is something that does not immediately pop up to the surface like 'doctor'. Nurse, we know. Landscape architect, we do not.

Secondly, most specialists agreed that the broad boundary of the discipline may have made it difficult to perceive. Tim Waterman, a senior lecturer in landscape architecture, commented that the scope of work for architecture or art was apparent, whereas the scope for landscape architecture was not. The scope of work for landscape architecture was unlimited. As a result, people could not pin down what landscape architects actually did. Nevertheless, most specialists in landscape architecture still insisted that landscape architects should have remained working within the broad territory, as this opened more opportunities for them to work. Waterman commented that, 'The landscape architect should be working at all scales – regional planning and a lot of work in a wide context'.

Finally, the reason for the ambiguous image could have been derived from the invisibility of the body of completed work in landscape architecture. Thompson noted that:

There is something about the nature of our profession, which is kept somehow out of the public eye. Peter Walker's *Invisible Garden* came out [was published] because he felt that the body of work was invisible. And you could say that landscape architecture is the invisible profession. I mean ... we do all these interesting things, and you would think the world would love us. But nobody pays that much attention.

Thompson continued:

And when landscape went through that period of very naturalistic and very scientific design and was not very bold and clear in form, then it became even more invisible. So, it was the period when nobody knew what landscape was.

Thwaites made an interesting remark:

When we present as landscape architects, the perception has already been determined in advance, and it is true that there is not much that we can do to alter the outcomes.

The misperception of the discipline was well acknowledged; the specialists approached this issue from two directions. On the one hand, the specialists suggested leaving the misperception the way it is. Hooftman noted that:

We learn to live with that. It is completely logical because our profession has never had a clear core. But on the day-to-day basis, I have to do what we do and most clients still do not understand, and I have to live with that. It is all problematic and the reality is complex.

On the other hand, there was encouragement for change. Denton remarked in the group discussion:

I think it is challenging out there as landscape architects. Because I think we are not seen as being developed or finely tuned or capable even of producing work that is of an aesthetic quality compared to other professions. I think we lose out; we miss out. The number of high profile projects, which are in a sense landscape projects, won by architects, for example, without landscape architects in sight. So, the battleground is being lost. So, what is the logical place to go? Is the logical place to go to the part that differentiates between landscape architects and earth design disciplines? And make that our own, so we create green infrastructure. We talk about ecologically driven design. Because we are much more comfortable in that sort of woolly area as opposed to dealing with design or aesthetics.

Davis's opinion supported Denton. He stated that:

We should be stronger in marketing ourselves as worthwhile. I think it's important for landscape architects to actually say to the clients that it's worthwhile to have landscape architects getting involved in the projects. That's something we should do always.

This may be the way to resolve the misperception. Davis also remarked that the obscure image could have been resolved via proper promotion by professional institutions towards the public. All landscape architects could have also corrected this misperception at every opportunity, while undertaking their works. As a result, the perception of landscape architecture as a practice could have been properly understood. However, in spite of its imprecise image, landscape architecture is somewhat familiar among environmental artists as they work across similar territory.

The professional bodies, such as the LI, were also prompted to properly promote the image of the profession. Thwaites pointed out that, in order to minimise the misperception of the profession, the LI, as a representative body of the profession, should have clarified the definition of landscape architecture, as well as establishing the boundaries of the profession. Wilkie further added that landscape architecture did not seem to do well in terms of managing to change the current perception of the discipline. Thus, the process of changing perception is slow and has not been highly perceived by the general public. Wilkie then stated that all landscape practitioners should take responsibility for changing the perception of landscape architecture when dealing with their clients and the general public. Once the change in perception has been well established, the benefit can be distributed to all.

7.6 CURRENT PRACTICES OF LANDSCAPE ARCHITECTURE

Although the perspectives of the specialists in landscape architecture on the current practice of landscape architecture were diverse, it could be concluded from the majority that the practice of landscape architecture overall is in a transitional period. Moore's thought on the topic was that:

I think there is a real change going on at the moment. A profound change in the way that landscape architect has been regarded. People begin to realise the true values and complexities of the landscape. ... Perhaps less here (in UK), but certainly around the world. So, there is a massive shift going on, and it is affecting legislation Landscape architecture has to step up. Though I do not know (if we have succeeded), I think it is a great opportunity for us to begin to step up.

Moore may have meant 'step up' in the sense that landscape architects were capable of designing and planning at various scales – not only in small-scale planting; and that landscape architects should be regarded as landscape designers rather than landscape gardeners when presenting their works to clients or while working collaboratively. Thwaites's opinion supported Moore's. Thwaites remarked that, 'I perceive landscape architecture today as being an intellectual discipline and a professional activity which is in transition'. He did not specify which aspects of landscape architecture were in 'transition'. Thwaites also pointed to evidence of the transition of the current landscape architecture, as he later stated:

The visible evidence of that transition is provided by the increasing involvement that landscape architecture has in urban regeneration. We have globally and, you know, evidentially within the UK over the last thirty years, an enormous expansion in urban regeneration. I think it would be very interesting to see the way that some professional landscape architects could be able to exploit these urban regeneration opportunities. It is more a gradual thing. It's probably been driven more by commercial and economic imperatives. Nevertheless, it has provided the multidisciplinary agencies that are rooted in urban regeneration and so on, and provided a chance to see what landscape architecture as a profession has to offer to the reshaping of the urban environment.

The specialists interviewed also pointed out that the current practice of landscape architecture was shifting towards a more globalised context. Hooftman shared his view that:

The profession (of landscape architecture) has become much more globalised Lots of things really have changed. Each region has a specific attitude, and the schools were very much like that. And there's a complete explosion in all kinds of exchange (between regions). In Britain, it is completely mixed. My office has people from Latvia, China, etc. Most of them are from many countries. We are based in Scotland, but we do not even do one product at the moment in Scotland. But we work globally. I am teaching at Harvard and Switzerland. The works are in China, Asia, the Middle East, and across Europe.

Moore's opinion was in agreement with Hooftman. Moore remarked that in several countries across the world, the profession of landscape architecture is well perceived and has good standing, and in some countries, such as China, it is even being considered to be a 'very powerful profession'. Moore further stated that this massive shift has actually happened in several international organisations across the world, such as UNESCO, the United Nations agency, etc. When dealing with contemporary issues such as climate change, food security, global warming, financial crisis, migration, forestation, deforestation and other environmentally related issues, all professions bear responsibilities. However, landscape architects would always be primarily considered in joining co-operative teams along with other related disciplines. For the general public, the perception of landscape architecture has also been greatly improved. Moore also added that, owing to the landscape architect in the UK being regarded as a technician for such a long period, this massive shift may have been slower in the UK. In the researcher's view, Moore may have implied that, in the UK, a landscape architect is still regarded as a technician. However, the massive shift of the profession worldwide could prompt a change in misperception of the discipline in the UK. With this shift, the British landscape architect may not be perceived as a technician in the future.

Most views of the specialists interviewed regarding the current practice of landscape architecture discussed above seemed to be on the positive side. However, there were also some adverse opinions. Davis remarked that landscape architecture was currently

at a crucial time owing to economic difficulties in contrast to a demand for high quality of works. He noted that

Landscape architecture, in my perception, at the moment, I think we are in quite difficult times. The budget is very constraining, and client's expectations are really greater and the time-scale for the design has been reduced. So, it's quite challenging – very challenging.

In the researcher's view, Davis may have been right in terms of budget, as there have been economic issues in most European countries in the past few years, which could have affected the development of landscape architecture in general. Yet, in this difficult time, we were still able to experience several grand-scale landscape projects, such as the Queen Elizabeth Olympic Park (2012) (as presented in Figures 7.15–7.17), the sporting complex for the 2012 Summer Olympics designed by EDAW, the famous landscape architectural firm, which has now merged with AECOM.



Figures 7.15-7.17: AECOM's Queen Elizabeth Olympic Park (2012)

If the budget was really as tight as referred to by Davis, this project would have not been able to proceed. So, the issue of budget may have not been as bad as Davis implied. Davis also added comments regarding the lack of an influential movement on the discipline. He pointed out that:

I think we are actually lacking a strong movement – perhaps influential design. I think there is general environmental awareness. Perhaps the time of the big scheme has gone because of the economic drive. I think there's still a desire to provide good quality public spaces in particular areas.

Recently, the idea of Ecological Urbanism seems to heat up debates among landscape practitioners and scholars. Ecological Urbanism is an evolution of Landscape Urbanism, arguing for a more holistic approach to connect ecology with an urbanism that is not in conflict with its environment (Mostafavi and Doherty, 2010). There have been a number of academic conferences, lectures, exhibitions and publications on the idea and Ecological Urbanism projects worldwide. The concept has been criticised as an idea that is loosely defined from a set of projects without any difference from its predecessor. All built environment professions including landscape architecture claimed to be responsible for the concept. In Charles Waldheim's⁵⁷ Landscape as Urbanism: A General Theory (2016), he argued that landscape architecture is the design discipline best positioned to create sustainable cities through the concept. Even though its scale of concern in Ecological Urbanism is large-scale projects in urban areas, which may be more difficult to perceive than the small- or medium scale of landscape design, it is debatable whether landscape architecture may not have been lacking a strong movement, as suggested by Davis.

In conclusion, even though there may have been issues of economic difficulty, the profound changes going on within the disciplines in recent years seem to be more vivid. The values and complexities of landscape architecture have begun to receive good recognition.

⁵⁷Charles Waldheim is a current Chair of the landscape architecture department at Harvard Graduate School of Design.

7.7 FUTURE APPROACH OF LANDSCAPE ARCHITECTURE

This section discusses how the profession of landscape architecture should progress in the future. As in the previous theme, the interviewees gave various views. Thompson said, 'I don't think there's going to be one particular approach. There'll be several different answers'. According to Hooftman,

Landscape architecture has a great future. We started to work in the more international scale. We really see two things. On the one hand, there are fast moving cities; on the other hand, there are declining cities. We see incredibly rapid urbanisation of cities in Asia. And there is no doubt that our profession should engage with that. In these rapidly urbanised cities, there will be more people living in the cities than the countryside. So, the idea of urbanisation is exactly of this period. We [landscape architects] will become a more urban profession. And we have to deal with this incredible speed and scale of development. On the other hand, some areas are the going into decline. So, there is no rationale for cities to be there any more. This is a big shift in the future that landscape architects have to deal with. ... I am a great believer that landscape architecture will create places for great, more adaptable, and inspiring cities.

While Hooftman's perspective towards the future approach in landscape architecture mainly concerned urbanisation, Waterman's was mainly aimed towards the boundaries of disciplines. He remarked that:

A lot of redefinitions are going on. There are, sort of, struggles at the boundaries, or what people think the boundaries are, between architecture, landscape architecture, urban design, Ecological Urbanism, Landscape Urbanism and probably also environmental art, particularly with environmental art; everyone tries to claim new territories. I think ... where the future really lies is probably in learning to be above boundaries, and learning how to become multidisciplinary and have more collaborative works is really important for landscape architecture. And also in the future, it's about blending together contextual

design and conceptual design. Those are the kinds of things that I think we need to resolve at the moment.

Davis commented on the future landscape architecture:

I think our vision is going to be one of sustainable development. And I think that one is quite exciting. It is to provide external space that is not only well designed, treasured by community, used by the community on a daily basis, but also contributes, in a major way, to minimising carbon footprint to sustainability. We should always be working towards making sustainable design, sustainable landscape, whether it is social or otherwise, we should always be aiming for that. It is very challenging.

Denton agreed with Davis. He remarked that:

I think most works are becoming environmentally driven, in a very broad sense. It is again going back to solving problems. For the future, we are dealing with the issue of global change. So, I think this pressure and this chance seem to be fundamental perhaps, rather than aesthetic. Although having something that is elegant, beautiful and enduring is important. But I think primarily the consideration for most of our works is environmental, social, and to an extent economical; all those strands of sustainability. And these are more powerful things at this moment in time than a new aesthetic or a new manifesto.

Wilkie and Thompson agreed with Denton. Wilkie also remarked that the future of landscape architecture was going to be 'quiet stimulation'. Thompson agreed with Wilkie and remarked that:

The quiet stimulation, yes. We should also measure our impact. So, it would suggest we need a gentle pervasive influence.

Wilkie and Thompson did not particularly explain what 'quiet stimulation' meant. However, in this researcher's understanding, the 'quiet stimulation', referring to the development and perhaps evolution of landscape architecture, were both persistent in however humble a way. With the quiet stimulation approach, significant issues in

development landscape architecture, both theoretically and in practice, could be considered well, which brings more satisfactory outcomes. The quiet stimulation approach, as suggested by Wilkie and Thompson, seems to be a wise move for the future development of landscape architecture.

Thwaites commented on the future of landscape architecture concerning two main themes. His first view was consistent with Waterman in the interview discussion. Thwaites remarked that:

Firstly, I think the unique skill set of landscape architects, in terms of spatial awareness especially, is now particularly well suited to addressing some of the key issues in urban design. Since urban design does not have a formal institute, I think that the Landscape Institute (LI) could give more consideration to how it might embrace the growing interest in urban design. This, I think, is something that, along with a more forceful approach to my first point, would significantly grow interest in landscape architecture across the country, and in so doing would help diversify courses and empower the professional and research communities involved in landscape architecture to develop their multidisciplinary influence.

Thwaites's second view was related to the LI and environmental awareness. He stated that:

Secondly, I think the Landscape Institute should make more of the growing public awareness of environmental issues in general and promote itself as the professional body that is particularly capable of responding with solutions that are environmentally benign.

Moore agreed with Thwaites and commented that there should be more multidisciplinary collaboration. She remarked,

Even with the magazine *Topos*, the European magazines are now global magazines. So, it is a new world out there. In a professional office, we can work in hybrid collaborations – completely international; sometimes it is artists and

sometimes it's architects – not always the same at all. We have to respond to that, and all works have to be reflective of that.

Indeed, the approaches of the future of landscape architecture are various, as stated by Thompson. Though being diverse, perspectives on the future of landscape architecture seems to be promising ones. Collaboration with multidisciplinary teams in all types of future practices was strongly encouraged by the specialists. James Brady, a participating artist, pointed out that one profession could not solve all problems and was very limited in terms of making progress towards hybrid collaboration. Therefore, such collaboration between all disciplines was crucial in facilitating the progress of creating sustainable, environmentally viable surroundings in the future. Both disciplines should be open to collaborations with others. Good collaboration could bring benefit to all. Hybrid collaboration was also strongly recommended in the group discussions. Moore pointed out that landscape architects collaborated with many professions, which were concerned with making environmental changes, including artists and scientists. Good collaborations, where each profession may share their professional expertise and speciality, could not only bring benefit to the projects, but also strengthen their professions. More importantly, the barriers between professions would be taken down. Moore also remarked that recently the profession of landscape architecture is becoming more recognised and has transformed into the glue or catalyst for hybrid collaboration. And in many projects – for example, Chelsea Barracks in London, Hong Kong Park in Hong Kong and several other projects – landscape architects are taking the lead role.

7.8 SUMMARY

This chapter discussed the findings of the semi-structured interviews and focus groups related to the practices of landscape architecture and environmental art. The chapter highlighted issues regarding institutionalised professional divisions between environmental art and landscape architecture. The discussion of the chapter was also concerned with the perceptions and current practices of the two disciplines. Although the issues are exclusively for each discipline, the other may benefit from reflecting on

some aspects of the discussions. The chapter also explored how landscape architecture should approach the future. The vision of landscape architecture in the future was expressed in association not only with environmental art but also with relevant issues within the discipline. These responses have assisted the researcher in drawing conclusions on what the approaches of landscape architecture should be in the future. In conclusion, the differences in licence requirements and professional bodies, which have been long established in each discipline, seem to play a major role in setting the two disciplines apart. However, considering a large number of landscape architectural projects in the manner of environmental art practice, which have been described throughout Chapters Five to Seven, the relevance of environmental art to landscape architecture within the theme of practice cannot be denied.



CHAPTER 8

LANDSCAPE ARCHITECTURE AFTER BEING ASSOCIATED WITH ENVIRONMENTAL ART IN THE 1960s

INTRODUCTION

This chapter presents overarching themes, which emerged from analysis of the findings from the data collection and triangulates them against the findings from literature review. The overarching themes not only encapsulate the relationship between the two disciplines, but also reflect underlying issues of landscape architecture in its contemporary context.

8.1 OVERARCHING THEMES

After analysing the data from the semi-structured interviews and focus groups, the researcher critically synthesised the findings from which key themes are identified. The overarching themes are presented and discussed in this chapter.

1) There may have been convergences in design expression between landscape architecture and environmental art

There seem to be common forms shared between works of landscape architecture and environmental art. However, the specialists of the two disciplines utterly disregarded the common forms, but recommended that the forms of landscape architectural design or environmental art should primarily be guided by site location, one of the most important elements of the two disciplines. This argument is related to two themes comprising 1) responding to the site and the spirit of the site, and 2) common form shared between works of the two disciplines.

2) Identity of place and spirit of place could be damaged by landscape architectural projects or environmental artworks with strong artistic expression

Each site location and context have their own characters and identity. According to the specialists interviewed, landscape architecture or environmental art that primarily aim at artistic quality, without considering site character and identity, could bring adverse effects to the site in the long term. How could landscape architecture or environmental art be harmful to the identity of site location and context? This overarching theme is related to the following two themes: 1) expressing ideas and concepts, and 2) attitudes of practitioners of the two disciplines towards aesthetic values in their works.

3) The lack of understanding of the relationship between humans and nature are a serious weakness in landscape architecture

Landscape architects design the built environment to fit human needs and uses. Understanding the relationship between humans and the environment should be mandatory in the study and practice of landscape architecture. This overarching theme is related to the theme of landscape theory.

4) When the principles of the Picturesque and McHarg's ecological landscape design are applied to landscape architecture, the results are considered dull

This overarching theme is relevant to four themes comprising: 1) concepts of eighteenth-century aesthetics, 2) environmentalism, 3) expressing creative concepts and ideas and 4) attitudes of practitioners of the two disciplines towards aesthetic values in their works.

5) Some principles of Landscape Modernism are not suitable for the discipline of landscape architecture

The discipline of landscape architecture has been directly linked with Modernism since the late 1950s. There was an argument among specialists interviewed that the principles of Landscape Modernism are not suitable for the discipline of landscape architecture. Are the principles of Landscape Modernism not truly appropriated for landscape architecture? If so, why? And which aspects of Landscape Modernism are not suitable for landscape architecture? This overarching theme is relevant to three themes

including 1) Modernism, 2) expression of creative concepts and ideas and 3) attitudes of practitioners of the two discipline towards aesthetics values in their works.

6) The line between Modernism and Postmodernism in landscape architecture is obscure The lines between Modernism and Postmodernism in the discipline of architecture seem to be solid and relevant. According to the specialists interviewed, this line does not seem obvious in landscape architecture. This overarching theme is related to two themes: 1) Modernism and 2) Postmodernism.

7) There is no landscape architectural theory

The discipline of landscape architecture, which has been formally established since the late nineteenth century, could be considered as relatively young if compared with architecture. Nevertheless, the history of practice in landscape architecture can be traced back much further in time. There was a debate among the specialists interviewed that landscape architecture has no theory. The overarching theme is directly related to the theme of landscape theory.

8) Landscape architecture is relevant to environmental art

Influences of environmental art upon landscape architecture are evident in much of the literature. In the course of empirical study, there was evidence suggesting that landscape architecture may have had impacts on environmental art. This overarching theme is related with four themes: 1) public perception of landscape architecture, 2) public perception of environmental art and terminologies, 3) current practices of landscape architecture and 4) the current position of environmental art.

9) An approach to the passage of time should be considered as a primary guiding principle in the theory and practice of the discipline of landscape architecture

Landscape architecture consists of living substances, such as geomorphology of the land and natural light, which are changed and transformed through time. Understanding time and the transformation process of these elements could bring great benefits to landscape architectural design. However, time and the transformation process seem to be applied only as concepts in landscape architectural projects. Should time and the transformation process be considered as one of the main principles in landscape

architectural design? This overarching theme will be discussed further in the next chapter.

10) Professionals in landscape architecture are regarded as plant experts

Landscape architects have actually long been perceived by the general public as plant experts. According to the specialists interviewed, this misperception of landscape architecture seems to remain still. How to fix this misperception? This overarching theme is directly related to the theme of public perception and the current position of landscape architecture.

11) Environmental art is dead

This robust statement was directly mentioned in the focus group discussion. Is environmental art really dead? What about the current practice of environmental art? This overarching theme is related to the theme of public perception and the current position of environmental art.

As in previous chapters, the overarching themes fit into three categories, as presented in Table 8.1. Figure 8.1 illustrates how the structure of the discussion fits into overall thesis and research process.

Table 8.1: Primary Themes and Overarching Themes

Primary themes	Overarching Themes
1. Forms and styles associated with environmental art	1. Landscape Modernism is not suitable for the
and landscape architecture	discipline of landscape architecture
	2. The line between Modernism and Postmodernism in
	landscape architecture is obscure
	3. There may have been convergences in design
	expression between landscape architecture and
	environmental art
2. Significant thoughts and ideas associated with environmental art and landscape architecture	1. Identity of place and spirit of place could be damaged
	by landscape architectural projects or environmental
	artworks with strong artistic expression
	2. When the principles of the Picturesque and McHarg's
	ecological landscape design are applied to landscape
	architecture, the results are considered dull
	3. An approach to the passage of time should be
	considered as a primary guiding principle in the theory
	and practice landscape architecture discipline
	4. There is no landscape architectural theory
	5. Landscape architecture is relevant to environmental
	art
	6. The lack of understanding of the relationship
	between humans and nature is a serious weakness in
	landscape architecture
3. Practices of the two disciplines	1. Professionals in landscape architecture are regarded
	as plant experts
	2. Environmental art is dead

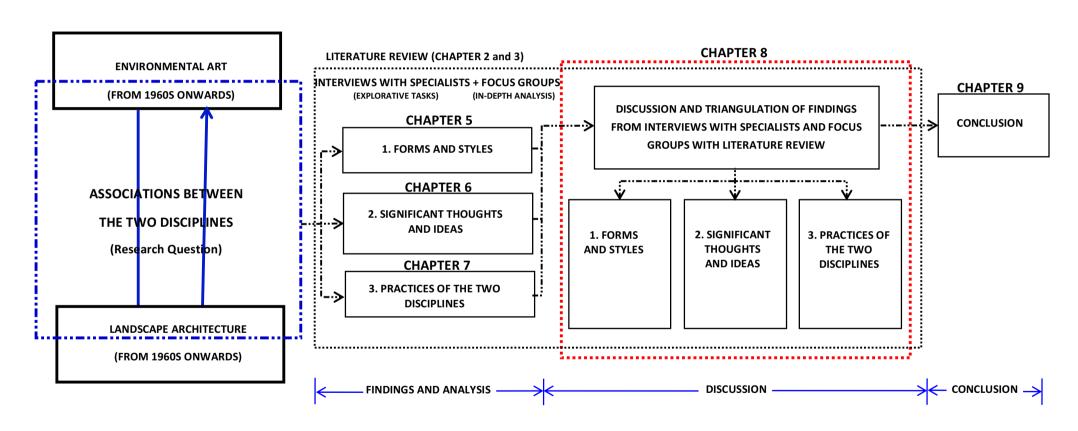


Figure 8.1: Diagram illustrating discussion and triangulation of findings and their interrelations with overall processes.

8.2 FORMS AND STYLES ASSOCIATED WITH ENVIRONMENTAL ART AND LANDSCAPE ARCHITECTURE

This section discusses forms and styles, which comprise three overarching themes including: 1) Landscape Modernism is not suitable for the discipline of landscape architecture, 2) the line between Modernism and Postmodernism in landscape architecture is obscure, and 3) there may have been convergences in design expression between landscape architecture and environmental art.

8.2.1 Some principles of Modernist architecture are not suitable for the discipline of landscape architecture

From the early twentieth century, landscape architecture aligned itself with Modernism (Treib, 1994). Modernist tradition remains relevant to the contemporary practice of landscape architecture. However, the findings of the research suggest that some principles of Modernism are actually neither suitable for nor appropriate to landscape architecture. This section explores the overarching theme of whether the suitability of Modernist architecture principles is correct for the discipline of landscape architecture.

The review in Section 3.2.1 noted that Modernist architecture was widely practised after Walter Gropius, an eminent Modernist architect, brought the Bauhaus principles to the Harvard Graduate School of Design, encouraging the three Harvard rebels, Garrett Eckbo, James Rose and Dan Kiley, to experiment with Modernist landscape design (Thompson, 2014). The review matched the research findings, confirming a direct connection between landscape architecture and Modernism. In the semi-structured interview, Thwaites remarked that landscape architecture was formally established at approximately the same time as the Modernist movement in architecture. As a young profession, landscape architecture became closely allied with Architectural Modernism and was vigorously influenced by its principles.

According to Treib (1994), Modernist architecture emphasises the purity of form and the importance of function, casting aside ornamental elements and attempting to build

a new aesthetic that disregards historical preferences. For Modernist architecture, landscapes or gardens were regarded only as adjuncts to architecture, outdoor rooms which formed part of the overall composition. Schwartz (1994) stated that the principles of Modernist architecture were remarkably uninterested in landscapes and collective spaces but focused on the space within buildings. Nor did they develop a formal attitude towards the built landscape. Landscape architecture, nevertheless, fully adopted its agenda and principles in landscape design and rooted itself within Modernist architecture. Without proper considerations of a romantic sentiment of existing surroundings, the ideas of Modernist architecture are heavily reliant on materials, technology and the social needs travelled to landscape architectural design creating a new spatial sensibility without proper considerations of a romantic sentiment of existing surroundings. Landscape architecture rooted itself in architectural modernity.

According to Treib (1994), reviewed in Section 3.2.1, some principles of Modernist architecture remain essential to contemporary landscape architecture including 1) rationality and functionality; 2) a concern for space rather than pattern; 3) landscapes for people; 4) individual qualities of plants as botanical entities and sculpture; and 5) integration of outdoor and indoor spaces. Indeed, some principles of Modernist architecture are significant in today's landscape design, particularly concerning function, and still remain as founding principles of the practice of landscape architecture. Contemporary landscape architectural practice could not be progressed without the keen rationales in design process and consideration of functions of elements in landscape programmes. Various aspects of Modernist architecture criticism were also discussed. Treib (1994) also pointed out various aspects of Modernist architecture that have been criticised, particularly international style, which was usually one of simplicity and clarity of forms with elimination of ornaments. Appearances were meant to be universal and suitable in any site setting. In other words, the international style aspect of Modernist architecture completely turned its back on the genius loci, the vernacular and all forms of local knowledge (Thompson, 2014), which were at the heart of landscape architectural design. Remarks by Treib (1994) and Thompson (2014) match the findings of the research. Thwaites noted that Architectural Modernism was concerned with building, quality of construction and prefabrication. Landscape

architecture is principally about place-making, and is only occasionally concerned with buildings (Murphy, 2005). For landscape architecture, place and nature were considered to be the primary concerns. Landscapes are consistently transformed according to living substances, which are growing and changing. In other words, the principles of Modernist architecture focus inwardly towards objects or buildings, while the nature of landscape architecture itself is always outward-looking. However, when applying the principles of Modernist architecture, landscape architecture becomes disconnected from natural surroundings, and when integrated with Modernist architecture, the intrinsic values of landscape architecture are taken away. The principles of Modernist architecture have generated intellectual and theoretical difficulties for landscape architecture. The research findings and review of the literature confirm that those principles are not suitable for the discipline of landscape architecture.

