2 Landscape Design Strategies

In the second chapter we will set the thematic context more specifically and explore the terms of landscape and its design strategies as I will use them throughout this study. The whole chapter focuses on the exploration of the idea of landscape around the question:

What landscape strategies are applicable in architectural design? (Q. 1.1.2)

I refer to landscape from a number of selected standpoints and discuss the concepts of landscape space. There I encounter crucial ideas about the human experience of landscape that are generally applicable to understanding space (2.1.). This will lead to a specific and concise definition of the discipline of landscape architecture through its approach to landscape itself (2.2.). Of many strategies of landscape design, this thesis relies on a comprehensive definition of landscape architecture "attitudes" by Sebastien Marot (1999). I illustrate each of Marot's four attitudes of landscape design with specific examples and distribute key concepts to landscape (2.3.1. to .4.). To explain the application of landscape strategies, I also place the four attitudes of landscape in the theoretical context of architecture in each section and briefly summarise them in the last subchapter 2.3.4. The introduction of landscape attitudes in this chapter is different and more accurate than the idea of nature in architecture that I will discuss in the chapter three.

"Nature every where speaks to man in a voice ... familiar to his soul ."[8]

Alexander von Humboldt (1769–1859)

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[8]   Quoted after Andrea Wulf The Invention of Nature 2015/2016 form Humbold Personal Narrative of Travels to the Equinocital Regions of the New Continent during the years of 1799-1804, London 1814-29 p.160

2.1 The Idea of Landscape

The dominant meaning of the word landscape is an extended area of land regarded as being visually distinct (Collins 2007). The limits of such an extent of a specific landscape comprise various scales ranging from climate zones of a continent, across countries and regions to areas of only local significance. The typological distinction includes a whole series of qualities such as topography, soil, vegetation and hydrological system, or the type of cultivations, built infrastructures, industries and settlements.

As landscape typology is often reduced to qualities of specific elements, among these the focus of phenomenological landscape research tends to be descriptive, concentrating on the 'what' of landscape perception rather than on 'how' and 'why' (Zube, Sell et al. 1982). In a popular sense landscapes are often reduced to national or regional stereotypes. Switzerland is referred to as the Alpine mountains, Norway as a fjord, and Tuscany as hills with olives and black poplars.

Beyond landscape as a cliché, there is a broader meaning in the etymology of the word landscape. The English word landscape originates from the Dutch landschap, described in 16th century painting (Dictionary 1989). In the 18th century, the more abstract notion of landscape as a view that could be seen from a certain point came into use, and only as recently as the 19th century did the word become understood as a certain area of land as space or environment. Since the 20th century, the term has expanded to even broader territory, such as intellectual landscape or financial landscape.

Land-scape is a compound word. The structure and development of this etymological composition is revealing and is therefore often quoted in literature (Meeus 1984; Hunt 2000; Vroom 2006; Jonge 2009). The combined words land and scape describe the defined area of land and its –ship in the sense of state or condition of being, as in other words like authorship, dictatorship, hardship etc. A similar composition is found in the original Dutch, land-schap. Its first component land- with the meaning of country remains a constant among the Germanic languages until today as in the German word Land-schaft, Frisian lân-skip, Nordic land-skapr or Danish land-skap etc. In German a similar meaning of –schaft as the English state or condition would be found in other words like Bruderschaft, Freundschaft, or Herrschaft (Engl. Brotherhood, Friendship, Governance). The suffix –schaft always describes a condition related to the first word, sometimes putting an emphasis on its duration or strength.

Also notable is the relation of –schap and -schaft to the Germanic root of the Dutch scheppen or schepping and German schöpfen or Schöpfung which is used in mythological and religious translations as in Prometheus creating man in Greek mythology (Schwab 1838/1982, book 1), God creating the earth, and the Garden of Eden guarded by Adam and Eve (Genesis 2:4,:15). The Question if landscape is indeed a divine creation is subject to long disputes. These disputes were intensified by discoveries in natural sciences from the Renaissance on. The invention of the word landscape and its aesthetics coincides historically with the new scientific approach to nature. This epochal concurrence of a new awareness with new discoveries in the Renaissance can be interpreted as the nucleus of the epochal change towards modernity (Ritter 1974).

