

The Heaven, the Earth and the Optic Array: Norberg-Schulz's Place Phenomenology and its Degree of Operationability

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Introduction

During May and June 2006, I was asked to give a set of lectures about Christian Norberg-Schulz's work for the PhD seminars in the DSD. Twenty-two years ago I started my architectural studies at the Oslo School of Architecture. I was eighteen and had the opportunity to have Norberg-Schulz as a teacher. Every one of his lectures was like a journey to different places with their various local spheres around the world. Norberg-Schulz used examples from landscapes, towns, buildings and arts --from local areas in our Norwegian vicinity to places far away-- to illustrate his argumentation about place as a phenomenon and about our existence. When reading his books and my 20-year-old lecture notes again, my memory of the contents and examples used by Norberg-Schulz in his lectures was refreshed. Through using Google images and scanning old photos from my journeys, it was possible to reconstruct the pictures he used to illustrate his argumentation in my Power Point presentation.

Recently published, *Presence, Language, Place* summarises Norberg-Schulz's latest work. He managed to complete a manuscript in Norwegian before he died. However, the book is translated from an Italian version into English, and thus part of its meaning might be lost in translation.

One critical question is, how is it possible to build a theory on how places are experienced, how places guarantee a harmonic life for inhabitants, and in what ways new artefacts will guarantee a

continuation of a place's sphere, when it involves human intentions, identification criteria, individual feelings and perceptions about places, and insights in various cultural backgrounds? Can it be made at all? This contribution aims to present the core of Christian Norberg-Schulz's work about place phenomenology and architectural existentialism during his last thirty years, its strengths and weaknesses and challenges for improvement. In order to reflect upon the degree of operationability of his place theory, examples from Dutch and Norwegian places are used to illustrate his contribution.

Norberg-Schulz's life and work in short

Even though he practiced as an architect in Norway, Christian Norberg-Schulz is mostly internationally known for his books on architectural history (in particular Italian classical architecture) and for his writings on architectural theory. His concerns for theory can be characterised by a subtle shift from the analytical and psychological concerns of his earlier writings to the issue of phenomenology of place. He is one of the first architectural theorists to bring the thinking of Martin Heidegger to the field of built environments.

Norberg-Schulz was born in Oslo in 1929. Shortly after the Second World War, he travelled from Norway through a ruined Germany to Zurich, in order to study architecture. He had Siegfried Gideon as a teacher in modern architecture history. Through Gideon he met Le Corbusier, Brancusi, Giacometti, Kandinsky's wife Nina, Hans Arp, Max

Ernst and Alvar Alto. He finished his studies in 1949 at the Eidgenössische Technische Hochschule in Zürich.

In 1950 Norberg-Schulz became a member of CIAM in England. From 1953-1959 he had a scholarship at Harvard University. In his writings from that period, the fascination of the private car in urban planning is taken into account. From 1960-1963 he studied in Rome, and from thereon architecture history was taken into account in his writings. From 1963 he worked as a teacher at the Oslo School of architecture. He defended his PhD at the technical university of Trondheim in 1964. In 1965 he was a professor at Yale University, and in 1966 he was a professor at Cambridge University, both in the United States. He became the first director for the Oslo School of Architecture in 1984. He worked as a professor up to his retirement in 1994. However, Norberg-Schulz was still involved in the school's research program up to his death in 2000.

Gideon's concept of 'Constancy and Change' interested Norberg-Schulz and influenced his work. It implies that some artifacts remain through all changes in built environments. Therefore, Norberg-Schulz's work focuses on modern art and architecture as well as folklore art and architecture.

The background for Norberg-Schulz's place phenomenology

Literature and art, phenomenology, and Gestalt Psychology influence Norberg-Schulz's work. The book *Intentions in Architecture* is his most scientific work. His later books tend to be more poetic than scientific. In many ways Norberg-Schulz's work is influenced by psychological concepts and poetics. He uses the philosophical and theoretical settings from perception psychology. How places are experienced or perceived depends on an identification and description of the architectural psychological conditions.

As Norberg-Schulz claims, there is a lack of a satisfactory architecture theory. Since architecture has impacts on the environment, Norberg-Schulz seeks for an architecture theory, which is able to teach us to see the richness of possibilities, rather than binding us to ready-made rules and clichés.¹ A background for Norberg-Schulz's work is the growth of a genuine interest in architecture as an environmental forming function in the 1950s and 1960s.² His main focus in understanding how places are shaped is to understand the symbolical meaning as well as the functional aspects of the building process.

The position of the architect is considered as that of a place creator. In many of his writings, Norberg-Schulz criticises the lack of a genuine cultural and art historical insight in the education programs of architects. As he claims, there is a lack of sociological and psychological insight regarding built environments and their influence on human beings. The effects are a genuine increase in poor-quality built environments, which cause human 'rootlessness'.

Norberg-Schulz poses the question what kind of task architecture has for the environment as a human product. A possible answer might be that architecture should be functional -- practical, milieu-shaping, and symbolising. How is it that architecture or our surroundings influence us? Norberg-Schulz approaches this question by focussing on how human beings react psychologically to their surroundings in terms of how places create certain kind of spheres.

Why do certain kinds of buildings from a certain period have a particular form? One essential question he proposes is: what is meant by architectural form? The central aspect in architectural theory is to transform practical, psychological, sociological and cultural situations into concrete architectural elements related to one another as a whole. The

relationship between building task and solution is central in an architectural theory. Therefore architecture has first to take its users into account in terms of conditions and effects. Secondly, the means' composition and form must be taken into account independently of their effects. Thirdly, one must invest how certain means correspond with certain conditions and effects. According to Norberg-Schulz, all three aspects must be fulfilled in order to make meaningful places for human beings.³

In his book *Intentions in Architecture*, Norberg-Schulz proposes two approaches to the task of making a comprehensive architectural theory. One is to gain insight into human intentions and perceptions. Here, Norberg-Schulz opts for a psychological approach. The other approach is to gain insight into symbol, symbolic meaning and cultural backgrounds. Here, Norberg-Schulz opts for a semantic, art historical and phenomenological approach. As Norberg-Schulz states, 'while science describes facts, art expresses values'.⁴

Norberg-Schulz's book *Intentions in Architecture* is probably his most internationally-known publication. Later international, but lesser-known books are *Existence, Space and Architecture* (1971), *Meaning of Western Architecture* (1974), *Baroque Architecture* (1979), *Genius Loci* (1980), and *Architecture: Presence, Language, Place* (2000). While the first book contains scientific material, the later books can be described as poetic architectural descriptions.

