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MERILA VELIČASTNEGA:

ARHITEKTURNA DEFINICIJA BLIŽNJEGA VZHODA

SCALES OF THE SUBLIME:

AN ARCHITECTURAL DEFINITION OF THE MIDDLE EAST

DOKTORSKA DISERTACIJA / DOCTORAL DISSERTATION

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POVZETEK

Kolikor nam je znano, se helenistični pojem veličastnega (ali vzvišenega) ni nanašal na naravo, ampak na človeška dela, ki so navduševala različna ljudstva ter so prenesla ponavljanje in prestala test časa. Moderno odkritje veličastnega kot sofisticirane estetske kategorije je sledilo velikim izumom in odkritjem ter vzponu newtonovskih naravnih znanosti, ki so človeški um nekoliko približale božanskemu. Posledica novega, naprednega razumevanja sveta je bilo odkrivanje veličastnega v Svetem pismu in homerskih mitih, v divji naravi in estetski razsežnosti naravnih znanosti. Veličastno, ki ga povezujemo z opustelostjo, samoto, nevarnostjo in grozljivo zavestjo o krhkosti človeškega obstoja v brezmejnem svetu, je svoj formalni izraz najprej našlo v krajinskem slikarstvu in književnosti. Lepo, ki ga povezujemo z zadovoljstvom in užitkom, je bilo pojmovano kot njegovo nasprotje. Preden se je novi par idej uresničil v arhitekturnih oblikah, se je utelesil v krajinskem vrtnarstvu, ki se je razvilo okoli imitativnega načela slikovitega (ali pitoresknega). To je poudarjalo lepo, veličastnega pa se je dotikalo samo v podrobnostih z dodajanjem nasprotja urejeni perspektivi.

Edmund Burke in Immanuel Kant sta veličastnemu in lepemu dala filozofsko vsebino. Burke je lepo videl v funkciji rasti in razmnoževanja, ki se kaže v fizični privlačnosti, medtem ko je veličastno pojmoval v funkciji samoohranitve. Burkeovsko veličastno za razliko od čiste groze zahteva določen odmik od svojega vzroka. Pojavlja se pred logičnim mišljenjem, vendar ni enostavno izenačeno s strahom pred smrtjo, bolečino ali nevarnostjo. Razlikuje se od lepega, a ni njegovo nasprotje. Nasprotje lepega je grdo. Kant je kritiziral Burkeove definicije zaradi njihovih empiričnih utemeljitev. Z uvajanjem racionalnih argumentov v svoje transcendentalne utemeljitve estetskih sodb je veličastno in lepo pomaknil z opazovanega predmeta na naše spoznavne sposobnosti. Veličastno se tako ne nahaja v predmetih v naravi, ampak v naših lastnih mislih. *"Tako poimenujemo to, kar je absolutno veliko."* Medtem ko sodba o lepem vključuje razmerje med sposobnostjo predstavljanja in pojmovanja, sodba o veličastnem vključuje razmerje med sposobnostjo predstavljanja in razumevanja, pri čemer združuje estetsko in moralno izkušnjo v racionalno estetsko sodbo. Veličastno vključuje mentalni premik, ki se navezuje na predmet s pomočjo sposobnosti spoznavanja kot matematičnega predstavljanja ali s pomočjo sposobnosti zadovoljstva kot dinamičnega predstavljanja. Zato imamo dve kategoriji izkustva veličastnega:

Matematično veličasten je občutek superiornosti razuma nad predstavljanjem, kadar je soočen z nečim takó velikim, da presega zmožnost sposobnosti predstavljanja, da bi to doumela. Takšen je pogled skozi teleskop. Dinamično veličastno pa je doživetje narave kot zastrašujoče moči, ki nam sicer ne vlada, a se moramo podrediti njeni oblasti. Za to doživetje je značilen zaščiten položaj, podoben položaju opazovalca, ki si ogleduje puščavo, v kateri ne more preživeti onkraj zaščitne pregrade. Po zaslugi te pregrade je o predmetu opazovanja mogoče presojati neodvisno od kakršnihkoli drugih konceptov. Iz te perspektive je oponašalno kategorijo slikovitega mogoče določiti kot nasprotje veličastnemu, zlasti v zvezi z arhitekturo.

Napredek v razumevanju narave in človekova gradnja vse večjih objektov sta prinesla nova vprašanja. Namesto narave so predmet doživetja veličastnosti postali pojavi razvijajoče se tehnologije. Razsvetljeni vladarji, podjetniki, inženirji in arhitekti, ki jih je zanimalo transcendentalno, so želeli svoje dosežke prežeti z moralnimi vrednotami in transcendentalnim pomenom, tako kot popotniki, umetniki in znanstveniki pred njimi. Ker pa je produktivnost postala glavni cilj in ljudske množice glavni protagonist industrializiranega sveta, se je spremenila tudi funkcija veličastnega. Nova, popularna, kvazireligiozna vrsta veličastnega “občutka” prenesena iz kantovsko-burkeovske vsebine se je pojavila zunaj “stare” Evrope, utelešena v vse večjem številu naravnih in umetnih objektov, ki so drug drugega neprestano izpodrivali in tako povečevali vznemirjenost množic. Misel, da je veličasten objekt odraz razuma, se je sicer ohranila, vendar je splošno moralno vrednoto Immanuela Kanta nadomestila s svojevrstno, tehnološko podprto, proizvodno in materialistično vero: v Ameriki v nacionalno, v Sovjetski zvezi pa v razredno veličino.

Neomajana očaranost nad tehnologijo se je najjasneje pokazala v kantovsko dinamičnih, veličastno nadzorovanih jedrskih eksplozijah in v raziskovanju vesolja. Hkrati z rastočo zavestjo o možnostih samouničenja je najvišjo točko dosegla na vrhuncu hladne vojne in se končala z energetsko krizo v sedemdesetih letih. Obdobja skrajne odtujenosti od prisotne resničnosti so se prekrivala z obdobji velikih znanstvenih, družbenih ali verskih revolucij ter z obdobji velikih tehničnih iznajdb, katerih uporaba je omogočila nove, širše poglede na naše okolje. Lahko bi dejali, da je digitalno veličastno zadnja stopnja v nizu, ki razpira zares veliko polje možnih doživetij veličastnega. Fizična pojavnost veličastnega v globaliziranem svetu dobiva vse večje razsežnosti in se zdaj že razteza v virtualno neskončnost.

Kant je opozoril na veličastno v nekaterih izjemnih arhitekturnih delih: piramide in notranjost Bazilike sv. Petra preplavijo čute in prevzamejo opazovalca. Za razliko od sodb o slikarstvu in kiparstvu je sodba o arhitekturi zlahka nekonceptualna, saj v arhitekturi vidiki predstavljanja niso tako pomembni. V Kantovi misli arhitekturno predstavo zamejuje njena končnost, vseeno pa ima arhitektura sposobnost vzbujati občutek veličastnega. Po mnenju Edmunda Burkea lahko arhitektura, čeprav je omejena z jasnostjo in težnjo po popolnosti, preslepi čute in tako napeljuje našo misel na neskončnost. Deljenje in dodajanje, vzorec in ponavljanje so ji pri tem v pomoč. Iz navedenega izhaja, da se lahko nek arhitekturni objekt na veličastno nanaša neposredno, t.j. kot možni vzrok občutka veličastnega v burkeovskem pomenu in kot sprožilo matematično veličastnega izkustva v kantovskem pomenu, in/ali posredno, t.j v povezavi z dinamično veličastnim izkustvom nečesa drugega. Mimo posameznih arhitekturnih objektov se lahko uporaba arhitekturnih kriterijev v celi vrsti razmerij razširi tudi na ogromno področje, kjer se stikajo matematični in dinamični vidiki veličastnega ter se - ne nujno omejeni z robovi našega pogleda - uporabijo v geografskem merilu. Satelitski pogled na Zemljo, ki je nasprotje pogleda v globine vesolja skozi teleskop, je podoben pogledu skozi mikroskop, saj vključuje možnost neskončnega približevanja, zagotavlja skrajno povečavo polja opazovanja in skrajno odmaknjenost opazovalca. Ta pogled z višine je začetna točka tega eksperimentalnega preizkušanja meja arhitekture kot stroke, ki nadzoruje in oblikuje stanje stvari na ogromnem ozemlju cele zemljepisne pokrajine: od razmerij oblik zemeljske površine do razmerij objekta.

Kaj natančno je Bližnji vzhod, je odvisno od opazovalčeve perspektive. Nahaja se na trojnem stiku Azije, Afrike in Evrope ter gledano iz več konvergenčnih perspektiv, v središču Starega sveta in sodobnega globaliziranega sveta. Geopolitično ga navadno določa območje, ki sega od Črnega do Arabskega morja ter od vzhodne meje Irana do egiptovske zahodne meje. Meje cesarstev, ki so tvorila Bližnji vzhod, so se širile in krčile preko meja regije, vendar se nikoli ni zgodilo, da bi bilo celotno območje Bližnjega vzhoda pod vladavino ene politične entitete. Znotraj regije je dvoje morij: Rdeče morje in Perzijski zaliv. Sredozemsko, Črno in Kaspijsko morje ter Indijski ocean regijo obkrožajo, širijo njen doseg ter prenašajo kulturne vplive. Pogled z višjega zornega kota jasno izostri naslednjo temo: slojevito zgodovino ljudstev v regiji odločilno pogojuje njena fizična oblika, opazna oblikovanost pokrajine in obilje naravnih bogastev pod njeno površino. Poleg te objektivne fizične oblike so v središču tako starih kot sodobnih pojmovanj in razumevanj Bližnjega vzhoda velike zgodbe, ki segajo daleč preko meja te zemljepisne regije.

Puščava v bližini obdelovalne zemlje in rastočih metropol povečuje dejansko prisotnost izjemnih materialnih dejstev. To ostro nasprotje med skrajno naravnim in skrajno umetnim je bilo od nekdaj bistvena okoliščina bližnjevzhodnih ozemelj. Monoteistična vera je prišla prav iz tega horizontalnega sveta, v katerem nikoli ni bilo mamljivih pogojev za trajno naselitev, vendar so se ljudje v njem od vekomaj počutili poklicane postavljati obeliske in graditi umetne gore. V sumerskih mitih je puščava predstavljala prvobitno grožnjo, medtem ko so puščavski nomadi v najzgodnejših velikih mestih in močnih državah videli utelešenje moralne gnilobe in propadanja, ki ogrožata naravni red stvari. Iz te prototipske situacije, v kateri trajnost sobiva z minljivostjo, se je izoblikoval linearni čas skozi vrsto razodetij ali mitičnih dogodkov, odvisno od opazovalčeve perspektive. Monoteistična misel o svetu, ki je v judaizmu in krščanstvu močno okužena s politeistično dediščino, v islamu ostaja nesporna ter se izraža skozi zavest o božanski enosti.