Similarly consistent is the formation in the Romance languages such as the French Pays-age, Spanish paisaje, Italian paesaggio, and Portuguese paisagem. While the prefix pays- means land (in French), or country (in the Germanic languages), the suffix -age indicates the making-of, as in vernissage (varnishing), pèlerinage (pilgrimage), or marriage (wedding). In French, -age describes

becoming or action that is in many other cases an inflexion in the normalisation of a verb. The verb se marier becomes marriage, abattre - abattage, saboter - sabotage and so forth. The suffix -age, rather than turning its prefix into a condition, turns into becoming or a transformative action as opposed to the other French suffix -ment, which describes a state or condition (as in sentiment, batiment, failissement, etc.). Some words take both forms: assembler becoming assemblage describes the action of bringing things together (assembler) whereas assemblement is the state of collection as a result of the action expressed in the verb.

 The different suffixes of land-scape and pays-age illustrate two alternatives to the meaning of landscape. Both include a constant transformative interaction with man with two alternative approaches. The suffix –scape turns land into a passive formation of mysterious complexity (Meeus 1984). The suffix –age extends pays (or land) into the active result of our intervention.

Both paysage and landscape in their complexity and transformation are influenced by imagination. Both imaginary and real landscapes are transformed by physical and cultural interaction with humans. From a philosophical perspective, the untouched landscape does not exist, at least on the surface of the European continent. There is a strong and lasting influence of collective use and collective imagination on a landscape's perception and physical appearance. Zube and Sell point out how understanding such interactions "will contribute to answering questions of why landscapes are perceived as they are (perceived), what they mean to individuals and groups and how they contribute to one's sense of well being or quality of life" (Zube, Sell et al. 1982).

In conclusion, we find that to fully understand landscape in its amplitude requires analysis of both the complexity and instability of landscape's appearance and existence beyond the mere sum of elements and the abstraction of their structure.

Landscape is first of all an environment of humans. We do not speak of landscape for an animal species but rather as a natural habitat or territory. Landscape is an aesthetic category, connected to human intellect rather than animal instinct.

Landscape is in fact a category beyond the geological and biotic natural state of an area of land. Landscape is an anthropological category – especially in the prospect of designing landscape we must understand it more as a condition of social history, art, and the humanities, than of purely natural sciences.

The anthropologist Tim Ingold has given a panorama of anthropological view on landscapes in an article on the temporality of landscape in an archaeological conference (Ingold 2000). He relates landscape to archaeology: archaeologists try to reconstruct past cultures from the remains found in the strata of the land, while landscape architects act in reverse in order to construct for future cultures by transforming existing strata and creating new ones. Both agencies of archaeology and landscape design require similar capacity for imagination and creativity in various cultural matters to gain either a diagnostic or prognostic understanding of the meaning of a given site.

According to Ingold, Landscape is not land, it is neither nature nor space (Ingold 2000). Rather, landscape is a world as it appears to those who live (or dwell) in it. Through this landscape is not a fixed object of observation outside the human sphere, but our self-inflicted environment. Landscape itself is the result of a complex process of relating that environment to humans that lived and live in it (Bazelmans 2010).

To experience landscape is not a physiological given but an intellectual performance. Often quoted to illustrate this is Francesco Petrarca's ascent of Mont Ventoux (Hunt 2000). Petrarca himself

carefully documented his ascent on 26 April 1336 in a letter to his friend Francesco Dionigi, from whom he had received as a gift a travelling edition of the writings of Augustinus. Mont Ventoux climbed 1912 meters above sea level in the Provence in southern France. In his letter (Petrarca 1336 / 1995) he describes his inner, emotional experience mirrored by the physical experience of climbing the Mont. In the physical arousal of the climb, the writer recapitulates his life. Reaching the peak, he is overwhelmed by the views, describing his own feelings with rare intensity for his time. Beyond his description of the view, he illustrates the intensity of his ecstasy comparing the outer world of the landscape with the inner world of the soul in reference to Augustine's Confessions, which he carries in his pocket. With a central quote, Petrarca describes how the admiration of the landscape makes him feel beyond himself as if he had left his body behind.