The research findings also suggest that with the emergence of ecological landscape design in the late 1960s, in which natural surroundings were of central significance, in contrast to the principles of Landscape Modernism, the connection between landscape architecture and Modernism seems to have changed. Contemporary landscape architecture may no longer be directly attached to Modernism except for the principles of rationality and functionality. The evidence of the research prompts consideration of our paths within landscape history. What we need to do is reconsider where landscape architecture should locate itself in the discourse of rationalism, functionalism and nature.

8.2.2 The line between Modernism and Postmodernism in landscape architecture is unclear

Modernism's ideology erases history and wipes away the chaos and confusion of previous ages to replace them with the accumulated knowledge and wisdom revealed through rationality (Treib, 1994). Postmodernism, emerging around the 1960s, is sensitive to site context and history. When environmental art and landscape architecture became associated in the 1960s, the transformation of two significant movements, Modernism and Postmodernism, gradually began. According to the

research findings, the line between Modernism and Postmodernism in landscape architecture is unclear. This section explores that overarching theme.

In the semi-structured interview, Thwaites pointed out the unclear lines between Modernism and Postmodernism in landscape architecture. Thwaites probably meant that the underlying ideas and design expressions of the two movements were not obvious. No review of the literature directly stated any consideration of unclearness between Landscape Modernism and Landscape Postmodernism. In fact, the researcher discovered that the literature on the subject of Landscape Postmodernism is rather limited. The researcher's observation is supported by the findings in the literature. Schmandt (1999) remarked that while the literature on Landscape Modernism is abundant, the literature in Landscape Postmodernism is scarce. Only a handful of authors, such as Charles Jencks, George Hargreaves, David Ley and Caroline Mills, have explored Postmodernism in landscape architecture. Most reviews of Landscape Postmodernism are mixed with descriptions of architectural forms and accents, or they classify the type of development found within these landscapes. This review is consistent with the findings of the research. Waterman noted in the semi-structured interview that:

One of the problems is that we don't have a discipline to understand Postmodernism in landscape architecture yet.

Waterman's remark was supported by Moore, who stated that, 'I don't think there's a cohesive body of works [in Postmodernism]'. Confirmed by the interview and literature findings, the body of works in Landscape Postmodernism is indeed limited.

The researcher continued to explore in terms of the ideology of the two styles. Barrett (2007) commented that Postmodernism is both the continuation and the rejection of Modernism. Barrett's (2007) notion is consistent with Thwaites, who commented that Modernism and Postmodernism are two sides of the same coin that respond to one another, so that the two movements form similar aspects. Kastner (1998) stated that Postmodernism is sensitive to the fragmentation of the past and also interested in the

exploration of culture and issues of site location and surroundings. Thus, Postmodernism is pluralistic, allowing various interpretations and accommodating a diversity of viewpoints. The non-fixed set of theories can present a puzzle. As reviewed in Section 3.2.2, Koh's (1982) ecological design in environmental design disciplines including architecture, landscape architecture, urban design and interior design can be classified as both Modernism and Postmodernism. Koh (1982) argued that aspects of contextualism or environmentalism ecological design, which are concerned with the interrelationship between humans and the environment, can be categorised as Postmodernism. However, according to Koh (1982), an aspect of determinism of ecological design, in which decisions on design or development are based on the determination of environmental evaluation, can be viewed as Modernism. The deterministic aspects of the ecological design are indeed in an ambiguous position, which supports the argument of an unclear boundary line between Modernism and Postmodernism.

Not only the underlying ideology of the two movements but also the form and style of Landscape Postmodernism can be considered unclear. Although most Landscape Postmodernist works have radically different forms and appearances from works of Landscape Modernism, some works from both styles share similarities. The Modernist form holds values of truth in materials, singularity, straightforwardness and simplicity. However, Landscape Postmodernism, in which the form and characteristics are gained through ongoing experimentation, re-examination and reinterpretation of history and site location, generally has a pluralistic style. Postmodern spaces and forms are typically complex and fragmented. However, some Landscape Postmodernism can be simplified similarly to Landscape Modernism. Environmental art includes great examples, for instance, works by Peter Walker, which are associated with Modernist art and the environmental art of Postmodernism. As reviewed in Section 3.2.3, Balmori (2010) noted that Walker was interested in the works of Ian Hamilton Finlay, which presented ideas of the recurrence of history and the view of classical art. From their point of view, each new development in classical art gives form to the human discovery of an essential aspect of nature, making it subsequently accessible to people as long as the art form endures. Finlay and Walker's thought, which seems to fit the description of Postmodernism, is reflected in Walker's Tanner Fountain (1984), which has the simplicity of form of Minimalism. A certain piece of environmental art could thus be an example of Modernism or Postmodernism, depending on the intention of the creators. A possible explanation of the ambiguity in the classification of works such as environmental art may be that the boundary between Modernism and Postmodernism in landscape architecture is unclear. Waterman shared his view:

We need to continue the exploration. In the future, I think we probably can draw the boundary between Modernism and Postmodernism quite differently from what we do now.

Further exploration, as suggested by Waterman, could assure a distinctive line between the two movements and help strengthen the foundation of landscape architectural theory overall. Both Modernism and Postmodernism have had successful times. Although the boundary line between the two movements may be unresolved, these two movements have created openings which allow thoughts, ideas and new formations of landscape design to follow.

8.2.3 There may have been convergences in design expression between landscape architecture and environmental art

Thoughts on the interrelationship, in terms of design expression, between works of landscape architecture and environmental art were firmly reflected by the specialists from both disciplines. In their semi-structured interviews, Davis and Entwistle pointed out that resemblances in form and design expression between works of the two disciplines are apparent. Entwistle also referred to a dominant landscape architecture book, Braun Publishing AG's 1000 X Landscape Architecture (2010), which revealed various examples of works by the two disciplines with similar design expression.

That 1000 Landscape Architecture book. I am sure that you will find 10% of landscape architects who will crash in the same categories with environmental artists. Some say they are environmental artists; some say they are landscape architects.

Davis and Entwistle were right. The resemblances of design expressions between works of the two disciplines is apparently noticeable in some projects. Some artists working with landscapes, such as Entwistle, who have been practising in environmental art for over a decade, even call themselves landscape architects, even though their works are categorised as environmental art. Artworks in landscapes by artists such as those by Entwistle obviously lie in between landscape architecture and environmental art. Strong correlation in design expression between landscape architecture and environmental art has been reported in the literature, as reviewed in Section 3.2.3. Beardsley (1998) pointed out that Peter Walker shaped land forms in a similar manner to earthwork artists such as Carl Andre, Ian Hamilton Finlay, Michael Heizer and Richard Morris, etc. Weilacher (1996) remarked that Smithson's idea of presenting nature through artforms in his Spiral Jetty (1973) was referenced in George Hargreaves's Guadalupe River Park (1990) in San Jose, California. In a more recent review, Conan (2010) remarked that there is an affiliation between the large S-shaped berm that Balmori proposed for the site of the equestrian games and Robert Smithson's Spiral Jetty in the Utah desert. There have been many reviews and publications⁵⁸ regarding topographic forms by practitioners from both disciplines during the past decade. For landscape architecture, topographic forms are found in works of George Hargreaves's Guadalupe River Park (1990) (Figures 8.2–8.3). For environmental art, examples include James Turrell's Roden Crater (1979), Herbert Mayor's Mill Creek Canyon (1982) and Trudi Entwistle's Fold (2003) (Figures 8.4-8.6). Viewing the topographic forms from the examples and identifying whether they are works of landscape architects or environmental artists may not be simple. Their land form expressions resemble one another. However, linkages in topographic forms designed or created by practitioners of the two disciplines have barely been reviewed in literature.

⁵⁸ For key examples see Weilacher, 1999; Braun, 2010; Balmori, 2011, etc.



Figures 8.2–8.3 (top row, left to right): George Hargreaves's Guadalupe River Park (1990); Figures 8.4–8.6 (bottom row, left to right): James Turrell's *Roden Crater* (1979), Herbert *Mayor's Mill Creek Canyon* (1982) and Trudi Entwistle's *Fold* (2003)

Considering periods of construction and apparent correlations in terms of forms and ideas between the projects, it is possible to argue that the ideas in creating environmental art may indeed directly or indirectly have an impact on landscape architectural design. The relevance of environmental art to landscape architecture in terms of forms and ideas can thus be confirmed.

Specialists in all focus group discussions generally agreed that design expression, particularly in topographic form between works of landscape architects and environmental art, may have been interrelated. However, the correlations between the two disciplines regarding design expression should not be encouraged for two main reasons. Firstly, practitioners of the two disciplines practise with a wide range of skills and techniques, yet their specialities are unique and superior in their own ways. Thus, instead of identifying the similarities or common forms or design expressions between works, each profession should rather develop its own professional expertise separately from the other. Secondly, the creation or design expression is unique within the process of creativity and subjective to each individual landscape designer or artist. The forms of

design or creation should be fluid and subjective to each individual artist or landscape designer. According to the research findings, identifying particular design expression in landscape architecture work and environmental art seem to be strongly discouraged by the specialists from both disciplines. In a way, the specialists are taking issue by saying that it is not a matter of landscape architects doing it one way and artists doing it another. Each discipline definitely has its own approaches and specialties. Individual practitioners also have their own way of working, whether they are landscape architects or artists. However, there does seem to be general agreement that both sets of practitioners initially look to the landscape for guidance and inspiration.

8.3 SIGNIFICANT THOUGHTS AND IDEAS ASSOCIATED WITH ENVIRONMENTAL ART AND LANDSCAPE ARCHITECTURE

This section discusses significant thoughts and ideas, which comprise six overarching themes, as follows: 1) how identity of place and spirit of place may be damaged by landscape architectural projects or environmental artworks with strong artistic expression; 2) when the principles of the Picturesque and McHarg's ecological landscape design are applied to landscape architecture, the results are considered dull; 3) an approach to the passage of time should be considered as a primary guiding principle in the theory and practice of landscape architecture; 4) there is no landscape architectural theory; 5) landscape architecture is relevant to environmental art; and 6) the lack of development in the understanding of the relationship between human beings and nature is a serious weakness in landscape architecture.

8.3.1 Identity of place and spirit of place may be damaged by landscape architectural projects or environmental artworks with strong artistic expression

Both landscape architects and environmental artists work with outdoor site locations at various different scales, each of which has its own distinct character and identity. When referring to character and identity of site, the literature refers to two key concepts (Relph, 1976; Motloch, 2001), identity of place and spirit of place, both of which should

be recognised by all built environment designers, including landscape architects and environmental artists (Motloch, 2001). However, according to the research findings, artistic landscape architecture or environmental art could damage the identity and spirit of the place.

According to the review in Section 3.4.1, site location is related to the concept of 'place', which goes beyond the consideration of physical characteristics of a site location to include the activities of a site and people's experience of a site. Norberg-Schulz defined a place as in 'the true sense of the word; a space that has a distinct character. Each place has a unique identity' (Motloch, 2001, p.57). Relph (1976) defined the identity of a place as 'a persistent sameness and unity which allows that place to be differentiated from other places' (p.45). Identity of place usually refers to a small context or to particular site locations. The identity or distinctive characters of larger site contexts are usually referred to as the 'spirit of place' or the 'genius loci' (Motloch, 2001). Thompson (1999) noted that Alexander Pope made the genius loci an important principle in garden and landscape design. Both concepts of identity of place and spirit of place are relevant to landscape design and art creation. The literature also highlights two other concepts: 'placeness' and 'placelessness'. Norberg-Schulz (1980) defined 'placeness' as 'the cognitive effect that occurs when the characteristics of a place convey a distinctive character, and communicate an image of a specific location that endures long after being moved on to other settings' (Motloch, 2001, p.57). 'Placelessness' occurs when a location lacks a distinctive character of site context (ibid). Motloch (2001) suggested that all built environmental designers, thus, are encouraged to design for 'placeness', which is responsive to the place identity and genius loci.

Motloch (2001) suggested that all built environment designers should capture the place identity and genius loci and embrace them the design and creation process. Motloch's view is supported by the research findings, as the need to embrace and enhance place identity and genius loci in landscape design and art creations was strongly encouraged by specialists from both disciplines. Denton pointed out in the focus group discussion that:

All of the works, as far as I can see in my experience, are about everything in the place, and about the place. ... Landscape design is all about place.

In the discussion, Denton also referred to his memorable moment at a private meeting, several years ago, with the icon of the landscape architecture discipline, Sir Geoffrey Jellicoe. Denton remarked on Jellicoe's words:

I may not be able to identify the particular trees. But I do know about the spirit of the tree.

Jellicoe's wise words amplify the significance of the concept of spirit of place or genius loci. Although findings investigated in this research did not directly show a link between environmental art and identity of place, the artists interviewed seemed to acknowledge the importance of understanding site and of recognising the characteristic features of a site in the art-creation process. Entwistle also noted, in the focus group discussion, that most environmental artists look beyond the physical and tangible elements of a site to understand the spiritual and intangible quality of a site. Entwistle's remark and Denton's reference to Jellicoe confirm the literature findings in Section 3.4.1, which stated the significance of tangible and intangible components of the concept of place. Norberg-Schulz (1980) remarked that the place is composed of not only the existing tangible natural environment, which may include land form and topography, but also intangible elements such as activities, situations and events; meanings created through people's experiences of a specific place. Spirit of place or genius loci, which has abstract quality, may be counted as intangible elements in the realm of Norberg-Schulz's place. 'The spirit of the tree' in Jellicoe's remark is intangible; yet, its abstract quality signifies the importance of the tree's existence for the site location. Landscape architects are also concerned with intangible components of the concept of spirit of place or genius loci, which have emerged in the discipline of landscape architecture since the time of Alexander Pope in the eighteenth century. However, according to the findings, landscape architects tend to prioritise other factors such as functions and uses beyond site identity and spirit of place, leading to criticism when dealing with the site.

According to the research findings, most creations of environmental art were highly praised for creating artworks that were well-blended with the site and embrace the spirit of place or genius loci. This quality of the artworks is a great example for landscape architects to follow. However, the research findings also identified criticism of some environmental artworks or landscape architectural projects in a particular site location where priority was given to the artistic values of the artworks over the character or identity of the site. Referring to works of both landscape architecture and environmental art with strong artistic expression, Thwaites made a firm statement in the semistructured interview that it is 'dangerous' to prioritise this approach as an artistic device over the site identity. Though Thwaites did not specify this, his statement directly referred to the fact that if the landscape architect is primarily driven by artistic motives, the identity and spirit of a place or genius loci may be damaged. The findings of the research also suggest that when works with strong artistic expression were created, the identity of place or spirit of place tended to be ignored. In this regard, Denton pointed out that a number of works by Martha Schwartz such as the Bagel Garden (1979) in Massachusetts and the Davis Residence (1996) in Texas (Figures 8.7-8.9) may have aimed solely towards artistic expression, so that the consideration of place identity and spirit of place were disregarded. Denton further noted:

There is no consultation with the place. Nothing about this work is related to the place or community.

Without consideration of the characteristic of place identity, this type of design could have made the place become undesirably placeless; place identity and spirit of place were also damaged.



Figures 8.7–8.9: Works by Martha Schwartz. *Bagel Garden* (1979) (left), *Davis Residence* (1996) (middle, right)

Landscapes or artworks emphasising artistic expression were strongly discouraged by the specialists interviewed. Wilkie suggested in the focus group discussion that:

My teacher at Berkeley, Michael Laurie, he is fantastic. And he at least once in a lecture would say 'this is not art, this is landscape architecture. Do not think for a second you are an artist'. And I think what he is driving at is that we are responding to the soil, water, and human needs. ... I think good art is a fantastic commentary on where we are. But we cannot be that self-indulgent. We are actually dealing with the life of the land.

When designing landscape, landscape designers must consider various aspects of the site, as stated by Wilkie. Although emphasis on artistic expression may be possible, consideration of all aspects of the site should always be at the foundation when designing landscape architecture. The specialists interviewed also commented that this type of landscape or art works may have brought experiences to people in a community or city; however, it would have only been for a moment in time, so it would not have had a long-term effect on identity of place. In this regard, Wilkie further added:

This type of installation (with strong artistic expression) was a great idea at that time. It adds experience and defines how each community and city is at that moment. ... But this type of work had so much energy in it. It became a trend, which every city likes to possess. ... The trouble is that images become so widely spread. It becomes like a word which loses its meaning. It becomes very hard to see past that image to see the city itself.

Wilkie may have meant that installations with strong artistic expression were so striking and unique that they did not fit with the context. Wilkie also pointed out that the installations should have been temporary: 'When it's time, it should have gone [been removed]'. Wilkie's proposal seems reasonable for the fashionable installations expressing ideas for a particular moment. Yet, when these installations become prominent, their removal would be a difficult task requiring a large amount of financial investment. For example, the iconic London Eye, which Wilkie referred to in the group discussion as an example of an installation with strong artistic expression, was originally

intended as a temporary structure to celebrate the millennium year. However, the giant Ferris wheel is now fixed as a permanent feature on the South Bank of the River Thames, set against the traditional context of the city of London. According to the London Eye's official website, the iconic London Eye attracts a large number of international tourists. Although the removal of the London Eye or other large investment installations seem rather impossible, Wilkie's idea may be applicable to new strong artistic installations.

Based on these discussions, it seems that there was widespread disapproval of landscape design with strong design expression, which could appear to be obtrusive. However, this view may not be universally held. Landscape architects can design landscape that fits the context; the landscape design can be subtle and harmonise with the context. It is also legitimate to have landscape design that is provocative and contrasts with the context, but is still considered as deliberately responsive to the context and still be appropriate. This aspect could be found in landscape architectural works by Roberto Burle Marx, whose design can be considered provocative, yet recognise the local distinctiveness of Brazil, including native Brazilian tropical plants and Brazilian folk art. A number of Marx's works were widely admired. Figures 8.10–8.14 present examples of works by Roberto Burle Marx.



Figures 8.10–8.14: Works by Roberto Burle Marx. Top row: Vergem Grande Fazenda (1979) (left), Raul de Souza Martin's Residence (1983) (middle, right). Bottom row: Olivo Gomes' Residence (1950) (left), Edmundo Cavanella's Residence (1954) (right)

Conclusively, artworks with strong artistic expression are highly discouraged and should not be influential in landscape architectural design. When designing landscape or creating artworks, artistic expression should not be the primary concern; other factors, such as social consequences, should also be embraced. All designs should also be rooted in a clear understanding of the site by observing carefully all compositions on the site, and such factors as the materials that were used historically locally. Selections of designs and art creation which are appropriate to the context are highly encouraged. What sits happily in an urban or industrial space may look obtrusive and out of place in a rural, naturalistic setting. Not paying enough attention to this principle results in damage to the identity of place and the spirit of place.

8.3.2 When the principles of the Picturesque and McHarg's ecological landscape design are applied to landscape architecture, the results are considered dull

The research findings outlined diverse thinking towards two traditional schools of thought in landscape architecture discipline; the Picturesque and McHarg's ecological landscape design. Hooftman stated in the semi-structured interview that landscape architectural design, under the influences of the Picturesque and McHarg's ecological design, were 'not interesting and very boring'. Hooftman's statement was supported by Thompson, who pointed out in the focus group that the combination between the Picturesque and McHarg's approach produced 'really dull landscape'. A number of studies in the literature such as Newton (1971), Laurie (1986) and Motloch (2001) demonstrate that both schools of thought have been hugely influential in landscape practice ever since they first emerged in the discipline. There are many landscape architectural works under the impact of the two schools of thought. These vigorous statements, however, revealed such negative views towards the two theories. Why do the principles of the Picturesque and McHarg's ecological landscape design make landscape architecture 'not interesting', 'very boring' and 'really dull'?

Section 2.3.2 discussed three classifications of aesthetic categories – the Beautiful, the Sublime and the Picturesque – which were widely recognised and debated among critics and philosophers of the eighteenth century, such as Edmund Burke, William Hogarth

and Richard Payne Knight (Thompson, 1999). In Section 3.4.2, how the three aesthetic concepts were associated with landscape architecture was reviewed. According to the review, Picturesque and Beautiful aesthetics were applied by the eighteenth-century English Landscape School, which had risen against French formality and coincided with a growing interest in empiricism. Characteristics of the English Landscape School were generally naturalistic and irregular, and its creations were a close approximation to nature (Balmori, 2010). A view of nature arose when paired with landscape, which made landscape-as-nature. The first widescale practice of the English Landscape School was the Beautiful landscape, also known as Brownian landscape after 'Capability' Brown, its most prolific practitioner. Besides his great ability in reading and transforming the land, Brown was partially inspired by the landscape paintings of Claude Lorrain and Nicolas Poussin, both of whom evoked scenes of Classical Arcadia (as presented in Figures 8.15– 8.17) (Birksted, 2004). The Beautiful, or Brownian, landscapes are naturalistic, uniquely smooth and gentle in character. Their distinct formula included the elimination of terraces, balustrades, and all traces of formality (Thompson, 2014). In rolling landscapes that had an existing small river running through them, Brown typically dammed the river. Therefore, different levels of serpentine lakes were formed connected with the small river. A Brownian landscape also often included a belt of trees around the park, and individual or clumps of trees scattered in the parkland (ibid).

Critic William Gilpin therefore coined the term 'Picturesque' to describe the aesthetic of the rustic landscape scenery, presented in paintings of Claude Lorrain and Nicolas Poussin, which could have been categorised neither as Beautiful nor Sublime (Thompson, 2014). The term 'Picturesque' was enthusiastically adopted so that people started to identify, paint and even physically construct Picturesque scenes and landscapes. Uvedale Price and Richard Payne Knight took the Picturesque painting agenda and applied it to landscape design. Picturesque landscapes were designed and constructed to look like Picturesque paintings and scenery. Picturesque gardens were viewed as if an artist were creating compositions and sceneries in nature, which suggested that the designer not only mixes nature and art but also composes nature as if it were a work of art. As a result, Picturesque landscapes usually look rough and irregular, but also bear a resemblance to nature. In this regard, Townsend (1997)

remarked that when one entered the Picturesque landscape, it was difficult to make a distinction between the existing natural element and the designed landscape. Its signature includes the construction of amphitheatres, curving paths through grass hills, and the arrangement of trees into clumps to frame natural scenes (ibid).

According to Thompson (1998), the terminology of the Beautiful and the Picturesque is not nowadays applied in its original sense, but has become slippery in our everyday use of language. Yet, for landscape architecture, the legacy of the English landscape continues to this day (Balmori, 2010). However, Adriaan Gueze, an eminent landscape architect remarked that the Picturesque landscapes received criticism as being a 'worn out cliché' burdening both design expression and the recreational activities of the park in the past three decades (Herrington, 2006). Its design style is 'too bare and too boring'. The critics perfectly match with the statement of Hooftman in the research interview. When entering a particular section of Picturesque landscapes, it raises the question of whether it is intended landscape design or a natural setting. In other words, to distinguish between the original natural scenery and the intended designed landscape is difficult. Two examples of landscape designs which were influenced by the Picturesque are illustrated in Figures 8.18–8.23. The first example is the English Garden or Englischer Garten (Figures 8.18-8.20), a large public park in Munich, Germany, first designed by Sir Benjamin Thompson in 1789 (Muenchen, 2015). The second is the Frito Lay Headquarters (Figures 8.21–8.23) at Legacy Park, Texas (1985) designed by Sasaki Associates. Their shaping of the designed landscape is romanticised and presents irregular forms with near resemblance to natural surroundings. The principles of the Picturesque landscapes are repetitively applied in park design throughout most Western countries without offering contemporary interpretations. With placing natural landscape elements repetitively in the same manners, the criticism of landscapes as being 'too boring' may not be exaggerated.



Figures 8.15–8.17: Paintings by Claude Lorrain. Imaginary View of Delphi with a Procession (1673) (left), A Sunset or Landscape with Argus Guarding Io (C.17th) (middle) and Nicolas Poussin's Landscape with Diogenes (1647) (right)



Figures 8.18–8.20: The English Garden (Englischer Garten) (1789)



Figures 8.21–8.23: Frito Lay Headquarters at Legacy Park (1985) by Sasaki and Associates.

According to Conon (2000), concerns for the impact of landscape designs on the environment has gained significant attention in the last five decades. As reviewed in Section 3.4.3, in the early 1960s, Ian McHarg, along with dominant landscape architects such as Brian Hackett and others, began to incorporate concerns for the environment into landscape design and planning. McHarg promoted the ecological view, in which the designer becomes congruent with the area through analysis of natural systems such as soil, climate, vegetation, hydrology, etc. His 1969 *Design with Nature* was the first work of its kind to define the problems of modern development and present a methodology or process prescribing compatible solutions (Spirn, 2000). The characteristics of McHargian landscapes were to not only look natural, but that the landscape also should function in a similar way to its

original nature. Balmori and Sanders (2011) and Treib (2011) remarked that McHargian landscapes have no design. Any form of art was not considered in McHargian landscape design.

As reviewed in Section 3.4.3, there are also direct linkages between the Picturesque and McHarg's approach in ecological landscape design. In Design with Nature (1969), Ian McHarg described the eighteenth-century English landscapes as a primal thought of land reclamation, which is one aspect of ecological design. To McHarg, the English landscapes represent a revolutionary transformation in the human conception of and relationship to nature, with humans and nature moving towards a more harmonious relationship. However, the recent study of the relationship between the Picturesque and ecological science by Aaron M. Ellison published in the article 'The Suffocating Embrace of Landscape and the Picturesque Conditioning of Ecology' (2013) demonstrates that Brownian landscape was, in fact, not selfperpetuating, and required a certain degree of maintenance and had few ecological values. With its rough, messy and less maintained character, the Picturesque landscape was considered to have more ecological value than the neatly grazed pastures of a Brownian landscape (Ellison, 2013). The specialists interviewed also concluded that unlike the Picturesque and the Beautiful or Brownian landscapes, McHarg's focus was not mainly concerned with visual qualities, but more broadly, with an ecological sensibility. Pollock also pointed out in a focus group discussion that, to some extent, the ecological landscape could have been considered as un-Picturesque. Figures 8.24– 8.31 show two examples of landscape projects which combine principles of the Picturesque with ecological design. The first is the Fish Creek Park (Figure 8.24–8.31), which provides a retrofit to treat water from a storm trunk discharging to the Fish Creek. It attempts to balance between environmental and recreational functions (Riparia, 2015). The second is the Forest Lawn Creek Park, which aims to divert the stormwater flowing down a canal traversing the landfill site to an ecologically sensitive facility. The park features a naturalised channel with meanders and a floodplain providing wildlife habitat while accommodating water conveyance (ibid). Both parks are located in Calgary, Canada and designed by Riparia. The specific years of design and construction of the landscapes of the two parks were not cited in the original source,

the official Riparia landscape architectural company website. As the two parks were published in the recent portfolio web page, it might be possible to presume that the two parks were designed and constructed around the 1990s or 2000s. In more recent years, designing parks or recreational landscape design in the manner that combines principles of the Picturesque with ecological design can still be seen in various publications and professional institutions' websites such as those of the American Society of Landscape Architects (ASLA), the Landscape Institute (LI) and the International Federation of Landscape Architects (IFLA) in more recent years. The impacts of the two schools remain firmly in contemporary landscape architecture.



Figures 8.24-8.25: Fish Creek Park by Riparia



Figures 8.26-8.31: Forest Lawn Creek Park (2006) by Riparia

According to the literature, the Picturesque landscape aims towards a visual natural landscape; McHargian design, on the other hand, emphasises making the landscape function as a part of nature, and it also aims towards visual natural landscape. It is already difficult to distinguish between existing natural elements from intended landscape design in Picturesque landscapes. When integrating the Picturesque landscapes with the McHarg's approach, it is very likely that landscape design becomes invisible and the line between the original and the intended landscape design is even more blurry. This approach to design seems to be common in park design and site planning. With the repetition of the approach of combining Picturesque landscapes and McHarg's ecological design in a number of parks and site planning, the accusation of the 'really dull landscape' might be plausible.

