

Elemental Sculpture

Elemental Sculpture:
Theory and Practice

By

Todor Todorov

**CAMBRIDGE
SCHOLARS**

P U B L I S H I N G

Elemental Sculpture: Theory and Practice,
by Todor Todorov

This book first published 2014

Cambridge Scholars Publishing

12 Back Chapman Street, Newcastle upon Tyne, NE6 2XX, UK

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

Copyright © 2014 by Todor Todorov

All rights for this book reserved. No part of this book may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the copyright owner.

ISBN (10): 1-4438-5454-9, ISBN (13): 978-1-4438-5454-2

To Daniela, Stoyan and Simon

CONTENTS

Introduction	1
Chapter One.....	15
Sculpture and its Environment	
Space in two-dimensional visual arts	
Sculpture and its three-dimensional environment in two aspects	
Sculpture-object	
Sculpture-space	
Sculpture-place	
Gallery	
Museum	
Park	
Urban environment	
Natural environment	
Chapter Two.....	35
The Roots of Elemental Sculpture	
Wind Driven Kinetic Sculpture	
Land Art	
Chapter Three.....	47
Natural Energies and Sculpture	
The Four Natural Elements	
Chapter Four.....	59
Authors Using the Potential of the Natural Elements	
Christo Javacheff – Christo	
Relative and absolute dynamics	
George Rickey	
Susumu Shingu	
Theo Jansen	
Isamu Noguchi	
Michael Heizer	
Robert Smithson	
Lucien den Arend	
James Turrell	
Charles Ross	

Chapter Five	79
An Attempt to Present the Author’s Creative Path in the Field of Elemental Sculpture	
The Four Elements	
Memorial/Cascades 13 Centuries of Bulgaria in Europe	
Dome of Birds	
Dance	
DNA of the Wind	
Conclusion.....	95
Bibliography.....	99
Appendix 1	103
Album	
Appendix 2	167
Catalogue of the Author’s Works cited in the Study	

INTRODUCTION

“The man who does not know where he's going goes farthest.”
—Oliver Cromwell

“There is only one way to learn. It's through action.”
—Paulo Coelho

One thing may definitely be claimed about the least understood, the least appreciated, the least popular art¹, with the least viewers and admirers, and therefore with the least theory written about it: sculpture is least vulnerable to the destructive effects of time, and thanks to this quality of durability it has preserved the most traces of human civilization throughout the ages. As it is said in the Encyclopaedia Britannica², and not only there, traditional sculptures in relief or in a round form are static, immobile objects or images. Their immobility and unchangeableness are part of the tradition that is invariably linked with the art of sculpture, especially of monumental sculpture.

The least dependent on and the most resistant to time... If we make an effort to grasp more readily this poetic metaphor, we will find that there are two things that sculpture has to physically resist in time, two basic destructive factors that it has to overcome: human aggression and the destructive energy of the natural elements – earth, fire, water, and air. And indeed, few works have withstood wars, religious “censorship”, earthquakes, fires, floods and hurricanes...

I have written this book as a sculptor giving voice to sculpture, the most mute of art forms. My search for congenial ideas has been limited to contemporary sculpture. For years I have focused my research on one particular aspect of the art of sculpture, namely the relationship between a sculpture and its environment. The first thing that comes to mind is that the sculpture must in some way “resist” that environment lest it be destroyed by purely physical forces. Now, that resistance can basically be achieved in two ways, which are diametrically opposed:

¹ Le Normand-Romain, Antoinette. SCULPTURE, Introduction. T 2, part IV. TASCHEN GmbH, London, etc., 2002, p. 847

² Encyclopaedia Britannica - <http://www.britannica.com>

- Static resistance, in which a work of sculpture achieves resistance without a change in its form/configuration,
- Dynamic resistance, in which the sculpture, changing its configuration, reduces the destructive power of the forces applied to it.

The difference is seen in the ways in which a stone bridge and a sailing yacht resist the wind: the bridge displays static resistance to the wind, and the yacht – dynamic resistance, by turning a natural energy into a motor.

Hence, the contemporary characteristics of sculpture may typologically be reduced to two modes of existence: one which in this research I shall call *static sculpture* (i.e. possessing static resistance to the natural energies) - and another which I call *dynamic sculpture*, which is my main interest.

The choice of the research theme stems from my view that even in contemporary sculpture only static resistance to the natural elements is popularly used. Accepting statics as a relative concept, I am convinced that the dynamic stability of the solar system³, as well as the dynamic balance of the elements in nature, can influence the development of contemporary sculpture both on a purely conceptual and on a physical level. By diminishing the differences between nature and sculpture, I envision a new aesthetic quality – art-nature, or *elemental sculpture*.

One of the main aims of this study is to expand the working perimeter of the property of resistance, and hence of contemporary sculpture as theory and practice, adding yet another possibility – dynamic resistance to the natural elements, integrating the natural energies, turning them into part of the work itself. Adopting this approach will increase the possible field for the sculptor's artistic expression, as well as the range of the sculpture's "engineering" resistance to the natural forces, offering solutions to this problem.

A nascent tendency to solve the issue of the dynamic resistance of a sculpture in its contact with the natural elements can be found in modern *outdoor* sculpture, given that the meeting with the natural elements takes place only in the open. These are odd cases, preceding the theoretical elaboration of the problem of the dynamic resistance of a sculpture interacting with the natural elements, as well as of the possibilities this

³ "The Dynamic Stability of the Solar System" was proven in 1773 by Pierre-Simon Laplace, a French scientist. It is based on Kant's Nebular theory/hypothesis, developed in "General History of Nature and Theory of the Heavens" and known as the Kant-Laplace theory.

change opens for the attainment of a new aesthetic quality, that would incorporate the natural energies in the final result.

My long practice in this direction of sculpture and observations of certain trends in contemporary sculpture have convinced me that this problem deserves elaboration, particularly given that global research on this is scant and fragmented. Besides expanding the possible sphere for artistic expression, the elaboration of this theory also contributes to greater clarity on a conceptual level regarding the possible future development of sculpture, showing that it is far from exhausting its potential for evolution⁴. The critical state of the arts is not at all informed by their supposed end, and explanation for it should be sought elsewhere. However, the last point is beyond the subject of the present study.