Many authors interpreted Petrarca's ascent of Mont Ventoux in 1336 as a turning point in the history of ideas and as the beginning of Humanism. This interpretation has been canonised by the influential art historian of the Renaissance Jacob Burckhardt (1860). The German art critic and activist Bazon Brock refers to Petrarca (and Burckhardt) as "the discovery of landscape as a piece of nature that is transformed by the subjects' perceptions, experiences and actions … Thus [Petrarca] discovered something that is taken for granted nowadays, landscape as a relationship between the subject and nature." (Brock 1977). While contributing to our understanding of the world and the arts, Bazon Brock explains a challenge: "In the normal practice of culture, discoveries (deeds) of this kind are not valued as much as books, pictures, pieces of architecture or tools of civilisation." (Brock 1977). Hence dynamic, subject-related views – as I quote them here to characterise a landscape approach – only catch on gradually, as their intellectual perspective needs time to reveal itself in the built environment.

Summarising these thoughts I came to call program a major shift in aesthetics during the Renaissance triggered massive changes in the arts, humanities and natural sciences, that is described as age of humanism. The significance of landscape for the Renaissance humanism can hardly be overstated.

2.2 Landscape Architecture's approach to Landscape

Although Landscape Architecture is a linguistically awkward expression (Hunt 2000) we may use the body of professional knowledge as a frame of reference (O'Connell 1983, Thompson 2014). Landscape is not nature. It is rather a concept that goes beyond nature. program

It is inherent to the three natures that each refers to the others. Bacon also describes nature as god almighty's garden and gardens mostly refer to nature. Although always defined in extension, gardens refer to what lies beyond their boundaries (Hunt 2000).

In this definition, the first nature would always be an ideal, untouched by man. So it poses an ontological problem: As soon as humans perceive nature we start to leave traces. Untouched nature or wilderness is hostile to humans; to be able to perceive its beauty we must tame it and thus irrevocably change it. One symptom of this dilemma of landscape perception is that as Lucius Burckhardt put it, "everything always gets uglier" (Burckhardt 2008) or we think that the Landscape was more beautiful in former times. We keep idealising landscapes, with no exception to those who are involved in the professional production of the collective landscape imagination. Landscape painters of the late 19th century Hague school would for example blend out any train or bridge that crossed the commercially successful Dutch landscape during the industrial revolution (Reynaerts, Boom et al. 2008). As trains, cars and planes have become more prevalent means of mass transportation, many explore the most remote regions of the world to praise its landscapes, leaving traces in the form of built infrastructure among many other disturbances.

For simplicity, and to avoid a moralistic view, I will concentrate on the anthropological realm and thus define landscape as cultivated nature, (the 2nd nature in Hunt 2000). This idea includes the actual physical man-made landscape in cultures and gardens, as well as the more idealised version of the human aesthetic appropriation of nature in visual and scenic arts.

I can derive methodological differences between landscape architecture and architectural design from the subject matter itself. Landscape design strategies (structured along the attitudes of Sebastien Marot in the next subchapter 2.3) stress the role of program; the integration and strategic manipulation of context within a design; the role of time; the limits and mechanisms of control in gardening landscapes as opposed to constructing buildings (Vroom 1995); and the distinction between building and site-making (Hunt 2000). As there are many theoretical approaches to landscape design, I choose one in the next section, to serve as a system of organisation for a number of others, integrated through one guideline.

2.3 Strategies of Landscape Design

The strategies of landscape design to a large extend depend on how designers perceive the landscape or how they may enact it for others to be perceived. Considering the age, impact, scale and often limitlessness of landscapes, a design intervention in landscape architecture is often also about designing the range and possibilities of alteration. (Fig. 2.3.1). The landscape architect in the midst of his artwork could compared to an ant walking across a large Jackson Pollock painting (Jellicoe and Jellicoe 1975 p.399).