Monoteistična misel o naravi je podobna misli o naravi racionalistične newtonovske naravne znanosti. V vesolju vladata razum in red in vse v naravi ima svoj namen ter razodeva stvarnikov načrt. Ta močna misel posledično učinkuje na človekove posege v naravo, predvsem v arhitekturi. Če se veličastno nahaja v našem razumu, potem newtonovske enačbe dokazujejo superiornost našega razuma nad naravo. Smela misel, da lahko nek abstrakten geometrijski vzorec odraža vesoljni red (skladna z odrekanjem idolom in opuščanjem upodabljanja), neposredno povezuje kantovski pojem matematično veličastnega z veličastnim verskim izkustvom. Onkraj na prvi pogled vidnega pa povečave satelitskega pogleda na Bližnji vzhod nudijo bogastvo materialnih dejstev, ki vzbujajo veličastna doživetja. Od tod izvira misel, da gonilne sile, izhajajoče iz različnih izvorov, razlogov in prepričanj, ki opisujejo specifičnost bližnjevzhodnega, v arhitekturi težijo k veličastnemu bistvu stvari in ne k njihovem slikovitem videzu, pri čemer hkrati opozarjajo na določena temeljna, brezčasna in splošna vprašanja v arhitekturi.

KLJUČNE BESEDE

Veličastno, lepo, slikovito, oblika zemeljske površine, pokrajina, mesto, arhitektura, naravne znanosti, Bližnji vzhod, puščava, monoteizem, islamska arhitektura

UVOD

Pričujoča disertacija je poskus dati vsebino opaženemu in doživetemu ter poskus prenosa neposrednih vtisov o izjemnih zemljepisnih oblikah, pokrajinah, mestih in objektih Bližnjega vzhoda v formalizirane znanstvene pojme, pri čemer niso upoštevani z njimi povezani minljivi koncepti. Napisana je iz perspektive arhitekta iz prakse z nekaj akademskimi izkušnjami ter temelji na obsežni *Raziskavi pogojev za sodobno arhitekturo na Bližnjem vzhodu*, ki jo je kandidat opravljal na katedri profesorja Josepa Lluísa Matea na ETH Zürich med letoma 2010 in 2013. Raziskava je vključevala tudi študijska potovanja po Bližnjem vzhodu in intervjuje z uglednimi osebnostmi v regiji. Rezultate raziskave so ETH in Park Books Zürich predstavili v knjigi *Middle East: Landscape, City, Architecture*, ki sta jo uredila Josep Lluís Mateo in kandidat, ter v seriji predavanj za podiplomske študente arhitekture na barcelonski BIArch v akademskem letu 2011-2012, ki so vključevala tudi vajo iz kartiranja, pri kateri so morali študenti opazovati regijo ter njene podrobnosti v velikem merilu projicirati z višje perspektive.

Tudi pričujoča disertacija je napisana z višje perspektive, ločene od opazovanega področja, ker kandidat prihaja iz drugega dela sveta in ker je utemeljena na prepričanju, ki ga je pred dvema stoletjema v pesniški zbirki *West-östlicher Divan* izrazil Johann Wolfgang von Goethe, da Vzhoda in Zahoda ne smemo več deliti: *"Orient und Okzident sind nicht mehr zu trennen"*. V poskusu, da bi presegli očitno, je Bližnji vzhod obravnavan od zunaj ter analiziran v različnih merilih, ki segajo od celovite oblike zemeljske površine do posebnosti pojavov in objektov. Ti dokazujejo splošni pomen te zemljepisne regije, njenega osrednjega položaja v okvirih starega sveta in sodobnega globaliziranega sveta ter njene starodavne in sodobne dediščine izročil in oblik. Zaradi obsežnosti podviga so mnoge podrobnosti neizogibno izpuščene. Posebnosti regije so obravnavane v razmerju do nekaterih splošnih vprašanj o arhitekturi, še zlasti v razmerju do vzročno-posledično povezanega niza domnev o tem, kako vidimo in razumemo stvari v našem neposrednem okolju, kako jih prikazujemo in kako jih projektiramo v nove fizične resničnosti oziroma v naše projekte.

Pričujoča disertacija je tudi preizkušanje fizičnih in retoričnih okvirov arhitekture kot stroke, ki nadzoruje in oblikuje fizično stanje stvari, razširjene na resnično velik prostor. Da bi formalizirali optiko takšnega preizkusa, je višja perspektiva podprta z uvodno analizo estetske kategorije *veličastnega* (ali *vzvišenega*), kot sta jo opredelila Edmund Burke in Immanuel Kant, umeščene znotraj splošnega konteksta tedanje misli o svetu okrog nas in izražene v vzponu newtonovskih naravnih znanosti. Nadalje je podprta z analizo razvoja te estetske kategorije in misli o svetu okrog nje ter ne nazadnje z analizo njene uporabnosti za teorijo in prakso arhitekture. Po drugi strani pa se uporabnost te optike za opazovano zemljepisno področje potrjuje v veličastnih lastnostih imanentnih fizičnih pogojev Bližnjega vzhoda, v njihovih transcendentnih substancah, ki jih omenjajo svete knjige, ter v njihovih umetnih posledicah oziroma splošno pomembnih, specifično arhitekturnih in splošno kulturnih paradigmah, ki izvirajo iz Bližnjega vzhoda ter združujejo v sebi temeljne značilnosti regije.

Pričujoča disertacija je nastajala ob pomoči širokega spektra različnih virov, od turističnih brošur, potopisov in časopisnih člankov do filozofskih in teoloških razprav. Kompleksnost *„zemljepisno-zgodovinskega palimpsesta“* Bližnjega vzhoda je obravnavana s stališč, ki jih zastopata Colbert Held in Thomas Cumming v knjigi *Vzorci Bližnjega vzhoda* (2011). Ekstremni naravni pogoji so povezani s svojimi umetnimi posledicami predvsem na podlagi heideggerjevske definicije *„eksistencialnega prostora“* iz drugega poglavja knjige *Genius Loci* (1980) Christiana Norberga Schulza z naslovom *Naravni prostor* ter na podlagi idej, ki sta jih predstavila Vittorio Gregotti v *Teritoriju arhitekture* (1966) in Rem Koolhaas v *Orjaškosti ali problemu velikega* (1994). Arhitekturna tradicija Bližnjega vzhoda je umeščena v svoj kulturni in prostorski kontekst po zaslugi trdnih razlag Titusa Burckhardta v *Umetnosti islama* (1976) in Seyyeda Hosseina Nasra v *Islamski znanosti* (1976), zanimivih zapletov romana *Moje ime je rdeča* (1998) Orhana Pamuka ter *Mest iz soli* (1978) Abdelrahmana Munifa ter zabavnega potopisa *The Innocents Abroad* (1869) Marka Twaina. Vtisi iz Carigrada, ohranjeni v zapiskih in skicah z mitičnega *Potovanja v Orient* (1966), na katerega se je mladi Le Corbusiera odpravilil leta 1911, umeščajo to disertacijo v prostorsko-časovni okvir moderne arhitekture.

ZAKLJUČEK

Na preprosto zgrajeno in oblečeno kocko v središču islamskega monoteizma in na njegovem izvoru lahko nedvomno gledamo kot na odmaknjeno središče Bližnjega vzhoda, ki se nahaja daleč proč od glavnih zgodovinskih središč moči v regiji. Njena središčna moč, ki žarči daleč izven Bližnjega vzhoda, se je porodila ravno iz te fizične odmaknjenosti (Held & Cummings, str. 80-82; Burckhardt, str. 2). To središče na več načinov povzema značilnosti Bližnjega vzhoda v celoti:

Ka'ba je stabilno (trajno, urbano) središče, ki se nahaja na varni oddaljenosti od morja, v neplodni dolini na robu izrazito oblikovanega Južnega Hijaza, ki leži nasproti neskončne puščave na drugi strani. Obdana je z različnimi plemeni in predstavlja dinamično središče, h kateremu se vsako leto in enkrat v življenju odpravijo na obvezno romanje resnični in idealni nomadi, s čimer vnašajo red v nestabilno (začasno, nomadsko) življenje ljudi. Čeprav je ta najstarodavnejši kraj med nazadnje "odkritimi" deli Bližnjega vzhoda, je tudi tukaj prisotno tehnološko kantovsko *"negativno zadovoljstvo"*, ker se gradbeni razmah dogaja v neposredni bližini. Puščava in mesto, minljivost in večnost, nomadska in naselbinska kultura, ciklična brezčasnost in linearni čas, "brezčasna dežela" in "dežela neskončnih možnosti" se srečujejo na tem najizjemnejšem kraju, kjer sobivata matematično in dinamično veličastno.

Ka'ba, ki praznino v svojem središču varuje pred ekstremnimi naravnimi elementi v neposredni okolici, izhaja iz horizontalne puščave in v sebi v arhitekturnem smislu zbira taisto puščavo. Pomeni predvsem arhaično in umetno arhitekturno formo v središču kulture, katere prostorski izraz je odmaknjen od minljivega privida stvari in je v prvi vrsti arhitekturen. Kroženje okoli nje posnema kroženje vesolja, *"sedmih nebes",* okoli svoje polarne osi (Burckhardt, str. 2): *"ravne črte, ki povezuje temeljne zakone"* (Le Corbusier, 1965). S tem, ko ne napotuje na nek poseben mikrokozmos, ampak na celoto vesolja, napotuje tudi na nekatera temeljna in splošna vprašanja o arhitekturi:

(1) Ali ne raste arhitektura, arhaična in umetna, kakšna po svoji vitruvijsko-semperovski definiciji je, ravno tako kakor skala, gora ali drevo, proti soncu, nebu in zvezdam? Ali pri tem ne ostaja spet kakor skala, gora ali drevo, čvrsto povezana z zemljo: *axis mundi*?