Norberg-Schulz's writings are on the one hand scientific and on the other hand poetic. It is reflective in the way that the spatial components of various places are described in relation to their surroundings. He was active in the debate on how the modern architecture in Norway lacks a genuine understanding of place and local identity. The aim in one of his latest books, *Stedskunst* (the art of making places)⁵ is to explain what a Nordic identity

consists of. The main message is that, as long as the building is aesthetically isolated from the place it belongs to, this will result in fragmented and meaningless environments.

One of his books, unfortunately only published in Norwegian, with the title *Mellom himmel og jord* (Between Heaven and Earth), presents a continuation of *Intentions in Architecture*. It offers a presentation of Norberg-Schulz's architectural existentialism and his theory of places. It is further built on Heidegger's text *Bauen Wohnen Denken*. This book will be used throughout this contribution as a basis for presenting Norberg-Schulz's work from his last thirty years.

Theoretical approach: what it means to dwell

According to Norberg-Schulz, our built environment is part of an architectural totality in which we belong. Often, our everyday activities take place in built environments, without us noticing what our surroundings look like. Seemingly, the more normal our living environment looks, the more it is taken for granted. It is only when something disturbing or uncommon changes occur that people first tend to react to it.

'Her er du heime, Knut'

One of the essential issues Norberg-Schulz questions is what it means to be at home or bounded emotionally to particular places. Often he refers to local art and literature. One of the significant examples he refers to in order to understand how important the Norwegian pine tree forest [fig.0] is for the existential feeling of its inhabitants, is a short story from the Norwegian writer Tarjei Vesaas. Vesaas describes the young man Knut's thoughts on what it feels like to be at home. Knut is in the forest, like he is wont to do for felling timber, but one day he suddenly reflects upon what it means to belong to a particular place or to know a place. For Knut it is the forest. He stays in the forest for a while in order to confirm his identity with the place.

He feels how the sphere of the forest changes from day to night and sees how the darkness leaks out of the ground, from the sky, from the horizon. The forest encloses Knut through to dawn. As Norberg-Schulz wants to illustrate with this example, Knut's own place is revealed to him on which is an important day for a human being.⁶

According to Norberg-Schulz, this connection to a particular place gives life meaning. A particular place is not described in Vesaas's text. The only thing we know is that it is about a typical Norwegian pine tree forest. Vesaas describes the forest as a typical surrounding (*Umwelt*). As Vesaas writes in the same text: '*Sjå med mørknet lek fram or skogbotnen, or himmelen, fra synsranda. Han er fanga inn her*'.

The concepts *skogbotnen* (the forest ground), *himmelen* (the sky), and *synsranda* (the optic array) shape the basic elements for describing places in built environments on various scale-levels. All kinds of places with their buildings have a ground or a floor, a ceiling, roof or sky, and walls, trees, hills or other artefacts shaping various types of optic array. These tree elements are used throughout Norberg-Schulz's book *Mellom himmel og jord* in order to come to an understanding on how places are built up and how they are experienced. In this way it becomes possible to describe the character of settlements in the landscape, urban space, streetscapes, buildings and interiors from various cultures and what they mean for human beings.

What, then, is general in the way one experiences a place? According to Norberg-Schulz, place experience is something one has in common, or shares, with others. It unites a group of people, which gives them a common identity and hence a basis for a fellowship or society. In this way, the home and what it means for human beings is essential in Norberg-Schulz's work. The house is not a given place like the forest. It is created by human beings. However,

there is an inter-dependent relationship between the house and the surroundings.⁷ Often Norberg-Schulz searches for descriptions from literature and poetics to illustrate what a home means for human beings.

When using Norberg-Schulz's approach to understand Dutch built environments, it becomes inevitable to refer to Dutch painters from the Golden Age up to present. The endless horizontal line in the swampy, flat Dutch landscapes is always present in the landscape paintings Salomon and Jacob van Ruisdael, Jan van Gooyen, Meyndert Hobbema and Rembrandt van Rijn. The sky takes up a large part in these paintings, and mostly consists of clouds evoking the unstable and windy Dutch weather. In contrast to the wet Dutch landscape, settlements, like for example a farmhouse, are placed on the landscape's highest and dry parts, sheltered or protected by a tree and vegetation. This breaks up the flat extension of the monotone windy landscape.

Dwelling is an essential feature of the human being. It is an establishment of a meaningful relationship between man and a particular given environment. It is first and foremost through the identification with a place that we give our life an existence. Therefore to dwell requires something from our places and from us. According to Norberg-Schulz, we must have an open mind, and the places must offer a large variation in possibilities for identification. As he writes: 'Today many places offer poor qualities for identification and many souls are not open for the surroundings'.⁸ In this respect, Norberg-Schulz talks about an environmental crisis (*Omverdenskrise* in Norwegian, or *Umweltkrise* in German). What is meant by this is a loss of the relationship between human identity and place identity.

As Norberg-Schulz claims, social science has so far been useless in developing a qualitative place concept. Therefore, art and architecture history, poetry and literature, and phenomenology have



Fig. 1-6 (from top left): A typical Norwegian pine tree forest; a classical landscape (Italy); a romantic landscape (Norway); a cosmological landscape (The Netherlands); settlement in the landscape in the Netherlands (Huygens huis, Voorburg); settlement in the landscape in Norway (a Norwegian old farm).

at least something more to offer than the social sciences.⁹ Norberg-Schulz's place phenomenology is influenced by the writings of Bachelard, Merleau-Ponty, Bollnow and Heidegger.