I hope that this study will benefit viewers and connoisseurs of this art, familiarizing them with the problems of **contemporary** sculpture, as well as its aesthetic quality.

The route of a contemporary sculpture from the artist's studio to the meeting with the natural elements in the exterior world is complicated and is also subject to study in this research.

The meeting between contemporary sculpture and the natural elements happened quite naturally – in crossing the threshold of the interior spaces of galleries and museums in order to expand the exhibition area – and as a result sculpture conquered new territories. Responding to the need of the urban environment for sculpture, some contemporary sculptures have ended up beneath the open sky, in a world with new realities which invariably impose their requirements: on the one hand, the realities of urban and architectural structures, and, on the other – the realities of nature acting through its elements. Some **contemporary** sculptors have reacted in a new way to these natural elements. Of course, those sculptors who do not react professionally to these new realities often produce inadequate results that do not last, the remains of which can still be seen today. This prevalent type of reaction, which does not change when conditions change,

⁴ “In his essay “Die unverbrauchte Moderne” (Unused Modernism), the German art critic Laszlo Glozer has found a suitable formulation. He speaks of the “expectant life” that is hidden in the art of yesterday, unseen and unused by its contemporaries, recognizable still, or perhaps only for the first time today. Through this art, whose survival over generations or indeed ages even the usually presumptuous Karl Marx was at a loss to explain, can be seen as a magical storehouse out of which posterity supplies itself differently than contemporaries do. A storehouse used like this will not be emptied so quickly.” (Grasskamp, Walter. *Public Art* (Florian Matzner ed.), *Art in The City, An Italian-German Tale*. Hatje Cantz Verlag, Germany, 1997, p. 338).

has always accompanied sculptural practice, and not only that practice. This approach of “lack of change” as genesis and reason or as an expression of inertia, would warrant a separate study. It would be an extensive one because this approach is by far more frequent, but it lies outside the scope of this book.

Rather than the creation of new forms *within* the scope of an existing field (extremely important and useful in the education and apprenticeship of a professional sculptor), I have always been much more interested in the new possible directions for the development of sculpture as art. Of course, in the sphere of practical activities, a practising sculptor should attempt this in his own way, finding his own direction.

This research offers a review of the relationship between contemporary outdoor sculpture and its surrounding environment, its meeting with the natural elements in an urban and natural environment, and the sculpture’s interaction with them in a static and dynamic aspect, as well as the outcome of this process. This provides the possibility to build a whole new **art environment**, in which open space is no longer just the stage for sculptural events, nor an “exhibition space of a new type”, characteristic of the time of “parachute sculptures”⁵, but a full participant in the sculptural events with their natural or architectural realities.

The analysis of this distinct trend in the development of contemporary sculpture, emerging in the most natural evolutionary way, whose main features take us back to the mid-20th century, poses a number of questions. The most important of them concern the **interaction** and the uniform final result, with nature incorporated.

It is particularly important to consider the new vistas in the interrelationship between the sculpture and the natural realities in a specific place of sculptural events, and, more precisely, the interrelationship and interaction with the different elements forming nature – earth, fire, water and air, which shape our whole visible and invisible world, at each concrete place.

The sky, earth, water – and light, as an expression of fire – not only form the substance of our being, but by interacting with each other they create life and forms. They are the foundation that has formed man in his

⁵ “...even the best examples of modern outdoor sculpture that were still executed in the studio and then fortuitously placed somewhere in the cities fell into disrepute. They were labelled “drop sculpture” or “parachute sculpture,” because, in their poorly chosen locations and in their urban accumulation, they looked as if they had been thrown out of cultural supply helicopters and simply left to lie where they landed.” (Grasskamp, Walter. *Public Art* (Florian Matzner ed.), *Art in The City, An Italian-German Tale*. Hatje Cantz Verlag, Germany, 1997, p. 333).

completeness, that models his thinking, feelings, actions, as well as his physical structure in the different points of our planet. To quote Einstein: “Our feet stay on the ground as a result of all the combined forces in the Universe.”

From the very awakening of human conscience in the distant times of antiquity, the four elements⁶ were worshipped as deities, given different names in different religions and cultures. In all historic layers of time we discover traces of cults and rituals, dedicated to the diverse aspects of this archetype. These are the substances which form the Universe⁷. Hence the name of the concept: *elemental sculpture*, focused on an organic meeting of modern sculpture with the natural elements.

A brief look back

In different cultures, with small variations, we find the four fundamental elements of the universe: earth, water, air and fire. The most ancient building blocks of the universe, according to the Babylonians, were four: earth, sky, sea and wind.

Another ancient description of the natural elements (five of them) is seen in Ayurveda⁸, i.e.: space, air, fire, water and earth.

Among the Chinese, among these elements called Wuxing or *Gogyō* (五行), air is missing, but we find metal (金), wood (木), water (水), fire (火) and earth (土) - (the enumeration conforms to the Chinese order of these elements).

Among the Japanese, who call the natural elements the “five greats” or Godai (五大), we find two systems. One is Chinese, arriving together with the Chinese alphabet (the first of the three Japanese alphabets used today). The other system belongs to esoteric Buddhism in Japan (Mikkyō 密教), whose elements are earth (地), air/wind (風), water (水), fire (火) and a fifth, additional element – void/sky (空). The idea of void/sky here comes from Buddhism, illustrating the concept of creative energy in its pure form.

⁶ Within the framework of this research, the concept of natural elements should be understood in this sense, and not in the sense of their chemical aspects.

⁷ For the first time the Greek philosophers Thales, Anaximander and Anaximenes, and later also Heraclitus, gave up the mythological explanation of these four elements and looked at them precisely as substances of nature.