To understand the core of landscape design it is necessary to understand its workings as a set of attitudes towards a given site. Following the categorisation of the french urbanist and architecture-theorist Sebastien Marot, we can distinguish program in landscape architectural design, all of which relate to the site. These four attitudes are 1. Anamnesis, 2. Process, 3. Spatial Sequencing and 4. Context. All of them are at the time design strategies and derived from the experience of existing landscapes. This double meaning as action and reaction is particular to this classification of activities in respect to phenomena.

Landscape Anamnesis and the related concepts of Strata and Layer

Anamnesis integrates the history that led to the present state of landscape. Traces of history are visible and readable in most landscapes. The discussion of the first, second, and third natures (Hunt 2000) focuses on the transformation process from untouched wilderness, agrarian cultivation, and gardening to many cultural implications of higher spiritual sense and symbols. The idea of nature with constantly changing means of representation and interpretation occupies a central theme throughout the history of garden design and landscape architecture.

In landscape, anamnesis is usually readable in a set of strata. Each stratum is a distinct sediment of a certain geological period, sometimes occurring in place, but more often moved in the geological formation of landscape. The term strata is used in both in geology for soil horizons and in archaeology for layers of earth and rubble. We could see the landscape of strata as a palimpsest – a metaphor introduced by André Corboz (1928 - 2012) (Corboz 1983). The palimpsest is a piece of ancient Egyptian papyrus or a Roman wax-coated writing tablet. These precious carriers were often reused for new writings, but traces of the older writings remain. The writing is often composed of different layers. Human use leaves traces on the territory; these traces overlap and form a complex multi-layered text or palimpsest.

It is the unique contribution of landscape architect and professor Ian McHarg (1920 - 2001) of the University of Pennsylvania to use map overlays and layer models (that later came back with the computer as geographical and design tool and geographical information systems GIS) to understand the Landscape. McHarg insisted on highways (among other interventions in the landscape) to be "designed by persons more knowing of man and the land" (McHarg 1969). As a teacher of environment, he realised that, working with an increasing number of specialists, he would need to use specialised map overlays and chronology. Layers often differentiated in time would unify geology, meteorology, hydrology, biology, and anthropology. The layer model or the "layer cake" put the role of the designer in the midst of a multidisciplinary process, intervening in the complexity of interaction between humans and the environment with a systematic approach to "what the place came to be, what it is and where it is going" (McHarg 1997). McHarg was not interested in the separation into layers as a goal on its own but as a vehicle for a more holistic understanding of the landscape relationship between man and nature, which also makes him one of the most influential environmentalists.

"Our eyes do not divide us from the world but unite us with it. Let this be known to be true. Let us then abandon the simplicity of separation and give unity its due. Let us abandon the self-mutilation, which has been our way, and give expression to the potential harmony of man-nature. The world is abundant, we require only a defence born of understanding to fulfil man's promise. Man is that uniquely conscious creature who can perceive and express. He must become the steward of the biosphere. To do this he must design with nature." (McHarg 1969)

Many layer models have been used to assemble large amounts of information in environmental planning and landscape design. To illustrate this, a few of these Layer models, subsequent to McHarg, will be represented here as they are applied to the academic programs in the Netherlands. In the Netherlands McHarg's ideas are of great influence not least of which through one of his students, Meto Vroom, a Professor of Landscape Architecture at Wageningen since 1966 (Roncken 2003). Vroom adopted the rather complex "layer cake" of 3 + 8 + 17 layers of McHarg into a comparably simple textbook version of a-biotic, biotic and anthropogenic layers at Wageningen. It is also known as the "triplex-model" (Kerkstra, Vrijlandt et al. 1976). There is meanwhile a large variety of layer models. In our Delft textbooks we use for example 3 layers as "natural, cultural,

urban" for the Dutch lowlands (Bobbink 2009) or 5 layers "use, buildings, public space, urban plan, and territory[9]" for urban plan design (Heeling, Meyer, Westrik 2002).

One recent proposition of layer models extends to 3 scales, 3 times, and 3 layers. The triple 3-layer approach is an elaborate design-oriented research model that has been developed in a collaboration between two urbanism and landscape academics of TU Delft for the analysis of urbanised deltas (Meyer and Nijhuis 2010).