S tem temeljnim spoznanjem se rodimo: majhni otroci v resnici opazujejo veličastnost sveta okoli sebe in imajo oči uprte proti zvezdnemu nebu; kadar pa rišejo ljudje, vidijo samo glave in oči z nogami, podaljšanimi do spodnjega roba risbe. Intuitivno projektirajo *"eksistencialni prostor",* razpet med zemljo in nebom (Norberg-Schulz, str. 10). Položaj arhitekture in arhitektov v tem prostoru je znamenito ubesedil Ludwig Mies van der Rohe v paradigmi (1924): *"Medtem ko z obema nogama želimo čvrsto stati na tleh, želimo z glavo doseči oblake"* (Neumeyer, 1991, str. 250). Pravzaprav nimamo veliko izbire. Arhitektura je neločljivo povezana s svojimi fizičnimi korenami, sila težnosti pa jo čvrsto drži na tleh.

(2) Ali se v središču slehernega arhitekturnega projekta ne nahaja daljna senca transcendentne praznine? Njegov materialni obstoj je v resnici zagotovljen v tistem trenutku, ko je projekt urejen kot usklajena zbirka risb, abstraktni "prostor" pa spuščen na zemljo. A ko je že zgrajen, ali ni nekaj več kot samo zrak med trdnimi zidovi?

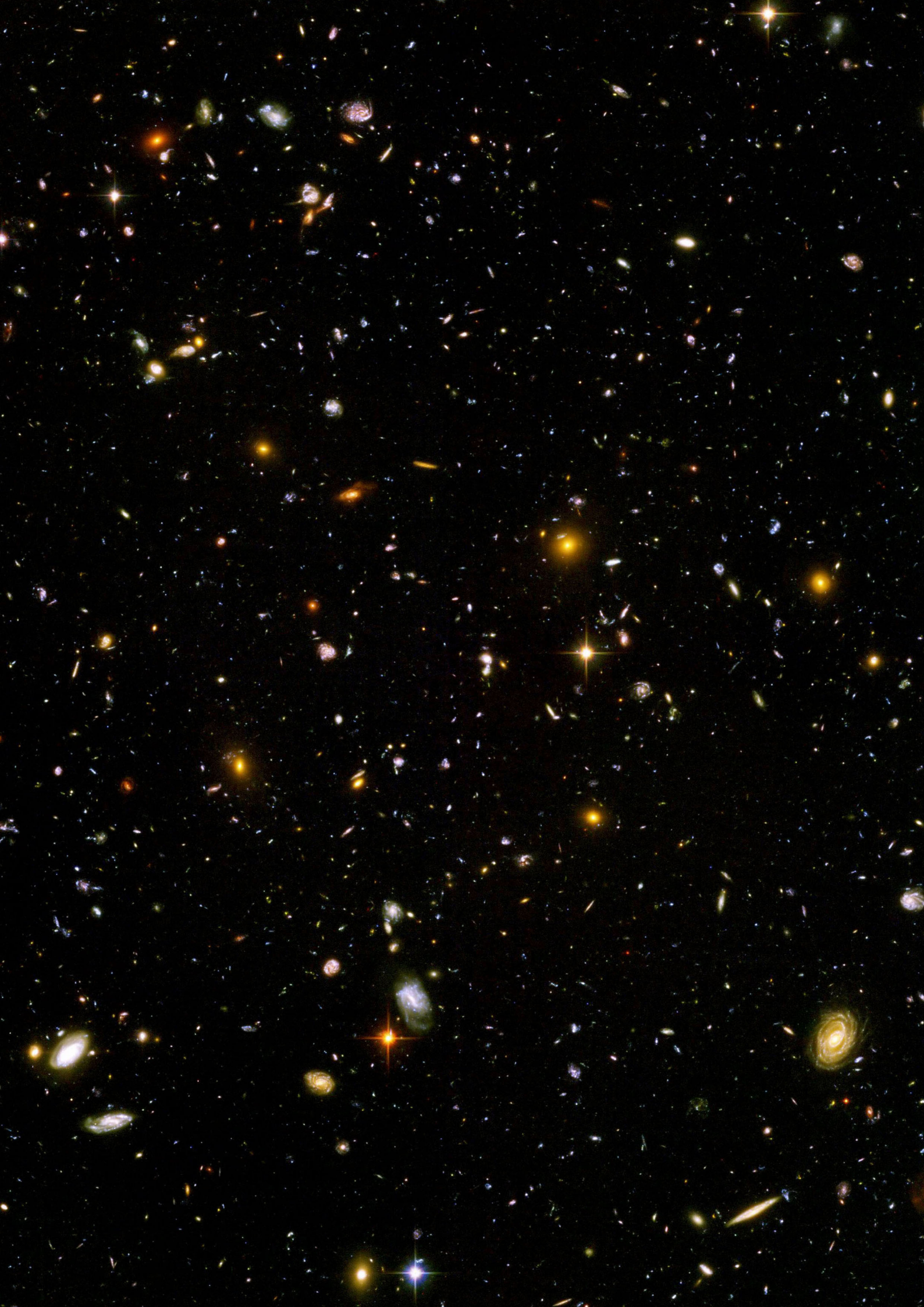
Gottfried Semper je ognjišče opredelil kot osrednji, *"moralni element"* arhitekture, okoli katerega se razvrščajo *"streha, ograja in nasip"*, *"zaščitne negacije"* naravnih elementov, agresivnih do umetnega *"ognja ognjišča"* (Semper, 1851, str. 5). Že Vitruvij ga je opredelil kot izvor arhitekture: toplota ognja je združila ljudi, da so oblikovali družbo; ker so *"za razliko od drugih živih bitij od narave prejeli milost, da jim ni treba hoditi upognjene glave, ampak vzravnano in opazujoč veličastnost sveta in zvezd"* in ker so *"tudi z rokami in prsti zlahka ravnali z vsem, s čimer so hoteli"*, so si svoja prva zavetja zgradili iz snovi, ki jim je bila na voljo (Vitruvij II:I). Od tod izvira ljudem prirojena drzna zamisel o arhitekturi kot nečem večjem od narave, zamisel, da lahko nek arhitekturni objekt, ne glede na svojo velikost in izpostavljenost eroziji in razpadanju, zbere, opredeli in razloži veličastni svet okoli sebe: trden zid, kos tkanine ali le tenka steklena plošča med nami in besnenjem naravnih elementov tam zunaj. V resnici je ogenj tisto, kar omogoča ločitev od narave in našim glavam pomaga, da – občasno – dosežejo oblake.

(3) In še nekaj: upoštevaje prostorski in kulturni kontekst te disertacije, ali se ob prižiganju ognja ni upravičeno vprašati, kdo zagotavlja gorivo za ta ogenj?

Ali ste se kdaj vprašali o ognju, ki ga prižigate? Ali vi ustvarjate les, ki služi za gorivo – ali smo mi vzrok njegovega nastanka? (Koran 56:71,72)

Arhitektura je zelo resna zadeva. Način gledanja na stvari, način risanja in način gradnje so vzročno-posledično povezani. Ko pri risanju analitičnega preseka ali transparentne aksonometrijske projekcije razmišljamo o svojih projektih, nas ne bi smel zanimati prazni videz stvari oziroma to, kar stvari predstavljajo ali čemu so podobne, temveč njihovo nespremenljivo bistvo oziroma to, kar stvari, ki tvorijo naše neprestano spreminjajoče se okolje, v svojem bistvu so. Naj bo ta preprosta resnica zaključek te razširjene mentalne vaje o veličastnih lastnostih, ki se nahajajo v bližnjevzhodnih zemljepisnih oblikah, pokrajinah, mestih in objektih ter onkraj njih, v svetovnem merilu in današnjem trenutku.

Fig.1 (next page): MATHEMATICALLY SUBLIME: NASA and the European Space Agency, Hubble Deep Field, 2003- 2004. Our idea about the sublime, enhanced by technology at our disposal, depends primarily on our perspective.



SUMMARY

As far as we know, the Hellenistic notion of the sublime applied not to nature, but to such works of men which pleased people of different backgrounds and beard repetition and test of time. The modern rediscovery of the sublime as a highly sophisticated aesthetic category was preceded by great inventions and discoveries and by the rise of the Newtonian natural sciences capable of elevating the mind closer to the divine. Consequence of the new, enhanced understanding of the world, the sublime was found in the Scriptures and in the Homeric myths, in wild nature, and in the aesthetic dimension of the natural sciences. Associated with desolation, solitude and danger, and the uncanny awareness of the fragility of the human condition in the immense universe, it was formally expressed first in landscape painting and literature. The beautiful, associated with pleasure and delight, was considered its opposite. Before the embodiment into architectural forms, the new pair-ideas embodied first in the landscape gardening developed around the imitative principle of the picturesque which emphasized the beautiful and addressed the sublime only in details, adding the contrast to the arranged perspective.

The sublime and the beautiful were given the philosophical substance by Edmund Burke and Immanuel Kant. Burke saw the beautiful in functions of generation and reproduction, as such manifested in physical attraction, and the sublime in function of self-preservation. Different from the pure horror, the Burkean sublime requires a certain detachment from its cause. It anticipates our reasoning but it does not simply equal the fear from death, pain or danger. It is contrasted, but not in opposition to the beautiful whose opposite is the ugly. Kant criticized Burke's definitions as based on the empirical exposition. Introducing rational arguments into his transcendental exposition of aesthetic judgements, he moved the sublime and the beautiful from the object observed to our own cognitive capacities. The sublime is to be found not in things of nature but in our own ideas. *"It is the name given to what is absolutely great."* While the judgement of beauty involves a relation between the faculties of imagination and understanding, the judgement of the sublime involves a relation between the faculties of imagination and reason, uniting the aesthetic with the moral experience into a rational aesthetic judgement. The sublime involves a mental movement attributed to the object through the faculty of cognition as a mathematical imagination or through the faculty of desire as a dynamical imagination. Hence the two categories of the sublime experience:

Mathematically sublime is the feeling of our reason's superiority to our imagination when confronted with something so large that it overwhelms imagination's capacity to comprehend it. Such is the view through the telescope. Dynamically sublime is the experience of nature as a fearful power that has no dominion over us, although we have to submit to that dominion. It requires a safe position, such as that of an observer looking at the desert that cannot sustain his life from behind the protective barrier. Thanks to that protection, the object of contemplation can be judged independent of any concepts. From such a perspective, the imitative category of the picturesque may be designed as the opposite to the sublime, especially in an architectural context.

