

## **Beyond the Catastrophes**

### Desert Research as a Human Concept

The desert is among the victors of our time. And its victory seems, from the human point of view, a great catastrophe. Deserts, arid zones, steppes expand all over the world, irresistibly, with an annual increase of an area of about the size of Germany. The process is called desertification. Scientists estimate that worldwide one and a half billion people are involved in it, meaning that the soil where upon they live and from which they draw their living, is turning into desert or steppe.

In our daily news about catastrophes the afflictions of the desert play a minor role compared with those of floods, tidal waves or thunderstorms. But the two phenomena are connected, the draught at one place and the flood at another, the deficiency and the waste, as if nature wanted to make us aware of our eternal dilemma: that we are not capable to keep equilibrium, that we are doomed to fail because of the extremes we cause.

There are deserts and steppes, arid and semi-arid zones that have been nothing than that from time immemorial, conditioned by climate, location and ecological actualities, and there are others that dried out and degraded gradually, by the impacts of human life. A well-known, early example for long-lasting, human-made damage are those devastated, steppe-like landscapes of the former Roman Empire in Asia Minor, the Lebanon, Greece or Armenia that once have been thick forests, before the Romans cut them down for their shipbuilding, for the countless fleets the Empire consumed in its wars. Some of these landscapes have not recovered until this day, two thousand years after. Almost nothing was left from the legendary woodlands of Phoenicia at King Hiram's time (called "the glory of Lebanon" in Isaiah 60, 13) that have, as the Bible tells us, provided the construction of the Jerusalem Temple with timber. Also the highlands of Armenia, as far as the eye can see, bear witness of the Romans' overfelling and land-degradation two millenniums and more ago.

Desert is a flexible topic. The word means a variety of landscapes, from lifeless salt flats to semi-arid steppes that, at springtime, after the winter

rains, are green and fertile. Today, dry land areas cover almost half of the landmass of our planet, but only the smaller part of it deserves the name desert in its literary sense, meaning wandering sand-dunes without any vegetation. The greater part is steppe or semi-desert. Not few of them have once been blooming landscapes. Relics of ancient productivity have been found in deserts around the globe, remains of mills, storehouses, cisterns. Many a landscape we call desert today was once a place of refined agriculture, and this “once” does not necessarily mean “long ago”. In our days, before our very eyes, a giant process of desertification is underway, of land-becoming-desert, forfeiture and loss of land all over the world.

The first step towards desert is the degradation of agricultural cultivable land to sorts of soil not suitable for cultivated plants anymore, but still a pasture for livestock, as steppe, savanna, prairie or grassland. During the last decades about one third of the global area of cultivable land – as UN statistics state – had to be given up because of the erosion of soil, a process that meanwhile threatens half of the global landmass. After this first step, the change of arable land, forest and other cultivable areas into steppe, often follows the next one, the total, irreversible decline to sand dunes and barren land.

But steppe can be habitable land as well, especially when the climate is helpful. The Biblical Psalms describe steppes as fertile, at spring time even lush grounds. *J'rafu naot midbar*, sings Psalm 65, verse 13, “The pastures of the steppe are dripping” (1). This kind of semi-desert is the last possible point of return. As long as there are plants – and if only creeping, soil-covering lichens – the dew fallen at dawn can be kept and with it the minimum of wetness necessary for the survival of plants and animals. As long as man manages to keep the land remaining in that balance, nothing is too late and the soil always to re-cultivate.

Such “stop in the last moment”, however, is thwarted in our days by rapidly growing populaces that even devour the scarce resources of steppe and semi-desert. Over-population leads to over-exploitation, subsequently to the destruction of the fragile eco-systems and finally to catastrophic famine as recently in the Niger, the sahel-zone on the southern periphery of the Sahara desert. Native peoples of steppe and semi-desert are mostly

shepherds who let their flocks roam around without caring about the regeneration of the grazed areas. The increase of people and livestock evokes a dangerous development that scientists call overgrazing, the quick consumption of the scanty desert vegetation, not giving plants and soil the necessary breaks to recover and regenerate. In addition, global changes of climate cause cold, stormy seasons with the subsequent need for fuel. “Shrubs and trees disappear in the quest for firewood and fodder.” (2)

The following step is the crucial one, the one that often leads to catastrophe: the work of the sand. The soil, not protected by plants any longer, will soon be covered with sand wandering unrestrained, coming with the wind from places already desertified. Once the landscape has turned into sand dunes, there is no way back, at least no one without tremendous human efforts. Flora and fauna of the dryland are specimen extremely adapted to their extreme environment, capable to survive under most difficult conditions, but likewise vulnerable and easy to destroy. And have the microorganisms of the soil, the fragile vegetation and animal kingdom of the steppe been destroyed, the next one to flee the place or to die is man. Sand desert will spread out, the legendary world of the nothing and the longing, described, reverently, fearfully or desirously, in human literature since olden times.