How the ideas of the Picturesque and principles of ecological science were also utilised in environmental artworks was discussed in Sections 2.3.2 and 2.3.3. In James Pierce's Pratt Farm (1982), in which the Picturesque idea was applied, its audiences need to view the artworks and the site from certain points of view same as guided in Picturesque landscape design. On the other hand, Joseph Beuys's 7000 Oaks (1982), as well as a number of environmental artists, encourage their audiences to reconsider the intrinsic values of the surrounding environments and ecological cycles. In both cases, the environmental artists keenly explored different aspects and offered contemporary interpretations of the two concepts and applied them in their artworks creatively. As a result, the innovations of environmental arts, which employed the same concepts, were praised as being rather interesting instead of dull. Drawing upon the review, the issue of 'the dull landscape' is clearly not about the concepts of the Picturesque and principles of ecological science, but how the concepts were applied repetitively without new interpretations, which fits modernisation. Reflecting upon this, the creatively exploring various angles of the concept should be encouraged in contemporary landscape design. In fact, landscape architects such as Diana Balmori, who designed landscapes in the environmental art manner, and several others, may have already started doing so.

In 2011, Balmori and Sanders demonstrated that the idea of the Picturesque and ecological design has been renewed in the current trend of landscape design; however, this has occurred with the integration of ecological design, as well as art application. Examples include the works of Diana Balmori, which use the flow of nature and natural processes as models to imitate (Figures 8.32–8.36). Balmori and Sanders (2011) noted that the landscape design of the late twentieth century has been criticised as rarely taking issues of artistic form and programmes into design consideration. Balmori (2010) suggested that landscape design should continue supporting the long-term development of mutual interactions between humans and nature; however,

They must be strikingly different from existing environments, signifying a new engagement with nature (p. xv).

Balmori's new form of landscape design, which combines artistic aspects and ecological principles, seem to be a good answer in combining the two dominant concepts in various different landscape types. Her creative works emphasise the essences of the two main principles of landscape architecture, art and science, as stated by Norman Newton's Design on the Land: Development of Landscape Architecture (1971). However, how art and science should be balanced in landscape architecture was not explored in this research and should be encouraged in future research.



Figures 8.32-8.36: Works by Diana Balmori.

Top row: Prairie Waterway Stormwater Park (1996);

Bottom row: The Garden That Climbs The Stairs (2009)

8.3.3 An approach to the passage of time should be considered as a primary guiding principle in the theory and practice of landscape architecture

Most elements in landscape architecture such as plants and living substances, geomorphology of the land, and natural light, are dynamic, transient and transformed through time (Swaffield and Bowring, 2013). The essence of time seems to be relevant to landscape architecture. Understanding time and its process could bring great benefits in landscape architectural design. However, according to Hooftman, the essence of time does not seem to be well acknowledged in the discipline of landscape architecture.

According to the previous discussion in Section 3.4.4 and the research findings in Chapter Six, the passage of time is directly related to landscape architecture in three main aspects. The first is time and the transformation process of living components in

the landscape. Swaffield and Bowring (2013) noted that landscape architecture always involves living substances such as soil, plants and water, which are dynamic, transient, and to a significant degree, indeterminate. The length of time of these elements in the landscape is vastly diverse; some elements such as soils and the geomorphology process are highly resistant over time, while others, such as shrubs and ground cover plants, are completely the opposite. Each of them has its own time frame; most of these are not easy to foresee. Valkenburgh and Saunders (2013) stated that landscape designers should fully understand all elements and figure out how to deal with each living element of the landscape in the full process. Regarding this, Laurie (1986) remarked that the landscape designer of New York's Central Park in the late nineteenth century, Frederick Law Olmsted, had stated that 'a picture so great that nature shall be employed upon it for generations, before the work he has arranged for her shall realize his intentions' (Laurie, 1986, p.8). The far-reaching conception of working with time in the landscape architecture seem to be well acknowledged since Olmsted's period. In the research interview, Hooftman pointed out that knowledge of time of living components in landscape architecture is scattered over the realm of natural science, covering various disciplines such as agriculture, biology, geomorphology and environmental science. Hooftman suggested that it would be wise to embrace the knowledge of time as one of the main principles of landscape architecture. It may be possible to apply Hooftman's ideas in landscape architectural courses. Significant content within the natural science disciplines could selectively be chosen for landscape architectural students, which could include and emphasise the passage of time. Yet, studying the natural science disciplines may not only offer their contents, but help to shape appreciation of nature. It should thus be a topic open to debate within each landscape architectural school as to which types of natural science class should be offered.

Secondly, landscape architects should consider the relevance of time beyond the design process. In the review in Section 3.4.4, Valkenburgh and Saunders (2013) stated that landscape design should address the present and the future, both in short- and long-term time frames, and design should address succession, natural rhythms, movement, changes over time and aesthetics. It must satisfy immediate needs and contribute to the long-term health and sustainability of the landscape and culture. As suggested by Laurie

(1986), when handing over landscape projects to clients, landscape designs are never complete, unlike architecture, and do not always have an immediately perceptible impact. Or rather, the finished landscape of today is not the finished landscape of many years from now. The literature review supported the research findings. Haley remarked in the focus group discussion:

When other built environment professions finished their works, that was when their products were handed in to the clients. This is different from works of landscape architecture. Works by landscape architects do not end there.

The literature review and the research findings are in agreement, signifying that thinking beyond handling projects should be considered when designing landscape architecture. Yet it seems that only a few landscape professionals continue to be involved in their built works after the projects are completed. Landscape architects should more deliberately include in their work predictions how the landscape design will change over time.

Thirdly, the aspect of time can also be expressed as a concept in landscape design. On this subject, Hooftman also mentioned that several environmental artists have worked creatively with time and process, and their work could be considered as the most interesting. For example, Robert Smithson, the celebrated American environmental artist, worked with time in his masterpiece, Spiral Jetty, where its red salt crystallisation process on the Great Salt Lake's eastern shore had been foreseen. Smithson's Spiral Jetty is currently completely different from what it had been when originally installed. Hooftman stated that working with time could have added an interesting aspect to landscape architectural design, especially in terms of process, transformation and transmutation, which occur over time. If this aspect of time is addressed, the landscape will be very special. This view is supported by Valkenburgh and Saunders (2013). Landscape design can take advantage of seasonal climatic conditions, for example, by using plants effectively for their seasonal behaviour, thereby expressing the unique character of each season and the unique sense of each place. Landscapes can be designed spaces that reflect changes in scale, character, sunlight and seasons (ibid). Although the literature review seems to demonstrate subjectivity according to the creativity of each landscape designer, it also gives some ideas of how time could assist

in the creative landscape design process. Landscape architecture should explore its approach to the passage of time further and consider the approach as one primary guiding principle in the theory and practice of the discipline of landscape architecture.

8.3.4 There is no landscape architectural theory

In the semi-structured interview, there was an argument that landscape architecture has no theory. The profession of landscape architecture was officially founded when Frederick Law Olmsted and Calvert Vaux designed Central Park in New York in 1858. Questions and debates over theory in landscape architecture have indeed emerged regularly throughout its long evolution and development as a profession and discipline (Swaffield, 2002). In achieving a harmonious relationship between human needs and the physical environment, the lack of landscape architectural theory would appear to be a problem. Is it essential for landscape architectural design to possess a strong theoretical foundation?

According to the literature and research findings, views on landscape architectural theory are divided into two opposite camps. The first viewpoint is that there are theories in landscape architecture. According to the review in Section 3.4.3, Ian McHarg's theory is a 'home-grown' landscape theory, which embraces scientific knowledge for making potentially contestable decisions in landscape design and planning. The literature review in Section 3.3.2 presents a number of theories in landscape architecture reviewed by Sa Ode (2008). The reviewed landscape theories are, for example, 1) 'biophilia' by Kellert and Wilson (1993), which is concerned with complexity and disturbance; 2) 'restorative landscapes' by Kaplan and Kaplan (1989), which focuses on naturalness; 3) 'landscape heritage' by Lowenthal (1979, 1985) and 'historic landscapes' by Fairclough et al. (1999), both of which aim towards historicity, or 4) 'topophilia' by Lynch (1960), Litton (1972) and Bell (1999), which deals with the issue of imageability and the conception of spirit of place, genius loci, vividness and historicity. Additionally, from the researcher's observation, publications regarding brand-new practices of landscape architecture across the globe seem to be up-to date; whilst critical reviews upon theoretical aspects of the projects are scarce. As a result, a number of publications in practice in landscape

architecture seem to be much higher than ones regarding landscape architectural theory. Not all built contemporary landscape architectural projects were critically discussed in terms of theory.

The second viewpoint states that landscape architecture has no theory. Thwaites remarked in the focus group discussion that there is no landscape theory; rather, there is one theoretical position adopted from other related disciplines such as architecture, urban design and urban planning. Thwaites' view of landscape theory is supported by the literature review. According to Deming and Swaffield (2011), Riley (1990) remarked that landscape theory 'frequently plagiarized from other disciplines' (p.48). Krog (1983) also mentioned that landscape architectural theory was 'lacking of originality' (p.74). However, these reviews must be interpreted with caution. Although landscape architecture may indeed have adopted thoughts and theories from other related disciplines, other disciplines have also adopted ideas from different disciplines. Landscape architecture shares boundaries with several disciplines, including engineering, art, architecture, urban planning and urban design. Treib (1994) indicated that in any design profession, there are two basic sources for new ideas: those that develop from the particularities and history of the profession, and those that are adapted from other fields and disciplines from the social milieu. Therefore, adopting thoughts and ideas from other disciplines should be acceptable if landscape architecture recognises their intrinsic values.

Though the two views on landscape theory differ, the majority of the literature seems to suggest that there are theories in landscape architecture. However, the foundation of landscape theory does not seem to be settled. The findings of the research pointed to two primary reasons why landscape theoretical foundation was not well established. The first reason is the way the discipline has developed over time. On this subject, Thwaites remarked that it depended on which part of the history of landscape architecture was to be traced; each part of the history seemed to possess its own myth, yet development of a theoretical foundation had not been well developed over time. Moore's opinion was consistent with Thwaites, noting that landscape architecture in the 1980s was purely technical; landscape architects in this period did not express their

thoughts and ideas through writing. Previous studies are divided: some support and some conflict with Moore's observation. On the harmonious side, Meyer (1992) and Walker (1998) suggested that landscape architects tended to focus on practical works rather than being critics or philosophers. As a result, there was no significant attempt to construct landscape theories during this period. Publications on thoughts and ideas in landscape architecture during this period were scarce. For the opposing view, two dominant landscape theorists were in fact active during this time. Geoffrey Jellicoe wrote numerous essays during the 1960s, while Ian McHarg published his 1969 Design with Nature. Both Jellicoe and McHarg came up with broad, philosophically based theories. Jellicoe's theory was based on Jungian psychology; McHarg's on a positivist ecological science (Thompson, 1999). The findings and the previous review seem to suggest that the development of landscape theory between the 1950s and the 1980s may not have been lacking; however, the pragmatic aspect of landscape architecture may have been dominant. The second reason is that landscape architecture is a broad and diverse discipline. Tim Waterman stated in the interview that the realms of knowledge in landscape architecture are very broad and diverse. Their boundaries connect with a diverse range of other disciplines, such as architecture, urban planning and urban design. Thus, it is hard to pinpoint the specific knowledge of the discipline. This study is in agreement with Thompson (2014), who remarked that landscape architecture has a fluid core with no fixed essence: 'Attempts to define the discipline usually fail' (p.24). As a result, attempting to construct a proper foundation of landscape theories becomes a difficult task. The profession's multiple areas of activity are also spawning various theories (Hohmann and Langhorst, 2005).

According to the review in Section 3.3.1, there have been constant debates on the reconstruction of landscape theory (Swaffield, 2002). Opinions in this regard are vastly diverse. The early contributions on the reconstruction of landscape theory focus upon the need to renew and broaden the theoretical basis of teaching and practice in landscape architecture (ibid). Recently, some landscape scholars have argued for a reorientation from Modernist theory to a more open-ended, creative, environmentally and socially responsive one (Deming and Swaffield, 2011). Other influential commentators focused upon the substantive content of theory, proposing different

agendas for further development and typically drawing upon emerging movements in related disciplines. Swaffield (2002) also noted that, basically, there are differences in belief over the forms of knowledge, as well as the strategies, methods and tactics that might be used to investigate. Each carries different assumptions and implications about the way in which knowledge in landscape architecture should be codified and validated, and each sees different implications for the way theory should be approached or constructed.

In Section 2.3, Weilacher (1996) and Kwon (2004) remarked that in the sub-discipline of environmental art, there is neither a home-grown environmental art theory⁵⁹ nor particular rules and general agreement on environmental art. Though, as a sub-discipline of visual art, environmental art, which emerged in the 1960s, relies on the large field of philosophy of art and the aesthetic, which has been entwined with the discipline of art and its sub-disciplines for centuries (Scruton, 2014). Within the realm of theory in the discipline of visual art, the artists of environmental art uniquely developed a series of different creative approaches and diverse ideas (Weilacher, 1996). The findings of the literature review seem to suggest that environmental art may not be a great example for landscape architecture to oversee. However, as a close discipline sharing various aspects, how the art uniquely applies the ideas and essences within environmental art including genius loci and passage of time, as highlighted in the thesis, may qualify as assisting in the reconstruction of landscape theory as more open-ended, creative, environmentally and socially responsive, as mentioned above.

In order to become a discipline with a truly holistic view, issues in landscape theory need to be properly addressed and solved. Moore stated that:

I think we just need to encourage people to write about what practice they are working towards to explain what they are doing, why they are doing it and how they are doing it and how it is appropriate, why that is significant. So all the

⁵⁹ According Merriam Webster (2016), home-grown is defined as "grown or made at home or in your local area." Based on the definition, home-grown theory should refer as theory, which are developed within the discipline.

time, we need to be exploring the connections between experiences and the physical, social, cultural context of our life and how we shape that and why we form that and why we do it. So, whether it is a scale of the region or scale of the garden, everybody should be encouraged that they can write; to write and to explain about it. Thus there will be more development of landscape theory in the future.

Moore's view is rather simple, yet straightforward. It may be a logical and practical answer in developing landscape theory. Discussions and critical reflections of landscape practice have been encouraged and the effort should continue to bring out new ideas and develop subtle foundations in landscape theory. We should develop landscape practice while at the same time building up theories alongside it.

8.3.5 Landscape architecture is relevant to environmental art

From the discussion in Section 5.7, it appears that the relevant of environmental art on landscape architecture is clear, while the impact of landscape architecture on the practice of environmental art appears to be debatable, and will be further explored in this section.

The findings of the research showed two opposite perspectives on whether landscape architecture has impacted the practice of environmental art. One view, dominated by environmental art specialists, suggested that environmental art had never been affected by landscape architecture. Pritchard and Entwistle shared their views stating that although environmental artworks were set in outdoor landscapes, environmental art did not reflect effects from landscape architecture in its art creations. Although this finding seems to be legitimate, no evidence in the literature supports this view. On the other hand, some specialists interviewed suggested that landscape architecture impacted upon environmental art. This view was mostly shared by specialists in landscape architecture. Thompson stated in the semi-structured interview that the two disciplines are 'the best of friends', in which practitioners from each discipline are relevant to the other. Thompson's comment was consistent with Hooftman, who stated:

Robert Smithson was a very good writer as well as a good artist. He wrote a very good essay on Olmsted and Central Park – very interesting. So, the artists were aware of the tradition of landscape design by Olmsted and the idea of the Picturesque and Sublime. Smithson was interested in the Sublime and Picturesque extreme, and the immediate experience, which the landscape designers barely touch on. That was an example in the past. But I think many artists still have something to say about them.

The literature reviewed in Section 2.3.2 corroborates this finding of the research. Martin (2011) remarked, in the article 'Frederick Law Olmsted and the Dialectical Landscape' (1973), that Smithson perceived environmental art as a continuation of eighteenthcentury English landscape design (Martin, 2011). For Smithson, Olmsted's Central Park was a product of Olmsted's phenomenological intervention on a particular site (ibid). By using the characteristics of the site, including its natural processes, Olmsted designed Central Park as if it was a part of the existing Manhattan Island. Smithson took Olmsted's phenomenological method further in a series of Site/Non-Site sculptures. According to Commandeur and Riemsdijk-Zandee (2012), Smithson's Site/Non-Site sculptures were created to slip into an undifferentiated state, which allowed materials of the site to structure the sense experience of sight. Smithson continued this thought in his creation of Spiral Jetty (1970) (ibid). Based on the literature and the research findings, Olmsted and his works of landscape architecture clearly had impacts upon Smithson. However, Smithson worked in the 1960s. What about contemporary environmental art? Has landscape architecture retained its effect upon environmental art? The findings of the research confirm the recognition of numerous prominent landscape architects. Ian McHarg, with his 1969 publication Design with Nature, was a well-known landscape architect among environmental artists. In terms of design, the research findings demonstrated that artistic landscape design by George Hargreaves, Martha Schwartz, Peter Walker, Katherine Gustavson and Ken Smith – New York landscape architects – were praised among environmental artists. In the research interview, Entwistle expressed her admiration for George Hargreaves:

George Hargreaves – the classic 1980s, 1990s, very inspirational landscape architect. I saw his current works. He tries to plant nature and he made a huge

wall out of stone. It was right next to the park, next to these skyscrapers. It was wonderful. He tricks the water to flow down on stainless wire. And so, to me that's poetical. No matter what he did – he touches your soul or something. You have got connection with nature, and you get connection with place, and it's just wonderful. I can't describe it.

Entwistle also referred to another work by George Hargreaves:

And he made his wall out of metal. A fence. And he had a pipe over the top and he drips water down it and it flows. That's been his tool for his experiment. For landscape architecture work, can you create something this wonderful?

A number of landscape architectural works suggested that landscape architecture may have had an effect on environmental art. When asked whether there was an impact by landscape architecture on environmental art currently, Hooftman responded, 'I think, to a certain extent, yes'. Hooftman described Theater der Pflanzen (2010) as an example of his competition-winning work in Emcherkunst Park, Germany. A landscape architect won over artists in this competition. There may be more contemporary landscape architectural projects that made an impact on environmental art.

The various perspectives of the specialists presented in this section seemed to suggest that landscape architecture may have had some impact on environmental art. However, there was not much evidence of this from the literature. When landscape architecture was associated with environmental art in the 1960s, McHarg's ecological design principle was widely covered in most academic literature. This could be the reason why the investigation of the relevance of landscape architects on environmental art was scarce in the academic literature. This remark should be further explored, so that landscape architecture can receive more recognition, as it deserves.

8.3.6 The lack of understanding of the relationship between humans and nature is a serious weakness in landscape architecture

One overarching goal of the profession of landscape architecture is to create order and harmony in relationships with nature (Laurie, 1986). These relationships are expressed through the ecological, functional, and aesthetic characteristics of the places that landscape architects create to facilitate human activity and to improve use, experience and understanding of the landscape. To achieve these objectives, designers need a clear understanding of human and environmental processes and the ways in which they mutually interact to shape the landscape. However, according to the findings of the research, the profession has somehow missed out on the underlying thinking concerning the relationship between humans and nature. In the semi-structured interview, Thwaites commented:

The lack of understanding of the relationship between humans and nature is a serious weakness in landscape architecture.

Thwaites also pointed that the thoughts and ideas were barely presented in the practice of landscape architecture and in the literature. Evidence in the literature was divided into two camps – those demonstrating the opposite view to that of Thwaites, others supporting his argument.

According to the review in Section 3.5.2, the concept of nature and its relationship with humans has in fact been explored, along with the development of the discipline of landscape architecture. Balmori (2010) remarked that the concept of nature has been explored in the discipline of landscape architecture since the eighteenth-century English Landscape School. Nature was an important concept in this school, meaning the countryside, unspoiled places, plants and creatures other than humankind. The Picturesque represented an important transition in the concept of nature within landscape architecture. The literature review matches the research findings. Moore noted in the focus group discussion that arguments regarding humans and nature have consistently been made in the discipline of landscape architecture; for example, in Picturesque landscape theory, humans were considered inseparable from nature.

Section 3.5.1 also demonstrated that the intellectual conception of nature and its connections with humans had been explored in landscape architecture after the eighteenth century. In 1969, when McHarg published his *Design with Nature*, the concept's paradigm shift occurred. Landscape architecture embraced the concept of ecology, which made humankind as a part of nature. McHarg's ecological sensibility sought to fully design human environments in concert with the conditions of setting, climate and environment (Balmori, 2010). Not only were scientific methods proposed in his renowned publication, McHarg clearly explored the intellectual concept of nature. His ideal was:

Nature is process, that it is interacting, that it responds to laws, representing values and opportunities for human use with certain limitations and even prohibitions (McHarg, 1969, p.7).

McHarg also remarked on the ideal in terms of relationship between man and nature that:

Man and nature should not be viewed as separate – that man is dependent upon nature for his own survival and well-being (McAllister,1982, p.187).

In the research interview, McHarg's major influence on landscape architecture in the 1970s was confirmed. However, his philosophical ideas in his ecological landscape design theory seem to have been overshadowed by their own scientific technical application. In the semi-structured interview, Hooftman commented:

I was educated in the School of Landscape Architecture at Newark, which taught me a very interesting and very specific way of looking at landscape, very much landscape as large-scale planning, regional land use, and the early days of GIS. My professor was one of the students of Ian McHarg. It was very much inspired by the teaching of Ian McHarg.

Hooftman's comment was matched by Denton's, who stated:

I do not think McHarg's underlying thoughts of nature reach landscape practice and the general public. I do not think it is relevant to most people.

McHarg's scientific method for analysis and planning seems to be better acknowledged and well known than his underlying philosophical thinking. Balmori (2010) also stated that the current view of nature is perceived as multifaceted, changing over the centuries, along with our actions, thoughts and artworks. Perceptions towards the concept of nature within the discipline of landscape architecture are constantly shifting over time; exploration and examination still continue. For example, Landscape Urbanism, which emerged in the 1990s, has quite a different attitude towards nature; indeed, it seeks to get rid of binary oppositions, such as nature vs. culture, urban vs. rural, etc., changing the relationship between the contemporary city and the countryside and forming a homogeneous continuum in landscape architecture (Gray, 2011).

How environmental art deals with the intellectual conception of nature is reviewed in Section 2.1. As seen in Section 2.2, two typologies of environmental art emerged in the 1960s, providing suitable metaphors for the transformation of land. The first was in the manner of the art, which directly addressed social and environmental issues. It often presented in the reclamation and remediation of damaged environments, restoring ecosystems through a diversity of artistic and scientific methods. The other tradition of environmental art of the 1960s was the manifestation of engagement with the natural world. The art proposed ways for humans to co-exist and share an engagement with nature. Such art appeared in the works and thinking of many other artists, particularly the avant-garde European artists, including Chris Drury, Andy Goldsworthy, Richard Long and Ian Hamilton Finlay. Even while having different agendas, both traditions of environmental art re-envision the complex conception of nature. Among all environmental artists, Robert Smithson was the one who most obviously transitioned to the new view of nature as being multifaceted and changing. In his interview in 1972, he made a clear statement: 'We have to develop a different sense of nature; we have to develop a dialectic of nature that includes man' (Boettge, 2002, p.218). Although not all environmental artists made a proclamation of their thinking on nature like Smithson,

expressions by most environmental artworks that demonstrated concern over nature clearly represented the artists' statement.

The review in Section 3.4.2 also noted that philosophical thoughts and ideas regarding the relationship between humans and nature can be found in the discipline of environmental philosophy, as some of the main areas of interest in environmental philosophy are environmentalism, environmental ethics, defining the environment and nature, how to value the environment, environmental aesthetics, restoration of nature, and consideration of future generations (Belshaw, 2001). Publications within landscape architecture concerning the philosophical thinking around the relationship between humans and nature seem to be scarce. Thompson (2000) noted that environmental ethics in landscape architecture, one of the main areas in environmental philosophy, received 'little in the way of serious philosophical investigation' (p.175). Environmental philosophy seems to be unfamiliar to the discipline of landscape architecture. It is explored only among academia and a few thoughtful landscape practitioners such as lan McHarg. If knowledge of some of the areas within environmental philosophy were to be integrated with landscape architecture, this could strengthen the understanding of the relationship between humans and nature. Landscape architecture should be encouraged to explore further in this field.

From the previous literature review and the research findings, the development of the understanding of nature and its relationship with humans does not seem to be 'a serious weakness' as stated. However, this understanding also could not be perceived as the strongest point of the discipline of landscape architecture. This thesis proposes that these thoughts be strengthened so that the discipline could accomplish the overarching goal of creating harmony in relationships with the environment. It could perhaps start by teaching more philosophical courses and ethics in design studios of landscape architectural programmes. By doing so, the impact and outcome may not be immediate. However, when such thoughts are truly integrated with the discipline, as happened with ecological science, this could bring more values to landscape architectural works overall. Works by landscape architects could be rich in intellectual ideas regarding the relationship between humanity and nature. Thus, the discipline of landscape

architecture could be perceived to be more than that of simply a technician or plant expert, as discussed in Section 8.4.1.

8.4 PRACTICES OF THE TWO DISCIPLINES

This section discusses professional practice, which comprises two overarching themes:

1) professionals in landscape architecture are regarded as plant experts, and 2) environmental art is dead.

8.4.1 Professionals in landscape architecture are regarded as plant experts

According to the research findings and previous review in Chapter Three, there are three main reasons causing misperceptions of landscape architecture. The first is that landscape architecture is relatively new, not being perceived properly in general. This view was evident in Peter Walker's 1998 publication, 'Invisible Garden: The Search for Modernism in Landscape Architecture', in which he stated that landscape architecture is an invisible discipline, because what landscape architecture is and what landscape practitioners do are generally not well understood. The second cause of misperception is because landscape architecture has broad boundaries and does not have a clear core. A large body of literature such as Booth (1990), Motloch (2001) and Thompson (2014) supports this. Thompson (2014) remarked that landscape architects undertake small landscape designs such as gardens among other landscape designs at various scales. The garden, however, stands in relation to the landscape architect as the private house does to the architect. However, Thompson (2014) noted that the perception of what landscape architects do is limited to small-scale design; large-scale landscape design or planning is often excluded from the professional description. Reviews by Thompson (2014) match with the research findings. Hooftman mentioned that:

There has always been misunderstanding about the profession of landscape architecture. And this is completely logical because the profession is completely hybrid. Landscape and architect; you know, two big words. And the incredibly different interpretations; from horticulture, the more artistic, and the more

scientific, and now more environmental. So the profession has never had a clear core.

The third reason is that landscape architects often regard themselves as plant experts or technicians. Moore pointed out in a focus group discussion that

The reason why the discipline of landscape architecture was perceived to be in such a 'terrible position' was because landscape architects are often expressed as or had been regarded as plant experts or technicians.

Moore shared that

If we keep talking about trees and shrubs, then we will just be regarded as tree technicians forever.

The reviews in Section 3.5.3 also identified two additional reasons why the perception of landscape architects has remained as that of plant experts or gardeners. The first reason is the history of landscape architecture itself. Thompson (2014) stated that landscape architecture has been linked with horticulture since the nineteenth century. The title 'landscape gardener' has not faded away with time. The second is the title of the discipline, 'landscape architecture'. According to Booth (1990), the term 'landscaping' is misused both within the profession and without as synonymous with 'plant arrangement' or 'planting design'. The term 'landscaping' is a narrow one and should not be used as a substitute for the name 'landscape architecture'. Booth (1990) stated that, in 1972, Albert Fein submitted a report to the American Society of Landscape Architects suggesting the profession consider changing its name, in an attempt to divorce the profession from the misperception of 'landscaping.' The report stated that there was rather widespread dissatisfaction with the title 'landscape architecture'. The report also suggested that a name which implied a broader professional expertise would more truly represent the profession. Although proposals of other names were dropped, the difficulty seems to remain.