While the nature was explained and man-made structures of ever greater size were constructed, new questions arose. The manifestations of the advancing technology replaced nature as objects of the sublime experience. Interested in the transcendental, enlightened rulers, entrepreneurs, engineers and architects, like wanderers, artists and scientists before them, intended to imbue their achievements with moral values and transcendent significance. But as the productivity was becoming the main objective and masses of people the mayor protagonist of the industrialized world, the function of the sublime has changed too. Displaced from the Kantian - Burkean substance, the new, popular, quasi-religious kind of sublime "feeling" was born outside the "Old" Europe, embodied in the progressive sequence of natural and artificial objects that have been continuously replacing each other, increasing the excitement of the masses. The idea that a sublime object is a manifest of reason was preserved, but Immanuel Kant's universal moral worth was replaced with a sort of technologically aided, productive and materialist faith: in America in the national, in the Soviet Union in the class greatness.

The unquestioned fascination with technology manifested most clearly in the Kantian dynamically sublime of the controlled nuclear explosions and the outer space expeditions. Paralleled with the growing awareness of the possible self-destruction, it reached its pinnacle in the heyday of the cold war and ended with the 1970s energy crisis. Periods of the extreme detachment from the immanent reality have been coinciding with great scientific, social, or religious revolutions and with periods of great technological inventions whose application enhanced new, elevated perspectives on our surroundings. The digital sublime might be seen as the ultimate step of the sequence, opening a truly vast field of possible sublime experiences.

In our globalized world, physical manifestations of the sublime are acquiring ever greater scales, now extending into the virtual infinite.

Kant has pointed out some outstanding works of architecture as sublime: the Pyramids and the interior of the St. Peter's basilica overwhelm the senses and absorb the observer. Unlike judgements about painting and sculpture, a judgement about architecture can easily be non- conceptual, because representational aspects are not as important in architecture. In his idea, architectural imagination is constrained by its finality, yet architecture has an ability to evoke the sublime. According to Edmund Burke, although limited by clearness and perfection, architecture can deceive our senses and thus suggest the infinite. Division and addition; rhythm, pattern and repetition work for that cause.

Consequently, an architectural object may address the sublime directly, as a latent cause of the sublime emotion in the Burkean, and a trigger of the mathematically sublime experience in the Kantian sense, and/or indirectly, related to the dynamically sublime experience of something else. Beyond the scope of single architectural objects, architectural criteria may also be extended in a sequence of scales onto the vast area where the dynamical and the mathematical aspects of the sublime meet, and, not necessarily confined to the limits of our sight, applied at the geographic scale. Opposite from the view through the telescope into the depths of the Universe, and similar to the view through the microscope because it implies the possibility of infinite close ups, the satellite view to the earth provides the ultimate augmentation of the observation field and the ultimate detachment of the observer. This elevated view from above is the departure point of this experiment in testing the limits of architecture as a discipline which controls and shapes the state of things at the vast territorial envelopment of an entire geographic region: from the landform, down to the object scale.

What exactly the Middle East is, it depends on the perspective of the observer. Situated at the tri-continental juncture of Asia, Africa and Europe, it is central to the Old World and to the contemporary, globalized world from many converging perspectives. Its commonly accepted geopolitical definition extends from the Black to the Arabian Sea and from the Eastern border of Iran to the western border of Egypt. The limits of the empires that constituted the Middle East have been expanding and contracting beyond the limits of the region, but it never happened that the entire area was under the same political entity. Two seas are contained within the region: the Red Sea and the Persian Gulf. The Mediterranean, the Black and the Caspian Sea, and the Indian Ocean surround the region widening the scope, bringing and emitting the cultural influences. From the elevate perspective, one mayor topic comes clearly in focus: the region's multi-layered human history has been decisively conditioned by its physical shape, the perceivable landform and the abundance of natural riches below its surface. Beside this objective physical form, the great narratives reaching far beyond the borders of this geographic region are central both to the ancient and to the contemporary notions and understandings of the Middle East.

The proximity of the desert to the arable land and to the growing metropolises magnifies the actual presence of the exceptional material facts. This sharp contrast between the extremely natural and the extremely artificial has always been the crucial condition of the Middle-Eastern territories. The monotheistic faith came from this horizontal world where the conditions for permanent settlement are not inviting and yet, the humans have always been tempted to raise obelisks and build artificial mountains. In the Sumerian myths, the desert was the primordial menace while the desert nomads saw the earliest big cities and mighty states the embodiments of moral corruption and decay menacing the natural order. The linear time was structured from this prototypical situation of the permanence situated next to the transience, through the sequence of revelations or mythical events, depending on the perspective of the observer.

Infected in Judaism and in Christianity by the strong polytheist heritage, the monotheistic idea about the world remains unquestioned in Islam, expressed in the consciousness of the divine unity. The monotheistic idea about nature appears similar to that of the rationalist, Newtonian natural science. The universe is dominated by reason and order and everything in nature has a purpose, explaining the intentions of the creator, a strong idea which has consequences for human interventions in nature, most importantly architecture.

If the sublime lies within our reason, Newtonian equations prove our power of reason's superiority over nature. The daring idea that, conforming to the denial of idols and to the abandonment of representation, an abstract geometric pattern may reflect the cosmic order links the Kantian notion of the mathematically sublime directly with the sublime religious experience.

Beyond the visible at the first glance, the close-ups into the satellite view on the Middle East provide an abundance of material facts which provoke sublime experiences. Hence the idea that it is in the aim towards the sublime essence of things, not towards their picturesque semblance, where driving forces of various origins, reasons and beliefs converge, outlining what is specifically Middle Eastern in architecture while referring to some fundamental, timeless and universal questions about architecture at the same time.

KEY WORDS

the sublime, the beautiful, the picturesque, landform, landscape, city, architecture, natural sciences, Middle East, desert, monotheism, Islamic architecture

INTRODUCTION

"Drink, and spare no water, The Well is full of grace and has no bottom."
(Bedouins chant to their camels in Muhammad Asad, The Road to Makkah, 1954)

This dissertation is an attempt to give the substance to the observed and the experienced, to formalize the immediate impressions of exceptional landforms, landscapes, cities and objects of the Middle East into the scientific terms, disregarding the evanescent concepts associated. Written from the perspective of a practicing architect with some academic experience, it is based on the extensive *Research on the Conditions for Contemporary Architecture in the Middle East* led by the candidate on the Chair of Prof. Josep Lluís Mateo at the ETH Zürich from 2010 to 2013 which included study trips to the Middle East and interviews with distinguished personalities from the region, results of which were published by ETH and Park Books Zürich in 2013 in the book *Middle East: Landscape, City Architecture* edited by Josep Lluís Mateo and the candidate (Mateo & Ivanišin, 2013), and on the course *A View from Above: the Middle East* delivered by the candidate to the post-master students of architecture at the BIArch, Barcelona in 2011-2012 which included the mapping exercise requesting the students to observe the region and to project its large-scale details in an elevated perspective *from above*.

This dissertation is written from the same elevated perspective, detached from the area of observation inasmuch the candidate comes from another part of the world, but also founded on the conviction expressed by Johann Wolfgang von Goethe in *West-östlicher Divan* two centuries ago, that Orient and Occident are not to be divided any more; *"Orient und Okzident sind nicht mehr zu trennen"*. Trying to go beyond the obvious, the Middle East is broached from without and analyzed through the sequence of scales in range from the totality of the landform to the singularity of the phenomena and objects which exemplify the universal significance of this geographic region, its central position within the Old World and the contemporary globalized world, and its ancient and contemporary heritage of traditions and forms. Given the vast scope, many details are inevitably omitted from the perspective. Particularities of the region are set against the background of some universal concerns about architecture, particularly against the set of the causally related issues about how we see and understand the things in our immanent surroundings, how we depict them and how we project them into new physical realities, that is, into our projects.

This dissertation is also an experiment into physical and rhethorical limits of architecture as a discipline which controls and shapes the physical state of things, extended onto a truly large spatial envelopment. To formalize the optic for such an experiment, the elevated perspective is substantiated with an introductory analysis of the aesthetic category of *the Sublime* as defined by Edmund Burke and Immanuel Kant situated within the general context of the contemporaneous idea about the world around us exemplified in the rise of the Newtonian natural sciences, of the subsequent development of this aesthetic category and the idea about the world around it, and, last but not least, of its applicability to the discourse and to the practice of architecture. On the other hand, the justification for application of this optic to the geographic area of observation is found in sublime properties of the immanent physical conditions of the Middle East, in their transcendent substances reffered to in the Scriptures, and in their artificial consequences, that is in universaly relevant, specifically architectural and generally cultural paradigms originating from the Middle East which gather and emanate the fundamental characteristics of the region.

This dissertation is developed around different references in wide range from touristic leaflets, travelogues and newspapers articles to philosophical and theological treatises. Complexity of the *"geographical – historical palimpsest"* of the Middle East is broached from the positions explicated in Colbert Held's and Thomas Cummings' *Middle East Patterns* (2011). Extreme natural conditions are related to their artificial consequences based primarily on the Heideggerian definition of the *"existential space"* in *Natural Place*, the second chapter of Christian Norberg Schulz's *Genius Loci* (1980), and secondarily on the ideas presented by Vittorio Gregotti in *The Territory of Architecture* (1966) and Rem Koolhaas in *Bigness or the Problem of Large* (1994). Architectural tradition of the Middle East is situated within its cultural and spatial contexts thanks to the sound explanations by Titus Burckhardt in *Art of Islam* (1976) and Seyyed Hossein Nasr in *Islamic Science* (1976), to the intriguing plots of the novels *My Name is Red* by Orhan Pamuk (1998) and *Cities of Salt* by Abdelrahman Munif (1978), and to the amusing travelogue *The Innocents Abroad* by Mark Twain (1869). Impressions from Istanbul recorded in the notebooks from the mythical *Journey to the East* (1966) young Le Corbusier undertook in 1911 frame this dissertation within the Space-Time of modern architecture.

THE SUBLIME

SUBLIME, according to Immanuel Kant in *Critique of Judgement* (*Kritik der Urteilskraft*, 1790) (§25), *"is the name given to what is absolutely great."*

TO SUBLIME is to refine a substance. SUBLIMATION is skipping of one physical state of matter in conversion from one aggregate state to another, for instance the direct evaporation of ice. Sublimation is also distillation of the essence by evaporating the liquid and then cooling the vapour down, also employed by alchemists in their attempts to find the philosopher's stone. Consequently, THE SUBLIME also indicates elevation from the common, and suggests pure realms of matter and thought, aims at raising and perfection of knowledge.

As an aesthetic category, the sublime can be traced back to Antiquity. As far as we know, it was related not to nature but to works of men. In times when wilderness was never far out of reach, all the *seven wonders of the world* were man-made. In *On the Sublime* (*Περὶ ὕψους*, 1st to 3rd century AD), the author identified as Longinus found the sublime *"in all its truth and beauty"* in such artworks that pleased people of different backgrounds and beard repetition and test of time (Eco, 2004, p278):

"The Sublime does not persuade audiences but rather transports them out of themselves...
For true greatness is something that enriches the thoughts, something that is hard, if not impossible to gainsay, something that leaves an enduring, indelible memory. In short genuinely Sublime beauty is something that always pleases anyone".