But fleeing from desert does not help to escape the problem. When desert areas grow into gigantic dimensions as nowadays, they become – owing to their influence on wind and wetter – a threat to even far distant places. One of the great environmental catastrophes of our days happens in China, where hasty industrialization, dramatic migration from country to town, neglect of agriculture and deforestation have triggered a huge process of desertification. The capital Beijing is about to be overrun by the Gobi desert that approaches speedily, about two kilometers per year (3). Desertification of giant landmasses like these has a global impact. *“Already, crops in Japan and South Korea are withering from Chinese acid rain, which poisons a quarter of the Chinese landmass”*, an American magazine writes. *“Toxic dust from Chinese sandstorms, the result of grassland erosion and logging that have helped turn 27% of the country into desert, travels as far as U.S. shores, obscuring visibility in national parks and raising mercury levels in*

*fish... China's dirty secret is out, and the rest of the world has little choice but to share it.”(4)*

The far American shores are threatened, however, without Chinese dust clouds or any other external catastrophes, just on their own. Not only in third-world countries there is rapid progress in the degradation of land, also in the countries of the West. „*Already the fire season in California is breaking all records*”, the same magazine states. “*Last year it was bad enough, this year is outpacing it in both, in numbers of fires started (2 749 vs. 2 453) and the amount of acreage consumed (69 167 vs. 38 523) (...)* And no one knows when the drought will end. Scientists believe this dry spell, which has plagued a broad swath of the West since 1999, is more typical of the region than its 60 million inhabitants would care to admit.” (5)

Which way ever fertile land will turn into desert, it is always – at least on the long run – a process with an overall impact on human civilization. A planet with a surface mostly covered by steppes and deserts will be a generally different biotope from one widely cultivated and overgrown. Much of what we take for granted in our days will be at stake on a deserted earth: not only the maintenance of the towns, conurbations and mega cities – whose increasing number coincides with the progress of deserts – also their energy supply. For natural sources in wild, uninhabited areas become unapproachable and uncontrollable. “*At risk are not only natural ecosystems and agricultural enterprises*”, the American source, already quoted, tells us, “*also the multiple amenities that people living in the West have for so long taken for granted: ski resorts and golf courses, green lawns and lush gardens, swimming pools and hot tubs, not to mention such modern necessities as dishwashers and flush toilets and the hydropower that keeps refrigerators and home computers humming.*” (6)

The desertification of once fertile land is no new problem; on the contrary, it is an ancient, even eternal one. New is the global dimension in our days, the impact on the earth as a planet. The threats of the growing areas of steppe and desert have proved to be a problem of worldwide influence. Nevertheless, the global dimension of the process is difficult to recognize, for its effects, the catastrophic events evoked by desertification,

remain local disasters. Also disaster control and prevention remain local affairs, with external support at best, and the efficiency of this support – even if it comes in abundantly from all over the world – depends widely on the strength and competence of those acting on the spot.

Catastrophes are sobering events. They disprove the belief in the universal solubility of problems, modern man's dream to rule the world by dint of his technical achievements. The belief in science and technology misleads to the false conclusion that high developed technical means were already successful disaster control. As it turned out on the occasion of recent catastrophes, also Western countries, amid piled up technology of disaster prevention, are highly vulnerable. They show weak points in their social structure like corruption, mismanagement and lack of solidarity that may become fateful in the moment of disaster.