As reviewed in Section 3.5.3, plant material is indeed a valuable element in landscape architecture. Booth (1990) confirmed that landscape architects do not need to be

experts on plants, which requires thorough knowledge of plants such as the shape of bud scars, petiole size or serration of the leaf. Such knowledge of plants, beyond their form, was already held by horticulturalists and nurserymen (Motloch, 2001). The landscape architect's expertise with regard to plant material lies in the context of a given landscape design, which includes an understanding of its design characteristics, such as size, form, colour and texture, and a knowledge of its growth habits and requirements (Booth, 1990). Besides the overall visual characteristics of plants, landscape architects should also understand a plant's growth requirements and environmental impacts (ibid). However, the profession of landscape architecture is involved in a much broader spectrum of projects than this, with an underlying concern for the stewardship of all land resources, regardless of scale. While still a significant design element, plant material is considered just one of many potential tools in landscape design.

As discussed in Section 7.3, the practice of environmental art has also been misperceived, being called by various names since its emergence in the 1960s in a similar manner to art, such as 'earthworks', 'land art', and 'site-specific art'. Even a few decades past, new terminology such as 'ecological art' entered the field, causing more confusion. However, Section 7.7 pointed out that in the context of modernity, complex contemporary issues could no longer be solved solely by one discipline. Therefore, hybrid collaboration and communication across disciplines became crucial. Both disciplines should be open to collaborations with other disciplines. The language of all disciplines, including environmental art and landscape architecture, should rather be expanded while developing the framework of each discipline. In this way, each discipline could have been understood while having proper communication across disciplines.

Section 7.7 suggested that the current situation of the misperception may have been improved. Wilkie touched on the topic in the focus group discussion:

In the past, landscape architecture was neither well perceived nor well understood [if compared with other built environmental designs].

Wilkie implied that the misperception may no longer have relevance in the current context. Section 7.7 also pointed out that, recently, the discipline seems to have been

better acknowledged among the general public and related disciplines such as architecture and urban planning. Wilkie's view is in agreement with Moore, who stated that the discipline was, in fact, being reborn and being perceived as a discipline with specialities in environmental design and planning. Landscape architecture is even being considered a 'very powerful profession' in some countries, such as China. There is no valid review in Chapter Three which directly supports this research finding. However, a number of large-scale landscape projects across the world have been published in various magazines such as Landscape Architecture Magazine (LAM) during the past decades. This seems to imply that landscape architecture has been well perceived, as suggested by Wilkie and Moore. Thwaites also made the suggestion that landscape organisations such as ASLA, LI and IFLA should have promoted what exactly landscape architects do. Thwaites's suggestion was certainly helpful and, in the researcher's understanding, landscape organisations such as ASLA, LI and IFLA constantly promoted the discipline. Yet, practitioners should also help in promoting the discipline among their clients and practitioners in closely related fields. Moore made a further point that landscape architects should not discuss their works in terms of plants or technology. Landscape architecture should have been explained and discussed in terms of ideas of landscapes, such as landscape as a relationship to people in their environment, as recommended by Moore. Thus, people could have begun to make those connections and the discipline could have been in a powerful and provocative position, along with other disciplines, to handle future built environmental projects.

8.4.2 Environmental art is dead

Beginning in the 1960s, environmental art brought together natural and cultural histories, offering aids to read ever-changing landscapes (Moyer and Harper, 2012). Environmental art today has expanded its realm, encompassing a vast scope of territory and issues (Kastner, 1998). However, in the semi-structured interview, Hooftman made an unanticipated hypothesis:

Environmental art already died years ago. It is an easy answer. It was a product of 60s or 70s. It had great influences on all professions ... and told a lot of what artists of the generation did. ... But it is my interpretation.

Section 7.4, which discussed the current position of environmental art, briefly covered this overarching theme. This finding has important implications for developing understanding of the associations between landscape architecture and environmental art in the future.

According to the literature mentioned in Section 2.1, the 1960s-style monumental earthworks remain as part of present-day environmental art practice. For example, Desert Breath, the art of 1997 – over two decades after Smithson's Spiral Jetty (1970) – was created by German artist D.A.ST. (Figures 8.37–8.39). A recent example is Charles Jencks's Northumberlandia (Figures 8.40–8.41), which was completed in 2012. Made of massive earthworks, Northumberlandia is created in a gigantic scale setting in a public park near <u>Cramlington</u>, <u>Northumberland</u>, UK. Not only was *Northumberlandia* created in the manner of the 1960s monumental earthworks, the artwork also made an interesting boundary case among three disciplines: landscape architecture, architecture and environmental art. Jencks is an architect; however, his Northumberlandia is classified as environmental art. This is probably owing to its main component, the land sculpture in the shape of a reclining female figure, conceived as a tourist attraction rather than for its functions or uses. Other grand-scale environmental artworks include snow artworks by the British artist Simon Beck and sand artworks by the American artist Andres Amador. No literature indicates whether Desert Breath, Northumberlandia or other monumental earthworks have been recognised as successors to the environmental art of the 1960s and 70s; this is one indication that environmental art may not have died as once suspected.



Figures 8.37–8.39: D.A.ST.'s *Desert Breath* (1997) (top row); Figures 8.40–8.41: Charles Jencks's *Northumberlandia* (2012) (bottom row)

Regarding this subject, Pritchard articulated that

If measuring by a notion of 'radical surprise', perhaps the art is no longer surprising in the way it once might have been. But if measuring by how much difference it's making, I think you'd have to allow for the fact that any innovative trend goes through some classic progressions of becoming a new orthodoxy and losing some of its 'edge', being appropriated by other stakeholders and bent out of shape, etc; but the 'edge' often just moves to a different place, and looks and sounds different, while possibly remaining just as strong.

After having made the hypothesis that 'environmental art has already died years ago', Hooftman also shared his observation that:

It [environmental art] has great offspring There are still fantastic artists who still operate on this intersection between the sciences and the arts, and are doing fantastic interesting things.

Hooftman's observation was reciprocated by many of the research's participants. In the focus group, Pritchard shared his thoughts:

The art continues to grow progressively ... environmental art currently responds more creatively to landscape with more uniqueness than the traditional practices. Contemporary environmental artists focus on expressing, reflecting, responding, highlighting characteristics of specific environments or context in their art.

Pritchard's remark is consistent with the previous review by Moyer and Harper (2012), who stated that it was clear that the environmental artworks of the 1960s cannot be said to be in today's context. Environmental art today has been drastically transformed since its first emergence in the 1960s (Kastner, 1998).

In the researcher's view, the transformation of today's environmental art may be related to environmental art practice and its professional body. Section 7.1 mentioned that, in the local authority, there are art officers, who guide standards and regulations that artists need to follow for certain projects; for example, artworks for schoolchildren's programmes. However, even though artists are not totally free from regulations in art practice, there is no representative professional body and no manuals concerning how to become an artist. Artists may be self-trained or go through academic training at art schools and develop their own practices. Art critique, which does not provide any professional guidelines for artists, is the only institution that environmental art has. From the researcher's perspective, the fact that environmental artists are free from professional licence requirements may allow them to reinvent themselves, which is one reason why contemporary environmental art is able to transform and reinvent itself from the 1960s.

In contrast to environmental art, landscape architects have many checks and approvals that they have to go through, set by professional organisations such as the LI. As mentioned in Section 3.5.2, there are several benefits from having a professional body; for example, promoting professional development, informing the public of what landscape architects are capable of doing, increasing the public's awareness and appreciation of the profession of landscape architecture and protecting areas of speciality. However, the professional body may place limitations upon landscape practitioners. The recommendation provided by the professional organisation includes

a professional framework to establish guidelines on what landscape architecture is, what it should do and what is good and bad for landscape architecture. These recommendations can somewhat limit the extent to which landscape architects can experiment, explore or be creative in landscape design.

Although the core of today's environmental art continues to circle around the discourse of nature, the new generation of artists does not always intend to convey a particular message regarding environmentalism in their works. Their emphases are more on creativity and the appreciation of art. The artists become more engaged with the public or their audiences, encouraging them to actively participate in the art-creation process or gain experience through the medium of art. Medhurst (2012) commented that in many contemporary art workshops, participants are given the opportunity to explore nature and express their own creative ideas. It is seen that enjoyment and appreciation offer a larger perspective and deeper understanding of nature. In terms of scale, there is less focus upon monumental sculptural structures in remote places, but instead, more on smaller works in urbanised areas. New technology, techniques and materials are integrated into the new art in order to further extend the imagination of the audience (Lailach and Grosenick, 2007). The ephemeral aspect becomes more relevant in such artworks; thus, media such as photography, film and the internet are significant in the new art. Pollock made an interesting remark about current environmental art:

The line between contemporary artworks cannot be drawn around conventional ways. There's no dominant or intellectual thought, and that is a positive thing. Instead we have a creative, intuitive and exploratory practice that responds to the issues presented by the context of the work.

Collectively, the evidence presented in this section suggests that environmental art is not dead. The art may have been overlooked, unlike during its glorious days in the 1960s, but these works nevertheless stand out as noteworthy examples that can reconcile nature and humanity.

8.5 SUMMARY

By triangulating the literature review with the findings of the research, this chapter discussed the overarching themes reflecting the theoretical and professional positions of landscape architecture that have been associated with environmental art since the 1960s. The summary of the chapter is presented according to the three main themes.

The first is forms and styles. The chapter discussed the convergences in forms and design expression between landscape architecture and environmental art from the 1960s to the present day. In addition, the chapter explored underlying issues within the two movements, Modernism and Postmodernism, which were associated with both landscape architecture and environmental art. The analysis confirmed that the central idea of Landscape Modernism utterly disregarded the spirit of place or genius loci, which is essential in landscape design. Although the contemporary practice of landscape architecture may be detached from Modernism, some of its principles, especially those concerned with uses and functions, still remain as foundational principles in the practice of landscape architecture. Therefore, the study suggested that the future practice of landscape architecture should be aware of the unsuitability of Landscape Modernism. The chapter supported the idea that the line between Modernism and Postmodernism in landscape architecture is unclear.

The second theme concerns significant thoughts and ideas. The chapter discussed underlying issues identified within identity of place and spirit of place, the principles of the Picturesque, McHarg's ecological landscape design and the passage of time, which underpin environmental art and landscape architecture. In addition, the chapter also investigated underlying issues within the theory of landscape architecture. Drawing findings regarding the theory of landscape architecture, it can be concluded that the foundation of landscape theory demands extensive exploration and development. Furthermore, the analysis confirmed that landscape architecture has been relevant to the practice of environmental art from the 1960s to the present day. This issue should be highlighted in the literature, so that landscape architecture receives the proper recognition it deserves. Finally, the chapter also discussed the overarching themes

regarding the conceptual understanding the relationship between humans and nature and approaches to the passage of time. Reflecting upon these thoughts and ideas through environmental artworks not only prompts landscape architects to be aware of underlying issues that may be encountered, but also provides a path to a way of developing more appropriate guidelines for landscape architecture.

The final theme is the practice of landscape architecture and environmental art. The chapter discussed the deep-rooted misconception of landscape architects as plant experts. The analysis suggested that landscape architecture should have been explained and discussed in terms of ideas of landscape so that the perception of landscape practitioners could be changed. In addition, the chapter investigated the current practice of environmental art. The evidence presented in the chapter suggests that environmental art today has drastically changed since its first emergence in the 1960s, yet, today, its main concerns circle around the discourse of nature.



CHAPTER 9 REFLECTIONS FROM THE 1960s TO THE FUTURE

INTRODUCTION

The purpose of the study is to investigate the relevance of environmental art to landscape architecture from the 1960s onwards. Accordingly, Chapters Two and Three reviewed a wide range of literature on both environmental art and landscape architecture, based on which the conceptual framework was drawn. The methodological structure proposed in Chapter Four determined the shape of the research. Two data gathering methods, comprising of semi-structured interviews and focus groups, brought together a number of specialists who presented their perspectives of the relationship between the two disciplines. Adopting the two methods has proved helpful in achieving the aims and objectives of the study, and allowing in-depth investigations. Reflecting on the research objectives, the fieldwork identified how environmental art is relevant to landscape architecture in three themes, comprising 1) forms and styles, 2) significant thoughts and ideas, and 3) the practice of the two disciplines, each of which was analysed by thematic analysis and presented in Chapters Five, Six and Seven respectively. The overarching themes which emerged were triangulated with the literature review and the results are presented in Chapter Eight. This chapter aims to review whether the question and aims of the research have been answered, and whether the methods and approaches used to answer them have been successful. It thus draws together the related literature, the empirical data and various interlinked subjects which have been examined and discussed throughout the study. Throughout the study, a number of issues within contemporary landscape architecture have arisen. They help in understanding how landscape architecture is currently positioned after being associated with environmental art since the 1960s. To conclude this study, the chapter highlights further analytical dimensions and provides guidelines for the future development of landscape architecture.

9.1 RETURN TO THE RESEARCH QUESTION AND RESEARCH OBJECTIVES

This study set out to determine the relevance of environmental art to landscape architecture with particular reference of the period from the 1960s to the present day. Drawing upon the findings of the research, the environmental arts may not be as dominant as they were in the 1960s; however, their contemporary transformation is still relevant in the modern context. Currently, the issue or message within today's environmental art seems to be environmental fulfilment, rather than other issues as in the environmental art of the 1960s. Over time, environmental art has continued to transform and reinvent itself by creating liminal spaces that mediate between humans and their surroundings. For landscape architecture, this study identified that there have also been many transformations since the 1960s. Evidence from the research suggested that landscape architecture has become a forum for the articulation and enactment of individual and societal attitudes towards nature. The following discussion draws together the analytical dimensions of the thesis to return to the research objectives in order to answer the research question.

9.1.1 RELEVANCE OF ENVIRONMENTAL ART TO LANDSCAPE ARCHITECTURE IN TERMS OF FORMS AND STYLES

The research highlighted works by practitioners of the two disciplines, which shared strong visual resemblances in their overall appearances; for example, works by iconic landscape architects such as Martha Schwartz, Peter Walker, Kathryn Gustafson and George Hargreaves, and environmental artworks by eminent environmental artists including Carl Andre, Ian Hamilton Finlay, Michael Heizer and Robert Smithson. The research identified that the landscape architectural projects in the manner of environmental art may not be representative of mainstream landscape architecture practice. However, a number of landscape architectural projects crossing with environmental art are not so few. Therefore, the significance of these works could not be denied. By critically analysing the results from the research fieldwork and literature findings, including the information provided, the year built and the apparent affiliations of forms in these works, the relevance of environmental art to

landscape architecture in terms of forms and styles could be confirmed. According to the discussion in Section 6.3, it took approximately twenty years from the to reach its impact on landscape architecture. The research also identified the uniquely created innovative forms of the artworks, which often implied that there were some meanings or messages encouraging their audience's imaginations and action or interaction between the artworks and audiences, as well as raising questions. Drawing from the research findings, this unique aspect of the environmental artworks evidently played an important role in the relevance of environmental art to landscape architecture, which is typically bounded by uses and functions. Critical analysis of various contemporary landscape architectural projects, such as Diana Balmori's works in the Section 8.3.2, suggested that landscape architecture has already aimed beyond functionality toward creative and meaningful forms and styles. The research suggested that encouragement of creativity and meaningful forms of landscape architectural design should be persistent, so that landscape architectural design remain lively, up-to-date and forward-looking.

The research also discussed the two dominant styles, Modernism and Postmodernism, which was linked with both environmental art and landscape architecture. According to the research findings, environmental art had variations and complexities of approaches, which produced ambiguities in positioning particular forms and styles. The art can thus be categorised as both Modernism and Postmodernism, depending on the emphasis of the artists. On the one hand, environmental art concentrated on simplicity, and reduction and rejection of a complexity of forms and uses of materials, in order to concentrate on the essential ideas of Modernism. The Modernism aspect of environmental art can be found in artworks by artists such as Carl Andre, Michael Heizer and Richard Morris. On the other hand, aspects of multiple interpretations, and the experimental and process-oriented practices of Postmodernism, are also applicable in environmental art works by artists such as Robert Smithson. The research's discussion in Section 8.2.2 identified the obscured lines between the Modernism and Postmodernism in the discipline of landscape architecture particularly in landscape architectural works in the environmental art manner such as works by Peter Walker and

George Hargreaves. Although not directly confirmed by the research findings, convergences between works of the two disciplines, which lie in between the two dominant cultural eras, suggest that aspects of Modernism and Postmodernism in environmental art may have been relevant to landscape architecture.

In Sections 5.7 and 8.2.5, the research also demonstrated that to some extent, works by landscape designers might actually be influential among environmental artists. Some of landscape architectural design may have been looked upon by environmental artists as inspiration. Section 8.3.5 discussed that landscape architecture may have affected environmental art in its early development of the 1960s through the works of environmental art pioneers such as Robert Smithson, and Dani Karavan. The study identified that contemporary landscape designers such as Martha Schwartz, Ken Smith, and George Hargreaves may impact environmental art in modern context. Landscape architecture has increasingly been acknowledged amongst environmental artists. In the researcher's view, these findings of the research have largely been neglected in the literature. Drawing from the research findings, it is possible to summarise the causes of the neglect into two factors. The first is the misperception of the profession of landscape architects, who have often been regarded as plant technicians. Secondly, impacts of landscape design were overshadowed by other influential social and cultural factors in factors in the period of 1960s, such as the modern environmentalism movements or other issues. Practitioners of the two disciplines utilise a wide range of skills and techniques, yet their specialties are unique and superior in their own ways. The creations of environmental art and landscape design are unique in their own way and are not meant to be models for one another. However, this research raises awareness so that landscape architecture can be properly recognised.

9.1.2 RELEVANCE OF ENVIRONMENTAL ART TO LANDSCAPE ARCHITECTURE IN TERMS OF THOUGHTS AND IDEAS

The research identified that the four significant ideas, comprising the concept of the spirit of the site, the three eighteenth-century aesthetic appreciations, the passage of time and environmentalism can be described as theoretical connections between

landscape architecture and environmental art. According to the literature findings, these four primary features of thought were not introduced to the discipline of landscape architecture through environmental art, but from various sources. The first is the concept of genius loci, which was presented to landscape architecture by Alexander Pope in his Epistle to Lord Burlington (1751). The second is the aesthetic concepts that were developed in parallel with the evolution of the English Landscape garden in the eighteenth century. The third is thoughts and ideas in environmentalism, which were integrated with landscape architecture through works Frederick Law Olmsted and Ian McHarg's Design with Nature (1969). Finally, landscape architects seem to be well aware of the significance of time through their training in landscape architecture programmes, both in the landscape design studio and teaching courses. Nonetheless, the critical analysis of the common forms in overall appearances or ornaments or motifs between the works of the two disciplines suggested cross-fertilisation between the two disciplines in terms of thoughts and ideas. Therefore, drawing from the findings, it is possible to confirm the relevance of environmental art to landscape architecture in terms of thoughts and ideas even though the four features identified that were applied in landscape architecture were not directly linked with environmental art.

The research also highlighted that these four key concepts were keenly explored and interpreted in various aspects by environmental artists. The innovative ideas, or issues or messages, raised or addressed in the artworks created unique experiences in actions and interactions between the artworks and their audiences. The responses from the audiences allows for the possibilities of future environmental artworks. As a result, the thoughts and ideas of the environmental arts are always vibrant and up-to-date. Therefore, even though employed with the same four concepts, environmental artists received more praise in expressive creative ideas than did landscape architects. Looking at environmental art as a role model, the research suggested that landscape architecture should always encourage creative minds and experimental spirits exploring various different concepts and their interpretations to fit modernisation while responding to functionality and uses, so that the landscape architecture could be enriched with refreshing innovative and meaningful ideas. The

intrinsic values of the landscape architectural design could then be regained as it should be.

9.1.3 RELEVANCE OF ENVIRONMENTAL ART TO LANDSCAPE ARCHITECTURE IN TERMS OF PRACTICES

The findings of the study confirmed that landscape architects work across boundaries with environmental art, although the professional practices of the two disciplines are unique in their own ways. The research suggested that practices of environmental art is relevant in practice of landscape architecture, which is evidenced in a number of landscape architectural projects as reviewed in the literature (Section 3.2.3). The literature findings matched with the research findings, which identified that a number of iconic landscape practitioners including Peter Walker, Martha Schwartz, Kathryn Gustafson and George Hargreaves were definitely affected by environmental artists. Relevance of environmental art in practice of landscape architecture is also evident in complexity of italicizing landscape architectural project's title names. Landscape architecture in the environmental art manner must be recognizable so that italicizations of their titles widely are presented in publications.

In addition, an observation of the researcher in this regard is worth reflecting on. It is well known among lay landscape practitioners that the landscape professional bodies, such as the Landscape Institute (LI) or the American Society of Landscape Architects (ASLA), aim to provide professional guidelines and standards to benefit landscape practitioners and their clients. However, the fact that there is a licence requirement to become a landscape architect and that there are so many checks and approvals that one has to go through, set by the representative body of the profession such as the LI, actually limits the scope of landscape architecture. This is perhaps because the representative professional body acts as gatekeeper, policing what landscape architecture is, what landscape architects should do, and what is good or not good for landscape architecture. These guidelines could be considered as professional

frames which limit the extent to which landscape architects can experiment, evolve or be creative. This aspect is in utterly in contrast to environmental art, which does not have any representative professional body. The only institution environmental art has is the art critique, which usually provides information about artworks and describes these artworks to audiences from a theoretical perspective. In other words, the art critique does not provide any professional guidelines for the artists. And the fact that the environmental artists are free from professional licence requirements and a representative professional body may allow them to reinvent and reinterpret themselves over time, so that environmental art today is so much changed from the 1960s. Landscape professional bodies, such as the LI or the ASLA should remain in order to continue giving strategic guidelines to the discipline/profession. However, with this reflection upon the realm of environmental art professional practice, we should consider reframing professional guidelines to allow landscape practitioners to practice more creatively. This may be helpful and beneficial to the future generation of landscape architecture.

9.1.4 HOW LANDSCAPE THEORY AND LANDSCAPE ARCHITECTURE STAND AFTER BEING ASSOCIATED WITH ENVIRONMENTAL ART SINCE THE 1960s

A comprehensive critique of landscape theory is beyond the scope of this study. Nevertheless, the study has attempted to critically analyse a range of theoretical perspectives deriving from the empirical investigation. Drawing from the findings, it can be noted that landscape architecture does have a body of theory; however, much of that theory is derived from or shared with other fields. Thwaites articulated in the interview that

There are a lot of theoretical positions, often borrowed from other discipline areas that are relevant to landscape architecture This causes a lot of problems because it does not have a theoretical coherence base.

However, the profession is now spawning multiple theories. The study also supports the claim that 'the theoretical terrain of landscape architecture is undoubtedly contested

ground' (Swaffield, 2002, p.227). The research findings also demonstrate that the Landscape Modernist agenda, which completely turned its back on the genius loci – the heart of landscape architecture – remains at the heart of today's landscape architecture, as explored in Section 8.2.1. In addition, the supposedly distinct line between Landscape Modernism and Postmodernism was evidently blurry, as investigated in Section 8.2.2. Moreover, the attachment to the English Landscape tradition was shown to be both a blessing and a curse. The embrace of the discipline with McHarg's ecological principles resulted in not only a conflict with artistry, but had a negative effect on landscape design. From these theoretical positions, it can be concluded that even though the discipline is maturing over the years, the development of theory in landscape architecture still seems to be at an early stage. Deming and Swaffield (2011) remarked that theorising can provoke change in thinking and challenge assumptions about practice. Issues about landscape theory need to be properly resolved. There have been diverse competing proposals concerning the appropriate approach; however, there is no general agreement. As reviewed in Section 2.4.2, art criticism is the analysis and evaluation of works of art, and is often tied to the theory and history of art. Through institutions of art, art critique is an interpretive process involving an effort to understand a particular work of art from a theoretical perspective and to establish its significance in the history of art (Charlesworth, 2013). As reflected in the study, the process, which is akin to the art criticism tradition, could be helpful in development of landscape theory. Discussions and critical thinking regarding landscape practices, which have included theoretical and historical perspectives, have long been done via landscape journals and magazines such as Landscape Journal, JoLA, Studies in the History of Gardens and Designed Landscapes. However, the number of the journals seems to be small when compared with the number of projects in landscape practice. This tradition should be further encouraged, not only to bring out new ideas, but also to help develop landscape theory.

Drawing from the research findings, environmental art has not made a great impact upon theory in landscape architecture. However, within the realm of theory in visual art discipline, the environmental art artists uniquely developed a series of different creative approaches and diverse ideas in creating their artworks, which were highlighted in the

research such as genius loci and passage of time, may qualify as assistances in the reconstruction and development of landscape architectural theory.

In terms of practice, the findings identified that landscape architecture seem to have been underrated owing to its being a relatively young profession. Landscape architects work across boundaries not only with environmental artists, but also with architects and urban designers. Although they have claimed to be environmental specialists, the positions concerned with projects' environmental issues have been usually occupied by environmental engineers. Landscape architects have always been mistakenly regarded as plant experts. These issues have persisted within the development of the profession over the years. However, according to the study, there have been profound changes during recent years. The values and complexities of landscape architecture have begun to be recognised. The evidence base supporting this claim has grown considerably in recent years, with various high-profile projects that required landscape architecture. Moore mentioned several projects in the interview:

If you are looking at Hong Kong Wetland Park [Figures 9.1–9.3], it was an extraordinary project because the project manager was the landscape architect who had the holistic set of skills. That is why it keeps winning awards. ... There are projects such as Chelsea Barracks in London [Figures 9.4–9.5], which required to use Kim Wilkie as a project leader. He is in the really powerful position, which came from his reputation and his ideas.



Figures 9.1–9.3: Urbis Limited's Hong Kong Wetland Park (2006)



Figures 9.4–9.5: Kim Wilkie's Chelsea Barracks (2012)

Drawing from findings of the research, contemporary landscape architecture seems to be perceived as being in a good position. The institutionalised divisions between landscape architecture and other built environmental design professions may not be rigid. Yet, it is arguable that there is no other profession that can bring together a holistic approach to environmental analysis, spatial planning and design, and site management, and that enhances the quality of human life as landscape architecture does. In the future, the range of work which landscape architects undertake will continue to expand. Landscape architecture will continually face more challenges and constant changes in the years ahead. Landscape architects need to adapt their approach to a range of specialist knowledge. All this will determine the development of landscape architecture in the future.

Beyond the relevance of the environmental art to landscape architecture, findings of the research also suggest that the sub-discipline of environmental art has underscored four overarching existing ideas of landscape architecture comprising 1) the concept of the spirit of place, 2) creativity and experimental minds, 3) the intellectual understanding of the concept of nature and 4) harmony between artistic and scientific values. The discussion of these four overarching existing ideas are as follows.

1) THE CONCEPT OF THE SPIRIT OF PLACE

As reviewed in Section 3.4.3, the spirit of place or genius loci, the concept placed at the core of environmental art (Beardsley, 1998), was firstly inserted as a founding principle of landscape design by the British poet Alexander Pope in the eighteenth century (Motloch, 2001). Christian Norberg-Schulz wrote in his *Genius Loci: Towards a Phenomenology of Architecture* (1980),

Architecture means to visualize the genius loci, and the task of the architect is to create meaningful places ... [where] he can orientate himself within and identify himself with an environment (Motloch, 2001, p.57).