As Norberg-Schulz states, human identity conditions place identity. In order to understand what is behind a place's identity, Norberg-Schulz tries to identify what are the concrete features of places. A place's structure and character on various scale-levels is analysed through Vespaas's concepts of *jord*, *himmel* and *synsrand*. It is about what we walk on, what we see around us, and what is above us. All these aspects affect how we experience a place. It is determined by the heaven, the earth and the optic array.

Thus, the sphere of the heaven and the earth, the light and the vegetation play a role in how places appear to us. Heaven varies from place to place through light and weather conditions. For example, the cloudy Dutch sky differs from the clear blue sky in Egypt. All these elements create a particular landscape. Some landscapes have endless extensions (like the Dutch landscape), while others are limited by well-defined spaces (like the Norwegian valleys and fjords). Some landscapes have elements rising towards heaven, like for example mountains and hills, while others have elements extending in a horizontal direction, like for example tree rows, canals, and lakes.

Our presumptions about the phenomenology of earth and heaven contain two different types of aspects. The earth reaches out and rises towards heaven. This gives us a qualitative difference between 'up' and 'down'. The description of a place's 'atmosphere' and 'character' is dependent on its earth, its heaven and its optic array. According to Norberg-Schulz, this concerns extension, rising and boundaries.¹⁰ The inter-play between these elements shapes a place's structure, or creates a place's individual features. The optic array

(*synsrand*) is the horizon or the outer limitation. Objects inside the *synsrand* make the distinction between the outside and inside. Various types of openings in the landscape towards the sky bring heaven down to earth in different ways.

To dwell means therefore to respect a place and to befriend it, with all its surrounding elements and qualities.¹¹ For example, the sand is an important place element for the Arab, like the snow is for the Norwegian. Probably, water must be an important element for the Dutch. Seemingly, houses located along canals and lakes tend to be more richly decorated (and the prices are also higher) than other houses. Norberg-Schulz's main message is that one must be open to a place's identity in order to protect it when intervening. Thus, a phenomenological approach means that the builder and the dweller must take into account a place's qualitative, hence not measurable, aspects. How can this be understood? Two different surroundings will be taken into account here.

The structure of a Norwegian forest can be, according to Norberg-Schulz, described as follows. It has a large variation in topography. One has no overview. The ground varies, with stones, grass, bushes, moss and roots. The heaven can be described by the way one sees glimpses of it between the trees. The optic array consists mostly of trees and hills. The variation is large in the way there is a surprise behind every hill. Sometimes the optic array changes through open areas in the forest, such as mountains, water or agricultural land. Water is recognised to be an element which changes with a place's local light and its topography. Examples are the silent water of lakes, the moving water of waterfalls, rivers and brooks.¹²

With this description of a Norwegian surrounding, Norberg-Schulz tries to illustrate how the Norwegians dwell. Norway has no urban tradition. The Norwegian dream is to live behind a hill each, or live

alone along a river, or a lake. The house should be a 'cave of wood'. Everyone shares these elements. Therefore, every Norwegian owns or shares these experiences together with the others.¹³ Since nature, with its extreme climate changes -in terms of long, cold, snowy winters and short and intense summers- Norwegians bring nature into their homes. In many traditional Norwegian homes, the interior consists of strong colours or the wooden furniture is decorated with flower paintings. In this way the short colourful summer is brought into their homes, standing in contrast to the white, snowy winter landscape.

The pine tree forest is a typical life-world, like the desert is for the Arab. How can a typical Dutch life-world (*Umwelt*) be described? A typical Dutch polder landscape has an endless horizontal extension. Mostly, the ground consists of endless swampy fields or arable land. The small linear canals or tree rows break up the monotony. Some low-rise vegetation can be found. No surprises exist behind trees or hills. On sunny days the horizon line is clearly visible, while it is an unclear line disappearing in the fog on cloudy or rainy days. The heaven consists of clouds or diffuse fog. Rows of trees have a regular rhythm rising up to heaven.

How, then, do the Dutch dwell? In comparison to Norway, the Netherlands has a long urban tradition. While Norwegians prefer to live on separate hills each, the Dutch cluster themselves together in small towns with a high density. In contrast to the endless horizontally extended polder landscape, there is a surprise behind every corner in Dutch brickstone towns. Water is an important element, in the sense that the Dutch prefer to have their homes adjacent to a canal. Farm houses and wind mills have a vertical orientation, in the volumes as well as in the shape of the windows, standing in contrast to the flat, naked polder landscape.

Norberg-Schulz classifies our surroundings (*Umwelt*) in three types, namely the classical, the

romantic and the cosmological.¹⁴ They are determined by the atmosphere of a place. According to Norberg-Schulz, a Norwegian forest is obviously a romantic surrounding, while a Dutch polder landscape is clearly a cosmological surrounding. According to Norberg-Schulz, Greek and Italian landscapes are used as examples of classical landscapes, with clearly defined shapes. Most landscapes have aspects of all three types, where one of them might be more dominant than the others [fig.1].

In order to be rooted in their existence, human beings must open themselves to the surrounding's particular typology. One has to live with the spirit of a place, or the *genius loci*. The *genius loci* is determined by the elements or things it consists of. According to Norberg-Schulz, the house is also a thing. The house naturally satisfies the material needs, but it should also assemble the world for human beings. First and foremost the surrounding's *genius loci* must be mirrored in the building. The house should thus express how one orients oneself to the place, and identifies oneself with the place. Therefore, to build is to interpret the surrounding's spatial structure and character.¹⁵ Like Heidegger, Norberg-Schulz aims to develop a poetic or creative relationship with reality. In this respect, nature is not only a pure resource. It also opens up meaning for human beings in the way they exist in the world.

The place structure

When Norberg-Schulz refers to a built environment's structure on various scale-levels, he refers to the spatial or organisational pattern of buildings in relationship to the surrounding landscape, building forms and the organisation of the interior. The definition of the spatial elements in this part of his work is the weakest part of his writings. He conflates normative matters with descriptive matters and his concept of space is not well-defined.