Similar models exist in various countries. For example, in the 6 layers in "Architecture of the territory" of the "Netzstadt" (Oswald and Baccini 2003) each of these models focuses on the specific situation of a slightly different use in practice. The holistic idea of McHargh occasionally gets lost in some of these recent applications in favour of a tendency to classify everything. This fragmentation happens especially when spatial planning is involved, and a need arises to distribute competences of certain layers to different state authorities. It should therefore not be forgotten that all these layers form the identity of one site, the genius loci, which not by chance carries the name of a spiritual human dimension.

While one tends to separate things into simple lists for educational purposes, a typical landscape design strategy emphasises the connection between superimposed layers and the preservation of a certain complexity. This leads us back to Marot's term anamnesis of a site and explains why he chose the term from medicine. Anamnesis is history from the perspective of the current (usually ill) state of the patient.

Until the crisis with modernist architecture in the 1970s, like all four crucial landscape attitudes, anamnesis has been excluded from or neglected by architecture. Modern architecture stressed timelessness and the overcoming of history in its many manifestos (e.g. Doesburg, Hoff, Wils, Mondrian e.a. 1918, Corbusier 1923, Hitchcock and Johnson 1932, etc.) Although the criticism of modern architecture in that crisis period consequently reorients history, it is seldom formulated in relation to the term anamnesis, except for the notion of the city as a collective memory by Aldo Rossi in his 'analogue city' (Rossi 1970), as well as in his self-reflective approach to architecture, 'Scientific Autobiography' (Rossi 1984).

In order to be able to act on the landscape, we not only need designers to know the history of a place but also need to focus on its current appearance and project into the future. The palimpsest needs to be wiped clean in order to provide space for new writing. Landscape design should think of a space holding several contents simultaneously, and, in particular, consider their evolution over time.

2.3.2 Landscape Process and the concepts of Transformation and Strategy

Landscape Process, according to Marot, focuses on natural and induced dynamics of landscape transformation. The effects of natural forces and time, but also of design strategies, steer processes of preparing a site to grow in a certain direction. Similar to the Anamnesis, Process is a term that applies to landscape as an object of observation or a subject of design. Processes can be observed (as the occurrence of natural processes by landscape ecologists) or influenced (as the

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9   In Dutch "gebruik, bebouwing, openbare ruimte, stadsplattegrond, grondgebied" translated by the author

transformation of topographies by landscape architects) (Antrop 2001). Processes can also be observed as spatio-temporal phenomena within a landscape or used for the actual process of evolving design. Designers often make analogies between the (physical) form of the landscapes and their conceptual approach to their work as the (intellectual) process of designing.

The connection, the full embedding, of the landscape into natural cycles and processes proves crucial:

"Being itself in a process of becoming, a landscape is fully bound into the effects of nature and time: the cycle of seasons and the passage of time; processes of hydrology, weathering, and succession; and the alternation of day and night, sun ,and moon." (Marot 1999 p. 51)

Buildings try to generate homogeneous interior conditions independent of the conditions outside - day or night; winter or summer; rain or sunshine. But landscapes fully depend on these contrasting conditions. These differences are always experienced when visiting or designing a landscape.

The process of a designed (physical) landscape transformation can be very different in its form, ranging from a clear cut to an invisible manipulation. A classical example for a clear cut would be the design of André le Nôtre for Vaux-le-Vicomte, with its structuring of the two brook valleys into a clear set of crossing axes. An example for an almost-invisible manipulation of pastoral landscapes by Lancelot "Capability" Brown would be the Alnwick Castle for the Duke of Northumberland, a relatively small 18th century park on both sides of the River Aln (Alnwick Castle in NHLE 2000). In this 265ha design with scattered clumps of trees and an artificial serpentine lake, the imitation of nature reached a form of perfection to the extent that the public may not even realise that the effects they attribute to nature are actually the work of a landscape architect.