The research discussed that much contemporary landscape design focuses on other aspects such as strong artistic expression or the Modernist approach, leading landscape architecture to receive criticism as not being well blended with the site, causing the

place to be placeless. The study indicated many factors contributing to this loss, such as budget constraints, limitation of land area, etc. Among all these factors, prioritising the significance of scientific site information must be included. Making potentially contestable decisions in landscape design often relies heavily on the scientific information gathered. Landscape practitioners have correspondingly become less concerned with the non-tangible elements of the site.

The study has identified that one central concern of environmental art was the proper placement of the artwork on the site to best enhance the site's character and spirit. Environmental artists always look beyond physicality and search to capture the spirit of the site. Though the findings of the research indicated that many artworks, particularly those with a strong artistic expression, may not be harmonious with their sites, the majority are well enhanced with the genius loci, as is evident in numerous artworks such as Smithson's Spiral Jetty (1970). The aspect of how environmental artists enhance the site may have rekindled the concept of the genius loci in landscape design. Environmental art helps to restore to landscape architecture its old and lost concern for the intricacies of site. The thesis thus proposes reinforcing the centrality of the spirit of place in the principle of landscape design. Designing landscapes should be rooted in a clear understanding of local tradition. Landscape practitioners should always be concerned with highlighting issues that relate directly to the creation of a sense of place and sensitivity to local distinctiveness. A clear priority must be to ensure that the solutions chosen enhance and reinforce local distinctiveness, just as in Pope's Epistle IV (1751):

Consult the genius of the place in all;

That tells the waters or to rise, or fall;

Or helps th' ambitious hill the heav'ns to scale,

Or scoops in circling theatres the vale;

Calls in the country, catches opening glades,

Joins willing woods, and varies shades from shades,

Now breaks, or now directs, th' intending lines;
Paints as you plant, and, as you work, designs.

(p.273)

2) CREATIVITY AND EXPERIMENTAL MINDS

Creativity and experimental minds are essential qualities for artists in all fields of art, including environmental art. Environmental art first emerged as a reaction against gallery or museum culture; finding alternatives became the means to the artist's creativity (Lailach and Grosenick, 2007). Although art in the manner of the 1960s creates no surprise in today's context, its sense of creativity and experiment remains relevant. As is evident in the study, the spirit of creativity and experimentation in environmental art seems to be one great attraction which landscape architecture seems to look towards. Katherine Moore stated in the focus group, 'Environmental art came in to fill in the gap of being creative in landscape architecture'. Works of environmental art may have ignited the innovative and experimental spirit of landscape architecture.

The investigation has shown that the attempt to provoke ideas may not have sat well with the conservative base values of the discipline. The findings of the research were consistent with Hunt (1996), who argued that landscape design fails to express conceptual concerns. Currently, even though landscape architectural design is better perceived, evidence set out in this study confirmed that the criticism of landscape design as lacking compelling ideas and expressive forms still remains. Theaker noted in his interview, 'The communication of ideas in some landscape designs was not there to allow people to actually recognise'. According to the research, there are two main factors. One is that landscape architecture is bound to be responsive to functionality and programmes. The other is the nature of the discipline as involving stewardship. The study also reveals that when the two professions have worked across boundaries, the avant-garde environmental art has been chosen. The artists took over the positions of landscape architects. This is reviewed in Section 3.2.3, in which Beardsley (1998) discussed the case of Irwin's artworks (1997) at the Getty Center in Los Angeles:

In hiring an artist rather than a landscape architect, the Getty Center made an adventurous choice that most supposedly innovative places are not willing to make (p.185).

This has made the professional boundaries become more blurred.

Landscape design creativity is not possible without considering functionality and science. Yet, persistence in formulating appropriate and inspiring design should always be encouraged at the landscape design base, as the LI (2015) set as a future plan for 2011–2016: 'creativity and critical thinking to ensure that the profession remains vibrant, forward-looking, multidisciplinary and relevant'. This recommendation by the LI (2015) was supported by Moore's comments in the interview:

Landscape architecture is as expression of ideas through the materiality of the discipline And the work of landscape architecture is to express creative ideas to shape qualities of experiences And to be able to do it successfully, you need to be very culturally aware. And you have to understand what creative idea is current. You have to be able to push the boundary You have to translate the idea into something that's spatial and visual, and articulate why that idea is appropriate.

Moore's suggestion seems to be logical and practical. With this guideline, it could eventually lead the innovative creations of landscape architecture into the twenty-first century and onwards.

3) THE INTELLECTUAL UNDERSTANDING OF THE CONCEPT OF NATURE

As reviewed in Section 2.1, there were two typologies of environmental art in the 1960s, providing suitable metaphors for the transformation of land. The first was in the manner of the art, which directly addressed social and environmental issues. It often presented in the reclamation and remediation of damaged environments, restoring ecosystems through a diversity of artistic and scientific methods. The approach was relevant among American environmental artists such as Michael Heizer, Robert Smithson, Robert Morris,

Dennis Oppenheim and Walter De Maria. In recent years, through collaboration with scientists and multidisciplinary teams, the approach has moved forward, allowing the artists to work freely in the investigation of nature. Artists such as Mel Chin, Helen Mayer Harrison and Newton Harrison, Tim Collins, and Reiko Goto often created their artworks based on a collaboration with a scientist (Matilsky, 1992). The other tradition of environmental art of the 1960s was the manifestation of engagement with the natural world. The art proposed ways for humans to co-exist and share engagement with nature. This art appeared in the works and thinking of many other artists, particularly the avant-garde European artists, including Chris Drury, Andy Goldsworthy, Richard Long and Ian Hamilton Finlay. Even having different agendas, both traditions of environmental art re-envision the complex concept of nature. Among all environmental artists, Robert Smithson was the one who most obviously transitioned to the new view of nature as being multifaceted and changing. In his interview in 1972, Smithson made a clear statement: 'We have to develop a different sense of nature; we have to develop a dialectic of nature that includes man' (Boettge, 2002, p.218).

These two traditions of environmental art, which were enriched with educational components and an advocacy stance, were compatible with McHarg's ecological landscape design, which was arguably considered one of the greatest achievements of landscape architecture. Although its scientific technical applications are better known, McHarg clearly explored the concept of nature. His ideal was:

Nature is process, that is interacting, that is responds to laws, representing values and opportunities for human use with certain limitations and even prohibitions (Mcharg, 1969, p.7).

In term of relationship between man and nature, McHarg remarked that:

Man and nature should not be viewed as separate – that man is dependent upon nature for his own survival and well-being (McAllister, 1982, p.187).

Many of the research participants argued about McHarg's concept. Hooftman shared in the interview:

I was educated in the school of landscape architecture at Newark, which taught me a very interesting but very specific way of looking at landscape. Very much landscape as a large scale planning, regional land use, and early days of GIS.

McHarg's scientific method of analysis and planning seem to be better acknowledged and well known than his philosophical underlying thinking. Evidence from the study demonstrates that framing a natural process as part of a design can be an excuse for landscape architects from making potentially contestable decisions, whilst the understanding of conceptual thinking of nature was missing and considered a 'serious weakness' of landscape architecture as referred to by Thwaites in the interview.

Nature is multifaceted, changing over the centuries, depending on the form of influence by society and cultural norms (Weilacher, 1996). One overarching goal of landscape architecture is to create a harmonious relationship between human needs and the physical environment (Murphy, 2005). The attempt to pursue an understanding of the concept of nature is arguably considered as something nice to have rather than something essential. This is evident in the practices of landscape architecture over the past decades. Landscape architectural works can be produced without considering intellectual underpinnings of the concept of nature. Yet, to be able to achieve the ultimate goal in creating harmony between humans and nature, the thesis argues that the understanding of the concept of nature should be brought to people's attention and consistently examined. It is also an explicit design service in which the landscape designer is knowledgeable and claims to have expertise. The proposal of the research corresponds with the ideas illustrated by Murphy (2005):

As educated citizens and professionals, we need a guiding philosophy, if only to satisfy our curiosity about the world and our place in it and, equally importantly, to establish our role in society as architects of the landscape (p.225).

Murphy's (2005) point is consistent with Weilacher (1996), who stated,

The realisation that the crisis facing the environment is being caused by man is not a 'factor' to be predicted by rational means and researched by science, but is also

being perceived through his senses and often acting intuitively, is only very gradually gaining acceptance. It is slowly being acknowledged that using scientific objectivity to research the causes of the growing destruction of our environment will be of scant avail unless accompanied by efforts to ensure that the established findings can also be understood and experienced subjectively, ultimately, the question as to whether we can overcome ecological and social crises is primarily a question of human behaviour (p.9).

4) HARMONY BETWEEN ARTISTIC AND SCIENTIFIC VALUES

Drawing from the findings of the research, accentuating either artistic quality or scientific determinism was clearly disapproved. The environmental art that was based largely on artistic concerns received strong criticism for ruining the identity of place and the spirit of place. Kevin Thwaites made a firm statement on this in the interview:

When aims of works are purely for visual reward, there's a danger. ... It's dangerous to prioritise the approach as an artistic device.

Landscape architecture is a combination of science and art. In his *Design on the Land:*Development of Landscape Architecture (1971), Norman Newton described landscape architecture as:

... the art – or the science if preferred – of arranging land, together with the spaces and objects upon it, for safe, efficient, healthful, pleasant human use (p.xxi).

Art and science have been merged in the landscape design vocabulary of the French Baroque gardens, the English Landscape gardens and in pure simplistic functional Modernism. The inherent paradoxical poles of art and science resurfaced during the 1960s with the advent of McHarg's ecological design and landscape design that was associated with environmental art. Landscape designers from both aspects intensively explored their core values and widely practised during approximately the same period.

The core values of McHarg's ecological design had a preference for science over aesthetics (Balmori, 2011). The findings of the study demonstrate that the combination of McHarg's ecological design and the principles of the English School of Landscape Design resulted in 'very boring' and 'really dull' landscapes. In addition to having negative effects on design, the emphasis on science seemed to accelerate the deeprooted misconception of landscape architects as plant experts.

Neither a single artistic nor scientific approach can meet the needs of today's complex society. To achieve a desirable landscape design, the mastery of scientific matters will continue to be of growing importance in the work of landscape architects, but the elements of artistic vision and creative invention will also remain essential. Rather than seeking dominance on one side, landscape architecture needs to embrace both the scientific and artistic poles that supply it with ideas, and as a discipline it needs to hold the balance between these complementary principles. This thesis's proposal is consistent with a recommendation in the Five Year Strategy Framework by the LI (2008), which states:

An approach to the spaces around us driven only by visual aesthetics and lacking a grounding in scientific analysis and environmental awareness will not produce durable solutions; an approach which is purely driven by environmental concerns and lacks the power to inspire the people who live in it will not be sustainable because nobody will enjoy it (p.3).

This proposal of the thesis corresponds with the concept of landscape design coined by Diana Balmori (2010), who stated:

Landscape design should take issues of artistic form and programmes into design considerations. And it should continue supporting the long-term development of mutual interactions between humans and nature; however, they must be strikingly different from existing environments, signifying a new engagement with nature (p.xv).

The essence of artistic quality of environmental art reminds landscape architecture of the proposition by John Beardsley (in Saunders, 2000):

Thirty years ago, in *Design on the Land*, historian Norman Newton could confidently describe landscape architecture as 'the art, or the science if preferred, of arranging lands, together with spaces and objects upon it for safe, efficient, healthful, pleasant human uses' We are now apt to view landscape architecture as an 'expanded field,' as a discipline bridging science and art, mediating between nature and culture (p.186).

The timeline illustrated in Figure 9.6 lists some examples of works by both disciplines, and highlights dominant events interlinked with the two disciplines present in this research.

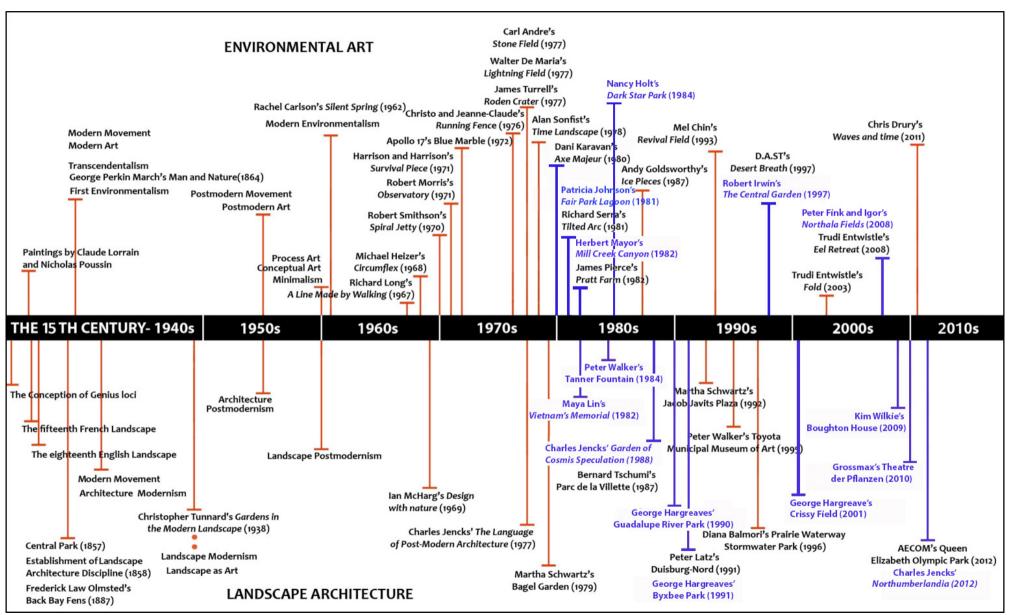


Figure 9.6: Time Line demonstrating some examples of works by both disciplines, which are associated with thoughts and highlights dominant interlinked events within the two disciplines.

List of selected dominant events and selected works by the two disciplines in Figure 9.6

SELECTED DOMINANT EVENTS

- 1. The fifteenth French Landscape
- 2. Paintings by Claude Lorrain and Nicholas Poussin (around the mid $17^{\rm th}$ c.)
- 3. The conception of genius loci (Egyptian period)
- 4. The eighteenth English Landscape
- 5. Modern Movement (around the late 19th c.)
 - 5.1 Modern Art (around the late 19th c.)
 - 5.2 Minimalism, Conceptualism, and Process Art (around the beginning of 1960s)
 - 5.3 Architecture Modernism (around the late 19th c.)
 - 4. Christopher Tunnard's *Garden* in the Modern Landscape (1938)
 - 5.5 Landscape as Art (around the mid 20th c.)
 - 5.5 Landscape Modernism (around the mid 20th c.)
- 6. Postmodernism (around the mid 1950s)
 - 6.1 Postmodern Art (around the mid 1950s)
 - 6.2 Rosalind Krauss's Sculpture in the Expanded Field (1979)
 - 6.3 Architecture Postmodernism (around the mid 1950s)
 - 6.4 Charles Jencks' *The Language of Post-modern Architecture* (1977)
 - 6.5 Landscape Postmodernism (around 1960s)
- 7. Environmentalism
 - 7.1 George Perkin March's Man and Nature(1864)
 - 7.2 First Environmentalism (around the mid 19th c.)
 - 7.3 Rachel Carlson's Silent Spring (1962)
 - 7.4 Modern environmentalism (around the mid 1960s)
 - 7.5The Blue Marble taken by Apollo 17 (1972)
- 8. Ian McHarg's Design with Nature (1969)
- Establishment of landscape architecture discipline (1858)

SELECTED ENVIRONMENTAL ARTS

- 1. Richard Long's A Line Made by Walking (1967)
- 2. Michael Heizer's Isolated Mass/ Circumflex (1968)
- 3. Robert Smithson's Spiral Jetty (1970)
- 4. Robert Morris's Observatory (1971)
- 5. Harrison and Harrison's Survival Piece (1971)
- 6. Christo and Jeanne-Claude's Running Fence (1976)
- 7. James Turrell's Roden Crater (1977)
- 8. Walter De Maria's Lightning Field (1977)
- 9. Carl Andre's Stone Field (1977)
- 10. Alan Sonfist's Time Landscape (1978)
- 11. Dani Karavan's Axe Majeur (1980)
- 12. Richard Serra's Tilted Arc (1981)
- 13. James Pierce's *Pratt Farm* (1982)
- 14. Mel Chin's Revival Field (1993)15. Tim Collins and Reiko Goto-Collins's Nine Mile Run (1997)
- 16. Joseph Beuys's 7000 Oaks (1987)
- 17. Andy Goldsworthy's Ice Pieces (1987)
- 18. D.A.ST's Desert Breath (1997)
- 19. Trudi Entwistle's Fold (2003)
- 20. Trudi Entwistle's Eel Retreat (2008)
- 21. Chris Drury's Waves and time (2011)

SELECTED LANDSCAPE ARCHTECTURAL PROJECTS

- 1. Central Park, New York (1857)
- 2. Frederick Law Olmsted's Back Bay Fens (1887)
- 3. Martha Schwartz's Bagel Garden (1979)
- 4. Sasaki and Associates's Frito Lay (1985)
- 5. Martha Schwartz's Splice Garden (1986)
- 6. Bernard Tschumi's Parc de la Villette (1987)
- 7. Peter Latz's Duisburg-Nord (1991)
- 8. Martha Schwartz's Jacob Javits Plaza (1992)
- 9. Peter Walker's Toyota Municipal Museum of Art (1995)
- 10. Diana Balmori's Prairie Waterway Stormwater Park (1996)11. Diana Balmori's The Garden That Climbs The Stairs (2009)
- 12. AECOM's Queen Elizabeth Olympic Park (2012)

SELECTED ENVIRONMENTAL ARTS AND LANDSCAPE ARCHITECTURAL PROJECTS, WHICH HAVE BLURRED DISCIPLINARY BOUNDARIES

(Lines and Texts Highlighted in Blue)

: ENVIRONMENTAL ARTWORKS

- 1. Patricia Johnson's Fair Park Lagoon (1981)
- 2. Herbert Meyer's Mill Creek Canyon (1982)
- 3. Nancy Holt's Dark Star Park (1984)
- 4. Robert Irwin's the Central Garden (1997)
- 5. Peter Fink and Igor Marko's Northala Field (2008)

: LANDSCAPE ARCHITECTURAL PROJECTS

- 1. Maya Lin's Vietnam Veterans' Memorial (1982)
- 2. Peter Walker's the Tanner fountain (1984)
- 3. Charles Jencks' Garden of Cosmic Speculation (1988)
- 4. George Hargreaves's Guadalupe River Park (1990)
- 5. George Hargreaves's Byxbee Park (1991)
- 6. George Hargreaves's Crissy Field (2001)
- 7. Kim Wilkie's Boughton House (2009)
- 8. Grossmax's Theater der Pflanzen (2010)
- 9. Charles Jenck's Northumberlandia (2012)

9.2 LANDSCAPE ARCHITECTURAL FRAMEWORKS: THE WAY FORWARD

Over the course of this chapter and throughout this thesis, a number of issues concerning the associations between landscape architecture and environmental art have been discussed. It is evident that being associated with environmental art made a great impression and generated new values in shaping the land for landscape architecture. By assessing the issues raised throughout the study, this thesis provides a set of recommendations, which can be taken forward in both conceptual and implementation terms.

- 1. Artistic form and expression should be taken into design consideration along with all other aspects. It is preferable for landscape design to be subtle and harmonise with the context, signifying a new engagement, but the difference from the existing setting should also be apparent. However, it is also legitimate to have landscape design that is provocative and contrast with the context, but is still considered as a deliberate response to the context and still be appropriate. There should be a counterbalance between artistic forms and characteristics of place.
- 2. Consultation with the genius loci should be retained. All designs should be rooted in a clear understanding of site setting. The identity of the site should be observed, plus the sorts of materials that were used locally historically. This knowledge should be used as a basis for working up a design. What sits well in an urban or industrial setting may look obtrusive and out of place in a rural, naturalistic place.
- 3. Attention should be paid to the intellectual understanding of the concept of nature, and this should be consistently examined. It could not only provide guidance in shaping land, but could also enrich design to be more than is conceive by the form.
- 4. Landscape designers should be encouraged in critical thinking and having creative minds and experimental spirits, to ensure that land transformation is vibrant, forward-looking and relevant.
- 5. Landscape design should be articulated in terms of ideas rather than techniques so that people can understand the nature of the profession properly. This is not only to diminish the deep-rooted misperception of the profession as being one of technicians, it could enrich the value of landscape design.

- 6. The tradition of criticism, particularly in the manner of art critique, should be encouraged in landscape architecture in order to evaluate, interpret and justify works of landscape architects. This tradition could be helpful in accelerating the development of landscape theory.
- 7. Landscape designers should always be well trained and skilled in the integrated process of acquiring new knowledge and in translating it into design performance.
- 8. The passage of time should be considered beyond the design concept and landscape management, as one primary principle of landscape design.
- 9. The landscape architect should look beyond professional boundary lines and learn to become interdisciplinary. Collaboration with multidisciplinary teams should always be encouraged to provide an appropriate framework that meets the environmental and artistic challenges in the development of landscape architecture.
- 10. Landscape architecture should be developed and evolved in quiet stimulation, which is persistent, yet in a humble way, so that development in landscape architecture can flourish in the long term.

9.3 LIMITATIONS OF THE RESEARCH AND FUTURE RESEARCH TRAJECTORY STUDY

This research has encountered constraints in the three major aspects as follows.

The researcher found that there was a lack of available literature in both the disciplines of landscape architecture and environmental art. In landscape architecture, the sources regarding the association between landscape architecture and environmental art, Landscape Postmodernism and landscape theory are few in number. From the researcher's viewpoint, some publications in landscape architectural practice seem to be much more numerous than the landscape architectural literature. Not all built contemporary landscape architectural projects were critically discussed in terms of theory. For environmental art, most of the literature primarily focuses on how the art is expressed and on examples of works. There are only a few books and publications reviewing theoretical positions of environmental art. Therefore, future research in the above is highly recommended.

There have been numerous approaches to the creation of environmental art since the 1960s to the present day. However, the research found that there was a lack of available information and data regarding the typology of environmental art. Such a typology in a chronological timeline could be used as a baseline to understand how environmental art has evolved over time. The typology would assist in the understanding of the overall context and development of environmental art, which should lead to further understanding in its associations with landscape architecture. Therefore, there is a need for more detailed studies in this regard.

According to *Art Encyclopedia* (2015), environmental art has also been partly associated with art forms such as traditional sculpture, De Stijl, Cubism, Assemblage and Installation, as well as the work of the Romanian sculptor Constantin Brancusi and avant-gardist Joseph Beuys. However, owing to the limitation of time, these art forms were not investigated in the research. Further investigation in these areas could complete that of this research, so that the association between environmental art and landscape architecture may be fully understood, assisting further development of the landscape architecture in art approach.

9.4 CONCLUDING STATEMENTS

It has been more than fifty years since environmental art was linked with the discipline of landscape architecture. Looking back, it is a unique landscape history, when the artistic form and the dynamics of nature were well recognised. These landscape architectural works nevertheless stand out as exceptional and noteworthy examples that reflect the ways of thinking about ourselves and of being in the world. With constant new developments in landscape architecture, such knowledge of the past can help to set aims for the future. Even though environmental art today has different approaches from its first emergence in the 1960s, contemporary landscape architecture seems to remain affected by the art. Together in the future, both disciplines might finally help us to regain the harmony between land and human that has eluded us for so long.



BIBLIOGRAPHY

- : Adams, Gerald R. and Schvaneveldt, Jay D. (1991) **Understanding Research Methods 2**nd **Edition**. Longman, New York.
- : Adamson, Glenn, Pavitt, Jane, Antonelli, Paola, Museum, Victoria and Museum, Albert (2011) **Postmodernism: Style and Subversion.** V&A Pub, London.
- : Albu, Cristina (2009) <u>Entropic Discourse in Robert Smithson's Spiral Jetty and Thoreau's Walden.</u> In Mihaila, Rodica and Pana, Irina G. (Eds.) (2009) **The Sense of America.** Univers Enciclopedic, Bucharest. Pg. 125-137.
- : Aliaga, Martha and Gunderson, Brenda (2002) **Interactive Statistics.** Prentice Hall, New Jersey.
- : Alfirevic, Djordje (2011). <u>Visual Expression in Architecture</u>. Architecture and Urban Planning, Vol. 31, Pg. 3-15.
- : Amherst, Alicia (2006) **A History of Gardening in England.** 3rd Edition. Kessinger Publishing, Montana, USA.
- : Andrews, Malcolm (1999) Landscape and Western Art. Oxford University Press, Oxford.
- : Appleton, Jay (1975) **The Experience of Landscape**. Wiley, London.
- : Arora, Raj and Stoner, Charles (2009) <u>A Mixed Method Approach to Understanding</u>
 <u>Brand Personality.</u> **Journal of Product and Brand Management**. Vol.18, No.4. Pg. 272 283.
- : American Society of Landscape Architects (2015) **About Us.** American Society of Landscape Architects. https://www.asla.org/aboutjoin.aspx, assessed 25/11/2015.
- : Art Encyclopedia (2015) **Land Art.** Art Encyclopedia. http://www.visual-arts-cork.com/land-art.htm, assessed 09/07/2015.
- : Art Movements (2015) **Expressionism**. Art Movements. http://www.artmovements.co.uk/expressionism.htm, assessed 01/08/2015.
- : Atkins, Robert (1993) **Artspoke**: a **Guide to Modern Ideas, Movements, and Buzzwords, 1848-1944**. Abbeville Press, New York.
- : Atkinson, David, Jackson, Peter, Sibley, David, and Washbourne, Neil (2005) **Cultural Geography: A Critical Dictionary of Key Concepts: A Critical Dictionary of Key Ideas.** I.B.Tauris, London.
- : Avery, Kevin J. (2015) **The Hudson River School.** The Metropolitan Museum of Art. http://www.metmuseum.org/toah/hd/hurs/hd_hurs.htm, assessed 20/01/2015.
- : Barry, John (1999) **Environment and Social Theory**. Routledge, New York.
- : Balmori, Diana (2010) A Landscape Manifesto. Yale University Press, New Haven.