According to Norberg-Schulz, a settlement

needs a clear organisation in the landscape. This contributes to a settlement perceived as a thing for human beings. In central Europe one distinguishes between three types of settlement forms: *Haufendorf*, *Reihendorf* and *Rundling*. In the *Haufendorf*, the buildings are organised in a cluster, in the *Reihendorf* the buildings are linearly located along a street, while in a *Rundling* the buildings surround a square located in the middle.¹⁶

Norberg-Schulz draws a parallel between these settlement shapes and the building location pattern of Norwegian farms: *Klyngetun*, *Rekketun* and *Sluttete firkant tun*.¹⁷ The *Klyngetun* bears similarities to the *Haufendorf*. These types of farms can be found at the hilly west-coast of Norway. The *Rekketun* bears similarities to the *Reihendorf*. Farm types of this kind can be found in valleys. The *Sluttete firkant tun* bears similarities to the *Rundling* and they can be found in the less hilly parts of Norway. The typology of the landscape or the place determines the shapes of the settlement patterns of farm houses.¹⁸

Dutch settlements are shaped through natural, economic or political circumstances. Some settlements have the shape of a *Rundling*, shaped by walls and mounds. Some settlements have the shape of a *Reihendorf*, shaped by dikes, transport roads or canals, while others are shaped as a *Haufendorf*, located on small sand hills with a curved street-net to break strong winds.

Urban structure

Norberg-Schulz defines place structure through the definition of the shapes of the built elements and the spaces between them. Inspired by Kevin Lynch, urban space is divided into three types; the street, the square, and the neighbourhood.¹⁹ The square is the centre of the surrounding settlement. It is a place within the place. While the street is a place we move through, the square represents a kind of destination we have reached. The street is not an

aim in itself. It connects one place with another. A neighbourhood is defined as a place where the buildings are closely located to one another. It is a place where one lives together.

Like Kevin Lynch, Norberg-Schulz claims that neighbourhoods and cities should have defined edges or borders.²⁰ Primary urban spaces appear as strong *gestalts* through their form, size or both aspects. Their task is to assemble the complex whole, which requires a structure consisting of many aspects, contents and meanings. When urban squares and streets become too wide and too fluid, the human scale tends to get lost. Urban space with a continuous border is, according to Norberg-Schulz, in line with the continuity-principle from Gestalt psychology. Free-standing buildings do not create squares and streets if the distances between them are too large. Likewise, an urban square can be destroyed if only one building is removed.²¹

The surroundings and urban space are closely related. As Norberg-Schulz writes, a village is an expression of a direct adjustment to a given natural situation. Therefore the village has a topological structure. Naturally, nature does not know a strict geometry. Therefore the settlement must make the natural structure of the place visible. It has to be highlighted in the way buildings are placed.²² For example, in a desert and a polder landscape a labyrinth-like organised settlement pattern complements the open extended landscape. A strict geometry is used to visualise a particular society's organisation and values. The Vatican in Rome is an example of this. The urban space's richness depends on the inter-relationship between topological and geometrical structures, i.e. between the local and the universal. According to Norberg-Schulz, a throughout geometrical city loses the roots of the place's situation, while a pure topological settlement never transcends its provincial isolation.²³



Fig. 7-13 (from top left): The ceiling of a central room (Pantheon); the ceiling of a long room (Cathedral in Köln); the ceiling of an oval room (Borromini's church in Rome); the urban street in Oslo; a typical Oslo window; an urban street in Delft; a typical Delft window.

The building's structure

Norberg-Schulz's approach in describing what the structure of a house consists of is limited to a description of its shape. Yet again, he refers to Brunsvik's Gestalt psychology. The building typology is determined by the volumes' horizontal and vertical relations. The proportions express the building's relationship to heaven and earth and hence elucidate basic meanings. The form of the roof decides a settlement's silhouette against the skies or as part of the surrounding landscape. The various shapes of the roofs in built environments distinguish places from one another.²⁴ The effect of a building on how places are experienced is influenced by its relationship to the landscape (the volume), its relationship to the city (the differentiation of volumes and articulation), and its relationship to its 'inner' (the articulation in the façade). [fig.2]

The interior's structure

In many ways, the interior is a 'micro cosmos' for the dweller. According to Norberg-Schulz, it is a model explaining the world in the way it repeats the surrounding's basic structure. The floor is thus the earth, the ceiling is the heaven and the walls define the borders of the optic array.²⁵ Norberg-Schulz tries to describe an interior's structure through the shape of the rooms. In general he makes use of two main groups; the central and the axial room. The central room rises up to heaven, while the axial room extends on the earth's surface. The oval shaped room first appeared in the baroque period. It unites the central and axial room in the sense that it is both centralised and extended. According to Norberg-Schulz, an interior's structure can be described through a composition of geometrical forms. [fig.3] Examples of this are old churches designed by Paolo Portoghesi, Alberti, Borromini and Bernini.²⁶

The character of place

The well-developed parts of Norberg-Schulz's writings can be found in his description of the char-

acter-shaping elements of places. He takes into account how the interaction between local building materials, lighting, vegetation, landscape forms, weather conditions and colours contribute to shape place character.

According to Norberg-Schulz, to arrive in a settlement is to experience its place character. The character should answer to the expectations one has before one arrives in the place. If this is not the case, then the place will be meaningless and strange. If the surrounding landscape is 'scary', then the settlement must offer the visitor a kind of protection, visualised in a settlement's place character.²⁷

Several factors influence place character. One is the quality of the light from heaven and another is the material and colours from the earth's surface. Likewise, horizontal and vertical rhythms in the architecture and landscape play a role in the way the settlement is experienced as a place. For example, trees give the endless horizontally extended Dutch polder-landscape a vertical rhythm. And this verticality is mirrored in the architecture in traditional Dutch towns. The dark Norwegian pine tree forest is vertically orientated and is covered by snow for more than half the year. The interior of Norwegian homes consists of wooden walls with warm colours in order to 'protect' human beings from the cold long winter.