⁸ Ayurveda (sanskrit) ayur, life; veda, knowledge. -

http://www.experiencefestival.com/ayurveda_-_the_five_elements

In fact, the above-mentioned elements coincide with the elements in Hinduism (Tattva) and Buddhism (Mahābhūta), naturally with changed names in the respective languages, as follows: earth (Prithvi/Bhumi), air/wind (Vayu/Pavan), water (Ap/Jal), fire (Agni/Tejas) and ether/space (Akash). Ether is the “fifth element” in the Ionian School of Philosophy as well, and was included by Aristotle as different from the four earth elements – earth, air, water and fire. It was later called quintessence (fifth essence) and differs from them in that it does not change its parameters of temperature and humidity, changing only its location.

We again find ether in the Middle Ages among the alchemists, who for the needs of their craft increased the number of “natural elements”, adding sulphur, mercury and salt – actually all of them contained in the old element “earth”.

Among the Tibetans, the natural elements (Bön) are again five: earth, air, water and fire, the fifth element being space. As we can see, the different systems are not too dissimilar.

For the first time in European history, the natural elements are mentioned as the four fundamental component parts of existence by Empedocles⁹ (reference: Appendix 1, p. 139) in his work *On Nature*. In this philosophical poem, he posits that there are four elements at the basis of the world and things – earth, air, water and fire¹⁰. Further in this study, I

⁹ An ancient Greek philosopher and citizen of Agrigentum (Greek name Akragas), a colony of the city of Gela in Sicily. Believed to have lived sometime between 483 and 423 BC.

¹⁰ A quote from *Empedocles* (Stanford Encyclopedia of *Philosophy*) – <http://plato.stanford.edu/entries/empedocles>

1. *On Nature* – a work by Empedocles

“*On Nature* is a bold and ambitious work. It is based on the claim that everything is composed of four material elements (“roots”); these elements are moved by two opposing forces. The elements are fire, air, earth, and water; the forces are Love and Strife. “Air” refers to aether, the upper, atmospheric air, rather than the air that we breathe here on earth. Aristotle credits Empedocles with being the first to distinguish clearly these four elements, traditional in Greek physical theory (Aristotle, *Met.* A4, 985a31-3). These elements and forces are eternal and equally balanced, although the influence of Love and of Strife waxes and wanes (B6 and B17, lines 14-20). Empedocles seems to have Parmenides' arguments in mind when he denies that these elements or forces come to be or pass away. Everything else comes to be and passes away because each is composed of elements that successively combine to form them and separate at their destruction (B 17.26-35).”

+ Encyclopædia Britannica –

<http://www.britannica.com/EBchecked/topic/279305/hylomorphism>

will use the term “natural elements” to denote the four elements, defined by Empedocles, as common to many different systems, without rejecting the Buddhist idea which influenced the Japanese system of creative energy. That I will leave in the company of the artists of *elemental sculpture*, and will use the Tibetan idea of space not in its global and absolute meaning, but in the sense of concrete space in and around the sculpture.

Tracing, describing and systematising *elemental sculpture* as a distinct trend in contemporary sculpture, we should note the continuation of the idea of restoring a closer man-nature relationship, or a return to Mother Nature, as a continuation of the ancient Greek attitude to it. Revived in 18th century philosophy by Jean-Jacques Rousseau, it is very simply and clearly formulated by him in the call “Back to Nature”. Following this movement, we see its individual manifestations in contemporary sculpture, tracing the road of development of *elemental sculpture* as a separate direction of creative quests in **contemporary** sculpture. Turning to the natural elements not only as a source of inspiration, but by their direct entry in the work as well, obliterates the boundary between art and nature; and the questions of their statics and dynamics, requiring adequate answers in sculpture, reveal unsuspected horizons for the evolution of thought and creativity.

The natural elements were the subject of observation, inspiration and portrayal in all the arts throughout the centuries: poetry, music, painting, graphics... (reference: Appendix 1, p. 162 – Turner), but in sculpture this is a rare theme, expressed mainly in relief. The natural elements are depicted less often than their deities, allegories, etc. Two of the natural elements – earth and fire – owing to their physical properties have been part of the technological processes of the creation of sculptural works throughout the ages, far more than being the object of inspiration, and least of all an equal participant in sculptural events – something that was finally achieved after a long evolutionary process in the second half of the 20th century.

The actual meeting between sculpture and the natural elements is a real professional challenge for merging them into a uniform, inseparable result, creating **art works** of a new type. Hence, the purpose of the present study may be defined as an attempt – theoretical and practical – to substantiate the opportunities for attaining a new aesthetic quality in contemporary sculpture.

“On the one hand, one must look for the primordial elements—*i.e.*, for bodies that are not derived from others and of which all other bodies are composed. He (Aristotle) found his solution to this question in Empedocles’ doctrine of the four elements: earth, water, air, and fire.”

For centuries on end, the natural energies have been less a cause for inspiration than a real danger to sculpture. Depicted mainly in bas-reliefs in the different ages, the natural elements, with their inherent dynamics, have always presented a physical threat to outdoor sculpture, challenging its static resistance. One of the logical answers to this dynamic threat – regarded for centuries exclusively as a threat - was work and efforts for reinforcing statics to withstand greater dynamic loads by nature, such as in earthquakes and hurricanes. With the development of engineering knowledge and technologies, as well as the ambitions of mankind, this inevitably led to deeper foundations, more buttresses, etc.¹¹

In the natural elements, *elemental sculpture* finds a building potential, rather than a threat, thus posing a fundamentally new question about resistance: is it to be resistance in statics or resistance of dynamic interrelations? The answers to the question begin to outline this direction of development of contemporary sculpture. *Elemental sculpture* is a new idea, born from the natural evolution of sculpture as theory and practice, and should be perceived as the latest trend, which has yet to develop. After its potential is revealed, in the most natural way it will become one of the foundations, one of the roots of subsequent trends.

This newer and adequate professional response to the dynamics of the natural elements expands the perimeter of the possible artistic answers “in material”. The dynamic interrelationship and interaction of sculpture with the natural elements, supplementing the former static relationships, close the statics–dynamics circle and in principle exhaust the possible answers in this field, maximally expanding its horizons.