Modern (re)discovery of the sublime as an aesthetic category included translations into English and French of Pseudo Longinus' treatise, widely read from the seventeenth century onwards (Eco, p278), and – more importantly – it was preceded by a series of technical inventions concurrent with a series of scientific discoveries focused at the argumentation of the rational structure of the universe. The telescope and the microscope for instance, were first constructed in Netherlands around 1600, Galileo constructed his own telescope (1609) and microscope (1625) based on these early Dutch models, and so the first natural scientist in the contemporary sense of that word were given radically deeper perspectives into the intelligibility of the micro- and macrocosm they were looking for.

Development of the highly sophisticated aesthetic theory which was to follow was closely related to the general progress in the seventeenth and early eighteenth century Europe, mainly its western and northern parts.

Heroic events from Homer's epics, narratives of creation and destruction from the Old and the New Testaments, John Milton's modern Christian epic *Paradise Lost* (1667) and cosmic discoveries such as those of Isaac Newton in *Philosophiæ Naturalis Principia Mathematica* (1687), all capable of elevating the mind to higher levels of contemplation and bringing it closer to the divine, were qualified as sublime in their own rights. Throughout the seventeenth century, the sublime was discussed from different perspectives, very often in relation to the aesthetic, rational dimension of natural sciences. Vast majority of the eighteenth century writings on the sublime were explicitly related to landscape in painting and literature (Wilton, 2002). It was only a logical consequence of the previous two centuries' exponential advancement of the abstract sciences and the fundamental questions this advancement carried about. New understanding of the nature of the world and new, uncanny consciousness about the fragile position of humans in that world was demanding its formal explanation: the physical embodiment into the world of manmade forms.

The sublime was associated with feelings of desolation, solitude and danger, with notions of landscape as a vehicle of terror and natural phenomena such as storms, rocky shores, mountain ridges or trees blasted by lightning, biblical and other *Hannibal has crossed the Alps here...* associative landscapes. The BEAUTIFUL, associated with pleasure, delight, harmony, luminosity, elegance, and balance, was at first considered its opposite.

Early ideas about the beautiful and the sublime depended on the ideas about landscape and nature already existing in seventeenth century painting:

Sometimes the Pencil, in cool airy Halls, / Bade the gay Bloom of Vernal Landskips rise, / Or Autumn's varied Shades imbrown the Walls: / Now the Black Tempest strikes the astonish'd Eyes / Now down the Steep the flashing Torrent flies / The trembling Sun now plays o'er Ocean Blue, / And now rude Mountains frown amid the skies;

Whate'er Lorrain light-touch'd with softening Hue, / Or savage Rosa dash'd, or learned Poussin drew. (James Thomson, 1748: The Castle of Indolence XXXVIII).

In the spirit of time, combinations of artistic impression and Newtonian scientific description in James Thomson's poems were aimed at explanation of everything. For him and for many of his contemporaries, the beautiful was exemplified in ideal landscapes of Claude Lorrain, while the sublime was exemplified in ideal landscapes of Salvator Rosa. In his large- scale melancholic fantasies, Rosa was magnifying the original wilderness of the Abruzzi. Combining views from the idyllic Roman countryside, Claude was constructing an idealized, pastoral setting. A century and a half later, John Constable admired Claude, while William Turner wanted to be associated with Rosa. Insisting that his large sublime scenes be hung low, so that the observer can "enter" the perspective, William Turner moved the sublime towards its spatial, architectural dimension.

But before their embodiment into architectural objects, new ideas, sooner about the beautiful, and later about the sublime, were to materialize as spatial forms first in landscape gardening. From the pure interest in the natural world to the venture in its improvement, from an aesthetic theory to its actual spatial implementation, an array of gardening techniques was developed around the imitative principles of the PICTURESQUE, transforming the parks and "improving" the nature into views which Claude Lorrain might have painted.

Travelling the English countryside, describing the actual views as if they were landscape paintings, William Gilpin defined the picturesque as *"that kind of beauty which is agreeable in a picture."* In his definition (Gilpin, 1768), and later upgrade of this definition by Uvedale Price (Price, 1794), the picturesque was situated between the beautiful and the sublime. Being not an ontological aesthetic category but a mere system of compositional techniques aimed primarily at the mimicking of nature, the picturesque addressed the sublime only in details (an old imperfect tree, a little asymmetry here, a barren rock there...) added in contrast to the general composition to enhance its overall beauty. The sublime rejected verbatim translations into actual physical forms or compositional principles.

PHILOSOPHICAL SUBSTANCE: BURKE AND KANT

With Edmund Burke's *Philosophical Inquiry into the Origin of Our Ideas of the Sublime and the Beautiful* (1756), the beautiful and the sublime were given the philosophical substance. He saw the beautiful in social functions of generation and reproduction, as such manifested in physical attraction, and the sublime in function of self- preservation (Burke, 2005, I/VII):

"Whatever is fitted in any sort to excite the ideas of pain and danger, that is to say, whatever is in any sort terrible, or is conversant about terrible objects, or operates in a manner analogous to terror, is a source of the sublime; that is, it is productive of the strongest emotion which the mind is capable of feeling."

The sublime is that emotion, that affection which does not simply equal the pure fear from death, pain or any danger. It requires a certain detachment, physical or mental, from its cause (I/VII): *"When danger or pain press too nearly, they are incapable of giving any delight, and are simply terrible; but at certain distances, and with certain modifications, they may be, and they are, delightful, as we every day experience."*

For Burke, the sublime anticipates our reasoning. Astonishment is its highest; admiration, reverence and respect are its inferior effects. Its mayor causes are terror, obscurity, ideas of eternity and infinity in both directions, power, privations such as vacuity, darkness, solitude and silence, vastness in depth, height and length, succession and uniformity, magnificence, loudness, suddenness... As by Milton, colour of the sublime is dark: black, shape of the Sublime is none distinguishable: shadow. Immense, nebulous, beyond exact description, it defeats the senses. The size is among its foremost attributes. There is and there will always be *"an eternal distinction"* between the sublime and the beautiful. Yet, thou the two ideas are in *"a remarkable contrast"*, they are not in opposition; the opposite of the beautiful is the ugly (II/XXVII).

Immanuel Kant criticized Burke's definitions of the beautiful and the sublime as based on the empirical exposition. In his transcendental exposition of aesthetic judgements in the *Critique of Judgement* (1790), while introducing rational arguments into the group of his theories on aesthetics, he moved the sublime and the beautiful from the object observed to our own cognitive capacities (Kant, 2012, §25):

"The sublime is not to be looked for in things of nature, but in our own ideas."

While Burke related the object of the contemplation to the state of our mind induced by such contemplation, for Kant (§25) *"the sublime is that, the mere capacity of reason transcending every standard of sense."*

For him, the sublime (= *das Erhabene*) and the beautiful (= *das Schöne*) are clearly not ontological opposites. But while the judgement of beauty involves a relation between the faculties of imagination and understanding, the judgement of the sublime goes beyond the object observed, involving a relation between the faculties of imagination and reason. The feeling of the beautiful is a positive pleasure while *"the delight in the sublime does not so much involve positive pleasure as admiration or respect, i.e., merits the name of a negative pleasure"* (§23), thus uniting the aesthetic with the moral experience into a rational aesthetic judgement. Beside the estimate of the object contemplated, the sublime experience involves a mental movement referred through the faculty of cognition attributed to the object as a mathematical imagination or through the faculty of desire attributed to the object as a dynamical imagination.

Hence two modes of representing an object as sublime, two distinct categories of the sublime experience: the mathematically and the dynamically sublime (§24).

MATHEMATICALLY SUBLIME we experience while facing the extreme magnitude or vastness. It is the feeling of our reason's superiority to our imagination when confronted with something so large that it overwhelms imagination's capacity to comprehend it. Such is a glance through a telescope into the depths of the Universe, a natural thing whose concept does not involve the idea of an end, but we are still capable to grasp its infinity as a whole (§26):

"Now in the aesthetic estimate of such an immeasurable whole, the sublime does not lie so much in the greatness of the number, as in the fact that in our onward advance we always arrive at proportionally greater units. The systematic division of the cosmos conduces to this result. For it represents all that is great in nature as in turn becoming little; or, to be more exact, it represents our imagination in all its boundlessness, and with it nature, as sinking into insignificance before the ideas of reason, once their adequate presentation is attempted."

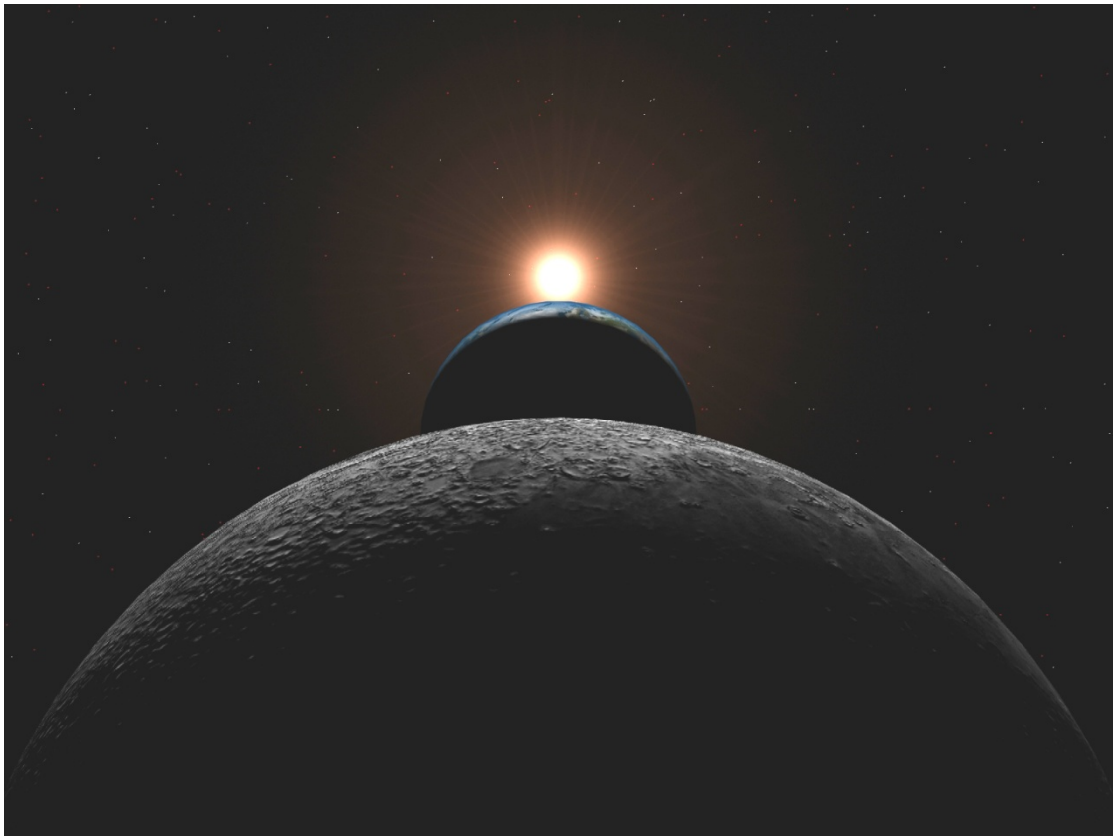


Fig.2: MATHEMATICALLY SUBLIME: Sun – Earth – Moon; the radiant and the reflected light of creation from the opening sequence of Stanley Kubrick's 2001: A Space Odyssey, 1968, tuned with Richard Strauss' Also Sprach Zarathustra.