Landscape design is a manipulation or preservation of social or ecological systems, which includes observation. It is always the consequence of a change over long periods of time, that goes on long after the intervention of the designer. A landscape designer structures potentials and is perfectly aware of the incompleteness of his design rather than building a final solution. Landscape architecture is a design of changing environments rather than of perfect objects. The self-awareness of being an actor in the process and the ability to imagine and steer processes have made the position of landscape architecture increasingly relevant with the rise of ecological concerns. An example of such an ecological approach is "systemic design" (Berger 2009), or the design of open and reactive systems rather than closed structures. The process of landscape architecture is also typically involved with the dominance of strategic concepts rather than formal ones. Some Landscape architects even take quite a fundamental position by prioritising the design of processes over space:

"What we are designing in this ecological view, I believe, are not 'form', 'space' or 'function' as modernists had led us to believe, but 'system', 'process', and our 'embodied experiences' thereof." (Koh 2004)

Bernard Lassus called the intervention by landscape architecture the "inflection of the landscape process" and an "inventive analysis in order to make an account of the physical and historical places and to identify the process of physical evolution and practices in those places." Furthermore: "The term process itself designates the ensemble of interactive movements of the place. It indicates how it is necessary not to stop the place, not to fix it. One could almost say that it is required to catch the place "on the move".(Lassus 1998)

FIG. 2.3.2.1 Vaux le Vicomte   FIG. 2.3.2.2 Alnwick Castle (Photos: .1:autor 2009 and .2:alnwickcastle.com 2011)

From its traditionally process-oriented approach, landscape architecture took on a leading position among the arts at the end of modernism in the late 1960s. While for example the art of sculpture freed itself from designing mere objects, the artist Robert Morris writes in Notes on Sculpture 4, Beyond Objects:

"Fields of stuff which have no central contained focus and extend into or beyond the peripheral vision offer a kind of 'landscape' mode as opposed to a self-contained type of organization offered by one specific object." (Morris 1969).

Such a position beyond the scope of the object into a wider complexity of both temporal and physical scale makes landscape architecture apt for an altered design process beyond the limitation of action upon a physical object or objects. John Dewey said: "No great piece of art could have been concieved at one momant out of one single idea. Great art always arises form a process, an evolving relationship between the work and the artist. The processes of creation and the processes of experience are connected." (Dewey 1958). The fact that landscape changes and that human activity does not merely overlay it but intertwines with it (Ingold 2000) makes unique the position of the landscape designer inside the design process. Process driven design strategies can range from simple models such as strategies for cultivating and harvesting the land, to complex ones such as writing musical scores or steering complex social participatory models. Controlling and designing processes is in any case a crucial part of any landscape architecture.

2.3.3   Spatial Sequencing and the concept of perception

Spatial Sequencing is an important design approach to landscape. According to Marot, as the dynamic of motorised transportation, speed, and communication technologies have changed, our perception of and relationship with landscape has as well (Virilo 1995). It has also increased the awareness of an even older "design issue ... the problem of designing visual sequences for the observer in motion" (Appleyard, Lynch et al. 1964).

A textbook example of such 'walk through' spatial sequencing is the garden of Stourhead (1741-1780). Those enacted scenes of buildings, plants, water, and rocks are laid out in a designed sequence, following Virgil's Aeneid (Leupen, Grafe et al. 1993; Reh 1996; Nijhuis 2011, 2015). Pictorial views are framed through buildings, grottoes, plantings and specific way-points. Still today, visitors to the National Trust site are advised to walk around the artificial lake counterclockwise, to experience the garden in the sequencing intended by the designer Henry Hoare II (1705–1785).

It is also easy to interpret Stourhead as a garden. The pictorial routing can be easily understood as Hoare designed it. At Stourhead the sophisticated manipulation includes fake perspective, manipulations of the horizon, and enacting or activating topography for a theatrical effect.