Elemental sculpture is the active artistic relationships with nature, combined in a uniform result: the natural elements have become a means of expression. The expansion of the borders of this new trend in sculpture continues to this day, although not defined and systematised as a complete theory, but rather as a comment on the efforts of individual authors, whom I will talk about later.

In order to better distinguish *elemental sculpture* as theory and distinct direction of search and development in contemporary sculpture and within the framework outlining this type of human activity as visual art, below I

¹¹ “With the architecture of many ancient civilizations reduced to ruins and their painting lost without trace, sculpture has assumed a position as the art par excellence. Many spectacular fragments are exhibited at archaeological sites or hold pride of place in museums; they are viewed as prime evidence of artistic creation, that is of man's power over raw matter and nature.” (Daval, Jean-Luc. SCULPTURE I. TASCHEN GmbH, etc., 2006, p. 9).

will dwell on the problem of the **dimensionality** of these arts and, more precisely, the zone of the two and three spatial dimensions.

For a fuller understanding of this thesis, let me define one seemingly obvious characteristic of the arts, and the visual arts in particular, on the basis of **dimensionality**, and identify the three-dimensional nature of sculpture as a property that makes its interaction with the natural elements in the real three-dimensional world possible and complete. Here the concept of “dimensionality”, in relation to the visual arts, should be understood as the generic concept of the concepts of “two-dimensionality”, “three-dimensionality”, “four-dimensionality”, etc., up to “n-dimensionality”. I will put aside the infinity of “dimensionalities” generously offered by mathematics, and focus mainly on the concepts of “two-dimensionality” and “three-dimensionality” because this is the zone in which the visual arts emerge, and which they later inhabit.

In principle this generic term should be understood as having a bearing on spatial dimensions, when it refers to the visual arts. When it relates to the temporal dimensions, characteristic of other types of arts, like the metre in music, for example, representing its “temporal dimensionality”, it is used to distinguish the visual arts – perceived with the eyes, as a group formed on the basis of spatial dimensionality, from music which is perceived with the ears on the basis of “temporal dimensionality”. As regards the human organs through which art may be perceived in general, a small yet significant exception is made by sculpture which, if it is life-sized, can be perceived with the hands with eyes closed, or in the dark¹².

Spatial dimensionality is a unifying feature of the group of the visual arts, a feature that makes them comparable and distinguishable; comparable because it is their common feature, outlining the borders of this group; and distinguishable because dimensionality also plays the role of a distinct feature inside this group, dividing it into two-dimensional and three-dimensional visual arts.

The three-dimensional nature of sculpture, together with materiality, makes it commensurate with the natural three-dimensional world, and this commensurability makes possible the correlation between sculpture and nature in a conceptual and material aspect; this enables the interaction of sculpture and nature and the achievement of a common result – the subject of this study.

In order to elucidate and better understand the examined problems, I will trace the road covered by contemporary sculpture with regard to its

¹² Increasingly museums are placing signs in Braille next to the sculptures, containing all the information for people with impaired vision who perceive the sculpture through touch.

environment, the expansion of the territory in which it appears to the viewer, as well as the main changes in its evolution.

After a sculpture leaves the studio, this road includes four phases which, due to their different conditions, inevitably impose their specific requirements on sculpture. Some sculptors, responding to the new requirements of the environment, achieve fundamentally new results. These adequate reactions lead to three different incarnations of contemporary sculpture, covering the road from gallery space to the natural environment, of sculpture that has left the limits of the city. This three-phase road has not been analysed and systematised as a complete process in specialised literature; only fragments of it have been described. I will attempt to do it now.

We will be better able to understand and feel the main differences of the separate forms in contemporary sculpture if we also take a look at the metamorphoses it experiences in its development along this road: A sculpture starts from the exhibition space as **sculpture-object**, passes through the phase of **sculpture-space**¹³ in and outside the interior, then reaches the next phase in its development as **sculpture-place**¹⁴, settled firmly in the exterior and gradually increasing its size in relation to the environment in which it appears.¹⁵ This is the place to explain that the sequence of the three phases, referred to in this typology, follows the chronology of their appearance in time; and the term “space”, as pointed

¹³ “For decades the approach to modern sculpture was dominated by spatial dimensions. However, before the surrounding space penetrated the sculpture, streaming through it and hollowing it, the genre returned once more to its original form, the block. As though seeking to secure its fundamental stance, the invasion of space was preceded by a return to the block-like archetype or the rough-hewn trunk.” (Schneckenburger, Manfred. *ART of the 20th Century, Part II, SCULPTURE, Spatial Dimension*. TASCHEN GmbH, Köln, etc., p. 419).

¹⁴ “20th-century art form intended to involve or encompass the spectators rather than merely to face them; the form developed as part of a larger artistic current that sought to break down the historical dichotomy between life and art.” BRITANNICA, Internet –

<http://www.britannica.com/EBchecked/topic/189197/environmental-sculpture>

¹⁵ “The result is that, today, sculpture is no longer an object to look at: it has become a space to live in. At a time when art forms are more and more overstepping their limits, overlapping each other and inventing the place where reality is staged and enacted, deeper reflection is called for if we are to understand the current interaction, so necessary and fruitful, between the space we live in and the art of our time.” (SCULPTURE, Introduction, T 2, part IV. Taschen GmbH, Köln, etc., p. 847).

out earlier, is not used in its cosmic sense, but concerns the space both immediately surrounding and inside the sculptural form.

Generally speaking, contemporary sculpture in its development (after its appearance in the studio of its creator) inhabits four types of spaces, existing in parallel, successively moving on their road from interior to exterior (an exterior corresponding to their scale), which I will discuss in greater detail in the next chapter of this study.

I will be using the relatively scant comparative material to derive from it some specific features and peculiarities, common to the relevant authors.

The study offers a comparative analysis of the creative quests and results in the work of sculptors, who in one way or another have turned to nature, responding to its requirements, inspired by the intensity of some of its elements and using them as means of expression. Included are sculptors who have devoted all their professional efforts and worked solely in these directions, as illustrating most clearly the process of development.