- : Avery, Kevin J. (2015) **The Hudson River School.** The Metropolitan Museum of Art. http://www.metmuseum.org/toah/hd/hurs/hd_hurs.htm, assessed 20/01/2015.
- : Bachman, Leonard (2007) <u>Eco-Aesthetics</u>: <u>Bridging Architectural and Ecological Motivations</u>. **Proceeding of The Solar Conference**. Paper presented at The Solar Conference, Cleveland, Ohio, July 8-12 (Pg. 432). American Solar Energy Society and American Institute of Architects, Colorado, USA.
- : Barry, John. (1999) **Environment and Social Theory**. Routledge, New York.
- : Balmori, Diana (2010) A Landscape Manifesto. Yale University Press, New Haven.
- : Balmori, Diana and Sanders, Joel (2011) **Ground Work: Between Landscape and Architecture.** The Monacelli Press, New York.
- : Barrett, Terry (1994) **Criticizing Art: Understanding the Contemporary.** Mayfield Publishing Company, California.
- : Barrett, T. (1997) <u>Modernism and Postmodernism</u>: An Overview with Art Examples. In: Hutchens, James and Suggs, Marianne S. (Eds.) (1997) **Art Education**: **Content and Practice in a Postmodern Era.** National Art Education Association, Washington, DC. Pg.17-30.
- : Batey, Mavis (1994) <u>The Picturesque: An Overview.</u> **Garden History**. Vol. 22, No. 2. Pg. 121-132.
- : Belden, A. and Fessard, O. (2001) **Children and the Arts.** Georgia Family, Atlanta, USA.
- : Berkes, Fikret. (2012) Sacred Ecology. Routledge, New York.
- : Be a Landscape Architect. (2014) **Becoming a Landscape Architect.** Be a Landscape Architect. http://www.bealandscapearchitect.com/advice-and-guidance/how-can-i-be-a-landscape-architect/, assessed 14/05/2014.
- : Beardsley, John (1998). **Earthworks and Beyond 3rd Edition.** Abbeville Press Publisher, New York.
- : Beardsley, J. (2000). <u>A Word for Landscape Architecture.</u> In: Saunders, William S. (Ed.) (2000) **Nature, Landscape, and Building for Sustainability: A Harvard Design Magazine Reader**. University of Minnesota Press, Minneapolis and London. Pg.185-197.
- : Bell, Simon (1999) Landscape: Pattern, Perception, and Process. E & FN Spon, New York.
- : Belshaw, Christopher (2001) **Environmental Philosophy: Reason, Nature and Human Concern.** Routledge, London.
- : Benikov, Paul (1998) **Obituary: Professor Brian Hackett.** Independent (News coverage) http://www.independent.co.uk/news/obituaries/obituary-professor-brian-hackett-1161209.html, assessed 10/01/2016.
- : Bernard, H. Russell (1988) **Research Methods in Cultural Anthropology**. Sage Publications, Thousand Oaks, California.

- : Binkly, Sheri (2010) Intertwined Through Time: Andy Goldsworthy and His Masterpieces. The URC Undergraduate Research Journal for the Human Sciences Special Edition. http://www.kon.org/urc/v9/Interconnected-Through-Art/binkly.pdf, assessed 04/03/2015.
- : Birksted, Jan Kenneth (2004) <u>Landscape History and Theory: from Subject Matter to Analytic Tool.</u> **Landscape Review.** Vol.8, No.2. Pg. 4-28.
- : Blackstone, Amy (2012) **Principles of Sociological Inquiry: Qualitative and Quantitative Methods.** University of Maine, Orono, Maine.
- : Boettger, Suzaan (2002) **Earthworks: Art and Landscape of the Sixties.** University of California Press, Berkeley.
- : Booth, Norman K. (1990) Basic Elements of Landscape Architectural Design. Waveland Press, Illinois.
- : Boyatzis RE (1998) **Transforming Qualitative Information.** Sage: Cleveland, USA.
- : Brady, Emily. (2007) <u>Introduction to 'Environmental and Land Art.</u> **Ethics, Place and Environment: A Special Issue of Ethics, Place and Environment.** Vol. 10, No. 3. Pg. 257–261.
- : Braun Publishing AG. (2010) **1000 X Landscape Architecture**. Braun Publish, Schweiz, Switzerland.
- : Braun, V. and Clarke, V. (2006) <u>Using thematic analysis in psychology.</u> **Qualitative Research in Psychology.** Vol.3, No.2. Pg. 77-101.
- : Brenson, Michael (1985) **Art View: The Case in Favor of a Controversial Sculpture.**The New York Times. http://www.nytimes.com/1985/05/19/arts/art-view-the-case-in-favor-of-a-controversial-sculpture.html?pagewanted=all, assessed 17/08/2016.
- : Crewe, Katherine and Forsyth, Anne (2003) <u>LandSCAPES</u>: A Typology of Approaches to <u>Landscape Architecture</u>. **Landscape Journal**. Vol.22, No. 1, Pg. 37-53.
- : Brueggemann, Walter (1982) **The Land: Place as Gift, Promise, and Challenge in Biblical Faith.** Fortress Press, Philadelphia.
- : Buckingham, Susan and Turner, Mike (Eds.) (2008) **Understanding Environmental Issues.** Sage Publications, Los Angeles, California, and London.
- : Bund Deutscher Landschaftsarchitekten (2015) **Bund Federation of German Landscape Architects.** Bund Deutscher Landschaftsarchitekten.

 http://www.bdla.de/english, assessed 15/11/2015.
- : Burke, Edmund (1757) **Philosophical Enquiry into the Origin of Our ideas of the Sublime and Beautiful.** Printed for R. and J. Dodsley, London.
- : Cambridge Dictionary Website (2016) **Dictionary.** Cambridge Dictionary Press. http://www.http://dictionary.cambridge.org/dictionary, assessed 14/11/2016.
- : Carlson, Rachel (1962) Silent Spring. Houghton Mifflin, Massachussetts, USA.

- : Carter, Neil (Ed.) (2001) **The Politics of the Environment: Idea, Activism, Policy**. Cambridge University Press, New York.
- : Charlesworth, Convenor J.J. (2013) Where is Art Criticism?: Art Writers in Britain. Tate. http://www.tate.org.uk/about/projects/art-writers-britain/where-is-art-criticism, assessed 16/11/2015.
- : Chameides, Bill (2013) **Are Artists the Ultimate Environmentalists?** Conservation, University of Washington. http://conservationmagazine.org/2013/10/artists-ultimate-environmentalists/, assessed 30/11/2014.
- : Commandeur, Ingrid and Riemsdijk-Zandee, Trudy van (2012) **Robert Smithson Art in Continual Movement.** Alauda Publications, Amsterdam.
- : Condon, Patrick M. (1988). <u>Cubist Space, Volumetric Space, and Landscape</u> Architecture. **Landscape Journal**. Vol. 7, No. 1. Pg. 1-14.
- : Conon, Michel (Ed.) (2000) **Environmentalism in Landscape Architecture.** Dumbarton Oaks, Washington DC.
- : Corner, James (1991) <u>A Discourse on Theory II: Three Tyrannies of Contemporary Theory and the Alternative of Hermeneutics.</u> **Landscape Journal.** Vol.10, No.3. Pg.115-133.
- : Corner, J. (Ed.) (1999) Recovering Landscape: Essays in Contemporary Landscape Architecture. Princeton Architectural Press, New York, USA.
- : Corner, J. (2002) Representation and Landscape. In: Swaffield, Simon (Ed.) (2002) **Theory in Landscape Architecture.** University of Pennsylvania Press, Philadelphia. Pg.144-164.
- : Corti, Louise, Day, Annette and Backhouse, Gill (2000) **Confidentiality and Informed Consent: Issues for Consideration.** Forum: Qualitative Social Research. http://nbn-resolving.de/urn:nbn:de:0114-fqs000372, assessed 17/05/2015.
- : Council of Europe (1992) Management of Public Access to the Heritage Landscape: Proceedings of the European Colloquy Jointly Organised by the Council of Europe and the Office of Public Works (Ireland) (Architectural Heritage). Office of Public Works, Ireland.
- : Creswell, John (2003) Research Design: Qualitative and Quantitative Approach 2nd Edition. Sage Publications, Thousand Oaks, California.
- : Cronon, William (Ed.) (1996) **Uncommon Ground: Rethinking the Human Place in Nature.** W.W.Norton and Company, New York.
- : Crouch, Christopher (1999) **Modernism in Art, Design and Architecture.** Macmillan, Basingstoke.
- : Cuddy, Dylan (2015) **Joseph Beuys.** Widewall. http://www.widewalls.ch/artist/joseph-beuys/, assessed 15/11/2015.

- : Deming, M. Ellen and Swaffield, Simon (2011) Landscape Architecture Research: Inquiry, Strategy, Design. John Wiley and Sons, New Jersey.
- : Denscombe, Martyn (2007) <u>The Good Research Guide: For Small-Scale Social</u> <u>Research Projects: For Small-scale Social Research Projects.</u> **International Journal of Research and Method in Education.** Vol. 30, No. 1. Pg. 3–17.
- : Denzin, Norman K. (2009) **The Research Act: A Theoretical Introduction to Sociological Methods.** Aldine Transaction, New Jersey.
- : Dia Art (2016) **Walter De Maria, The Vertical Earth Kilometer.** Dia Art. http://diaart.org/visit/visit/walter-de-maria-the-vertical-earth-kilometer-kasselgermany, assessed 11/07/2016.
- : Dictionary Online (2016). **Definition.** Dictionary Online. http://www.dictionary.com, assessed 20/10/2016.
- : Dreyer, Frederick (1978) <u>The Genesis of Burke's Reflections.</u> **The Journal of Modern History**. Vol. 50, No. 3. Pg. 462–479.
- : Dobson, Andrew (1995) Green Political Thought 2nd Edition. Routledge, New York.
- : Duus, Masayo (2006) The Life of Isamu Noguchi: Journey without Borders. Princeton University Press, New Jersey, USA.
- : Eagleton, T. (1990) The Ideology of the Aesthetic. Blackwell, Oxford.
- : Earthday Network (2015) **Earth Day: The History of a Movement.** http://www.earthday.org/earth-day-history-movement, assessed 20/09/2015.
- : Eastman, Susan (1982) <u>Coining a Phase.</u> Landscape architecture Magazine. Vol.72, No.1. Pg. 54 57.
- : Eckbo, Garrett (1950) **Modern Landscape For Living.** New York Architectural Record with Duell, Sloan, & Pearce, New York.
- : Eckersley, Robyn (1992) **Environmentalism and Political Theory: Toward an Ecocentric Approach**. State University of New York Press, New York.
- : Elkins, James (1996) <u>Art Criticism.</u> In: Turner, Jane (1996) **Grove Dictionary of Art**. Oxford University Press, Oxford.
- : Ellison, Aaron M. (2013) <u>The Suffocating Embrace of Landscape and the Picturesque</u> <u>Conditioning of Ecology.</u> **Landscape Journal.** Vol. 32, No. 1, Pg. 79-94.
- : Ely, M, Anzul, M., Friedman, T., Garner, D. and McCormack-Steinmetz, A. (1991) **Doing Qualitative Research: Circles within Circles.** The Falmer Press, London, UK.
- : Encyclopaedia Britannica (2015) **Britannica Stories**. Encyclopaedia Britannica. http://www.britannica.com/, assessed 16/11/2015.
- : Fairclough, Graham J., McNab, Andrew, Chadwick, Paul, and Lambrick, George (Eds.) (1999) Yesterday's World, Tomorrow's Landscape: the English Landscape Project 1992-94. English Heritage, London

- : Fishman, Solomon (1963). The Interpretation of Art: Essays on the Art Criticism of John Ruskin, Walter Pater, Clive Bell, Robert Fry, and Herbert Read. University of California Press, Berkeley, California, USA.
- : Forman, Richard T. (1986) Landscape Ecology. Wiley, New York, USA.
- : Forman, R. T. (1995) Land Mosaics: the Ecology of Landscapes and Regions. Cambridge University Press, Cambridge and New York, USA.
- : Framing a Modern Mess (2010) **Aesthetic of Care.** Framing a Modern Mess. https://cityarchpruittigoe.wordpress.com/2010/09/16/lexicon-term-aesthetic-of-care/, assessed 22/11/2015.
- : Francis, Mark (2001) <u>A Case Study Method For Landscape Architecture.</u> **Landscape Journal.** Vol.20, No.1. Pg.15-29.
- : Gaber, John (1983) Reasserting the Importance of Qualitative Methods in Planning. Landscape and Urban Planning. Vol.26. Pg.137-148.
- : Gagnon, Kristen (2013) Martha Schwartz: Landscapes, Mayors, and Bagels. Spacing Ottowa. http://spacing.ca/ottawa/2013/11/05/martha-schwartz-landscapes-mayors-bagels/, assessed 17/10/2014.
- : Gardenvisit (2014) **Birth of the Genius Loci.** Gardenvisit Website. http://www.gardenvisit.com/history_theory/library_online_ebooks/architecture_city_as_landscape/birth_genius_loci, assessed 11/01/2014.
- : Gaynor, Andrea and Mclean, Ian (2005) <u>The Limits of Art History: Towards an Ecological History of Landscape Art.</u> **Landscape Review**. Vol. 11, No. 1. Pg. 4-11.
- : Gibbs, Anita (1997) **Focus Group.** Social Research Update. http://sru.soc.surrey.ac.uk/SRU19.html, assessed 24/11/2014.
- : Gilpin, William (1768) An Essay on Prints: : Containing Remarks upon the Principles of Picturesque Beauty, the Different Kinds of Prints, and the Characters of the Most Noted Masters. G. Scott for J. Robson, London.
- : Glynos, Jason, Howarth, David, Norval, Aletta and Speed, Ewen (2009) **Discourse Analysis: Varieties and Methods.** National Center for Research Methods. http://eprints.ncrm.ac.uk/796/1/discourse_analysis_NCRM_014.pdf, assessed 20/05/2014.
- : Godfrey, Tony (1998) **Conceptual Art.** Phaidon Press, London.
- : Gray, Christopher (2011) <u>Landscape Urbanism</u>: <u>Definitions and Trajectory</u>. **Scenario 01**: **Landscape Urbanism**. http://scenariojournal.com/article/christopher-gray/, assessed 20/11/2015.
- : Graziani, Ron (2004) **Robert Smithson and the American Landscape.** Cambridge University Press, Cambridge and New York.
- : Greenmuseum. (2016) **Lynne Hall.** Greenmuseum. http://greenmuseum.org/content/artist_index/artist_id-7.html, assessed 20/08/2016.

- : Gregory, Derek (1989) <u>Aerial Differentiation and Post-Modern Human Geog-raphy.</u> In: Agnew, John, Livingstone, David N. and Rogers, Alisdair (Eds.) (1996) **Human Geography: An Essential Anthology**. Blackwell, Cambridge. Pg. 211-232.
- : Guest, Gregory, Macqueen, Kathleen M., and Namey, Emily E. (2012) **Applied Thematic Analysis.** Sage Publications, London.
- : Guest, Gregory, Namey, Emily and Mitchell, Marilyn L. (2013) **Collecting Qualitative Data: A Field Manual for Applied Research.** Sage Publications, London.
- : Gussow, Alan (1997) A Sense of Place: The Artist and The American Land. Island Press, Washington D.C., USA.
- : Hackett, Brian (1950) Man, Society and Environment, Volume 2 of the Science of Planning Series. Marshall, Barrington, Illinois.
- : Hackett, B. (1971) Landscape Planning: An Introduction to Theory and Practice. Oriel Press, Hull, England.
- : Hardingham, Samantha and Rattenbury, Kester (2011) **Bernard Tschumi: Parc de la Villette.** Routledge, Oxon England and New York.
- : Hamilton, Albert (2010) **Art and Practice of Managing Projects.** ICE Publishing, London.
- : Hargreaves, George (1983) <u>Postmodernism Looks Beyond Itself.</u> **Landscape Architecture Magazine.** Vol.73, No.4. Pg. 60-65.
- : Hargreaves Associates (2016) **Projects.** Hargreaves Associates. http://www.hargreaves.com/projects/index.php, assessed 19/08/2016.
- : Harris, Dianne (1999) <u>The Postmodernization of Landscape: A Critical Historiography</u>. **Architectural History.** Vol. 58, No. 3. Pg. 434-443.
- : Harvard University Graduate School of Design (2016) **Richard T. Forman: Curriculum Vitae.** Harvard University Graduate School of Design. http://www.gsd.harvard.edu/#/people/richard-tt-forman.html, assessed 10/01/2016.
- : Henket, Hurbert-Jan. (2002) <u>Modernity, Modernism and the Modern Movement</u>. In: Henket, Hubert-Jan and Heynen, Hilde (Eds.) (2002) **Back from Utopia: The Challenge of the Modern Movement**. Uitgeverij 010 Publishers, Rotterdam. Pg.10.
- : Herrington, Susan (2006) <u>Framed Again: The Picturesque Aesthetics of Contemporary</u> Landscapes. **Landscape Journal.** Vol.25, No.1. Pg.22-37.
- : Hildebrand, Grant (1991) **The Wright Space: Patterns and Meaning in Frank Lloyd Wright's Houses.** University of Washington, Seattle.
- : Hoeveler, J. David (1996) **The Postmodernist Turn: American Thought and Culture in the 1970s.** Rowman & Littlefield Publishers, Lanham, Maryland.
- : Hogarth, William (1753) **The Analysis of Beauty.** Printed by J. Reeves, London.
- : Hohmann, Heidi and Langhorst, Joern (2004) <u>Landscape Architecture: A Terminal</u> <u>Case</u>. **Landscape Architecture Magazine.** Vol.95, No.4. Pg. 26-45.

- : HOK (2016) **About.** HOK (Hellmuth, Obata, and Kassabaum, Inc.). http://www.hok.com/about/, assessed, 05/11/2016.
- : Horayangkura, V. (2011) <u>Creating a Livable Urban Environment: Unseen Problems and Possible Solutions.</u> **Journal of Architecture/Planning Research and Studies**. Vol.8, No.2. Pg. 9-26.
- : Howett, Catherine (1985) <u>Landscape Architecture</u>: <u>Making a Place for Art.</u> **Journal Places**. Vol. 2, No. 4. Pg.52-60.
- : Howett, C. (2002) <u>Systems, Signs, and Sensibilities</u>: <u>Sources for a New Landscape</u> <u>Aesthetic.</u> In: Swaffield, Simon (Ed.) (2002) **Theory in Landscape Architecture.** University of Pennsylvania Press, Philadelphia.
- : Hunt, John D. (1994) <u>The Dialogue Modern Landscape Architecture with Its Part.</u> In: Treib, Marc (Ed.) (1994) **Modern Landscape Architecture: A Critical Review.** The MIT Press, Cambridge, Massachusetts.
- : Hunt, J. D. (1996) <u>Foreword.</u> In: Weilacher, Udo (1996) **Between Landscape Architecture and Land Art.** Birkhauser Verlag AG, Basel, Switzerland.
- : Hunt, John Dixon and Willis, Peter (Eds.) (1988) **The Genius of the Place: The English Landscape Garden, 1620-1820.** MIT Press, Cambridge, Massachusetts.
- : Imbert, Dorothee (2007) <u>The AIAJM: A Manifesto for Landscape Modernity</u>. **Landscape Journal.** Vol.26, No.2. Pg.219-235.
- : International Federation of Landscape Architects (2015) **About IFLA.** International Federation of Landscape Architects. http://iflaonline.org/, assessed 15/11/2015.
- : International Association for Landscape Ecology (2015) Landscape Ecology: What is It? International Association for Landscape Ecology. http://www.landscape-ecology.org/index.php?id=13, assessed 20/12/2015.
- : Jacob, Margaret (2000) **The Enlightenment: A Brief History with Documents.**Bedford, Massachusetts.
- : Jellicoe, Geoffrey (1960, 1966, 1970) **Studies in Landscape Design, Volumm I, II, and III.** Oxford University Press, London.
- : Jellicoe, Geoffrey A. and Jellicoe, Susan (1995) **The Landscape of Man: Shaping the Environment from Prehistory to the Present Day.** Thames and Hudson, London.
- : Jencks, C. (1977) 'Postmodern Architecture,' from the Language of Postmodern Architecture. In: Hays, K. Michael Hays (Ed.) (1998) Architecture Theory Since 1968. The MIT Press, Cambridge Massachusetts and London, England. Pg. 306-317.
- : Jencks, Charles (1977) **The Language of Postmodern Architecture.** Academy Editions, London.
- : Jencks, C. (2011) The Story of Postmodernism Five Decades of the Ironic, Iconic and Critical in Architecture. John Wiley and Sons, West Sussex.

- : Jobson, Christopher (2014) **Desert Breath: A Monumental Land Art Installation in the Sahara Desert.** Colossal. http://www.thisiscolossal.com/2014/02/desert-breath-a-monumental-land-art-installation-in-the-sahara-desert/, assessed 15/12/2015.
- : Johnson, Norman K. (1982) <u>Postmodernism: Questions Not to Ask.</u> Landscape architecture Magazine. Vol.72, No.1. Pg. 52-53.
- : Jorgensen, Marianne W. and Phillips, Louise J. (2002) **Discourse Analysis as Theory and Method.** Sage Publications, London.
- : Kaplan, Rachel and Kaplan, Stephen (1982) **Humanscape: Environments for People**. Ulrich's Books, Michigan.
- : Kaplan, R. and Stephen Kaplan (1989). **The Experience of Nature: A Psychological Perspective.** Cambridge University Press, New York.
- : Kastner, Jeffrey (1998) Land and Environmental Art. Phaidon, London.
- : Kaye, Nick (2000) **Site-Specific Art: Performance, Place and Documentation**. Routledge, London and New York.
- : Kellert, Stephen R. and Wilson, Edward O. (Eds.) **The Biophilia Hypothesis.** Island Press, Washington D.C
- : Kelly, Michael (Ed.) (1998) **Encyclopedia of Aesthetics.** Oxford University Press, New York.
- : Kelsey, John (1970) A Design Method. Landscape Architecture. Pg.425-428.
- : Kidd, Pamela S. and Parshall, Mark B. (2000) <u>Getting the Focus and the Group:</u> <u>Enhancing Analytical Rigor in Focus Group Research.</u> **Journal of Qualitative Health Research.** Vol.10, No.3. Pg.293-308.
- : Kivy, Peter (1997) Philosophies of Arts: An Essay in Differences. Cambridge University Press, Cambridge and New York.
- : King, Elaine A. (2011) Artists and Environmental Change: The Elusive Power of Contemporary Art. Artes Magazine. http://www.artesmagazine.com/2011/10/artists-environmental-change-the-elusive-power-of-contemporary-art/, assessed 14/10/2014.
- : Kitzinger, Jenny. (1994) <u>The Methodology of Focus Groups: the Importance of Interaction Between Research Participants.</u> **Sociology of Health and Illness.** Vol.16, No.1. Pg. 103-121.
- : Knight, Richard P. (1794) **The Landscape, a Didactic Poem.** W. Bulmer and Co., London.
- : Knight, R. P. (1805) **An Analytical Inquiry into the Principles of Taste 2nd Edition.** Printed by Luke Hansard, London.
- : Koh, Jusuck (1982) <u>Ecological Design: A Postmodern Design Paradigm of Holistic Philosophy and Evolutionary Ethic.</u> **Landscape Journal**. Vol.1, No.2. Pg. 76-84.
- : Krauss, Rosalind (1979) Sculpture in the Expanded Field. October. Vol. 8. Pg. 30-44.

- : Krog, Steven (1985) <u>The Language of Modern.</u> **Landscape architecture Magazine.** Vol.75, No.2 Pg. 56 59.
- : Krauss, R. (1986) The Originality of the Avant-garde and Other Modernist Myths. The MIT Press, Massachusetts.
- : Krueger, Richard A. (1994) Focus Group: A Practical Guide for Applied Research 2nd Edition. Sage Publications, California.
- : Kvale, Steinar. (1996) Interviews: An Introduction to Qualitative Research Interviewing. Sage Publications, California.
- : Kwon, Miwon. (1997) For Hamburg: Public Art and Urban Identities. In: **The Exhibition Catalogue Public Art, Everywhere**. Artist Christian Philipp Muller, Hamburg. Pg. 95-109.
- : K., Miwon. (2004) One Place After Another: Site Specific Art and Locational Identity. The MIT Press, Cambridge, Massachusetts and London.
- : LaGro, James A. (2007) Site Analysis: A Contextual Approach to Sustainable Land Planning and Site Design 2nd Edition. John Wiley & Sons, New Jersey.
- : Lailach Michael and Uta Grosenick (2007) Land Art. Taschen, Koln.
- : Lamborn, Peter W., and Weinberg, Bill (Eds.) (1999) **Avant Gardening: Ecological Struggle in The City and The World.** Autonomedia, New York.
- : Lancaster, Gillian, Susanna Dodd, and Paul Williamson (2004). <u>Design and Analysis of Pilot Studies: Recommendations for Good Practice</u>. **Journal of Evaluation in Clinical Practice** Vol.10, No. 2, Pg.307-312.
- : Landscape Institute. (2008) **Five Year Strategy Framework.** http://landscapeinstitute.org/PDF/Contribute/StrategyDevelopmentPlanandBudget20 11-12_000.pdf, assessed 09/08/2015.
- : Landscape Institute. (2012) **Landscape Architecture: a Guide for Clients.** Landscape Institute. http://www.landscapeinstitute.co.uk/about/, assessed 16/10/2015.
- : Landscape Institute. (2015) **Future plans for 2011-2016.** Landscape Institute. http://www.landscapeinstitute.co.uk/about/future_developments.php, assessed 09/12/2015.
- : Landscape Institute (2016) **The Landscape Institute Code of Standards of Conduct and Practice for Landscape Professionals.** Landscape Institute.
- https://www.landscapeinstitute.org/PDF/Contribute/CodeofConduct-May2012.pdf, assessed 06/11/2016.
- : Laurie, Michael (1986) **An Introduction to Landscape Architecture 2nd Edition**. Elsevier, New York.
- : Ley, David (1989) Modernism, Postmodernism, and the Struggle for Place. In: Agnew, John, Duncan, James (Eds.) (1989) **The Power of Place: Bringing Together the Geographical and Sociological Imaginations.** Urwin Hyman, London. Pg.44-65.

- : Ley, David and Mills, Caroline (1993) <u>Can There be a Postmodernism of Resistance in the Urban Landscape?</u> In: Knox, Paul (Ed.) (1993) **The Restless Urban Landscape.** Prentice Hall, New Jersey. Pg.255-278.
- : Lippard, Lucy R. (2007) **Weather Report: Art and Climate Change.** Boulder Museum of Contemporary Art, Colorado.
- : Lister, Gavin (1987) **Postmodernism and Landscape Architecture.** Dissertation. Lincoln College, University of Canterbury, New Zealand.
- : Litton, R.B. (1972) <u>Aesthetic Dimensions of the Landscape</u>. In: Krutilla, J.V. (Ed.) (1972) **Natural Environments**. John Hopkins University Press, Baltimore. Pg. 262-291.
- : Livingstone, Macro (1990) **Pop Art: A Continuing History.** Harry N. Abrams, New York.
- : London Parks and Gardens Trust (2016) **Northala Fields: A 21st-Century Park.** London Parks and Gardens Trust. http://www.londongardenstrust.org/features/northala.htm, assessed 17/08/2016.
- : Lowe, Philip and Goyder, Jane (1983) **Environmental Groups in Politics**. George Allen and Unwin, London.
- : Lowenthal, David (1979) Age and Artifact: Dilemmas of Appreciation. In: Meinig, D. (Ed.) **The Interpretation of Ordinary Landscape**. Oxford University Press, New York.
- : Lowenthal D. (1985) **The Past is a Foreign Country.** Cambridge University Press, Cambridge and New York.
- : Lyle Center for Regenerative Design (2016) **History of the Lyle Center.** Lyle Center for Regenerative Design. https://www.cpp.edu/~crs/history.html, assessed 10/01/2016.
- : Lyle, John Tillman. (1994) **Regenerative Design for Sustainable Development**. John Wiley & Sons, New York.
- : Lynch, Kevin (1960) **The Image of the City.** MIT Press, Massachusetts.
- : Lynch, K. and Hack, Gary (1962). **Site Planning.** MIT Press, Massachusetts.
- : Marsh, George Perkin (1864) Man and Nature or Physical Geography as Modified by Human Action. Charles Scribner, New York.
- : Martin, Timothy D. (2011) <u>Robert Smithson and the Anglo-American Picturesque.</u> In: Peabody, R. (Ed.) (2011) **Anglo-American Exchange in Postwar Sculpture, 1945-1975**. Getty Publications, Los Angeles. Pg. 164-175.
- : Maslow, Abraham H. (1943). <u>A Theory of Human Motivation</u>. **Psychological Review**. Vol. 50, No.4. Pg.370-96.
- : Mason, J. (2004). <u>Semi-structured Interview.</u> In: Lewis-Beck, M., Bryman, A. and Liao T. (Eds.) (2004) **Encyclopedia of Social Science Research Methods**. Pg.1021 1022.
- : Matilsky, Barbara C. (1992) Fragile Ecologies. Rizzoli, New York.