Fig.3: DYNAMICALLY SUBLIME: Caspar David Friedrich, Der Mönch am Meer, 1808- 10, 1110x1715 mm. A sublime view of the Baltic Sea from a coastal dune; the first painting in the Western tradition with such a huge surface painted in single colour.

DYNAMICALLY SUBLIME is closer to the direct physical surroundings. It is the experience of nature as a fearful power that has no dominion over us, although a human being – because we are mortal – finally has to submit to that dominion. Contemplating dangerous scenes makes us feel superior to nature, again by virtue of our reason (§28):

"But we may look upon an object as fearful, and yet not be afraid of it, if, that is, our estimate takes the form of our simply picturing to ourselves the case of our wishing to offer some resistance to it and recognizing that all such resistance would be quite futile. So the righteous man fears God without being afraid of Him, because he regards the case of his wishing to resist God and His commandments as one which need cause him no anxiety. But in every such case, regarded by him as not intrinsically impossible, he cognizes Him as One to be feared."

Dynamically sublime implies a safe position, such as that of a protected observer (behind the glass, in the conditioned environment... in the shadow at least) looking at the desert that cannot sustain his life. Yes, nature is a might, but an insignificant one, before the ideas of our reason. Already Burke wrote about the detachment of the observer from the cause of the sublime emotion. Reframing the inside – outside relation in architecture (Nadir, 2009, p13) within his intelligent speculation on Kant, Slavoj Žižek put the dynamically sublime experience into architectural terms (Žižek, 2011, p96):

"The sublime is the majesty of nature seen from the inside, through a (real or imagined) window frame - it is the distance provided by the frame which makes the scene sublime".

Thanks precisely to that, not necessarily physical protection; the barrier between the scene and the observer, the object of contemplation can be judged independent of any concepts too. Kant's definition of the dynamically sublime can thus be seen framed within his major contribution to the aesthetics theory: that right aesthetic judgement is disinterested and non-conceptual (Mitrović, 2011, pp77-91). Things must be judged independent of personal attachments and free of concepts, meanings, and ideas associated. Opposed to representation and imitation, Kant's formalist system has been challenging the idea of the linearly progressive art history ever since. In this context and from an architectural perspective, the imitative category of the picturesque may be designed as the opposite to the non-conceptual category of the sublime.

FROM NATURAL TO TECHNOLOGICAL SUBLIME

Eighteenth century's *Wanderers* on the *Grand Tour*, conquerors of the Americas and explorers of the Middle East and Africa used to describe nature as sublime, their interest a logical consequence of the general progress of natural sciences, as the frontiers were moved not only in American wilderness but also in the fundamental understanding of the world.

In parallel to the Newtonian explanation of the cosmic order, a range of theories aimed at the objective description of the form of the earth, including those about the geological formation of the mineral crust, have significantly changed not only our idea about the physical form of the world. The ideas about time involved in creation of that form and about its origin have changed too. With the Cartesian coordinate system, each location on the surface of the Earth was objectively specified - geometrically controlled by a set of three numbers: geographic latitude, longitude and elevation while the geological, paleontological and archaeological analysis of the layers of the earth's crust has provided detailed records of the endless geomorphic, the long biological and the extremely short cultural times. The landforms were explained detached from the fearful power beyond their creation.

But the idea that humans should measure the land, draw exact maps of the entire world, and explain the natural logic even behind the most astonishing relief formations was not simply a consequence of the revolution in natural sciences, the rationalist philosophy and the rising ideas of Enlightenment. It was also fundamentally related to the human nature. Extraordinary relief formations, apparent witnesses of the mythical events, have always been provoking in humans reflections on the origin of things. As archaeological findings prove, the reason of even the most primitive human beings, by its natural virtue, understood such exceptional natural forms as visible proofs of the existence of the metaphysical world, beyond the one visible with bare eyes. Long time before the modern geologists, geographers, geomorphologists and geometers ventured into its scientific explanation, the totality of geological facts spread before the humans, was seen as a logical self- explanation of the nature of this world. Consequently, the narratives about creation of the world may also be read as inspired records of the actual geological facts.

The fact that the interest in nature, particularly in the sublime in nature, appeared first in the northern and western parts of Europe and then in the Anglo America, was interpreted (Wilton, p14) as related to the protestant idea that God can be seen in nature, *the mirror of his works*. In John Calvin's words (Nye, 1994, p5):

"On all his works he hath inscribed his glory in characters so clear, unequivocal, and striking, that the most illiterate and stupid cannot exculpate themselves by the plea of ignorance".

In technologically most advanced parts of Europe (that is to say, in those parts of Europe which were first to become denaturalized), scientific discoveries and religious beliefs converged by the beginning of the eighteenth century, changing the idea about our planet from that about the static fallen world, the *lacrimarum valle* which is no more than a passage to heaven, to the idea about the progressive world which is constantly changing while reflecting the creator. Interest in the sublime in nature, detached from that nature, was reawakened from that ground. For Alexander von Humboldt, upon the return from his 1799- 1804 journey to the northern parts of South America (Wilton, p15), *"everything in creation could be taken as evidence of divine order of the universe"*. As a result of this convergence, the mountain was not seen as a deformed residue of the creation, that horrible place where frightening creatures reside, any more.

Sound explications of the sublime experience of the real nature as opposed and superior to the picturesque experience of the faked nature of parks and gardens are to be found first in the *"poetics of mountains"*, and later in the *"poetics of ruins"* (Eco, pp280-287). We read the astonishment in front of the mountains already in Thomas Burnet's *Telluris Theoria Sacra* (1681) (Eco, p284): *"... and next to the great concave of heavens, and those boundless regions where the stars inhabit, there is nothing that I look upon with more pleasure than the wide sea and the mountains of the earth."* Fascination by the might of nature was behind the interest in ruins too. They were appreciated *"precisely for their incompleteness, the marks that inexorable time had left upon them, for the wild vegetation that covered them, for the cracks and the moss"* (Eco, p285), as we can read in Percy Bysshe Shelley's impressions from Rome in *Adonais* (1821):

"... Where, like an infant's smile, over the dead
A light of laughing flowers along the grass is spread."

Fig.4: NATURAL SUBLIME: Caspar David Friedrich, Der Wanderer über dem Nebelmeer, 1818. Nature is explained; the landform is emerging over the sea of fog. The wanderer is detached from nature and elevated above the ancient superstitions; the ghosts and the spirits residing in nature.

In parallel to the industrial revolution and its material manifestations on the face of the earth in the customization of the wilderness to the needs of humans and in the rapid growth of cities, the visible, physical part of this progressive, constantly changing world had been given the scientific, the theological and the philosophical substance.

While nature was explained and man-made structures of ever greater size were constructed, new fundamental questions arose. The metropolis and the objects and performances of the advancing technology replaced nature as objects of the sublime experience. In the century that followed the publication of Edmund Burke's *Philosophical Inquiry*, the increasingly industrialized Victorian cities and landscapes were built with edifices and infrastructural objects that were not meant to be beautiful but astonishing and awesome, demonstrating not only the social hierarchy or the power of builders. In continental Europe, the publication of Kant's critical works including the *Critique of Judgement* was paralleled by the powerful rise of Classicist architecture and urban planning aimed not only at demonstration of the power of kings, dukes and princes or those challenging their authorities. Interested in the transcendental, the eighteenth and nineteenth century enlightened rulers, mighty entrepreneurs, engineers and architects, like natural scientists, artists and philosophers before them, intended to imbue their discoveries, inventions and achievements with moral values.

Fig.5: TECHNOLOGICAL SUBLIME: William Turner, Rain, Steam and Speed, the Great Western Railway, 1844. Technology is sublimely mystified.

Early engineering structures may indeed be seen as the embodiments of moral intentions of their builders. But as productivity and speed were becoming the main objective of this new world, masses of people and machines in motion were becoming its mayor protagonist instead of the enlightened individuals. Consequently, not only has its object changed, the function of the sublime has changed too (Nye, pxiii): *"In a physical world that is increasingly desacralized, the sublime represents a way to reinvest the landscape and the works of men with transcendent significance"*.

While in "old" Europe, constrained by cultural meanings and limited spatial possibilities, the eighteenth and nineteenth centuries' *Wanderer* was at least partly replaced by the nineteenth and twentieth centuries' *Flâneur*, a new, popular kind of sublime, displaced from the Kantian- Burkean philosophical substance into what was to become the most pragmatic productive social system in history, was born on the other side of the Atlantic (Nye, 1994, pxiii): *"an essentially religious feeling, aroused by the confrontation with impressive objects, such as Niagara Falls, the Grand Canyon, the New York skyline, the Golden Gate Bridge, or the earth- shaking launch of a space shuttle"*.