As recent catastrophes have proved, global information, early diagnosis by sophisticated gauge and scientific forecast could not – in many cases – lower their impact. Several mega catastrophes of the last years were foreseen early enough, but all warnings did neither move the local administration nor the inhabitants of the area to act usefully and take sufficient preparations. This kind of blockage facing disaster occurs not only in third-world countries, but also in wealthy industrial nations with highly developed infrastructure and all technical means for effective disaster prevention. Hurricane Katrina, for instance, was visible on all weather charts, its coming had been announced, the possible consequences predicted, and yet the storm hit its victims with the strike power of a surprise attack. Something unbelievable did occur: the inability of a modern, technical equipped society to deal with disaster. The hurricane's impact was multiplied by the failures of an American society too complacent to act. „Clearly, with all the money we've spent, all the focus we have put on homeland security”, American Congressman MacCreary declared in September 2005, “we are not prepared for a disaster of this proposition whether it's induced by nature or by man.”(7)

The current famine in the Niger, a direct consequence of desertification, escalated to a mega catastrophe despite early predictions and massive Western aid. Tremendous growth of the region's populace had driven

peasants and shepherds northward, in landscapes too dry, too thinly grown to allow agriculture on a large scale. The result was overgrazing and deforestation, exposing the soil to the fatal impact of sun and sand. Western aid of about 7,5 billion Dollars was poured into the region, but to no remarkable effect. Most of the money ended up with government officials, the military and the police, a part of it was clearly embezzled by the local upper class. The necessary changes were not introduced, the populace did not cease to grow. The destruction of the fragile desert border region goes on. Africa expert Martin Meredith writes: *“The images from Niger are a timely reminder that helping Africa is not only difficult, but sometimes nearly impossible.”* (8)

Desertification is, different from floods, whirlwinds or earthquakes, a catastrophe not coming with a bang, but slowly, creeping. Although its effects reach global dimension, its beginning, its gradual, steady progress attracts attention only in the areas where it happens. Yet the progress of the desert has an effect on far distant, apparently indifferent places. The starving population of the deserted area is looking for ways out. Mass migration starts. The silent agony of widely forgotten, out of the way landscapes causes stirrup in the centers of civilization: increased immigration, pressure on established inhabitants, social tension, violence, civil war.

There is no escape from the problem. And because there is no escape, it is wiser to face it. During the last decades Western countries have started to support desert research, a new interdisciplinary science. Its goal is to stop the process of destruction and to return desert – where ever possible – into inhabitable land. With the progress of steppes all over the world, for sheer survival of man it becomes necessary to halt the further decline of the biotope at least here, at its last stage. This last minute effort is not only a passive refraining from habits leading to further devastation of land, it turns out to be hard labor in itself.

Cultivating desert is among the oldest endeavors of man. The earliest developed and cultivated environments of human life, those in the Middle East, were situated in arid and semi-arid zones. The “Fertile Crescent”, the region between Mesopotamia and the Nile delta, where the advanced civilizations of the Sumerians and Babylonians, the Egyptians and the

Hebrews sprang and some centuries later Greek Asia Minor as the first European beginning, the ancient cultures upon which Western civilization and identity is founded, this “Fertile Crescent” was land wrested away from the desert and defended against it every day.

At the landscapes of this region we still find the traces of our ancestors’ battle against the permanent danger of desertification. At the stone terraces, for instance, which are visible all over Israel, remnants of landscape design and agriculture of some thousand years ago. German traveler Messmer noticed 1844 in his book *Das Heilige Land* (The Holy Land): “*Mostly the hills consist of limestone, carrying a layer of fertile soil. This layer, if not protected by terraces, will easily be swept away with the rains, and the rocks will occur bare and bleak. If the population lacks of endurance and energy to build and maintain the terraces despite frequent damage, the once fertile place will turn into barren wasteland.*”

An old wisdom of man: nothing we have is really for certain, that’s why we lose what we do not preserve and protect. The two faces of the desert remind us of this old truth: the desert’s alternating character between rich pasture and deadly dry land. Desert is a symbol of our ambivalence, of the contradictoriness of our life. It is a motive of literature since ancient times, beginning with Egyptian papyri and Sumerian cuneiform. Among the oldest evidence of human writing are texts mentioning the desert, among the few preserved papyri from the Egyptian Old Realm or early clay tablets of the Sumerian kings of the so called “Four Parts of the World”, almost five thousand years ago.