A settlement becomes a place when it collects and interprets the surrounding landscape. As Norberg-Schulz claims, it is a base for human identification and makes the settlement a possible home. The settlement is adjusted to the given natural spatial structure, either through emphasising it or by complementing it. Therefore it must interplay with the character of the landscape.²⁸ Seemingly, a Norwegian settlement adjusts itself to its given natural character, while a Dutch settlement complements its given natural character. Interplay of this

kind is mirrored in the settlement's façade and silhouette. When these two conditions are fulfilled, the experience to arrive in or to leave a place will have a meaning. The place's identity then becomes, according to Norberg-Schulz, our own identity.

Urban character

According to Norberg-Schulz, the experience of a place's character is spontaneously given in the way the direct feeling of being in a particular place offers us safety when we return home and excitement when we visit a unknown or new place. If the urban character is spontaneous, then it is conditioned by the way the place looks. A place can be perceived as being friendly, cold, sombre, lively, enclosed, open, etc. It creates the spirit of a place and its inhabitants in the way it is expressed by the spatial structure and the architectural elements. A wide and open space can never offer an intimate atmosphere, while a narrow space can never offer an atmosphere of openness and grandness. Every spatial structure can be organised in such a way that it conditions various character traits. Hence, the man-made built environment has a high degree of adjustability to the given natural surroundings.

Urban place character is dependent on a built environment's borders and surfaces. An urban space has a floor and walls. The roof or ceiling depends on the changing sky. The effect on the sky can be influenced by cornices, towers, roof corners etc, which determines the part of heaven experienced from the urban space. The floor has a characteristic place-bound structure, shaped by local materials and the way they are laid. A settlement's walls are the most important aspect shaping a place's character. The border is not where a place stops, but where it begins, i.e. where its character is conditioned. The walls are articulated in relation to the houses or buildings. The opening's shape, building materials, colours, rhythm and tension determine the character.²⁹ The meaning of the openings, such as doors, entrances and windows connects the private

interior with the public space in terms of movement, light and transparency. It expresses the way of life the city assembles. Every city has its local architectural motives.³⁰ The Amsterdam window expresses a particular relationship between inside and outside. It differs from the Oslo window in the way the rhythm and size of the crosspieces differ from one another. The same accounts for the degree of insight in the way curtains and hatchways are used. An architectural motive is repeated in the buildings of a place. It is not copied. It is a variation on a theme, which shapes the combination of unity and variation. An urban theme consists of several motives, like a window form in relation to a particular rhythm and suspense, and its surface and connections to the walls. [fig.4]

Main cities consist of a combination of local character features with forms symbolising universal meanings. The local and the universal are not always present. The strange elements are imported into the main urban squares. One example is the Palazzo Ducale in the small Italian town of Urbino. The building consists of strict symmetrical forms in a classical style, which stands in contrast to the organic settlement pattern of the city. In Oslo, the old University building located along the Karl Johan street has the style of a Greek temple. In the Netherlands, the Binnenhof in The Hague represents the country's governmental power. The buildings are organised symmetrically, but in the articulations and the materials it is locally place-bound. [fig.5]

Oslo's urban spaces have in many ways direct contact with their natural surroundings, like the Nordic light, its topography and its nature. Even though elements from the hilly Norwegian landscape are present, the city also has defined urban spaces. The streetlights and the light from windows play an important role in its place character. On cold snowy winter evenings, the warm light from the windows gives the city a particular atmosphere.

Amsterdam is one of the largest old cities in The Netherlands. Its urban pattern is shaped through the way the river Amstel is dammed in by canals and the land between the canals (shaped by dams) is made dry. The urban streets in Amsterdam are mostly curved and urban squares are few. The structure of the buildings is vertically oriented in their shape and in the form of the openings. This contrasts with the flat open polder landscape and the old sea, the Zuiderzee. The urban spaces inside the city are narrow and tend to be labyrinth-like. The material of the houses and streets consists of hard bricks, contrasting to the muddy soft ground of the polder landscape. Examples of the character of typical Dutch urban spaces can be found in the paintings of Gerrit Terborg, Bernard de Hoog, Johannes Vermeer and Adriaen van Ostade.

When looking at the post-war urban areas, such as Bijlmermeer, Nieuw Sloten, the Westerlijke Tuinsteden and present low-rise *Vinex* locations, seemingly the vertical orientation of windows and the vertical extensions of buildings and streets with very long sight-lines do not contrast with the flat polder landscape. These new settlements do not have a particular interesting place character and most of the dwellers tend to be low-income people. Often, these places are experienced as dull or non-places.

The character of the house

Norberg-Schulz emphasises the importance of the walls of a house, in the sense they play a role as character-shaping elements. Even though the joints are important for the volume's effect, the architectural articulation is mostly focused on the wall. The wall separates the private interior from the public space. It is the 'face' towards the outer world of the building with a private content. As Norberg-Schulz writes, 'inner and outer forces' meet in the wall and it is there that architecture takes place. Thus, this is between heaven and earth and shows where the building is in the world.³¹

As Norberg-Schulz states, articulation does not occur randomly. The volume has its own structure, which the articulation must take into account. Therefore, it must express a particular relation to heaven and earth. All buildings consist of this kind of relationship. The floor has a relationship to the earth, while the wall controls the extension and correlation in horizontal direction and connects the floor to the roof. Finally, the roof finishes the vertical direction of the building towards heaven. In the façade it appears as a silhouette or cornice. Where roof, walls and floors meet a corner is created. The corner makes their inter-relationship visible and is important in shaping a house's character. Hence, different articulations of corners contribute to different atmospheres in buildings.³²

A wall's openings, in terms of windows and doors, define the relationship between its inside and outside. The size and shape of windows defines the degree of openness of a wall, its continuity, degree of massiveness or lightness, rhythm and tension and the character of a place's milieu. As Norberg-Schulz writes, windows play a role as the 'eyes of a place'.³³ For example, windows in Oslo's old buildings tend to have a T-shaped crosspiece pattern. Each building has its individual variants, shaping a place's character with variations. In the Netherlands, windows consist of a white frame, with an inner frame coloured in dark red, blue or green. Sometimes the upper parts are filled with stained glass in warm colours.