- : McAllister, Donald M. (1982) **Evaluation in Environmental Planning: Assessing Environmental, Social, Economic, and Political Trade-offs**. The MIT Press, Cambridge, Massachusetts and London.
- : McLeod, Saul (2014) **Maslow's Hierarchy of Needs.** Simply psychology ttp://www.simplypsychology.org/maslow.html, assessed/15/12/2015
- : McIver, Gillian (2015) **Art / Site Theory and Practice in Site-Specific / Site-Responsive Contemporary Art.** Site-Specific Art. http://www.sitespecificart.org.uk, assessed 05/08/2015.
- : McGrath, Matt (2013) **Plastic Waste Threatens Lakes as Well as Oceans.** BBC News. www.bbc.co.uk/news/science-environment-24434378+&cd=1&hl=en&ct=clnk&gl=uk, assessed 15/10/2014.
- : McGill Library Bibliotheque (2015) **The Exhibition.** McGill Library Bibliotheque. http://digital.library.mcgill.ca/artdeco/exhibition.php, assessed 20/09/2015.
- : McHarg, Ian (1969) **Design With Nature.** Garden City, New York.
- : McHarg, I. (1996) A Quest for Life: An Autobiography. John Wiley & Sons, New York.
- : Medhurst, Lucy (2012) Science, Nature and Identity: Understanding the Value of Experiential Learning in a Land Art Context. Stour Valley Arts, Kent.
- : Merriam Webster (2016) **Dictionary.** Merriam Webster. http://www.merriam-webster.com, assessed 20/10/2016.
- : Meyer, Elizabeth (1992) <u>Situating Modern Landscape Architecture.</u> In Swaffield, Simon (Ed.) (2002) **Theory in Landscape Architecture: A Reader**. University of Pennsylvania Press, Philadelphia. Pg.21-31.
- : Meyer, E. (2008) <u>Sustaining Beauty. The Performance of Appearance. A Manifesto in Three Parts.</u> **Journal of Landscape Architecture**. Spring. Pg.6-24.
- : Meyer, James (Ed.) (2010) **Minimalism.** Phaidon Press, London.
- : Milton, Key (Ed.) (1993) **Environmentalism: The View from Anthropology**. Routledge, London.
- : Moore, Leslie (1990) **Beautiful Sublime: The Making of Paradise Lost, 1701 1734**. Stanford University Press, Stanford, California.
- : Mostafavi, Mohsen and Doherty, Gareth (Eds.) (2010) **Ecological Urbanism.** Lars Muller Publishers, Baden, Switzerland.
- : Motloch, John (2001) **Introduction to Landscape Design 2nd Edition.** John Wiley and Sons, New York.
- : Moyer, Twylene and Harper, Glenn (Eds.) (2012) **The New Earthwork: Art, Action, Agency.** International Sculpture Centre Press, New Jersey.
- : Muenchen (2015) **English Garden.** Muenchen: The Official Website for the City of Munich. http://www.muenchen.de/int/en/sights/parks/english-garden.html, assessed 11/12/2015.

- : Murphy, Micheal (2005) Landscape Architecture Theory: An Evolving Body of Thought. Waveland Press, Illinois.
- : Nassauer, Joan I. (1995) <u>Messy Ecosystems, Orderly Frames.</u> Landscape Journal. Vol. 14, No.2. Pg 161-170.
- : Nassauer, J.I. (1995) <u>Culture and Changing Landscape Structure</u>. **Landscape Ecology**. Vol. 10, No. 4. Pg. 229-237.
- : National Geographic (2015) **Milestones in Space Photography.** National Geographic. http://photography.nationalgeographic.com/photography/photos/milestones-space-photography/#/earth-full-view_6125_600x450.jpg, assessed 15/11/2015.
- : Newton, Norman T. (1971) **Design on the Land: Development of Landscape Architecture**. Harvard University Press, Massachusetts and London.
- : Norberg-Schulz, Christian (1976) <u>Phenomenon of Place.</u> In: Larice, Michael and Macdonald, Elizabeth (2013) **The Urban Design Reader 2nd Edition.** Routledge, London. Pg. 272-284.
- : Norberg-Schulz, C. (1980) **Genius Loci: Towards a Phenomenology of Architecture.** Rizzoli, New York.
- : Olmsted, Frederick Law (1865) *Yosemite and the Mariposa Grove: A Preliminary Report, 1865*. **Landscape Architecture.** Vol. 43 (1952), No.1. Pg.12-25.
- : Orwin, C.S. and Sellick, R.J. (1970) **The Reclamation of Exmoor Forest**. Exmoor Books, Somerset.
- : Osborne, Peter (Ed.) (2002). Conceptual Art. Phaidon Press, London.
- : Oxford Dictionary (2015) **Dictionary.** Oxford Dictionary. http://www.oxforddictionaries.com/, assessed 15/11/2015.
- : Papapetros, Spyros and Rose, Julian. (Eds.) (2014). Retracing the Expanded Field: Encounters between Art and Architecture. MIT Press, Massachusetts.
- : Paulson, Ronald (1991) **Hogarth Vol.1: The Modern Moral Subject, 1697-1732.** Rutgers University Press, New Jersey, USA.
- : Pope, Alexander. (1751) The Works of Alexander Pope, Esq. Volume III. Containing His Moral Essays. MDCCLI, Dublin.
- : Potter, Jonathan and Wetherell, Margaret. (1987) **Discourse and social Psychology: Beyond Attitudes and Behavior.** Sage Publications, London and California.
- : Powell, R.A., H.M., Single, and K.R., Lloyd. (1996) <u>Focus Groups in Mental Health</u> <u>Research: Enhancing the Validity of User and Provider Questionnaires</u>. **International Journal of Social Psychology.** Vol. 42, No. 3. Pg. 193-206.
- : Pregill, Philip and Volkman, Nancy. (1993) Landscapes in History: Design and Planning in the Western Tradition. Van Nostrand Reinhold, New York.

- : Raaij, Willem Fred Van (1993) <u>Postmodern Consumption: Architecture, Art, and Consumer Behavior</u>. In: Raaij, W. Fred Van and Bamossy, Gary J. (Eds.) (1993) **E-European Advances in Consumer Research.** Vol.1. Pg.550-558.
- : Rabiee, Fatemeh (2004) <u>Focus Group Interview and Data Analysis</u>. **Journal of Proceedings of the Nutrition Society**. Vol.63, No.4. Pg. 655–660.
- : Relph, Edward. (1976) **Place and Placelessness.** Pion Limited, London.
- : Richards, Helen and Schwartz, Lisa (2002) <u>Ethics of qualitative research: are there</u> special issues for health services research? **Family Practice**. Vol.19, No.2. Pg.135-139.
- : Riley, Robert (1990) <u>Editorial Commentary: Some Thoughts on Scholarship and Publication.</u> **Landscape Journal.** Vol.9 Pg.,47-50.
- : Riparia (2015) Our Projects. Riparia, http://riparia.ca/, assessed 11/12/2015.
- : Revkin, Andrew (2001) Ian McHarg, 80, Architect Who Valued a Site's Natural Features. New York Time. http://www.nytimes.com/2001/03/12/arts/ian-mcharg-80-architect-who-valued-a-site-s-natural-features.html, assessed 20/08/2016.
- : Rocco, Tonette S. and Plakhotnik, Maria S. (2009) <u>Literature Reviews, Conceptual Frameworks</u>, and Theoretical Frameworks: Terms, Functions, and Distinctions. **Human Resource Development Review.** Vol. 8, No. 1, Pg. 120 -130.
- : Rodencrater (2015) **Rodencrater.** Rodencrater Skystone Foundation. http://rodencrater.com/about/, assessed 30/11/2015.
- : Rowe, Hayley A. (2011) **The Rise and Fall of Modernist Architecture.** Student Pulse. Vol.3, No.4. http://www.studentpulse.com/a?id=515, assessed 12/11/2014.
- : Rowland, Kurt dobson(1973) A History of the Modern Movement: Art, Architecture, **Design.** Van Nostrand Reinhold, New York.
- : Scruton, Roger (1998) The Aesthetic Understanding: Essays in the Philosophy of Art and Culture. 2nd Edition. St. Augustine's Press, Indiana, USA.
- : Soja, Edward (1987). What's New? A Review Essay on the Postmodernization of Geography. Annals of the Association of American Geographers Vol. 77. Pg. 289-293.
- : Sa Ode A, Mari S. Tveit and Gary Fry (2008) <u>Capturing Landscape Visual Character Using Indicators</u>: Touching Base with Landscape Aesthetic Theory. **Landscape Research**. Vol.33, No.1. Pg.89 117.
- : Schmandt, Michael (1999) <u>The Importance of History and Context in the Postmodern</u> Urban Landscape. **Landscape Journal.** Vol.18, No.2. Pg.157-165.
- : Schwartz, Martha (1994) <u>Landscape and Common Culture since Modernism.</u> In: Treib, Marc (1994) **Modern Landscape Architecture: A Critical Review**. The MIT Press, Massachusetts and London.
- : Seel, Martin (2004) **Aesthetics of Appearing.** Stanford University Press, Redwood City.

- : Simmonds, John O. (1961) Landscape Architecture: the Shaping of Man's Natural Environment. Iliffe, London.
- : Shirazi, M. Reza (2008) <u>'Genius Loci', Phenomenology from Without.</u> **International Journal of Architectural Theory**. http://www.cloud-cuckoo.net/journal1996-2013/inhalt/en/issue/issues/207/Shirazi/shirazi.php, assessed 21/05/2015.
- : Smithson, Robert. (1973) <u>Frederick Law Olmstead and the Dialectical Landscape.</u> In: Flam, Jack (Ed.) (1996) **Robert Smithson, the Collected Writings.** University of California Press, Berkeley.
- : S., Robert. (1968) A Sedimentation of the Mind: Earth Projects. Artforum. Pg.44-53.
- : Soanes, Catherine, Hawker, Sara and Elliott, Julia (2006) **Paperback Oxford English Dictionary 2nd Edition.** Oxford University Press, Oxford and New York.
- : SOM. (2016) **About.** SOM (Skidmore, Owings, and Merill LLC.). http://www.som.com/about, assessed, 05/11/2016.
- : Spirn, Anne Whiston (1988) <u>The Poetics of City and Nature: Towards a New Aesthetic for Urban Design.</u> **Landscape Journal.** Vol.7, No.2. Pg.108-112.
- : Spirn, A. W. (2000) <u>Ian McHarg, Landscape Architecture, and Environmentalism: Ideas and Methods.</u> In: Conan, Michel (Ed.) (2000) **Environmentalism in Landscape Architecture.** Dumbarton Oaks, Washington DC. Pg.97-114.
- : Sim, J. (1998) Collecting and Analyzing Qualitative Data: Issued Raise by the Focus Group. Journal of Advanced Nursing. Vol. 28, No.2. Pg. 345-352.
- : Staats, Henk (2012) <u>Restorative Environments</u>. In: Clayton, Susan D. (Ed.) (2012) The **Oxford Handbook of Environmental and Conservation Psychology.** Oxford University Press, Oxford.
- : Steele, Fletcher (1930) New Pioneering in Garden Design. Landscape Architecture Magazine. Vol. 20. Pg.166-167.
- : Steinitz, Carl (1995) <u>A Framework for Landscape Planning Practice and Education.</u> **Process Architecture.** No. 127, Pg.42-53.
- : Stevens, Anthony (1994) Jung. Oxford University Press, Oxford.
- : Strelow, Heike, and David, Vera (2004) **Ecological Aesthetics: Art in Environmental Design: Theory and Practice**. Birkhauser Verlag AG, Basel, Switzerland.
- : Summers, Chris (2008) **The Hills of the Future.** BBC News Online. http://news.bbc.co.uk/2/hi/uk news/magazine/7310211.stm, assessed 17/08/2016.
- : Swaffield, Simon (2002) **Theory in Landscape Architecture: A Reader**. University of Pennsylvania Press, Pennsylvania.
- : Swaffield, Simon and Bowring, Jacky (2013) <u>Shifting Landscapes In-Between Times.</u> **Harvard Design Magazine.** No.36. Pg.96-104.

- : Sweeting, Adam (1996) Reading Houses and Building Books: Andrew Jackson

 Downing and the Architecture of Popular Antebellum Literature, 1835-55. University

 Press of New England, New Hampshire.
- : Tate (2015) **Glossary of Art Terms.** Tate. http://www.tate.org.uk/learn/online-resources/glossary, assessed 01/08/2015.
- : Tatum, George B. (1951) <u>The Beautiful and the Picturesque.</u> **American Quarterly**. Vol.3, No.1. Pg. 36-51.
- : Tayler, Mark C. (2003) <u>Refusing Architecture.</u> In: Culler, Jonathan (Ed.) (2003) **Deconstruction: Critical Concepts in Literary and Cultural Studies, Volume 3.** Routledge, London and New York. Pg.422-442.
- : Tiberghien, Gilles (1993) Land Art. Dominique Carré, Paris.
- : The Art Story (2015) **Modern Movements Full List.** The Art Story. http://www.theartstory.org/section_movements.htm, assessed 20/09/2015.
- : Solano, Laura (2016) **The Landscape Guides to Boston: Tanner Fountain.** The American Society of Landscape Architecture. https://www.asla.org/guide/site.aspx?id=41138, assessed 19/08/2016.
- : The Center for Land Use Interpretation (2015) **Pratt Farm.** The Center for Land Use Interpretation. http://clui.org/ludb/site/pratt-farm, assessed 5/01/2015.
- : The Harrison Studio (2016) **The Survival Pieces 1970-72.** The Harrison Studio. http://theharrisonstudio.net/the-survival-pieces-1970-72, assessed 16/07/2016.
- : The Institute for Intercultural Studies (2015) **Gregory Bateson.** The Institute for Intercultural Studies. http://www.interculturalstudies.org/Bateson/, assessed 15/12/205.
- : The New York City Department of Parks and Recreation (2015) **Greenstreet: Time Landscape**. The New York City Department of Parks and Recreation. http://www.nycgovparks.org/parks/greenstreet-mz31/history, assessed 15/12/2015.
- : The New York Times **Obituaries: Prof. Albert Fein, 58, Urban Studies Expert.** The New York Times. http://www.nytimes.com/1989/03/11/obituaries/prof-albert-fein-58-urban-studies-expert.html, assessed 15/10/2016.
- : Thornes, John E. (2008) <u>A Rough Guide to Environmental Art.</u> **The Annual Review of Environment and Resources.** Vol.33. Pg.391–411.
- : Treib, Marc (1994) <u>Axioms for a Modern American Landscape Architecture.</u> In Marc Treib (1994) **Modern Landscape Architecture: A Critical Review.** The MIT Press, Massachusetts and London.
- : Treib, M. (2011) <u>Must Landscape Mean? Approaches to Significance in Recent Landscape Architecture.</u> In Marc Treib (Ed.) (2011) **Meaning in Landscape Architecture and Gardens**. Routledge, New York.

- : Trudi Entwistle (2015) **Trudi Entwistle Site Specific Artist.** Trudi Entwistle. http://www.trudientwistle.com/#, assessed 15/3/2015.
- : Tuan, Yi-fu (1974) **Topophilia: A Study of Environmental Perception, Attitudes, and Values.** Prentice-Hall, New Jersey.
- : Tunnard, Christopher (1948) **Gardens in the Modern Landscape**. The Architectural Press, London.
- : Thompson, Catharine Ward (2007) <u>Complex Concepts and Controlling Designs:</u>
 <u>Charles Jencks' Landform at the Scottish National Gallery of Modern Art, Edinburgh.</u> **Journal of Landscape Architecture.** Vol.2, No.1. Pg.64-75.
- : Thompson, Ian H. (1995) <u>Can a Landscape be a Work of Art?: An Examination of Sir Geoffrey Jellicoe's Theory of Aesthetics.</u> **Landscape Research**. Vol. 20, No. 2. Pg.59-67.
- : Thompson, I. H. (1999) **Ecology, Community, and Delight: Source and Values in Landscape Architecture.** Spon Press, London and New York.
- : Thompson, I. H. (2000) <u>The Ethics of Sustainability.</u> **Landscape Research.** Vol. 23, No. 2. Pg. 157-194.
- : Thompson, I. H. (2009) **Rethinking Landscape: a Critical Reader.** Routledge, Oxon and New York.
- : Thompson, I. H. (2014) Landscape Architecture: A Very Short Introduction. Oxford University Press, Oxford.
- : Tonkiss, Fran (2012) <u>Discourse Analysis.</u> In Seale, Clive (Ed.) (2012) **Researching** Society and Culture 3rd Edition. Sage, California.
- : Townsend, Dabney (1997) <u>The Picturesque.</u> **The Journal of Aesthetics and Art Criticism.** Vol. 55, No. 4. Pg. 365- 376.
- : Tuan, Yi-Fu (1974) **Topophilia: A Study of Environmental Perceptions, Attitudes, and Values.** Prentice Hall, Englewood Cliffs, and New Jersey.
- : Ulrich, Roger S. (1979) <u>Visual Landscape and Psychological Well-being.</u> **Landscape Research.** Vol. 4, Pg.17-23.
- : Ulrich, R.S. (1984) <u>View Through a Window may Influence Recovery from Surgery</u>. **Science.** Vol. 224. Pg. 420-421.
- : University of Oxford Style Guide (2016) <u>Section 8.7: Works of Art.</u> **University of Oxford Style Guide.**
- http://www.oxforddictionaries.com/secondary/harts_rules/8-7-works-of-art?q=works+of+art#works_of_art, assessed 20/01/2016.
- : Vaccarino, R. (2000) **Roberto Burle Marx: Landscapes Reflected.** Princeton Architectural Press with the Harvard University Graduate School of Design, New York and Massachusetts, USA.
- : Valkenburgh, Michael Van, and Saunders, William S. (2013) Landscape Over Time. Landscape Architecture Magazine.

- http://landscapearchitecturemagazine.org/2013/03/14/landscapes-over-time/, assessed 17/10/2014.
- : Veterans Memorial Park Foundation (2016). **Home of Wall South.** Veterans Memorial Park Foundation. http://www.veteransmemorialparkpensacola.com/page/about-us, assessed 17/08/2016.
- : Walker, Peter (1998) Invisible Gardens: The Search for Modernism in American Landscape. The MIT Press, Massachusetts and London.
- : Warren, Robert P. (1929) **John Brown: The Making of a Martyr.** Payson and Clarke, New York.
- : Waldheim, Charles (1999) <u>Aerial Representation and Recovery of Landscape</u>. In: Corner, James. (Ed.) (1999) **Recovering Landscape: Essays in Contemporary Landscape Theory.** Princeton Architecture Press: New York, USA. Pg.121-137.
- : W., Charles (2016) Landscape as Urbanism: A General Theory. Princeton University Press, New York, USA.
- : Weilacher, Udo (1996) **Between Landscape Architecture and Land Art.** Birkhauser Verlag AG, Basel, Switzerland.
- : Westphal, Merold (2010) <u>The Emergence of Modern Philosophy of Religion.</u> In: Taliaferro, Charles, Draper, Paul and Quinn Philip L. (Eds.) (2010) **A Companion to Philosophy of Religion.** 2nd Edition. A John Wiley & Sons, Ltd., Publication, Massachusetts and Oxford. Pg.133-140.
- : Wijaya, Made (2007) **Modern Tropical Garden Design.** Thames and Hudson, London.
- : Wheeler, Daniel (1991) **Art since Mid Century, 1945 to Present.** Vendome Press, New York.
- : World History Chronology (2015) **The Woman of Willendorf.** World History Chronology. http://www.thenagain.info/WebChron/World/Willendorf.html, assessed 10/10/2015.
- : Wright, Shelagh (2013) **Introduction**. :In Mission, Models, Money and Common Cause (2013) The Art of Life: Understanding How Participation in Art Can Affect Our Values. http://valuesandframes.org/download/reports/The-Art-Of-Life-MMM-and-Common-Cause.pdf, assessed 15/07/2016.
- : Yosemite (2014) **Yosemite History: Frederick Law Olmsted, Landscape Architect**. Yosemite. http://www.yosemite.ca.us/library/olmsted/, assessed 15/11/2014
- : Zell, Jennifer Kay (2007) **The Art of Perception: Robert Irwin's Central Garden at the J. Paul Getty Centre.** A Thesis. The Louisiana State University.
- 141814/unrestricted/theartofperception.pdf, assessed 15/11/2014.

http://etd.lsu.edu/docs/available/etd-11122007-

: Zella, Carmen (2014) **Creating Connections With Nature Via Art**. Huffpost Art and Culture http://www.huffingtonpost.com/carmen-zella/creating-connections-withland-art_b_4833677.html, assessed 15/11/2014.



BIBLIOGRAPHY OF ILLUSTRATIONS

- : A Collection of Things (2015) **Gallery: Duisburg Nord: Peter Latz.** A Collection of Things. https://acollectionofthings.wordpress.com/2011/08/31/duisburg-nord-peter-latz/, assessed 19/12/2015.
- : Alan Sonfist (2015) Sculptures. Alan Sonfist.

http://www.alansonfist.com/sculptures.html, assessed 11/9/2015.

- : Allsworth, Hannah (2013) **Creative Spark.** Hannah Allsworth. https://gdblogs.shu.ac.uk/b0004211/2013/10/, assessed 15/11/2016.
- : Annenberg Learner (2015) **Robert Smithson, Spiral Jetty.** Annenberg Learner. http://www.learner.org/courses/globalart/work/283/index.html, assessed 20/12/2015.
- : An Outdoor Life (2011) **Unity, Function, Simplicity and Scale.** An Outdoor Life. https://anoutdoorlifemag.wordpress.com/tag/californian-style/, assessed 19/12/2015.
- : Arslocii (2011) **Stone Age.** Arslocii. https://arslocii.wordpress.com/tag/stone-field-sculpture/, assessed 11/12/2015.
- : Art Gallery NSW (2015) **Stonypath, from the series Stonypath.** Art Gallery NSW. http://www.artgallery.nsw.gov.au/collection/works/190.1995.18/, assessed 15/12/2015.
- : Avant Guardians (2015) **Alan Sonfist.** Avant Guardians Website. http://avant-guardians.com/sonfist1/as_pop8.html, assessed 22/12/2015.
- : Balmori Associates (2015) **Selected Projects.** Balmori Associates. http://www.balmori.com/projects/, assessed 14/12/2015.
- : Bell, Jessica L. (2014) **Site Specific Project: Richard Long.** Jessica Louise Bell Photography Website. https://jessicalouisebell.wordpress.com/2014/11/08/site-specific-project-richard-long/, assessed 20/12/2015.
- : Bernard Tschumi Architects (2015) Parc de la Villette. Bernard Tschumi Architects. http://www.tschumi.com/projects/3/, assessed 19/12/2015.
- : Bizarre Beyond Believe Magazine (2015) **Nils Udo: Clemson Clay Nest.** Bizarre Beyond Believe Magazine. http://bizarrebeyondbelief.com/2012/03/29/nils-udo-clemson-clay-nest/, assessed 27/12/2015.

: Brown, Sara (2015) A Look at the Back Bay Fens. Boston.com.

http://www.boston.com/yourtown/boston/fenway_kenmore/gallery/fens_park/, assessed 5/11/2015.

: Bridge and Tunnel Club (2016) Isamu Noguchi. Bridge and Tunnel Club.

http://www.bridgeandtunnelclub.com/bigmap/queens/astoria/noguchi/index.htm, assessed 10/11/2016.

: Burle Marx (2015) **Portfolio.** Burle Marx. http://burlemarx.com.br/portfolio-2/, assessed 19/12/2015.

: Castermans, Suzy (2013) James Turrell: Roden Crater. TL Mag Website. http://tlmagazine.com/james-turrell-gives-us-an-insight-into-his-roden-crater/, assessed, 10/12/2015.

: Charles Jencks (2015) Projects. Charles Jencks

http://www.charlesjencks.com/#!projects, assessed 20/12/2015.

: Chris Drury (2015) Works Outside. Chris Drury.

http://chrisdrury.co.uk/category/works_outside/, assessed 15/10/2015.

: Christo and Jeanne-Claude (2015) **Running Fence.** Christo and Jeanne-Claude. http://christojeanneclaude.net/projects/running-fence#.Vplv-WqhQfh, assessed 27/12/2015.

: City of Wells, Mendip Hills and Somerset Levels (2015) **Stourhead.** City of Wells, Mendip Hills and Somerset Levels.

http://www.wellssomerset.com/search/entry1071_stourhead.html%20%20l, assessed 20/12/2015.

: City Trip Planner (2015) Visit Freeway Park. City Trip Planner.

http://www.citytripplanner.com/en/things-to-do_Seattle/Freeway-

Park#.Voo72GqhQfg, assessed 20/12/2015.

: Claude Lorrain (2015) The Complete Works. Claude Lorrain.

http://www.claudelorrain.org/the-complete-works.html, assessed 15/10/2015.

: Clayton, Stephanie (2012) **Art Spaces: Menil Collection Front Lawn.** Stephanie Clayton Art Journal. http://stephanieclayton.blogspot.co.uk/2012/10/art-spaces-menil-collection-front-lawn.html, assessed 22/10/2015.

: Clemson Chamber of Commerce (2015) **Home.** Clemson Chamber of Commerce. http://www.clemsonareachamber.org/#!visit-clemson/cbqp, assessed 27/12/2015.

: Collier, Ric and Edwards, Jim (2004) **Spiral Jetty: The Re-Emergence**. International Sculpture Center: Publisher of Sculture Magazine.

http://www.sculpture.org/documents/scmag04/julaug04/spiraljetty/julaug04_spiraljet ty.shtml, assessed 20/12/2015.

- : Collins and Goto (2015) **Public Art.** Collins and Goto: Art and Environmental Change Website. http://collinsandgoto.com/artwork, assessed 10/12/2015.
- : Contemporary Benefactors (2014) Art Pilgrimage: Walter De Maria, the Broken Kilometre and the **Vertical Earth Kilometer**. Contemporary Benefactors.

http://contemporarybenefactors.com/2014/09/01/art-pilgrimage-walter-de-maria-the-broken-kilometer-the-vertical-kilometer/, assessed 26/12/2015.

: Contemporary Art Now (2012) **Vertical Earth Kilometer: Walter De Maria.**Contemporary Art Now Website.

https://contemporaryartnow.wordpress.com/2012/10/27/vertical-earth-kilometer-walter-de-maria/, assessed 27/11/2015.

: Danae Stratou (2015) **Desert Breath.** Danae Stratou.

http://www.danaestratou.com/site/portfolio/desert-breath/, assessed 17/12/2015.

- : Denes, Agnes (2015) **Art For The Third Millennium: Creating A New World.** Women Environmental Artists Directory. http://weadartists.org/art-for-the-third-millennium, assessed 20/10/2015.
- : Design Boom (2009) Radical Nature: Art and Architecture for a Changing Planet 1969-2009. Design Boom Website. http://www.designboom.com/design/radical-nature-art-and-architecture-for-a-changing-planet-1969-2009/, assessed 22/10/2015.
- : Dispositioning (2015) **Inspiring.** Dispositioning Website. https://dispositioning.wordpress.com/, assessed 9/10/2015.
- : Dreher, Thomas (2008) Robert Morris: Observatory.

http://dreher.netzliteratur.net/6_LandArt_Morris_Observatorium.html; assessed 11/12/2015.