In *American Technological Sublime* (1994), David E. Nye discussed in detail the development of this transcendental, popular "feeling" in the rapidly developing United States throughout the last two centuries. The progressive sequence of objects of the sublime experience that have been continuously replacing each other, increasing the excitement of the masses, describes a surprising combination of the Hellenistic understanding of sublime objects as those which can be universally admired with some of Immanuel Kant's and Edmund Burke's ideas, converging in support of the successful political and social nation- building programme. Along with the cultural (historical, social, religious, ideological, political and economical) ones, among the reasons, why such large- scale equalization of nature, religion and human makes never took place in Europe was perhaps the absence of natural wilderness, the shortage in pure, vast landform or free, uninhabited space. Lacking historical sites (Hannibal has not crossed the Rocky Mountains anywhere) with which the emigrants from Europe could identify, Americans turned to what they abound in. They saw first nature and then their own technological achievements as reflections of their national character: traffic networks crossing the continent; industrial landscapes, great dams and artificial lakes; bridges spanning ever larger distances; skyscrapers growing ever higher not because it was necessary but because it was possible, projecting ever more exciting metropolitan skylines.

Similar convergence of society and technological achievements related to the vast, unprocessed natural spaces and resources occurred in the pre- revolutionary Russian Empire and in the post- revolutionary Soviet Union, now with emphasized ideological and denied quasi-religious aspects. Boris Pasternak's emphasize of the role the railway network played in the spread of revolution to the distant parts of the Empire, along with his description of the pulsating metropolis as *Doctor Zhivago* (1957) returns to Moscow supports this argument.

The idea that a sublime object is a manifest of reason was preserved in both national- ideological building projects, but Immanuel Kant's universal moral worth was replaced with a sort of productive, materialist faith: in America in the national, in the Soviet Union in the class greatness. To fulfil its function, the popular sublime had to be apprehensible to the growing social masses, not only to the intellectual elite. In our contemporary context, now on the global scope, the unnamed tourists; *passengers on a leisure travel*[1], are (in plural!) the ideal embodiment of the subject of this new sublime experience.

Yet, in spite the ever growing power of the masses, a more personal perspective on the sublime has been preserved on the margins of the *"desacralized"* world: Interestingly, and probably not accidentally, Ayn Rand's programmatic novel *The Fountainhead* (1943) begins with the natural (as her ideal architect dives into the mountain lake) and ends with the technological sublime (as he directs the construction works above the Manhattan's skyline). Celebrating the entrepreneurial spirit; the opposition of the superior individual to the suffocating collective, it brings the somewhat exaggerated, photogenic sublime back to the Kantian substance. Triumph of reason over nature resonates in Ayn Rand's demonstrations of the Kantian mathematically sublime: endlessness of the geological time, spatial infinity in vertical and horizontal directions, nature and metropolis, and a single human figure, an architect, in control of all:

[1] *"Passageri nella gita di piacere"*; this is how in the late XIX century Port Authorities recorded the arrival of the first organized group of tourists to the Port of Dubrovnik.

"Howard Roark laughed.

He stood naked at the edge of a cliff. The lake lay far below him. A frozen explosion of granite burst in flight to the sky over motionless water. The water seemed immovable, the stone flowing. The stone had the stillness of one brief moment in battle when thrust meets thrust and the currents are held in a pause more dynamic than motion. The stone glowed, wet with sunrays. The lake below was only a thin steel ring that cut the rocks in half. The rocks went on into the depth, unchanged. They began and ended in the sky. So that the world seemed suspended in space, an island floating on nothing, anchored to the feet of the man on the cliff...

...The line of the ocean cut the sky. The ocean mounted as the city descended. She passed the pinnacles of bank buildings. She passed the crowns of the courthouses. She rose above the spires of churches.

Then there was only the ocean, the sky and the figure of Howard Roark."

GLOBAL SCOPE SUBLIME

As technological development was accelerating, the self-esteem of the humanity, at least of its luckier, "progressive" part, was growing too. By 1930's, a plenitude of ideas about how the bright future should look like was there. The common denominator of almost all those visions was that they relied on the quasi religious belief in technology. The tipping point was the ending of the Second World War. Of the scientists who witnessed the first nuclear explosion, protected and from a relatively safe distance, one famously quoted *Bhagavad Gita*: *"I am become Death, the destroyer of worlds"*, another recalled *Genesis*: *"Let there be light"* and yet another simply said: *"Now we are all sons of bitches"* (Nye, p228). A *negative pleasure*, sublime beyond comparison, a challenge to the self preservation of the human race... the first nuclear explosion observed from the safe distance was probably the most literal staging of the Kantian dynamically sublime in human history. It has rendered all technological achievements and nature itself dispensable.

Fig.6: TECHNOLOGICAL SUBLIME: Nuclear Armageddon; the radiant light of destruction from the closing sequence of Stanley Kubrick's Doctor Strangelove, 1964, tuned with Vera Lynn singing "We'll Meet Again".

Such an extreme form of detachment from the physical reality arose within a very dynamic period in now global history. As the Second World War was won by the Allies, the unbiased fascination with technology paralleled with the uncanny awareness of the possible self-destruction, continued for another quarter of century. In America, in Soviet Union, in Europe and elsewhere, it reached its pinnacle in the heyday of the cold war. In July 1962, Life magazine (vol. 52, no.3, July 20 1962 pp 26-33) reported about the H- bomb test in the Pacific as observed by masses of people, tourists and natives, from the Waikiki beach in Hawaii:

"For time before the memory of man, the night sky rose unreachable above him. Its remote dark dome reflected only the pinprick of stars, the moon's changing face, the aurora's subtle glow, the jagged webs of lightning. But now man was no longer a mere observer of his sky. He had tumultuous lightning of his own... As the incredible flash spread over millions of square miles of ocean man looked up in awe and wonder at what he had done...

... The blue- black tropical night suddenly turned into a hot lime green. It was brighter than noon. The green changed into lemonade pink and finally, terribly, blood red. It was as if someone had poured a bucket of blood on the sky... There were prayers all across the Pacific last week- prayers across the world- that man's headlong mastery of his universe would always stay as wondrous, and as safely remote, as on the awesome night when we set the sky on fire."

Indicatively, commercials for ice cream, lipsticks, alcoholic and non-alcoholic beverages from that same magazine all feature the same choice of colours: emerald green, lemonade pink, and blood red, fashioned in tune with the ultimate physical manifestation of the technologically sublime. Periods of extreme detachment from the physical reality obviously coincided with great revolutions; scientific, social, religious, or technological "leaps forward", periods of great inventions whose application enhanced new perspectives on our surroundings.

The 1960s peak of the century of great progress, before the energy crisis undermined the unquestioned belief in technologically aided future, certainly was one of such periods. Some contemporary global concerns remind, moreover, they might be seen as logical consequences, of those amazing and frightening years. Half a century later, advertisements of an oil company, such as *"Humble supplies enough energy to air condition a desert!"* (LIFE, Jul 20 1962), or *"Each day Humble supplies*

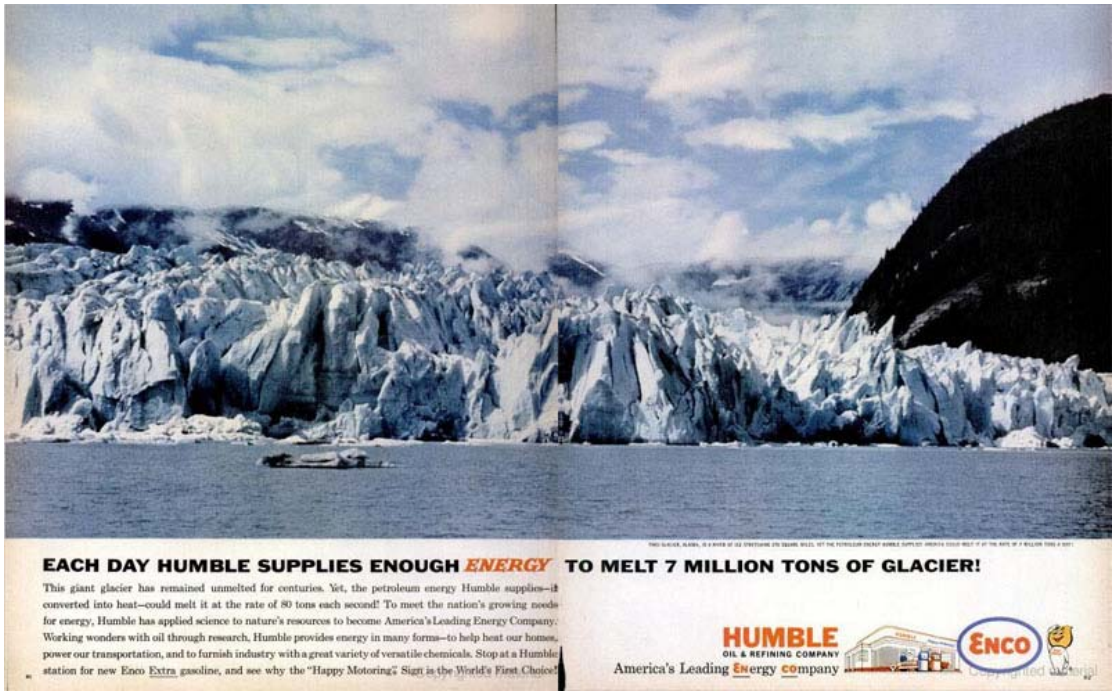
enough energy to melt 7 million tons of glacier!" (LIFE, Feb 2 1962) have acquired unexpected meanings. Sublime projection of future has become frightening reality. As we have been warned for some decades already, on the daily bases and from the global and the local media, much more than seven million tons of glaciers were melted since the publication of those slogans.

Physical embodiments of the only seemingly naïve belief that it is possible *"to air condition a desert"*, sights of the contemporary large-scale developments on the Arabian side of the Persian Gulf, provoke the Kantian negative pleasure in similar way. Indeed, the tallest building in the history of humankind is *"ultimate architecture"*, and *"bigness"* (Koolhaas, 1994) is its ultimate goal: nothing more but also nothing less. Same could be said for the totality of the urban form adored with *palms* horizontally projected onto the sea surface and the artificial archipelago resembling the whole world in front of it. Any human make that aims to be seen from the Universe clearly aims at the superhuman, subliminal status. In our globalized world, unlike in times past, the consequences of such physical acts are likely to perform at the superhuman scale.

The negative pleasure contained within the whole political, economical, and cultural project the Burj Khalifa Tower stands for is to a great extent conditioned by a sort of menace contained within the ultimate architectural and urban forms at the edge of the desert. In spite the fact that contemporary apocalyptic projections of future, in wide range from scientific papers and political pamphlets to movie productions, are founded on the quasi objective scientific data, they abound with horrifying paradigms from the ancient revelations from precisely that desert, linking our contemporary condition to the very beginning of time.