If one had to apply Norberg-Schulz's approach to traditional Norwegian architecture, the following could be said. The *stavkirke* is the only public building.³⁴ Most Norwegian farms consist of a group of small buildings. The main building, the *stugu*, is the daily living room. The building containing this function has a simple, inward orientation. It lies low and safe in the landscape and represents a complement to the high variation in Norwegian nature. Moreover, it has an earthbound form, and a massive wooden



Fig. 14-19 (from top left): Mauritshuis in The Hague (the old residence of the prince); Oslo University (the old building); *Stugu* - represents the living room and kitchen; *Stabburet* - represents the food storage building; *Stavchurch* - represents the meeting place for religious activities; dwelling in Delft.

construction.³⁵ Conversely, the *stabburet* is the building for food storage. It is a vertically-orientated building and is richly decorated. It is not a dwelling. [fig.6] According to Norberg-Schulz, the *stabburet* represents a symbolic picture expressing the human being's understandings of the surrounding world and the results of their work. Thus it assembles nature's forces in a romantic building form.³⁶

Concerning the relationship between inside and outside, the *stabburet* is richly decorated and articulated on its façades. The inside is mostly for storage. Conversely, the *stugu* is richly decorated and articulated on the inside and poorly articulated on the façades. In many ways, the short and intense Norwegian summer is represented in the interior of the *stugu*. The *stavkirke* collects the settlement as a whole in the sense that it consists of a 'roofs on roofs' structure. It is richly decorated on the outside, while the inside is dark. However, there is a play with light through the way in which holes in the ceiling open up for incoming daylight. This also mirrors the rich starry Norwegian winter night sky.

What, then, is the traditional Dutch brick-stone architecture? The church is the most dominating element in old Dutch built environments. The extreme dimension of the high vertical church towers stands in contrast to the endless flat polder landscape. Most churches have a skeleton construction. Dwellings are also vertically shaped. They are located in rows and the density is high. Together they shape an intimate space contrasting to the open polder landscape. Larger squares are rarely found in traditional Dutch towns and cities. The façades of homes have an open representative orientation towards the public street. In contrast with traditional Norwegian architecture, there exist several other public buildings than the church, which have an old traditional form. The town hall, the weighing hall, the fortress, the court, the hospital and the business house are examples of this kind. Often, these kinds of buildings have a classical geometrical order in their façades,

which contrasts with the labyrinth-like settlement pattern. [fig.7]

The character of the interior

According to Norberg-Schulz, the atmosphere of the interior manifests the identity of a house. In our language we use the words 'cosy room, sacral room, intimate room', etc. in order to describe the atmosphere of a room. The interior's character creates a connection between the inner and outer world which gives life meaning. This identification is the most important aim for architecture.³⁷

A room's atmosphere neither comes from outside nor is an isolated thing. It is an integrated part of our being-in-the-world. While the character of the urban space expresses a local individuality, the interior interprets place character as a variant of generic atmospheres. An interior's atmosphere is dependent on open and closed rooms. This determines how an interior can interact with the surroundings or isolate itself from it. The relationship between surroundings and interior depends on the shape, size, and placement of the windows. As Norberg-Schulz acknowledges, the light openings are the most important place-shaping factor in the atmosphere of a room.³⁸ In many Northern and central-European settlements, crosspieces are used in order to break up the light. Probably the aim is to bring the diffuse light from a cloudy sky into the interior. [fig.8]

Likewise, materials and colours decide an interior's character. What a room's interior aims to be is always experienced in relationship to its surroundings. This relationship gives the interior meaning for human beings.³⁹ For example, Arab and Norwegian settlements bring elements into the interior standing in contrast with the outside world. For the Arab the interior represents a shadowy oasis as a contrast to the desert, while for the Norwegian the interior represents the colourful short Scandinavian summer as a contrast to the snowy long winters. The Norwegian interior aims to represent a cave of wood, while

the Arab interior aims to represent the oasis.

The Dutch interior assembles the interplay between shiny surfaces made of tiles (representing the surface of water), warm and dry surfaces of wood and carpets (representing the protection from the 'wet' part of the swampy landscape), and stones (as a contrast to the weak surface of the polder landscape). The diffuse light from outside is broken up by cross pieces. Often coloured lead glass windows with various colours bring the shifting colours of the Dutch sky into the interior. Examples of light in traditional Dutch interiors can be found in Terborg, van Ostade, and Vermeer's paintings. Norberg-Schulz uses the ceiling of the *stavchurch* as an example of how it represents the Nordic winter heaven full of stars.⁴⁰ The Gothic cathedral's ceiling represents probably the sky visible above the trees in a central European forest. [fig.9]

According to Norberg-Schulz, the interior functions as a place for human beings only when we have brought our world into our homes. Then we really dwell. It is the point of departure for our existence in the world. In studies of old cultures, a meaningful relation between the large scale and the small scale and between inside and outside is shown. This is our poetic relationship to a place. As Norberg-Schulz writes, to be in a world means to be between heaven and earth.⁴¹

Norberg-Schulz's influence in Norway

The first implementation of Norberg-Schulz's ideas occurred in the 1970s in Norway. A group consisting mostly of architecture students and newly-educated young couples prevented old urban settlements consisting of small-scale wooden buildings from being demolished in larger Norwegian towns. Examples are Rhodeløkka in Oslo, Langnes in Bergen and Baklandet in Trondheim. Demonstrations against demolishing took place and a group of people started to restore the old dilapidated buildings. At present, these areas have become the most attractive areas to live in, due to their high architec-

tural and location qualities.