- : Dunlap, David W. (2008) **A New York Grand Canyon Rides on Landmark Lane.** The New York Time. http://cityroom.blogs.nytimes.com/2008/03/18/a-new-york-grand-canyon-rides-on-landmark-lane/?_r=1, assessed 20/12/2015.
- : E-Architect (2015) **Chelsea Barracks.** E-Architect. http://www.e-architect.co.uk/london/chelsea-barracks, assessed 27/12/2015.
- : Encyclopaedia Britannica (2015) **Britannica Stories**. Encyclopaedia Britannica. http://www.britannica.com/, assessed 16/11/2015.
- : Explore The Getty (2015) **Gardens.** Explore The Getty. http://www.getty.edu/visit/center/gardens.html, assessed 20/12/2015.

: Favermann, Mark (2015) Pioneer Artist Otto Piene's Last Environmental Artwork.

New Media International. http://www.newmediainternational.com/#!Pioneer-Artist-Otto-Piene%E2%80%99s-Last-Environmental-

Artwork/cjds/553a44cb0cf2adc1ace64836, assessed 20/11/2015.

: Feel the Planet (2015) **Longleat Hedge Maze.** Feel the Planet http://feel-planet.com/longleat-hedge-maze-uk/, assessed 15/10/2015.

: Finkel, Jori (2014) **Artist of Light, Space and, Now, Trees.** The New York Times. http://www.nytimes.com/2007/10/14/arts/design/14fink.html? r=0, assessed 20/12/2015.

: Flathead County (2015) **Flathead County Parks.** Flathead County. https://flathead.mt.gov/parks/rec/parks.php, assessed 05/12/2015.

: Frank, Peter (2012) "Ends of the Earth: Land Art to 1974" at MOCA (The Geffen Contemporary). Art Ltd. Magazine Website.

http://www.artltdmag.com/index.php?subaction=showfull&id=1346948845&archive= &start_from=&ucat=43&, assessed 27/11/2015.

: Free City Guides (2015) **The English Garden, Munich.** Free City Guides. http://www.free-city-guides.com/munich/english-garden/, assessed 14/12/2015.

: Fresno State (2015) Memorial Plaza. Fresno State.

http://www.fresnostate.edu/adminserv/arboretum/garcol/memplaza.html, assessed 05/12/2015.

: Garden Drum (2015) **All Listings.** Garden Drum: Garden Tour Hub. http://gardentourhub.gardendrum.com/tours/, assessed 20/12/2015.

: Geolocation (2015) Longleat Safari Park. Geolocation.

https://geolocation.ws/v/P/39375521/longleat-safari-park/en, assessed 15/10/2015.

: Germany Wanderer (2015) **Top 5 free things to do in Munich.** Germany Wanderer http://www.germanywanderer.com/top-5-free-things-to-do-in-munich, assessed 14/12/2015.

: Getty Image (2015) **Contributor Archive.** Getty Image. http://www.gettyimages.co.uk/detail/news-photo/rolling-hills-and-forests-of-oak-trees-separating-chalk-news-photo/502905290, assessed 27/12/2015.

: Great Salt Lake Advisory Council (2015) **Background.** Great Salt Lake Advisory Council. http://www.gslcouncil.utah.gov/, assessed 27/12/2015.

: Green Museum (2015) **Artists.** Green Museum. http://greenmuseum.org/archive_index.php, assessed 15/10/2015.

- : Grossmax (2015) **Theater der Pflanzen.** Grossmax http://www.grossmax.com/projects.asp?n=Installations&y=59&x=6&offset=4, assessed 16/11/2015.
- : Guggenheim (2015) **Process art: U.S. and Europe, mid-1960s.** Guggenheim Museum Website. http://www.guggenheim.org/new-york/collections/collection-online/movements/195233, assessed 27/11/2015.
- : Hargreaves, George, Czerniak, Julia, Berrizbeitia, Anita and Kelly, Liz Campbell (2009) **The Alchemy of Landscape Architecture**. Thames and Hudson, London.
- : Hoge, John (1982) **Herbert Bayer Mill Creek Canyon Earthworks.** The Official Website for City of Kent. http://kentwa.gov/content.aspx?id=2152, assessed 10/12/2015.
- : Hong Kong Asia's World City (2015) **Hong Kong Wetland Park.** Hong Kong Asia's World City. http://www.discoverhongkong.com/uk/see-do/great-outdoors/nature-parks/hong-kong-wetland-park.jsp, assessed 27/12/2015.
- : IDAAF Magazine (2015) Maya Lin. http://idaaf.com/maya-lin, assessed 20/12/2015.
- : In and Out of the Garden (2010) **The Beauty of Stourhead Gardens and Capturing the Little Ones.** In and Out of the Garden.
- http://inandoutofthegarden.blogspot.co.uk/2010/11/beauty-of-stourhead-gardens-and.html, assessed 7/11/2015.
- : Jamesb (Ed.) (2015) **Walter De Maria's Vertical Earth Kilometer.** Atlas Obscura. http://www.atlasobscura.com/places/vertical-earth-kilometer, assessed 25/10/2015.
- : Jchan (2011) **Mark Your Calendar for JC Miller.** Landscape Architecture Daily. http://www.landscapearchitecturedaily.com/?p=74, assessed 19/12/2015.
- : Kastner, Jeffrey. (1998) Land and Environmental Art. Phaidon, London.
- : Kim Wilkie (2015) **Chelsea Barracks.** Kim Wilkie. http://www.kimwilkie.com/london/chelsea-barracks/, assessed 27/12/2015.
- : Krauss, Rosalind (1979) Sculpture in the Expanded Field. October. Vol. 8. Pg. 30-44.
- : London Living (2015) **London Grilling with Groundwork.** London Living. http://londonliving.at/london-grilling-with-groundwork-london/queen-elizabeth-olympic-park/, assessed 15/10/2015.
- : Madius, Freeda J. (2014) **Recreating Maya Lin's Wave Field.** Grasshopper. http://www.grasshopper3d.com/forum/topics/recreating-maya-lin-s-wave-field, assessed 20/12/2015.
- : Martha Schwartz Partners (2015) **Projects.** Martha Schwartz Partners. http://www.marthaschwartz.com/home/index.php, assessed 20/12/2015.
- : Matilsky, Barbara C. (1992) Fragile Ecologies. Rizzoli, New York.

- : McAndrews, Michael (2011) **Leave Hartford's "Stone Field Sculpture" Alone.** Word Pond. https://donnafleischer.wordpress.com/2011/06/28/leave-hartfords-stone-field-sculpture-alone-courant-com/, assessed 11/12/2015.
- : McGrath, Matt (2013) **Plastic Waste Threatens Lakes as Well as Oceans.** BBC News. www.bbc.co.uk/news/science-environment-24434378+&cd=1&hl=en&ct=clnk&gl=uk, assessed 15/10/2014.
- : Mel Chin (2015) **Revival Field.** Mel Chin Website. http://melchin.org/oeuvre/revival-field, assessed 9/10/2015.
- : Michael Van Valkenburgh Associates (2015) **Projects: Parks.** Michael Van Valkenburgh Associates Incorporation Website. http://www.mvvainc.com/category.php?c=parks, assessed 12/12/2015.
- : Missouri City Texas (2015) **Parks and Recreation.** Missouri City Texas. http://www.missouricitytx.gov/?nid=109, assessed 05/12/2015.
- : NASA (2007) Blue Marble: Image of the Earth from Apollo 17. NASA Website. https://www.nasa.gov/content/blue-marble-image-of-the-earth-from-apollo-17, assessed 26/12/2015.
- : Northumberlandia (2015) **Quick change for the Lady of the North.** Northumberlandia: The Lady of the North Website.
- http://www.northumberlandia.com/news_details.html?NID=742, assessed 10/12/2015.
- : Now Here This (2014) Five ways to get the most out of the new Queen Elizabeth Olympic Park. Now Here This. http://now-here-this.timeout.com/2014/04/05/five-ways-to-get-the-most-out-of-the-new-queen-elizabeth-olympic-park/, assessed 17/11/2015.
- : On an Overgrown Path (2012) **Art in the Age of Mechanical Reproduction.** On an Overgrown Path. http://www.overgrownpath.com/2012/06/art-in-age-of-mechanical-reproduction.html, assessed 15/12/2015.
- : Patrick Dougherty (2015) **Featured.** Patrick Dougherty. http://www.stickwork.net/featured/, assessed 15/10/2015.
- : Pelican Tusk (2015) **Controversy Surrounding Richard Serra's "Tilted Arc."** Pelican Tusk. https://pelicantusk.wordpress.com/2013/02/17/controversy-surrounding-richard-serras-tilted-arc/, assessed 20/12/2015.
- : Public Art Directory (2015) **Northala Fields (London) created by artist Peter Fink and landscape architect Igor Marko.** Public Art Directory Website.

- http://www.worldarchitecturenews.com/project/2009/12200/form-associates-ltd/northala-fields-in-london.html, assessed 11/12/2015.
- : PWP Landscape Architecture (2015) **Projects.** PWP Landscape Architecture Website. http://www.pwpla.com/projects/all, assessed 15/12/2015.
- : Rainer Ganahl (2015) **Wading the Spiral Jetty**, 2012. Rainer Ganahl http://www.ganahl.info/spiraljetty.html, assessed 27/12/205.
- : Reid, Georgina (2015) Roberto Burle Marx: The Modernist Gardener. The Planthunter http://theplanthunter.com.au/gardens/roberto-burle-marx-the-modernist-gardener/, assessed 10/12/2015.
- : Reimer, Maria H. (2010) <u>Unsettling Eco-Scapes: Aesthetic Performances for Sustainable Futures.</u> **Journal of Landscape Architecture**. Spring. Pg.24-37.
- : Richard Long (2015) **A Line in Ireland.** Richard Long Website. http://www.richardlong.org/Sculptures/2011sculptures/lineireland.html, assessed 20/11/2015.
- : Riparia (2015) Our Projects. Riparia, http://riparia.ca/, assessed 11/12/2015.
- : Roper, Eric (2013) **New York Firm Selected for Nicollet Mall Revitalization.**Startribune. http://www.startribune.com/new-york-firm-selected-for-nicollet-mall-revitalization/224404881/, assessed 20/12/2015.
- : Sasaki Associates (2015) **Frito Lay Headquarters.** Sasaki Associates. http://www.sasaki.com/project/203/fritolay-headquarters/, assessed 14/12/2015.
- : Sail Scotland (2015) Largs Yacht Haven Ltd. Sail Scotland

 http://www.sailscotland.co.uk/62/The-Firth-Of-Clyde/Marinas-and-Boatyards/Largs-Yacht-Haven-Ltd, assessed 16/11/2015.
- : Sdoutz, Franz (2008) **Le Corbusier.** Architecture Theory. http://www.mediaarchitecture.at/architekturtheorie/index_en.shtml, assessed 5/11/2015.
- : Selanon, Pattamon (2012) <u>Michel Foucault and the Perception of Landscape</u>

 <u>Architecture Practices.</u> **Built Environment Research Associate Conference 3 (Berac 3)**,

 25th May 2012, Bangkok. G.B.P. Center, Bangkok, Pg.192-206.
- : Smart Growth (2015) **The National Economic Impact of Parks and Recreation.** Smart Growth Online. http://smartgrowth.org/the-national-economic-impact-of-parks-and-recreation/, assessed 05/12/2015.
- : Smith, Kim (2013) **Spiral Jetty.** Good Morning Gloucester. https://goodmorninggloucester.wordpress.com/tag/robert-smithson/, assessed 5/10/2015.

: Taylor Wimpey (2015) Queen Elizabeth Olympic Park.

https://www.taylorwimpey.co.uk/about-us/what-we-do/case-studies/partnership/chobham-manor-queen-elizabeth-olympic-park, assessed 15/10/2015.

: The City of Yelm (2015) **Parks and Recreation.** The City of Yelm. http://www.ci.yelm.wa.us/parks_and_recreation/, assessed 05/12/2015.

- : The Center for Land Use Interpretation (2015) **Land Use Database.** The Center for Land Use Interpretation. http://clui.org/ludb, assessed 15/11/2015.
- : The Pritzker Architecture Prize (2015) **Luis Barragan 1980 Laureate.** The Pritzker Architecture Prize. http://www.pritzkerprize.com/1980/works, assessed 20/12/2015.
- : The Salt Way (2013) The Natural Growth of Things. The Salt Way. http://thesaltwayfarer.blogspot.co.uk/2013/08/the-natural-growth-of-things.html, assessed 14/11/2015.
- : The Tehran Projects (2016) **Cubist Garden.** The Tehran Projects. http://www.tehranprojects.com/The-Cubist-Garden, assessed 10/11/2016.
- : The Telegraph (2015) **Five free things to do in Munich.** The Telegraph. http://www.telegraph.co.uk/travel/budgettravel/8280953/Five-free-things-to-do-in-Munich.html, assessed 14/12/2015.
- : This Hidden City (2015) **7000 Oaks and High Line Park.** This Hidden City Website. http://thishiddencity.blogspot.co.uk/2015/04/7000-oaks-high-line-park.html, assessed 25/10/2015.
- : Todd Haiman Landscape Design (2010) **Naumkeag Continued.** Todd Haiman Landscape Design. https://toddhaimanlandscapedesign.com/blog/2010/07/naumkeag-continued.html, assessed 10/11/16.
- : Transport Service Texas A&M University (2015) **Texas A&M To Open Koldus Plaza On Campus.** Transport Service Texas A&M University.

https://transport.tamu.edu/about/news/2012/12_9_6KoldusPlaza.aspx, assessed 05/12/2015.

: Trip Advisor (2015) Hong Kong Wetland Park. Trip Advisor.

http://www.tripadvisor.co.uk/Attraction_Review-g294217-d548055-Reviews-

Hong_Kong_Wetland_Park-Hong_Kong.html, assessed 27/12/2015.

: Trudi Entwistle (2015) **Trudi Entwistle Site Specific Artist.** Trudi Entwistle.

http://www.trudientwistle.com/#, assessed 15/3/2015.

- : Union Park Press (2015) **Olmsted, Grundel, and the Remaining Back Bay Fens.** Union Park Press. http://www.unionparkpress.com/olmsted-grundel-and-the-remaining-back-bay-fens/, assessed 5/11/2015.
- : University of Pennsylvania School of Design (2015) **Architectural Archives.** University of Pennsylvania School of Design (Penndesign)
- https://www.design.upenn.edu/architectural-archives/ian-lennox-mcharg-collection-109, assessed 5/11/2015.
- : Warwick University (2015) **Benefactors Place.** Warwick University. https://www2.warwick.ac.uk/insite/kcm/happening/central_plaza/, assessed 05/12/2015.
- : Web Gallery of Art (2015) **Poussin, Nicolas.** Web Gallery of Art. http://www.wga.hu/html_m/p/poussin/3/05landsc.html, assessed 14/12/2015.
- : Weilacher, Udo (1996) **Between Landscape Architecture and Land Art.** Birkhauser Verlag AG, Basel, Switzerland.
- : Wolfe, Ross (2015) **Dynamite or détournement?: One year after Pussy Riot's "Punk Rock Prayer."** The Charnel House: From Bauhaus to Beinhaus.
- http://thecharnelhouse.org/2013/02/14/dynamite-or-detournement/, assessed 16/11/2015.
- : Women Environmental Artists Directory (2015) **Ana Mendieta.** Women Environmental Artists Directory. http://weadartists.org/artist/mendietaa, assessed 15/10/2015.
- : Yoo, Alice (2013) **12** Amazingly Creative Examples of Environmental Art. My Modern Met. http://www.mymodernmet.com/profiles/blogs/environmental-art-calendar, assessed 17/11/2015.
- : Your Guide to Living Well (2015) **The Top 10 Spaces for Reflection at University of Maryland.** Your Guide to Living Well. https://unwellness.wordpress.com/about/, assessed 05/12/2015.



APPENDICES

APPENDICE A: ROSALIND KRAUSS'S EXPANDED FIELD DIAGRAM

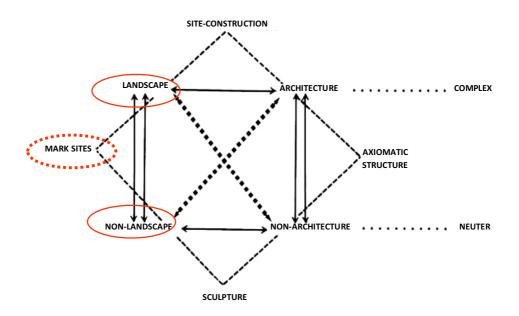


Figure A-1: Rosalind Krauss's diagram of Postmodern Sculpture

Krauss's (1979) diagram identified the network of relationships that exists between and beyond concepts such as landscape, architecture and sculpture. The diagram was based on two features; 1) the practice of the artists, and 2) the question of medium. Initially, four terms expressing strict opposition are placed at opposite sides of the diagram including "not-architecture" vs "architecture," and "not-landscape" vs "landscape." Krauss remarked that the "not-architecture" is another way of expressing the term "landscape," and the "not-landscape" is, simply, architecture. Following this logic, "notlandscape" and "architecture" and "landscape" and "not architect," therefore, are interrelated. Between the two opposite poles are terms in areas, in which what Krauss described as an "expansion field". Terms in the "expanded field" cannot be classified in one of two opposite terms, from which they expand. Four terms classified in the "expansion field" include 1) "mark sites," 2) "sculpture," 3) "axiomatic structures," and 4) "site construction." For example, the term "sculpture" is neither "not-landscape" nor "not-architecture. Krauss identified environmental artworks, such as Smithson's Spiral jetty (1970) and Heizer's Double Negative (1969), and works by Serra, Morris, Carl Andre, Dennis Oppenheim, Nancy Holt, George Trakis, and many others, as "mark-sites,"

which are considered to be neither "landscape" nor "non-landscape." The term "expansion" to which Krauss was referring, is called a Klein group, which is employed mathematically and has various other designations such as the Piaget group, used by structuralists involved in mapping operations within the human sciences. Krauss also identified the two terms of "not-landscape" and "not- architecture" as "neuter," which was placed in opposite with the term "complex." In the diagrammatic scheme, the "complex" is ideologically prohibited from the current culture. Krauss categorized the two terms of "landscape" and "architecture" as "complex."

APPENDIX B: EXAMPLES OF LETTERS FOR BOTH SEMI-STRCUTURE INTERVIEWS AND FOCUS GROUPS

1) An Example of Letter of Introduction

6 Parrish View, Pudding Chare, Newcastle upon Tyne United Kingdom NE 1 1UD

15 November, 2011

Dear Mr. Eelco Hooftman,

LETTER OF INTRODUCTION

My name is Pattamon Selanon — a PhD student from Thailand currently studying at the School of Architecture, Planning and Landscape, Newcastle University. I'm working on a thesis under the supervisions of Dr. Ian Thompson, Dr. Paola Gazzola and Dr. Andrew Law. The primary aims of the research are to investigate the interrelation between landscape architecture and environmental art in the context of environmentalism from the 1960s onwards.

I would like to interview you to pursue the examination on the follow themes;

- History, influences and development of (landscape architecture/environmental art) from the 1960s onwards.
- Relation between landscape architecture and environmental art in the 1960s and subsequent decades.
- Environmental awareness raised by works from the two disciplines.

I would be willing to come to your office or to meet you at some other agreed location and I envisage that the meeting will take around 60-90 minutes. If you are willing to be interviewed, please could let me know of a suitable time or location. If possible I would like to undertake this interview before the end of February. I would like to receive your reply by 23 December.

I hope you will grant my request as your exceptional expertise could bring enormous benefits to not only my research but also further study and research in landscape architecture and environmental art.

Yours sincerely,

Pattamon Selanon PhD student

School of Architecture, Planning and Landscape, Newcastle University, United Kingdom, NEA 7RU Tel: +447792184003 Email: p.selanon@ncl.ac.uk

Pattamon Sclanou

2) An Example of Consent Letter

Pattamon Selanon – Consent Letter

INTERVIEW INFORMATION

The interview is a part of thesis titled, "Interrelation between Landscape Architecture and Environmental Art in the Context of Environmentalism from the 1960s Onwards." Information will cover the followings;

- History, influences and development of (landscape architecture/environmental art) from the 1960s onwards
- Relation between landscape architecture and environmental art in the 1960s and subsequent decades.
- Environmental awareness raised by works from the two disciplines.

Participant observation and photographic survey on selected case studies will be conducted to complete the investigation.

INTERVIEW CONSENT FORM

I understand that the interview will be conducted in person. I also understand that my participation in this project is completely voluntary and that I am free to decline to participate, without consequence, at any time prior to or at any point during the activity.

I understand that the results of this activity will be used for the purpose of a PhD thesis and the information I provide may be published, anonymously (circle if you wish to remain anonymous), in journals or conference proceedings. And my name will be cited properly. All interview responses, notes, and records will be kept in a secured environment and destroyed once the thesis has been written up.

I have read the information above. By signing below and returning this form, I am consenting to participate in this project.

Signature:		 	 	 		
Date:		 	 	 		 _

Please keep a copy of this consent form for your records. If you have other questions concerning your participation in this project, please contact me at:

Telephone number: +447792184003 Email: p.selanon@ncl.ac.uk

Thank you for agreeing to participate in my project.

APPENDIX C: LIST OF PARTICIPANTS FROM SEMI-STRCUTURE INTERVIEWS AND FOCUS GROUPS

Table A-1: Interviews Conducted, Institution and Field of expertise

NAME	INSTITUTION	POSITIONS	FIELD OF EXPERTISE	INTERVIEW DATE
1.Thompson, lan	Newcastle University	Director, Reader	Landscape Architecture	17 /11/2011
2. Richardson, Criag	Northumbria University	Professor	Fine Art	22 /11/2011
3. Brown, Irene	Newcastle University	Senior Lecturer	Public Art	25 /11/2011
4. Davis, CHris	TGP Landscape Architects	Principle	Landscape Architecture	9/12/2011
5. Entwistle, Trudi	Leeds Metropolitan University	Senior Lecturer	Environmental Art	16 /12/2011
6. Theaker, Kevin	The University of Edinburgh	Guest Lecturer	Landscape Architecture	6 /01/ 2012
7. Harley, David	Manchester Metropolitan University	Senior Lecturer	Ecological Art	10/01/2012
8. Thwaites , Kevin	University of Sheffield	Senior Lecturer	Landscape Architecture	25/01/2012
9. Brady, Emily	University of Edinburgh	Reader	Environmental Philosophy	20/02/2012
10. Waterman, Tim	University of Essex	Senior Lecturer	Landscape Architecture	31/03/2012
11. Wale, lan	Space HUB	Senior landscape Architect	Landscape Architecture	3/04/2012
12. Hooftman, Eelco	Gross Max Landscape Architects	Principle	Landscape Architecture	18 /05/2012
13. Kathy Hide	Independent artist	-	Media Art (Environmental)	11/06/2012
14. Moore, Kathryn	Birmingham City University	Professor	Landscape Architecture	22/10/2012

Table A-2: Group Discussion Conducted, Institution and Field of expertise

FOCUS GROUP 1 ON 15/03/2013					
NAME	INSTITUTION	POSITIONS	FIELD OF EXPERTISE		
1.Thompson, lan	Newcastle University	Director, Reader	Landscape		
1.1110111 p3011, 1a11	ivewcastie offiversity	Director, Reader	Architecture		
2.Wilkie, Kim	Kim Wilkie Associate	Principle	Landscape		
		Tillciple	Architecture		
3.Vicencotti, Vera	Newcastle University	Visiting Fellow	Landscape		
3. Vicencotti, Vera	ivewcastie offiversity	Visiting Fellow	Architecture		
4. Denton, Guy	Reform Landscapes	Director	Landscape		
	Neioiiii Lanuscapes	Director	Architecture		
Venue: Thai Embassy, London.					

FOCUS GROUP 2 ON 27/03/2013				
NAME	INSTITUTION	POSITIONS	FIELD OF EXPERTISE	
1. Pollock, Venda	Newcastle University	Senior Lecturer	Public Art	
2. Goto Collins, Reiko	Independent artist / Curator	-	Environmental Art	
3. Pritchard, Dave	Independent artist / Curator	-	Environmental Art	
4. Fremantle, Chris	Independent artist / Curator	-	Environmental Art	
5. Brady, James	Independent artist / Curator	-	Environmental Art	
Venue: Conference Room, Claremont Tower, Newcastle University, Newcastle upon Tyne				

FOCUS GROUP 3 ON 12/04/2013					
NAME	INSTITUTION	POSITIONS	FIELD OF EXPERTISE		
1. Moore, Kathryn	Birmingham City University	Professor	Landscape Architecture		
2. Thwaites , Kevin	University of Sheffield	Senior Lecturer	Landscape Architecture		
3. Haley, David	Manchester Metropolitan University	Senior Lecturer	Ecological Art		
4. Entwistle, Trudi	Leeds Metropolitan University	Senior Lecturer	Environmental Art		
Venue: Conference Room, Claremont Tower, Newcastle University, Newcastle upon Tyne					

APPENDIX D: EXAMPLES OF TRANSCRIPTIONS OF SEMI-STRUCTURED INTERVIEWS

AND FOCUS GROUPS

1) An Example of Transcriptions from Semi-structured Interviews

Pattamon: Do you think practice of environmental art has influence on landscape

architectural practice?

Specialist: No, I don't think it does.

Pattamon: No!?!?

Specialist: No. But I think it should. I think a lot of what environmental artthe way I

understand the environmental art to be has a potential of extremely intense

understanding of a sense of place and I think that aspect and that contribution of

environmental art should be much more influential on the way that we design

landscape, but I don't think it is.

Pattamon: Umm, you've mentioned in the beginning about the works of George

Hargreaves.....

Specialist: Uh, I didn't mean to suggest that there aren't examples where the way there

is strong influence of environmental art into landscape design. Because there are George

Hargreaves as one, Kathryn Gustafson, Martha Schwartz, and may be, others. But they

aren't the main stream.

Pattamon: Ah, I see...

Specialist: But what distinguish those people and this is way we came in the beginning

in our discussion, isn't it? I could recall those landscape people as landscape

architectural personality because they have developed a particular style. And I guess

that style partly has at least been in part influenced by appreciation and enthusiasm for

deliberating landscape which has artistic merit as well as functional value. But I don't

think it has penetrated the main stream of what landscape architecture does.

2) An Example of Transcriptions from Focus Group

Pattamon: May I start with a brief introductory? Can you please share among the group,

which landscape architectural works or environmental art, you're particularly high off?

And why?

Specialist 1: I actually worked with Andy Goldsworthy. He looks at the land and takes the ideas out of where he is. He does it with such precious. You see it in a way that you've never seen it before. In fact, other sculptors look down on him and sneer at him, probably reinforcing for the fact that he's doing really well. So, I put him right over the top.

Specialist 2: I concur Goldsworthy. He's always been my inspiration. And recently, the York sculpture park had a Goldsworthy exhibition. I think it's fabulous; not just the landscape installations, but also something internal installations he did are quite unique. I'm always inspired actually by places, where man marks on the landscapes, not necessary done in a name of art or intentionally as art. But industrial landscapes, the West Yorkshire industrial landscapes, I think, are some of the most fantastic inspiring places because of the stark contrast you get between architecture buildings and landscapes. And there are sort of bleakness to it, which is also quite romantic at times. But it's also quite awe inspiring, I feel. So, places where intentionally you get a very dramatic intervention, I think, are the places that inspire me.

Specialist 3: I'm gonna subvert and say some of the pieces I don't like. I don't like *Northumbriana*.

Specialist 1: What a surprise.

Specialist 3: I don't like it.....I confess I was looking at your monograph before I came down, and thinking that, in some way, you do similar things. You move earth around, and you shift earth and so on. But you do it in a far more subtly strength manner, I would say.

Specialist 1: I think so.