The Biblical Psalms, about three thousand years old, understand desert as a double faced phenomenon, in special those contrapuntal poems in which drought functions as a symbol of man godforsaken because of his sins and unfaithfulness, confronted with a situation of bloom and blessing in times of meek and fear of God. For instance Psalms 68, 75 or 126, most perceptible in Psalm 107, verses 33 to 35, where desert is described as a topic in permanent change between these two extremes: “*He changes rivers into desert and springing rivulets into dry valleys. Fertile land into salt flats, for the malice of their inhabitants. And desert again into water pools.*”

The last word, in the Hebrew Psalm *agam maim*, in Aramaic *agama*, points out to the construction of terraces and pools collecting water after the winter rains. It is one of the ancient methods to vitalize and fertilize the soil in dryland areas, rediscovered today by modern desert research. The double task of desert research is to stop the degradation of semi-arid land and to implant new life into areas already turned into sand dunes. Both are possible, and the possibilities in our days are amazing.

If brought to bear in time, the methods and technologies of desert research offer prevention against catastrophe and human disaster. But research of the desert finds its motivation not only in the demands of our days. It is a science summing up human experience and knowledge from earliest times. Aside from disciplines of natural science (hydrology, microbiology, agricultural science, geology or solar physics) desert research requires the humanities to rediscover ancient achievements with the help of archeologists, historians, anthropologists, literary scientists, papyrologists, cuneiform-experts and other specialists for early human cultures.

In the fifties of the last century, Michael Evenari, an Israeli scientist of German origin, has proved with his torrent-water farms in the Negev Desert that growing fruit trees and other cultivated plants in arid zones is possible without irrigation. He used the water of the winter rains, coming down the hills in torrents that he caught in terraces and collected in pools. A deeper significance of his empiric findings was added by archeologists who excavated remains of houses, oil presses and threshing floors from the time of Biblical kings David and Uzija, later from the time of the Nabateans. With this historic background Evenari's torrent-water farms turned out to be the revival of flourishing life in the desert which the Bible describes: with highly developed agriculture and widespread settlement, even small towns. "*And he built fortresses in the desert and dugged many wells*", as the Biblical Book Chronicles 26, verse 10, let us know about king Uzija, three thousand years ago.

Near Evenari's farm, next to the ancient Nabatean town Avdat, David Ben-Gurion, after retiring from politics in the early Seventies, founded an institute for desert research with the generous help of American sponsor Jacob Blaustein after whom the institute is named. Its conception – to bring



it into one sentence – is the optimistic idea, that the desert despite its apparent emptiness is full of enormous potentials for man's future. There is, first of all, the sun as a sheer inexhaustible source of energy. Consequently, the institute researches the use of solar energy for many purposes. There are agricultural projects based on sunlight and warmth as alga- and fish breeding in the desert. Fossil underground water helps to establish fish ponds in arid landscape and to irrigate plantations whose fruits – obviously influenced by the high salinity of the underground water – taste more intense than others. The desert sand, long considered a substance without life, is rich in micro organisms, insects and animals that help to revive the biotope. The greatest surprise is the abundance of vegetable life, hidden in the desert soil that begins to unfold the moment the soil is watered, or, to say it more precisely, when man brings desert flora and water into a fruitful connection.

For the catalyst of all that revival is man. He regains here, in the apparent nothing, his special, unique dimension. He is the connecting, organizing power, the helpful intelligence to unite topics that, although existing without him, become useful for higher life only by man. Energy of the sun, sprouts of life in the soil, water at hidden places or in rare moments – all this is given in the desert, sometimes in over abundance, but gets its real significance only when man interferes and coordinates, when he starts to use the benefits of creation in fulfilling his mission to love and to care for it. This hopeful, encouraging approach to man's being on earth is expressed in the Book of Genesis 2, 16 in two Hebrew words, *l'avdah u l'shamrah*:  
*“And God took man and placed him into the Garden of Eden to work on it and to keep it.”*

Is the desert – hidden from our unbelieving senses – the Garden of Eden? At least, desert is a place, giving man back what he has lost in our days: his task and meaning. Re-discovering the significance of human life turns out to be essential in a time of destruction of nature, ruin of the resources, crises and catastrophes, and subsequently the growing self-contempt of man. This self-contempt, the feeling that human life is bereft of content, the estrangement, loneliness, anxiety of modern man threatens the survival of the entire creation. One of these threats is the desert.