The effects of Norberg-Schulz's work were implemented on a municipal level at the end of the 1980s. The traces of the high building activity after the Second World War became visible in the Norwegian landscape. A broader audience started to realise that the spectacular hilly Norwegian landscape is also sensitive to poor quality buildings. It had, up till then, been a general belief that the landscape was in itself a strong identification-shaping element, such that it could tolerate all kinds of buildings styles and shapes. In this way, the concept of *Byggeskikk sirkelen* was introduced. It means 'building behaviour', which implies that a new building should be adjusted to its surroundings. A rough guide was made, illustrated with examples helping one adjust a new building to its surroundings and neighbouring buildings.⁴²

Later on, a great number of municipalities began giving out a yearly prize to new building projects (*Byggeskikk prisen*) adjusting to their surrounding, with architecture taking up local aspects. The aim was to stimulate project developers to think further than profit maximisation. Moreover, a prize of this kind functions as a good advertisement for their firms. The effects of *Byggeskikk prisen* have become visible in new building projects built during the last ten years. New buildings have a high quality of architecture. The first large visible example is in the 1994 winter Olympic Games buildings in the Norwegian towns of Lillehammer, Hamar and Gjøvik, and their surrounding regions. All new buildings and large constructions facilitating the games were adjusted to the landscape and the materials used were harmonised with the existing small towns and villages.

In the beginning of the 1990s, the Norwegian public road administration started to give out a yearly prize for new road projects well-adjusted to their surroundings (*Vakre Vegers pris*, which means the 'beautiful road prize'). Since the 1960s, the hilly

Norwegian landscapes had been suffering from road cuttings and infills from large highway projects. Cheap materials functioned as a strange element in their local surroundings. Therefore, during the 1990s, the public road administration started to involve landscape architects in the planning of new roads. Before, road engineers mostly carried out this task.

On a legal level, the building law with its paragraph 'PLB § 74.2' was approved in Norway in 1996. It is named the *skjønnhetsparagrafen*, which means the 'paragraph of beauty'. The contents of this paragraph claim that politicians can deny an obviously poorly designed proposal standing in ugly contrast with its surroundings. As one might expect, this paragraph concerns subjective matters. Therefore, for borderline cases this paragraph has been difficult to implement.

In the education program at Oslo School of Architecture, one semester was dedicated to study the theory and history of architecture. Lectures in art history, architectural history and theory were given. Students had to design entrances from various style periods in order to learn the historical formal language and proportions. The course was criticised for representing too narrow an architectural view. Little attention was paid to modern architecture and the present social economical processes in society. After Norberg-Schulz's retirement, the course disappeared from the education program. However, its content is now spread over several ground courses. In each course a small part is dedicated to historical issues. Since most architecture students in Norway have no basic education in philosophy and scientific methods, parts of Norberg-Schulz's lectures could be difficult to grasp. However, his main messages have somehow influenced a generation of architecture students from the Oslo School of Architecture through the examples he used to illustrate them. One of Norberg-Schulz's PhD students, Thomas Thiis Evensen, developed a kind of grammar for

our built environment.⁴³ In his PhD thesis, *Archetypes in Architecture*, he focused on archetypes of building elements. Later on, he made a system for towns and cities.⁴⁴ In the beginning of the 1990s he was appointed to make an esthetical plan of Oslo's centre.⁴⁵ The plan consists in using forms and materials in all kinds of urban elements and the ground belonging to Oslo's old urban tradition. At present, the plan has been more or less implemented.

Norberg-Schulz's last PhD student, Anne Marie Vagsten, aimed to make a place-analysis method based on Norberg-Schulz's work.⁴⁶ She made a place analysis of the small settlement Sykkylven on the hilly north-western coast of Norway. The Norwegian Department of the Environment published Vagsten's methodological approach as a guide to how place analyses can be carried out. However, the usability of this guide depends on subjective matters. It requires the user to have an architectural background and the right cultural preferences. Vagsten's method is based on Norberg-Schulz's work, but it also has similarities to Kevin Lynch's approach.

The weaknesses of Norberg-Schulz's place phenomenology

The concepts used in Norberg-Schulz's work to describe place character are well defined. However, the concept used to describe place structure is not clearly defined. It is coloured by normative and subjective meanings. Moreover, normative matters are conflated with descriptive ones. Through the application of Brunswik's Gestalt psychology, one is easily bound to small old settlements lying as clearly shaped units in the landscape. In this way, normative matters, such as that the settlement should have clearly defined forms in the landscape, become too present without any scientific evidence. Moreover, an approach of this kind ignores rapid changes caused by recent globalisation processes. As one might expect, all kinds of globalisation processes leave traces on built environments. Therefore,



Fig. 20-25 (from top left): The Townhall; the Church; school building (the first building of TU Delft); the traditional Norwegian interior; the traditional Dutch interior.

applying Gestalt psychology binds one to the idea that small settlements with clear boundaries to the surroundings are defined as pleasant for the existential feeling of human beings.

The later work of Norberg-Schulz is coloured by a general belief that human beings need beautiful, harmonic and ordered surroundings. The conclusions are too simplistic as to what built environments should be like. Norberg-Schulz's ideals are far too old to take into account the urbanisation processes that have occurred during the last 40-50 years. The concept what 'placelessness' implies or consists of is not refined.

According to Norberg-Schulz, the architect has a role in interpreting places and the built form and meaning of places. As implied, the architect is not only managing the pragmatic side of the building process, i.e. the relationship between form and technique, but he or she is also taking the interpretation and categorisation of semantic aspects into account. Therefore, the architect becomes the master of human interpretations, where he or she gives form to material and spiritual needs. Seemingly, meanings in architecture mostly get established within architecture. The only code the designing architect seems to follow is the syntactic or grammar which has to do with the architectural expression. What is lacking is precise scientific evidence regarding the user's reflection on how a place is perceived and experienced.

A place analysis is a value-loaded interpretation. It highlights parts of reality. Therefore it is subjective reality description. It is a mixture of the presumed cause relations behind a phenomenon (the place character), what the phenomenon is meant to express (intentions), and the real architectural effect (meaning). Therefore parts of it have a low degree of operationability. As it requires, the user must have the proper cultural insight or preferences in order to identify the identification-shaping elements of a

place. Moreover, the identification of those artefacts breaking with a place's *genius loci* is a subjective matter.