A contemporary example of such manipulation is Parc de la Villette in Paris (1982-1998). It uses the "cinematic promenade as a series of frames organised in sequences". According to the architect Bernhard Tschumi, "in the early days, the cinematic was a popular trend that represented - and in a sense still does for me - the dynamics of movement through space. At the time, there was the theoretical aspect, which was fundamental. Just as architects were looking at the history of architecture for a starting point for their work, I was inclined to look at the theory of film as a starting point. I was quite fascinated by montage theory - that is how you assemble to create certain effects, like Eisenstein's 'montage of attractions'. In other words, looking at cinema as other people were looking at paintings, and trying to derive architectural concepts." (Tschumi and Ran 2000). Here the cinematographic interest that Tschumi applies in his work before becoming involved with landscape design through the La Villette competition provides in his eyes an architectural work with the theoretical project Manhattan Transcripts (1976-1981) (Tschumi 1994). Tschumi is an architect but also a strong advocate for spatial sequencing. Tschumi's drawings of events in his Manhattan Transcripts (1981) introduce movement notations of events into the practice of urban and architectural design. For Tschumi, architecture is not simply about space and form, but also about event, action, and what happens in space. In Manhattan Transcripts Tschumi derives an architectural structure from events through analytical drawings. From photographs he draws the movements of different protagonists as architectural construction.

Criticising the post-war WWII modern cities, Swiss sociologist Lucius Burkhard (1923-2003) introduced the beauty of landscape as a measure to human spatial quality. From landscape he develops his Spaziergangswissenschaft (Burckhardt 2006) that he translates into English as 'Strollogy' (Burckhardt 2012). He propagated it as a novel approach to planning as opposed to functional urban engineering. The cultural critic and educator Burckhardt managed to have the scientific committee of the Kassel Art Academy approve Strollogy when it became a University in 1990 and advance Spaziergangswissenschaft as an academic discipline (Burckhardt/Obrist in Schmitz Ed. 2006). Even if a touch of humour lies in his approach, recent overviews (Weisshaar 2013, Obrist 2014) show that the science and practice of exploring and designing urban developments in particular, not by drawing and meeting but by walking and talking have become a widespread and successful practice in planning especially in Germany and England. Today many practice strollogy as participatory urban design processes, originally inspired by the flaneur Burckhardt who enjoyed walking through his alpine landscapes (Weisshaar 2013).

A sequential approach to space has especially in modern times influenced all the arts, certainly with the invention of cinema but also new scientific models of nature in modern physics. It for example influenced one key painting "Nu descendant un escalier" by Marcel Duchamp (1912). Other paintings from the early modern period that involve such dynamics include those by the Soviet Constructivists and the Italian Futurists. In architecture this translates to the promenade architecturale (Corbusier 1923; Blum 1988; Corbusier 2007) propagated by Le Corbusier. In the Situationist movement around Guy Debord (1931 - 1994), the flaneur reappears in the 'theorie de la derive' (Debord 1958) for a revolutionary understanding of the city. Both of these cases refer to the experience of wandering through a landscape translated either to buildings or to the city as a whole. They provide an essential link to the landscape attitude of spatial sequencing in architecture theory.

2.3.4   Context and the posterior generation of program

Marot's fourth attitude of landscape architecture towards a site works in context. A landscape does not just react to an existing context but landscape design generates a context in and of itself. It consists of dense functional, visual, and spatial relations and constellations. Relational structure means the rearrangement of spatial constellations or the interweaving and joining of separate elements.

Designed landscapes often need to define their own limits and field of intervention. They create and determine the context and also develop programs from their interrelations. Landscape Architecture has a particular way of developing program out of the form and context of the landscape rather than the form following a predefined function (as defined for architecture by Sullivan 1896).

FIG. 2.3.4 Università della Calabria (1974-1977) (Drawing: Gregotti Associati)

The idea of context has been stressed in architectural theory since the 1960s (e.g. Rowe and Slutsky 1963, Rossi 1970 / 1975 / 1982) as a reaction to the International Style (Hitchcock and Johnson 1932) of timeless and often context-relation-less modern architecture. Rowe criticises the disregard for context of the modernists even more explicitly in Collage City (Rowe and Koetter 1984), where he proposes the figure-ground analysis that later will be relevant for Peter Eisenman in his design for the City of Culture (Chapter 6).

 Since landscape architecture pertains to creating a place rather than placing objects, one may state that while architecture merely reacts to context, landscape architecture creates it. Designing gardens represents creating a place of harmony for communication between man and nature, or in a broader sense, the art of joining things to create harmony (Finlay 2008).