Not included are sculptors in whose art, although stimulated by nature, the natural elements are not used as immediate “working material.” Strictly speaking, these cases do not directly refer to *elemental sculpture* and would be of interest to a different study, showing the place of nature as an image in sculpture through different periods of its development, being solely a source of inspiration or the inhabited environment in which art appeared in pre-historic times. In painting and graphics many more artists are inspired by the natural elements, but this does not mean that *elemental graphics* or *elemental painting* are possible. The border is simple but categorical – dimensionality. In the conditions of two-dimensional space, images of the natural elements may be present, but not the elements themselves, with their scale, their power, their three-dimensionality. That is possible only in real three-dimensional space.

In this study I will examine the process of the sculptor-nature relationship in which the sculptor uses a natural element, or natural elements, directly in his work.

Such sculptors are found mainly in two directions in contemporary sculpture, emerging in the last century. These are Land Art¹⁶ (reference: Appendix 1, p. 165), taking its beginnings from Earth Art¹⁷ – a movement

¹⁶ “Once Michael Heizer and Walter De Maria found the means to realize their immense outdoor projects which altered nature, land art and site sculpture became a major avant-garde development.” (SCULPTURE, From the Renaissance to the Present Day, LAND ART AND SITE SCULPTURE. TASCHEN GmbH, etc., 2006, p. 1116).

¹⁷ “Indeed, it could be argued that earthworks, in which artists use the soil itself as their material, began with Walter De Maria, Robert Smithson and Robert Morris

without a direct relation to *elemental sculpture* due to being restricted mainly to the interior, except as the foundation of Land Art; and one variety of Kinetic Sculpture¹⁸ (reference: Appendix 1, p. 123), i.e. Wind Driven Kinetic Sculpture¹⁹ (reference: Appendix 1, p. 173). These are the areas for the meeting and rediscovery/reconsideration of the natural elements by sculptors²⁰.

Roots of this movement can also be seen among artists who have found their own road in directions in visual art, in general very different from *elemental sculpture*, but for one reason or another they have touched on the natural elements and their boundless possibilities in some of their works. One such example is Christo Javacheff – Christo, in his works *Valley Curtain*, *Surrounded Islands*, *Running Fence*, as well as *The Gates* (reference: Appendix 1, pp. 119), which reveal the powerful poetic dynamics of the air and the way it can be included in a work of art. The strength of his *Surrounded Islands* project lies not only in the aesthetics of the work, but also in the location chosen for its creation. This is the border between three natural elements – earth, water, and air. This study shall pay attention to this exciting border further on.

As in the biological world, the natural elements may be viewed as invisible and visible, depending on our approach. They are invisible if

literally filling galleries up with dirt.” (ibid.), *EARTHWORK AND LAND ART* - p. 1114

¹⁸ The preceding trends in sculpture, as well as the names of the authors and their works, quoted by foreign sources, as well as the titles of the sources themselves are quoted in their original form for greater accuracy.

¹⁹ “As a theorist and historian of Constructivism, George Rickey gave the Calder mobile fresh possibilities in carefully articulated mechanical constructions. His first Mobiles date from 1945. Starting from geometric investigations into the development of forms in space -- their balance and direction -- he built, with the precision of a mechanic, objects that moved and vibrated in response to the push of air, and as he himself noted, “When you build an object for movement you are always surprised by the movement itself: however premeditated the design the movement seems to come from somewhere else.” (ibid.), *LIGHT AND MOVEMENT*, p. 1060

²⁰ “Is Land Art, as it quickly came to be known, simply a brutal intervention in the untouched expanses of the West? Or is it a protest against the alienation of nature with an escapist tendency towards ecological reparation?”

Land Art can be regarded within the Northern Romantic tradition traced by Robert Rosenblum from the work of such artists as Caspar David Friedrich and William Turner to the art of our own times. In the paintings of John Constable prehistoric ritual sites evoke a frisson of the primordial and the cosmic.” (Schneckenburger, Manfred. *ART of the 20th Century, Part II, SCULPTURE, Land Art: Painting with Mountains*. TASCHEN GmbH, Köln, etc., 2000, p. 543).

taken as the microstructure of nature and the structure of crystals forming the earth (reference: Appendix 1, p. 159 – water crystal), forming not only our own planet, but the whole Universe. And they are visible if taken as the nature in which we ourselves are located. While the real world in which we live is the zone in which we can create *elemental sculpture*, the world invisible to the naked eye, regardless of its level, can only be a source of inspiration for us – at least for now.

This conclusion calls forth a natural interest in the relationship between microstructures, invisible to the naked eye, and the visible world of the natural elements: how does the microstructure of the crystal, forming the rock, influence its form, and how does its form impact the formation of the mountain as a growth process; how do the natural elements influence each other? The earth is formed according to a logic, in most cases including fire, in some cases also water, and once the process of its formation is complete it enters into relationships with the water and air, no longer as forming, but as eroding factors, which significantly change these forms in time. Here we can see the two classical principles of sculpting – the principle of adding (the work of the volcano and deposits), used in working with clay, and the principle of subtracting (washing away and eroding of the earth through air and water), used in working with stone and wood.

The urge to turn back to Nature in its pre-biological, geological appearance and there to seek a source of inspiration, as well as a means for creative expression, has been and continues to be this sculptor's main driving force. This naturally leads to a further step beyond the homocentric period in sculpture (as said, extremely useful in the teaching of sculpture), ridding sculpture of all things transitory/biological, placing the focus on the primordial natural elements, their interactions and their sculptural use.

The interest in the microstructures in nature and their replication at different levels leads us to the powerful microscopes which made visible the microstructure of the rock. After many years of observations and drawings appeared the first sculptures inspired by this microworld. Central to my interest was the recurrence of structures on different scales. A rock structure, which forms part of a mountain and gives it its specific appearance, can be distinguished even when a miniature piece of that rock has been magnified a thousand-fold under a microscope²¹. The microstructure, although invisible to the naked eye, is just as much nature and can be studied in an academic way, and the ultimate result can be art, inspired by that nature. This micro-aspect of the natural elements is a universe of

²¹ Similarly to the theory of fractals in mathematics.

possible inspirations for reflection and creativity, regardless of whether we observe the microstructure of water in a liquid or solid state, or of one mineral or another, forming the earth.