Challenges for improvements

Is it possible at all to make objective qualitative place analyses based on Norberg-Schulz's work? If it is possible, where are the limitations and strengths? In the first instance, the definition of a built environment's space and various spatial concepts are in need of clarification and improvements. The weakest parts of Norberg-Schulz's work can be improved by incorporating configurative as well as morphological spatial approaches.

The strength of Norberg-Schulz's work lies in the way he takes qualitative aspects into account. Through his writing one can gain an understanding of how built the 'proportions of artefacts, the articulation of openings and directions of built volumes contribute to shape a place's character. In order to apply his understandings on one's own culture requires a hermeneutic approach in the way of understanding the parts together with a larger whole. One's cultural background, understanding and preferences have to be set against the universal preferences of the locals.

In particular, the relationship between space and society needs clarification from a descriptive approach. A refinement and clarification of concepts used in the weakest part of Norberg-Schulz's work, place structure, could be helpful here. Norberg-Schulz's spatial concepts of place character are clear, but his spatial concepts of place structure are in need of redefinition and adjustment. One suggestion would be to divide this part in two: place order and place structure.

In the analysis of place order, the descriptive part of the urban morphologists' work, such as that of Muratori, Canaggia, Whitehand, Conzen, etc, are helpful to describe the spatial pattern of a

place and to relate this to socio-economical processes.⁴⁷ Describing place structure, concepts used by researchers with a configurative approach are useful. As David Seamon acknowledges, Hillier and his colleagues have developed clearly defined concepts of space and spatial relationships for describing the hidden spatial structure determining a built environment's degree of liveliness and vitality.⁴⁸

Results from research has shown that spatial structure influences pedestrian and vehicle flows, the distribution of shops, dispersal of crime, and the degree of safety in urban areas. These aspects also play a role in how places are experienced. A built environment with almost no pedestrians on the streets can be experienced as empty, dull, dangerous, or silent. Conversely, a built environment with high pedestrian flow-rates can be experienced as lively, safe, crowded, or vital. It all depends on the hidden spatial structure.

When describing place character, it is possible to identify the formal aspect of a built environment's spatial components. Our language is able to describe these elements and compare different settlements to one another. Moreover, they are also visible in the built environment. However, describing place structure is rather difficult. Therefore the use of spatial models with their mathematical calculations becomes important when describing spatial relationships. It is a spatial configurative approach. When describing urban pattern from a bird's-eye point of view, one describes or visualises the order of a place. Urban morphologists tend to identify the urban pattern shaped through transformation processes in society.

Place character, place structure, and place order are shaped through societal activities. However, the spatial structure of places, and their order and character also have an impact on activities in society, human feelings and existence. Evidence

from research contributes to some extent to some normative proposals on how one should make new design in given, existing surroundings in order to shape successful places. What the end product will mean for the existence of its users is difficult to predict. It all depends on how various types of people react to changes in their places. For some people, changes in places are considered to be refreshing, while for others they create instability. Seemingly, 'place creators' such as architects, planners or project developers are condemned to draw criticism from their products' users. For, the users have various preferences regarding what a home between heaven and earth should be.

Notes

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3. Ibid. p. 22.
4. Ibid. p. 63.
5. Christian Norberg-Schulz, *Stedskunst*. (Oslo: Gyldendal Norsk Forlag, 1995.)
6. Christian Norberg-Schulz, *Mellom jord og himmel* (Oslo: Universitetsforlaget, 1971a), pp. 12-14.
7. Ibid. p. 16.
8. Ibid. p. 17.
9. Ibid. p. 20.
10. Ibid. pp. 23-26.
11. Ibid. p. 28.
12. Ibid. p. 30.
13. Ibid. p. 30.
14. Ibid. p. 44.
15. Ibid. p. 31.
16. Ibid. p. 38.
17. Christian Norberg-Schulz, *Stav og laft*, (Oslo: Byggekunst, Norske Arkitekters Landsforbund, 1969), p. 11.
18. Christian Norberg-Schulz (1971a), p. 38.

19. Kevin Lynch, *The Image of the City*, (Cambridge, Massachusetts: MIT Press, 1990).
20. Christian Norberg-Schulz (1971a), p. 19.
21. Ibid. p. 55.
22. Ibid. p. 57.
23. Ibid. p. 58.
24. Ibid. p. 71.
25. Ibid. p. 85.
26. Ibid. pp. 89-91.
27. Ibid. p. 42.
28. Ibid. p. 49.
29. Ibid. p. 60.
30. Ibid. p. 62.
31. Ibid. pp. 76-79.
32. Ibid. p. 76.
33. Ibid. p. 78.
34. Christian Norberg-Schulz (1969), p. 23.
35. Ibid. p. 15.
36. Ibid. p. 19.
37. Christian Norberg-Schulz (1971a), p. 92.
38. Ibid. p. 93.
39. Ibid. p. 98.
40. Ibid. p. 100.
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42. L. Schmidt and H. Wilhjelm. *Mitt hus er din utsikt. God byggeskikk for hus og land - Hva, hvorfor og hvordan*. (Oslo: Statens Byggeskikkutvalg, 1999).
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46. A. M. Vagsten, 'Kvalitativ stedsanalyse', *Byggekunst*, 3.3: (1993), pp.164-9.
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Biography

Akkelies van Nes researches and teaches for the International Master Course at the Department of Urbanism, Faculty of Architecture, TU-Delft in The Netherlands. In 2002 van Nes received her PhD at the Department of Land Use and Landscape Architecture at the Agricultural University of Norway. She graduated at The Bartlett School of Graduate Studies, University College London in 2000 and at Oslo School of Architecture in 1993. She was a student of Christian Norberg-Schulz from 1986 to 1993. She worked for 5 as a planner in Drammen and Asker municipalities and at the Public Road Administration in Akershus province.