In view of that, a new start in the desert is – beyond all practical reasons – a kind of therapy. Being exposed to the pressure of unrestrained elements, of wilderness, of permanent challenge, man has to summon up all his strength neglected by the spoils of a misled civilization. Man in the desert has to live up to a higher level of power of resistance, spiritual fulfillment, inner balance. The desert seems to have healing powers. As, some decades ago, the English poet Wystan H. Auden wrote in the prophetic lines: “*In the desert of the heart let the healing fountain start*” (9).

In the ambivalence of the desert – as an end of the line and a starting point in one – we find one of the eternal cycles of human life. The apparent end turns out to be the beginning, the decline bears the revival. Man in the empty desert is a beginner, he develops a more optimistic, future-orientated psychological structure than man in crowded, contaminated conurbation. It makes a big difference for self-esteem and mental health, whether a person is living in a lethargic mass, caught in dangerous, destructive habits, manipulated by media, misled by populist politicians, or acting as a moving power at a place still to discover.

Since years I am occupied with the literature of the desert. I read and research the literary evidence of human struggle and self-assertion throughout centuries and millenniums. One of the old expressions for desert is *arava*, an Aramaic word meaning frontier or border zone, a place, a situation, where the spheres meet and mix with each other. *Arava* means – aside of other derivations as *aravi*, the Arab, or *erev*, the dusk – also confusion or bewilderment, a state of mind often caused by the wilderness, the desert. Indeed, at first glance desert is confusing. The confusion can go into both directions: enchantment or fright. Both are based on alienation, for what is alien enchants or frightens much more than what is our own. For instance, the first sight of a landscape never seen before. The awareness of vast expanse and emptiness. The abolition of all we are accustomed to. A totally different proportion between human ego and environment. The apparent loss of our own dimension.

In the desert, there is too much or too less of all. Too less visible difference, variety, support for the searching eye, too much secrecy, mystery, premonition hidden in obscurity. An incessant expanse spreads in

front of our eye throwing us out of the framework of the parceled out pictures. Mercilessly the infinite is indicated, just in front of us, nevertheless out of reach. In drastic immediacy a world shows up, alien, evasive, not submitted to our will. Here, in the unlimited, we feel our limits more than elsewhere. The first glance causes confusion, perhaps a kind of recognition, the strange idea of having been here before. Not everyone – this my experience with first time visitors – is happy about it. There are people who withdraw instantly, turn at the heel and flee.

Deserts, as literature from all periods of human history let us know, are places of death, of exile, scenes of decline and catastrophes of civilizations. The Greek-Roman view on desert was predominantly negative. Typical for its general abhorrence is the portrayal of desert and desert people in Herodotos' novellas or, half a millennium later, in Roman poet Lucanus' famous opus *Pharsalia* or *De Bello civili* (The Civil War) (11). The imprint of the Greek-Roman picture on European literature is still dominant in the Middle Ages or later, although the negative picture had its reasons mainly in political actualities and the geo-strategic situation of the Alexandrian and Roman Empires, both bordering to and always threatened by fiercely fighting desert peoples (12).

In fact, the desert border zones were the cradles of civilization. The development of higher cultures had its beginning in frontier areas where desert and water meet, along the Nile, in the deltas of Mesopotamia, at the Mediterranean coast of Canaan. Here writing and science, religion and law of the later Western empires have their origins. The Middle Eastern deserts were the scene of survival and tradition, of written records and the early awareness of man's historicity. Because of the ups and downs they had witnessed in the political play between the great powers of old, the desert peoples gained the knowledge of transitoriness and doom, of hope and new beginning. In the soil of these cultures rests the mystery of our Becoming.

Beside the political danger, the Greek and Romans felt from the old desert cultures as Egypt, Judea or Persia, there was always a hard pressure of the so called "Eastern religions" on Greek-Roman polytheism, evident in numerous complaints of Roman historians and philosophers and finally, with the triumph of Christianity, victorious. The Christians, a religious sect

coming from the Judean desert, proved right the forebodings of Roman authors looking suspiciously on the province Judea as a deadly peril for Roman religion, lifestyle and *mos maiorum*, despite Judea's decline at this time, leading to its political breakdown in the year 70. *Victi victoribus leges deterunt*, Roman philosopher Seneca truly predicted, "In the end the victims will conquer the victors".