This train of thought and experiments led to 13 sculptures in the *Memorial/Cascades 13 Centuries of Bulgaria in Europe* in Shumen where, on an area of 5,000 sq m, after two years of microscopic observations, sketches and studies, I developed a composition inspired by the microstructure of granite. The sculpture transposes this microstructure, visible only under a microscope, on a human-urban scale, again showing that microstructure and macrostructure have a lot in common (reference: Appendix 2, pp. 163).

The appendices to this study include other sculptural projects, which illustrate my ideas of the directions in which *elemental sculpture* can be developed.

Their creation is a very important part of the endless iterative process of practice – theory – practice, accompanying the arts and leading to their development over time. The lack of one of these two elements in most cases has hindered or delayed making the next step. A short sentence of the philosopher Merleau-Ponty, which illustrates a part of this process, sounds almost like an axiom: “I experience myself in experiencing the world.”²²

All these issues are linked with the possibility to share practical experience in a broader context, whose comprehensive and thorough analysis I hope will benefit art critics, practising sculptors, students of sculpture and experts as well as the general public.

²² „Phénoménologie de la perception” (1944), S.L.

CHAPTER ONE

SCULPTURE AND ITS ENVIRONMENT

The environment in the visual arts is the space that is inhabited by visual events. This environment is different for the different visual arts, but can generally be reduced to three types:

- The environment created by the author in picture space, or the picture world created by the artist, enclosed by its frame¹.
- The real world as an environment inhabited by the sculpture, as well as by the viewer. In this space the creation of an environment is mostly limited to certain changes in the existing one. In contrast to picture space, it must take into account the real world.
- A particular border environment in which elements of the first two may intertwine. The boundary between the two-dimensional and three-dimensional visual arts is not sharply defined. It flows from one into the other in the field of relief² or, following modern

¹ “In fact, this is what distinguishes the frame of a showcase or a window from the frame of a painting: through the first things are seen that are subject to gravity; through the second you see forms freed from reality.” (Ortega y Gasset, Jose. (1984), *ESSAYS IN AESTHETICS: On realism in painting*. Nauka i Izkustvo, Sofia, 1984, p. 110).

² “Also called **relievo**, (from Italian *relievare*, “to raise”), in sculpture, any work in which the figures project from a supporting background, usually a plane surface. Reliefs are classified according to the height of the figures’ projection or detachment from the background. In a low relief, or **bas-relief** (basso-relievo), the design projects only slightly from the ground and there is little or no undercutting of outlines (reference: Appendix 1). In a high relief, or **haut-relief** (alto-relievo), the forms project at least half or more of their natural circumference from the background and may in parts be completely disengaged from the ground, thus approximating sculpture in the round. **Middle relief** (mezzo-relievo), falls roughly between the high and low forms. A variation of relief carving, found almost exclusively in ancient Egyptian sculpture, is **sunken relief** (also called incised relief – see Appendix 2), in which the carving is sunk below the level of the surrounding surface and is contained within a sharply incised contour line that

terminology, in the field of “2.5D” (reference: Appendix 1, p. 139). While the third dimension in a painting is imitated, in most types of reliefs it is reduced, though genuinely existing. In this way the relief extends across the border between the two-dimensional and the three-dimensional, forming a new perimeter – that of 2.5D, where height is reduced proportionally to width and length as dimensions. A Renaissance bas-relief, as for example Lorenzo Ghiberti’s *Gates of Paradise* (reference: Appendix 1, p. 150), which makes use of perspective -- an instrument for imitating the third dimension, characteristic of painting -- is close to the two dimensions. The centre in this type of relief is much closer to painting and the figures are simply slightly more protruding. In contrast, high relief, for example in the Pergamon Altar, completely inhabits three-dimensional space, in which the figures are almost detached from the plane of the relief (reference: Appendix 1, p. 150). In this case the plane is the only element distinguishing high relief from sculpture in the round, keeping it in the category of relief. The phenomena close to the border between the two and three dimensions, start from “three-dimensional” drawing in the conditions of the two-dimensional picture plane and flow through bas-relief into high relief. The visual plane of the drawing passes like a basic plane of the bas-relief and then slowly fades away on its way to the real three-dimensional sculptural form like an invisible plane of symmetry in some sculptural configurations. Another such border phenomenon is the line, previously an element of drawing, that appeared in sculpture, fully freed of the picture plane in the work of Calder, Picasso³ and others in the 1920s (reference: Appendix 1, p. 161 – line in two-dimensional and three-dimensional space – Picasso).

frames it with a powerful line of light and shade. **Intaglio**, likewise, is a sunken relief but is carved as a negative image like a mold instead of a positive (projecting) form (in miniature sculpture this type of relief is known as a gem. Encyclopædia Britannica –

<http://www.britannica.com/EBchecked/topic/497046/relief>

³ “Twenties was the idea of “drawing in space”. As always, but even more so then, the artist most responsible for that motto was Pablo Picasso”. (Serraller, Francisco Calvo. CALDER: Gravity and Grace. Editors Carmen Gimenez, Alexander S.C. Rower. Phaidon Press Inc., New York, 2004, p. 7.)