This approach to place-making, rather than object-making, also expresses a different relation in regard to the function of a space or its program. While often in architecture the program defines the shape of an object, in landscape architecture programs are derived from a site through formal transformation. It is such differences that trigger the interest of many architects looking for alternative formal concepts to "form follows function" (Sullivan 1896). For instance Stan Allen suggests: "The goal (...) is to rethink conventional institutional form through the concept of the field. (...), by forming the institution within a directed field condition, connected to the city or the landscape, a space is left for the tactical improvisations of future users. A "loose fit" is proposed between activity and enclosing envelope." (Allen 1999)

Such thinking beyond 'the institution' (Allen 1999) in both formal and theoretical fields illustrates how the expansion of the notion of space into landscape is always loaded with a certain

expectation, in particular in the case of architecture. Landscape implies deliberation from the deterministic to the more open relation of meaning and content in architecture. Landscapes imply reconnection to context in a wider anthropological meaning: a fundamental understanding of being human in spaces of both architecture and nature.

Much of the preoccupation of architecture with landscape is rooted in a crisis of modern architecture that arose in the 1960s and 70s across theoretical literature (e.g. Mitscherlich 1965, Tafuri 1976 and 1979 or Rossi 1975 / 1982). Such fundamental questions have been very often treated or touched upon by architecture mentioning landscape. Vittorio Gregotti (*1927) called this a multidimensional approach to the environment by the architect and insisted on the necessity for architects to understand geographic space and the concept of landscape (Gregotti 1966; Engl. by Havik 2010). He deliberately introduces a calculated ambiguity. It is in fact increasing scale of the spatial influence of architecture onto the landscape that makes it urgent for architects to understand landscape, thus shifting "the problematic of architectural space by elevating it to the level of geographic space" methodologically or "to find the means of intervention that correspond with different scales" (Gregotti 2010).

But although Gregotti has been influential especially in the Italian academia of architecture, his crucial text is relatively difficult to read or translate. Also Gregotti's own giant building projects may not have provided an example that made his understanding of landscape a plausible alternative to the dominant engineering approach to mass housing. Gregotti's role for my studies of landscape strategies in architecture is his clear deference to geography, as the anthropological method to understanding landscape and his postulate for any architect to learn such methods. Only very recently Gregotti's text and involvement with geographical context, and his notion of the territory of architecture have been reconnected to the question of the relevance of landscape to architecture in an international discussion by Kenneth Frampton (Frampton 1999) when his article was also reedited for Landform Building (Allen and McQuade 2011) as discussed previously in the literature review (1.4).

2.4 Landscape Design Strategies in Architecture

To conclude chapter two, I return to my subsidiary question:

What landscape design strategies are applicable in architectural design? (Q. 1.1.2)

On the one hand while summarising the previous four attitudes, I can briefly recapitulate the few appearances of the attitudes in architecture: anamnesis used by Aldo Rossi (1981) in his preoccupation with history; process as a key element for Peter Eisenman (2004, 2007); Bernard Tschumi's spatial sequencing (1981); and Colin Rowe's Transparency (1963) and Collage City (1984). The distinction among the four positions in architecture to those of landscape makes visible how architecture has been divided into various critiques on the modernist movement, but not engaged in a theory that could be summarised in the four attitudes. Since the heroic architects' pamphlets on modernism, there is no closed theory or discourse in the reaction to modernism after the 1960s; rather, architecture has been dismantled into a variety of fields: Quickly they have been labelled by publication machinery and art history as 'postmodernism' (Klotz 1988) or 'deconstructivism' (Johnson Wigley 1988), but have rarely been seen as a consistent movement (as coherent as modernism was) except for their common critique of modernism.

Landscape attitudes unify many facets of architectural theory. Led by various experiments often along one track of the four attitudes, very different architects developed their individual and often intuitive interpretation of landscape. Many have adopted the term landscape, or a whole range of other terminologies, but no unified theory connected the fragments. I think that landscape design strategies consolidate a whole range of seemingly different approaches towards architecture in our time.

The question in the set up of the case studies adopted in this thesis should indeed be explored in the individual cases, but beforehand we also need a more general view on architectural design. Why landscape attitudes - in their potential to connect humans with nature - have not appeared as one concise theory of architecture so far becomes clear when we look into the difficult intellectual relationship of nature and architecture in the next chapte#