The break between the Jews and their own offspring, the Christians, coinciding – about the third century – with the integration of Christianity into the system of rule of the Roman Empire, brought Christian literature under the influence of Roman thought habits, so that its pictures of the desert – despite Jesus being born and always living in a desert environment – became ambivalent. We find evidence of the growing indifference, even abhorrence towards the topic desert in pre-mediaeval texts about pilgrimage to the Holy Land, Crusaders' poetry, novels about traveling heroes or Christian chronicles (13). With the European humanism of the renaissance area the attitude towards desert changed again, especially when the study of Hebrew language and the original Hebrew Bible became customary among European thinkers of the time. An example is John Milton's famous poem *Paradise Lost*, published in 1667, with its astonishing geographic knowledge and detailed descriptions of the Biblical deserts, written by an author who never in his lifetime had been in a desert and was already blind when the poem was recorded. With the Enlightenment and the modern age, especially in the 18<sup>th</sup> and 19<sup>th</sup> century, desert became a subject of growing interest in European literature, even of longing and romanticism.

There have always been – and will probably ever be – lovers of the desert as well as those who feel an inexplicable dislike. The question is, whether we discern in the meeting of the extreme something productive or not, a potential of unusual possibilities, a symbiosis of the still undiscovered with our human capacity to discover. Nowhere appearance is as deceptive as in the desert. Nowhere the clandestine, the invisible is of such influence. The barren soil turns out to be a container of unexpected surprise. A little water only, and the sand, lying like dead in the heat, is covered with delicate green, crowded with micro organisms and insects. In the shadow of these tiny plants and creeping lichens the sprouts of bigger and stronger ones will

thrive. Man becomes the catalyst, the connecting entity, a crypto-creative instance.

Being conscious of that function is the exact opposite to the feeling of human life being bereft of content, of being minute and insignificant that spreads among people in modern Western societies. Man in the desert discovers his own importance. This sensational process is a leitmotif of world literature, from the Mosaic Books to Saint-Exupéry's memories *Wind, Sand and Stars*, from Sumerian cuneiform tablets to Thomas Mann's *Joseph*-novels, from the report of Egyptian traveler Sinuhe in the twentieth century before Christ to T.S.Eliot's poem *The Waste Land* in the twentieth century of Christian era. Desert literature spans a period of about five millenniums. It became the subject of my interest and analysis, my contribution to modern desert research. I know that I am a pioneer in this field. In the stereotypes of the West, of academic literary science in Europe or North America, desert is still considered a topic out of the world.

The parable of the desert, its being All-in-Nothing, Infinite-in-One, the World in a Grain of Sand, was expressed by 18<sup>th</sup> century English poet William Blake in his poem *Auguries of Innocence* in four eternal lines:

To see a World in a Grain of Sand  
And a Heaven in a Wild Flower  
Hold Infinity in the palm of your hand  
And Eternity in an hour

It is the metaphor of a world still to discover, a world of nothing but sand and sky, brought into formula by an author who never saw a desert with his own eyes. Also German writer Wilhelm Hauff, English poet John Milton or French novelist Honoré de Balzac to which we owe the most beautiful descriptions of the desert, the deepest declarations of love for this landscape, have never been there. Hauff pictured Middle Eastern deserts in his fairy-tales *Die Karawane* (The Caravane), published 1825, Milton in his translations of Hebrew Psalms and his own poems in the second half of the 17<sup>th</sup> century, Balzac in his novella *Une passion dans le desert* (A Passion in the Desert) of 1830 with descriptions so accurate and impressive that one

cannot help to ask from which source the authors got it. It is a mysterious phenomenon, showing that we all contemplate the desert, know about it from olden times, that desert is a part of the essential, eternal program of man.

Desert research is an optimistic science, generally supposing that the human race will survive the catastrophes and challenges of our troubled days, generally in accordance with the Biblical promise given immediately after the flood to Noah and his sons, the promise of being spared of another overall cataclysm destroying mankind as a whole (14). In accordance as well with the predictions of the psalms and the prophets about a coming bloom of the desert, especially in the land of Israel inhabited again by its ancient owners, the Hebrews or Jews.

The concept of human revival in the desert is an alternative to usual Western thought habits and life-style of our days. It means the reduction of standards to the approximate nothing, a readiness to work without having demands in advance, a new start completely out of us and the given actualities of Creation. This approach to life is just the opposite of what is usual today: egotism, consumption, wastefulness. It seems, just the waste land helps to cure man from waste. From perilous habits leading to the self-destruction of our civilization.