Space in two-dimensional visual arts

Two-dimensional visual space, in the modern sense of the term, has been formed for centuries. From the gradual emergence and establishment of the picture plane as environment, starting from the uneven and rough rock surfaces of caves and stones, a long road is covered before it is asserted as something different from a natural reality, as an isolated two-dimensional world with new rules and a new purpose. As Meyer Schapiro says: “We take for granted today as indispensable the rectangular form of the sheet of paper and its clearly defined smooth surface on which one draws and writes. But such a field corresponds to nothing in nature or mental imagery where the phantoms of visual memory come up in a vague unbounded void. The student of prehistoric art knows that the regular field is an advanced artefact presupposing a long development of art.”⁴

Sculpture and its three-dimensional environment in two aspects

In contrast to the picture world, the environment in which the events depicted by the author happen, i.e. the picture space enclosed within the frame⁵ and belonging to the picture itself, sculpture, with some stipulations for some types of relief, as noted earlier, exists in the real three-

⁴ Schapiro, M. *Artist, Society, Style. On Some Problems in the Semiotics of Visual Art: Field and Vehicle in Image-Signs. Selected studies and articles.* Bulgarski Hudojnik publishing house, Sofia, 1993, p. 214

⁵ “Besides the prepared ground we tend to take for granted the regular margin and frame as essential features of the image. It is not commonly realized how late an invention is the frame. It was preceded by the rectangular field divided into bands; the horizontals as ground lines or strips connecting and supporting the figures were more pronounced visually than the separate vertical edges of the field. Apparently it was late in the second millennium B.C. (if even then) before one thought of a continuous isolating frame around an image, a homogeneous enclosure like a city wall. When salient and when enclosing pictures with perspective views, the frame sets the picture surface back into depth and helps to deepen the view; it is like a window frame through which is seen a space behind the glass. The frame belongs then to the space of the observer rather than of the illusory, three-dimensional world disclosed within and behind. It is a finding and focusing device placed between the observer and the image.” (Schapiro, Meyer. *Selected Papers*, George Braziller, Inc. Publishers. New York, 1931 – 1973. *Artist, Society, Style. On Some Problems in the Semiotics of Visual Art: Field and Vehicle in Image-Signs. Selected studies and articles.* Bulgarski Hudojnik publishing house, Sofia, 1993, p. 218).

dimensional world, in one space/environment, common to it and the viewer.

The relationships between the sculpture and its three-dimensional environment may be viewed in two aspects. The first is theoretical, excluding the materiality and specificity of the place, as well as of the work itself, examining the development of these relationships in time at the level of form and space. Tracing this typology⁶ will give an idea of the road covered by contemporary sculpture at the level of form-space in its continuity/wholeness and the genesis of the “interior” and its development in sculptural form, as inherited by contemporary sculpture from the hitherto prevalent classical “compact” sculptural form. This typology is also valid for the modelled sculptural form, regardless of whether by adding or taking away, because it contains a closed space which is a potential for work, and hence also for the appearance of the “interior”. Due to the fact that they mostly lack this closed space, i.e. a potential for the development of an “interior”, in some techniques in contemporary sculpture, such as construction, assemblage, etc., things develop according to the specific peculiarities of the technique itself, although later, and especially in **sculpture-place**, they again become similar.

These three qualitatively different levels in my typology are arranged thus to clearly outline the road of development in theory. But in reality these processes are far from taking place in such strict succession, because reality is an ocean that is unaffected by the principles of navigation; they affect people. Let me therefore examine these stages of relationships separately.

Sculpture-object. The object is monolithic, with clearly outlined and firm borders. The contact with surrounding space, the air around it, is at the level of touch. The air/space does not take part in shaping the form, it simply borders on it. This border has already been worked on, it has been rid of the superfluous, superficial details that played an important role in the sculpture of Mannerism and Classicism (reference: Appendix 1, pp. 108 – Brancusi), but this border still remains sacred and inviolate. The space around it has no bearing on the structure of form; here form simply displaces air/space.

The relationships between form and space are still juxtaposed, i.e. they are almost lacking. The cast sculptural form possesses an interior, but it is a purely technological, rather than an aesthetic one. Isolated from the

⁶ As specified in the Introduction, the sequence of the three phases, referred to in this typology, follows the chronology of their appearance in time; and the term “space” is not used in its global and comprehensive sense, but concerns the space both immediately around and inside the sculptural form.

outside world, without contact with the space surrounding the sculpture, it is a blind space inside the form itself. Wooden and stone sculptures too possess an interior, yet although massive, it may be regarded as unconquered space, as a potential waiting to be developed. And this does indeed happen at the next stage.

Sculpture-space. The borders start opening up. This is the beginning of a dialogue between form and surrounding space, contact is at the level of penetration and creation of a new type of configuration in which both components take part – form and space⁷. This penetration enables an “interior” to appear in sculpture (reference: Appendix 2, p. 175). Space, as it enters the form, starts to influence its structure or, more precisely, both take part in this new type of form-shaping, where form is still the main character, responsible for the structuring principles, while space joins this configuration.

It should be pointed out that this is the situation in most cases, though not in all. There are cases in which, due to its configuration, space inside the sculpture has a greater impact, being better structured and organised than the form of the sculpture itself. These less frequent cases show the attained high level of organisation of the “interior” in the sculpture, show that the reached boundary can be overcome.

The air/space has already penetrated the mono-form and takes part in its construction. The first small, but significant step in this direction was made by Barbara Hepworth, who was the first to use the hole in a massive volume (reference: Appendix 1, p. 109) in her work *Pierced Form* from 1931.⁸ In this connection I should also mention Jacques Lipschitz and Kan Yasuda, among others (reference: Appendix 1, p. 112). Empty space in sculpture is also seen in the multi-component composite form. Here it serves to enrich the concave/convex pair, sometimes as a “pause” and sometimes as the vehicle of the sculptural form (reference: Appendix 1, p. 106 – Archipenko).

At the next stage of development, space is used even more actively in form-shaping the sculpture’s “interior”, which becomes more complicated and the most important part in some works. And at a later stage a second

⁷ “There was no longer a clear-cut boundary between the epidermis and the surrounding space. Either the surrounding space itself encroached upon the sculpture with a vitality of its own that broke and distorted the continuum of the sculpture; or the sculpture opened out to embrace the surrounding space in which it was situated.” (Schneckenburger, Manfred. *ART of the 20th Century, Part II, SCULPTURE, Spatial Dimension*. TASCHEN GmbH, Köln, etc., p. 419)

⁸ Todorov, T. Barbara Hepworth – Art in Bulgaria, 22, 1995, p. 12.

sculptural form appears in this interior, contained in the first one (reference: Appendix 1, p. 165 - Henry Moore).