Modern desert research was developed especially in Israel and the United States, countries with recent settlement in arid landscapes triumphing over apparently overwhelming hardships. Desert regions are those with the highest growth of populace in North-America (15), a fact proving that there are not only the well-known negative reasons as flight, exile or expulsion, but also positive motives to turn to the desert. In the United States desert life became fashionable during the last decade among those who look out for alternative life. It may become a trend in other countries, too: frustrated inhabitants of big towns discover the desert's clean air, open spaces and relatively affordable housing.

He who exposes himself to the extreme climate, the dangers and hardships of desert life, is a believer in the possibilities of man. Most of my neighbors in the academic community Sde Boqer in the Negev are natural scientists and non-religious, but they are different from most secular people

today: they believe in the future. They assume, there will be no general disaster finishing man's history on earth, and it will be worthwhile to prepare new programs of revival for hard times to come. When human history moves in cycles, as the Talmud states, desert is the cyclic return of a situation man has already gone through and managed successfully. We only have to remember. We have to look back to the knowledge of former man, to the oldest sources of wisdom and literature. To those that came from the desert.

© CHAIM NOLL, 2006

Lecture given at the Hebrew University of Jerusalem, The Franz Rosenzweig Research Center for German-Jewish Literature and Cultural History, on May 7<sup>th</sup>, 2006.

An abridged version was published in: PEN International. Context: The Middle East, London, Vol. 57, No.2, Winter 2007

A German version was published in: *Mut*, Forum für Kultur, Politik und Geschichte, Asendorf, Januar 2006, Heft 461.

**Notes:**

(1) Psalm 65, Vers 13. The Hebrew word *midbar*, often translated as desert, means rather semi-desert or steppe.

(2) The Jacob Blaustein Institute for Desert Research, Ben Gurion University of the Negev: A Look At Our World, Sde Boqer Campus, Israel, o.J., A Look at our World, p. 3

(3) vgl. *Il deserto di Gengis Khan stringe d'assedio Pechino*, Corriere della Sera (Milano), 24.2. 2001. About the reasons the article states: "*Le cause sono in parte naturali, ma il vero disastro l'ha fatto l'uomo con la sua opera di deforestazione*". (The reasons are partly natural, but the real disaster was caused by man with deforestation.)

(4) *Time*, June 27, 2005, p.42

(5) *Why the West is Burning*, *Time*, August 16, 2004

(6) *ibid.*

(7) *Time*, September 12<sup>th</sup>, 2005

(8) Martin Meredith, *The Fate of Africa*, New York 2005

(9) Wystan H.Auden, In Memory of W.B.Yeats, quoted from: W.Schmiele (ed.), *Poesie der Welt*, England, Frankfurt/M., Berlin 1985, p.306

(10) Michael Evenari, *Ökologisch-landwirtschaftliche Forschungen im Negev. Analyse eines Wüsten-Ökosystems*, Darmstadt 1982; *Und die Wüste trage Frucht*, Gerlingen 1987

(11) cf. Chaim Noll, *Die Wüste als literarischer Topos von der Bibel bis zur Moderne (The Desert as a Topic of Literature from Biblical to Modern Times)*, Lecture Series, Ben Gurion University of the Negev, Beer Sheva, 2000

(12) The Persians, a desert realm, were among the permanent enemies of the Greek, later the Roman Empire. A people with a desert background also the Phoenicians/ Carthaginians, Rome's arch foe for centuries. Also North African desert princes became threatening, for instance the infamous Yoghurta. First century C.E. was dominated by increasing tensions in and influence by the province Judea. Altogether, from a geo-strategic point of view, deserts were the problematic, dangerous frontier zones of the Rome-centered ancient world.

(13) The literature of the late ancient world did generally not picture wild landscapes,



as A.v.Humboldt noticed ("Den Griechen und Römern... schien fast allein das gemächlich Bewohnbare anziehend in der Landschaft, nicht, was wir wild und romantisch nennen", cf. L.Friedlaender's History of Roman Life and Customs, vol.IV, p.142 ff.) J. Burckhardt noticed that this lack of interest was typical for European mediaeval literature as well (J.Burckhardt, The Culture of the Renaissance in Italy, II, p.16)

(14) Genesis 8,21 and 22

(15) American statistics, quoted by Time (October 2005), give the following numbers: growth of populace during the last decade: in desert state Arizona 53%, Nevada even 87%