In the last phase of this development, space breaks up the form into different parts, occasionally acting as a unifying principle in the composition of the now separate elements of traditionally inseparable/monolithic forms, the human body for example. This can be seen in the work of Henry Moore, Jean Arp, etc. (reference: Appendix 1, p. 164). Frequently in this case the form/structure of the air between these volumes stands for the organising principle in the composition and is therefore “modelled” very precisely.

At this stage of development the form-space relationships have become interdependencies. Form and space become equal partners in building a uniform structure of a new order. Such interrelations are also seen in nature (reference: Appendix 1, p. 158 - *Rock*). The nascence of the interior in sculpture paves the way for the next stage of development – turning this interior into environment. The eye can now see into the interior, but the physical access of the viewer inside the form is still impossible, with a few exceptions where the size of this “interior” is large enough to allow someone to squeeze inside it – for a little while, with difficulty, just long enough for taking a photo or playing with it (reference: Appendix 1, p. 164 – Henry Moore - *Large Two Forms*, 1966).

A premise already at the conceptual level, the viewer’s entry into this new environment, specially designed as such, i.e. as a place created especially to lead the viewer into the sculpture, happens at the next stage of the form-space relationship, i.e. sculpture-place.

Sculpture-place. The borders between form and space have opened wide. The scale of the sculpture has grown to something close to that of urban architecture; the interior flows into the exterior and together with the sculpture a uniform, qualitatively new sculpture-place is formed. This is no longer a question of simply situating the sculpture in an exhibition or urban environment; the work has been created to receive viewers who will no longer merely view the sculpture from the outside or scan the interior with their eyes, but will merge with it and experience this unison with all their senses, turning into a part of the whole. This art-environment of a new order is no longer an added element in the surrounding space, but an integral part of it. It is so “woven” into it, thanks to the fact that it was designed especially for a concrete place, that its shifting is unthinkable – something that is implicit for the **sculpture-object** and in most cases possible for the **sculpture-space** (examples: Isamo Noguchi - *Contoured Playground*; Maya Lin - *Vietnam Veterans Memorial*; Todor Todorov –

Memorial/Cascades 13 Centuries of Bulgaria in Europe - reference: Appendix 2, pp. 170-71; and Appendix 1, p. 147).

Sculpture-place in some cases, as for example *Contoured Playground* and *Memorial/Cascades 13 Centuries of Bulgaria in Europe*, comes close in configuration to the relief, as a proportional relationship of the two horizontal dimensions to the vertical. The second aspect of the theme sculpture-place involves the examination of the relationship between the sculpture and its environment at a concrete, material level – the sculpture and the real world we inhabit. Speaking of a concrete environment, although in this study I am concerned primarily with contemporary sculpture, I will take a quick look at the beginnings of sculpture which will provide a basis for comparison.

The need to integrate art into the living environment is already evident by the first traces of human civilisation. People experienced the need to create art even in the most ancient “architectural” space: the cave. Already at this early stage mankind became aware of its need for the presence of art in the surrounding environment. Throughout the centuries this need has been expressed in different ways, constituting the foundation of the different ages in the history of the arts and the civilisation process in general. Changing in time, sculpture established itself as an independent means for human self-expression. It also became an emotional mediator between architectural and urban structures, determined mainly by its functional nature and the human spirit, in need of more concentrated emotions. This is why the surrounding space is both physical and emotional. Below I will discuss mainly surrounding space in its physical dimensions, as well as its relationship with sculpture.

Implanted in or originating from a specific architectural space, the sculpture becomes an element of this place, an emotional and optical centre in space, which interacts with the other elements, influencing their optical proportions, colour range, emotional climate. A new harmony is born that lends uniqueness and a new identity to the concrete place. Moreover, we can speak of a kind of dating of the place as a result of the new cultural meaning it has been given by the sculpture⁹.

⁹ “Opposed to that is the productive idea that perhaps these campaigns can be seen as an attempt to date a territory: that is, to place signals of the present against a historical context... Dating the environment through architecture and art is something that appears regularly in history; Romanesque and Gothic developed in the Middle Ages as stylistic alternatives which allowed a decision between an antique and a modern kind of design (“opus modernum”). Since then, the attempts of all other later epochs to date themselves are known as styles. Taking this into account, marking the present would have been one of the main tasks of art from an

To clearly determine the nature of the relationship between sculpture and its concrete environment, it is necessary to trace the path of the sculptural work from its leaving the interior space to its permanent setting outdoors.

Gallery

With the conclusion of the creative activity in the process of its taking shape, the sculptural work starts living its own independent life, entering into dialogue with the three-dimensional world in which it is situated.

In the relative quietude of the exhibition hall, this dialogue is essentially between the viewer and the work, since this is a world deliberately created as the habitat of works of art. The exhibition hall is an interior, hermetic space, which separates the work from the everyday world, placing it in the context of other such works in an exhibition. With consciously muted colours and orchestrated lighting, deprived of the dynamics and diversity of the outside world, the exhibition hall is the place that provides optimal conditions for contact between the viewer and the work, designed for the interior. A good gallery does not impose itself, but lets the works speak for themselves. Here, inside the exhibition hall, a gentle presence is imposed even on the air, temperature and humidity being fully controlled. Exhibited in it, the work has already detached itself from its author, making the first step towards beginning its own independent life. The difference between the studio of its creator and the exhibition hall lies mainly in the function of these rooms (which determine the differences in lighting, heating, etc.), but let's not forget that in both cases the work has no real contact with the atmospheric conditions of the exterior..

Museum

The museum version of this type of "special" space aims not only to show the individual exhibit, but also to "recreate" the respective age, to restore the context by supplementing the expositions with artefacts

early point on... The outdoor sculpture of the modern must be a welcome tool for dating; it allows the burden of the historical to be broken, where it simply could not be demolished; that is, in the context of city architecture. In order to assert itself over the past and to date its own contemporaneity, outdoor sculpture is, at any rate, thoroughly useful," (Public Art (Florian Matzner ed.), Art in The City, Dating. Hatje Cantz Verlag, Germany, 2004, p. 340).