True, spread of new technologies lubricated by political hegemony has always been among the most important cohesive forces of globalization: ever faster exchange of information, goods, products, services, ideas and ideologies was enabled by the steamship and the expansion of railroads in the 1880s, the shipping containers and the internet in 1990s and 2000s. In this context, the *digital sublime*, the term coined by Vincent Mosco to deconstruct the myths about how the supreme technology fundamentally changes the course of history (Mosco, 2004), might be seen as the logical ultimate step of this progressive sequence...

Figs. 7,8: NUCLEAR SUBLIME: Pages from Life Magazine July 20 1962 reporting about the H-bomb test above the Pacific as seen from the beach on Hawaii. Nuclear explosions have rendered all the technological achievements and the nature itself dispensable.



Figs.9,10: GLOBAL SCOPE SUBLIME THEN AND NOW: "Each day Humble supplies enough energy to melt 7 million tons of glacier"; pages from Life Magazine July 20 1962 (up); Arshad Ali, "The End of an Eventful Year"; a view of the tallest building in the world from Gulf News, 1 January 2012 (down).

... And indeed, our digital age has enabled further detachment of the observer from the physical reality, opening a truly vast field of possible sublime experiences. The *Google Earth* application originating from a CIA owned company and released in 2005, a sort of global *panopticum*, a ubiquitous Kantian microscope featuring the possibility of endless close ups, is among its most radical tools. Originally targeted at a very specific group of users, natural scientists in search of the ultimate explanation of the nature of the universe and launched on the Internet in 1989-1990, the immaterial but real *World Wide Web*, defined as *"a wide- area hypermedia information retrieval initiative aiming to give universal access to a large universe of documents"* embraced almost everyone and everything on the planet in the real time. Not constrained to the sequentiality of the traditional text and media, the *hypertext – hypermedia*, terms coined by Ted Nelson in 1965 with an aim to augment the human memory by mechanical means, acquired the properties of a quasi-organic structure with endless capacity of growth (info.cern.ch, 2013)...

But technology was never enough. Just like in Isaac Newton's times or in early years of the industrial age, our scientifically explained, technologically wired, networked and controlled world, once again aspires at the transcendental significance. While the new, "global awareness" is being raised, physical manifestations of the sublime are acquiring ever greater scales, now extending into totally abstract domains: the virtual infinite.

ARCHITECTURAL LIMITS OF THE SUBLIME

In *Critique of Judgement* (1790), Immanuel Kant has situated architecture among the figurative arts. In his idea, architectural imagination is constrained by its finality, yet architecture has an ability to evoke the sublime. Although limited by clearness and perfection, according to Edmund Burke's *Philosophical Inquiry into the Origin of Our Ideas of the Sublime and the Beautiful* (1756), architecture can deceive our senses and thus suggest the infinite. Division and addition; rhythm, pattern and repetition work for that cause.

This artificial infinite is extended either in length, height or depth (Burke, II/VII), it is constituted by succession and uniformity of parts (II/IX)... the *Inquiry* not only abounds in architectural paradigms and analogies but Burke also gives a set of requirements a sublime piece of architecture should meet. Thus the oblong forms, where it is impossible to fix a boundary are easily accounted for sublime. The cross plan of churches is les eligible than the parallelogram of ancient temples because negative angles prevent all possibility of progression (II/IX). *"Edifices calculated to produce an idea of the sublime, ought rather to be dark and gloomy"* (II/XV). Cheerful colours except a strong red are *"unfit to produce grand images"* therefore *"in buildings, when the highest degree of the sublime is intended"*, the materials ought to be *"of sad and fuscous colors, as black, or brown, or deep purple, and the like"* (II/XIV) etc. But, most important for suggestion of the infinite in architecture is its magnitude. It does not simply equal the greatness of dimension (II/X):

"To the sublime in building, greatness of dimension seems requisite; for on a few parts, and those small, the imagination cannot rise to any idea of infinity. No greatness in the manner can effectually compensate for the want of proper dimensions...

... a true artist should put a generous deceit on the spectators, and effect the noblest designs by easy methods. Designs that are vast only by their dimensions are always the sign of a common and low imagination. A good eye will fix the medium betwixt an excessive length or height, and a short or broken quantity..."

In *The Lamp of Power*; the third of his *Seven Lamps of Architecture* (1849), John Ruskin agrees with Burke's understanding of the magnitude (Ruskin, 1995, pp208-213):

"It is not to be supposed that mere size will ennoble a mean design, yet every increase of magnitude will bestow upon it a certain degree of nobleness: so that it is well to determine first, whether the building is to be markedly beautiful, or markedly sublime; and if the latter, not to be withheld by respect to smaller parts from reaching largeness of scale; provided only, that it be evidently in the architect's power to reach at least that degree of magnitude which is the lowest at which sublimity begins, rudely definable as that which will make a living figure look less than life beside it."

Figs.11,12: POWER OF NATURE and POWER OF ARCHITECTURE: John Ruskin, Study of Gneiss Rock, Glenfinlas, 1853-54; Northern Arch of the West Entrance of Amiens Cathedral, before reconstruction, 1856

His discussion on the *"power of architecture"* is more pragmatic and his advices to architects more precise than Burke's discussion on the *"sublime in building"* and how to achieve it, yet it clearly follows the Burkean substance in almost every formal respect: Ruskin's power of architecture depends on the overall size of building (equal to vastness, magnitude, infinity by Burke), on the weight of its walls (Burke admired Stonehenge for heaviness of its stones which turns the mind on the force necessary to set them on end and pile each on other), and finally on the Burkean obscurity, the quantity of shadow cast within or reflected from these walls:

"among the first habits that a young architect should learn, is that of thinking in shadow, not looking at a design in its miserably liny skeleton... let him cut out the shadows, as men dig wells in unwatered plains; and lead along the lights, as a founder does his hot metal."

Unlike Burke who mainly idealized some vaguely described buildings with pillars and porticos, Ruskin considered the buildings *"whose interest is in their walls"* to be more powerful than those *"whose interest is in lines dividing their walls"*. Himself an ideal *Wanderer*, Ruskin justified his notions about powerful architecture in nature, comparing architecture of heavy walls to natural plains, cliffs and waters,

"for, whatever infinity of fair form there may be in the maze of the forest, there is a fairer, as I think, in the surface of the quiet lake."

Not surprisingly, he depicted his ideal architect as a *Wanderer* too: *"An architect should live as little in cities as a painter. Send him to our hills, and let him study there what nature understands by a buttress, and what by a dome."*

Kant himself has pointed out some outstanding works of architecture as sublime: the Pyramids and the interior of the St. Peter's basilica overwhelm the senses and absorb the observer. Indeed, when entering the basilica for the first time, a visitor incapable of encompassing the giant interior space with one sight or from one position, is bewildered and his imagination is perplexed (Kant, §26)

"... for here a feeling comes home to him of the inadequacy of his imagination for presenting the idea of a whole within which that imagination attains its maximum, and, in its fruitless efforts to extend this limit, recoils upon itself, but in so doing succumbs to an emotional delight."

Slavoj Žižek's situation of the Kantian dynamically sublime in nature within architectural terms (Žižek, p96) points to another important characteristic of Kant's definition: thou his *Critique*, just like Burke's *Inquiry* abounds in things vast, immense, and incomprehensible with bare senses; his definition of the sublime, as "*the systematic division of the cosmos"* which makes *"everything great in nature"* become little, might yet be seen as independent or at least not strictly bound to the facts of dimension and scale. The paradigm of nature as *"sinking into insignificance"* before our reason supports such a reading. If the sublime, defined as *"a presentation of an indeterminate concept of reason"*(Kant, §23), *"a disposition of soul"* (§25), or *"the cast of the mind"* (§26), resides *"in our own ideas"*, the greatness of anything cannot be equalized with its absolute physical size in scale relative to something else. It must also be seen as a standard within itself (§25):

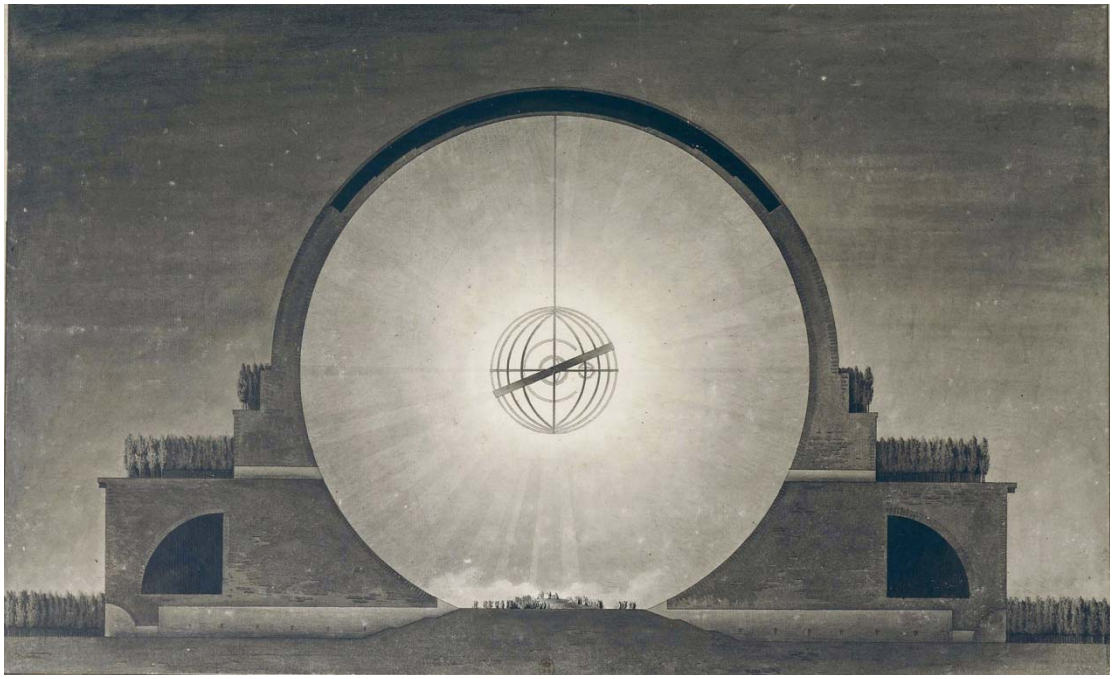
"That is sublime in comparison with which all else is small. Here we readily see that nothing can be given in nature, no matter how great we may judge it to be, which, regarded in some other relation, may not be degraded to the level on the infinitely little, and nothing so small which in comparison with some still smaller standard may not for our imagination be enlarged to the greatness of a world. Telescopes have put within our reach an abundance of material to go upon in making the first observation, and microscopes the same in making the second."

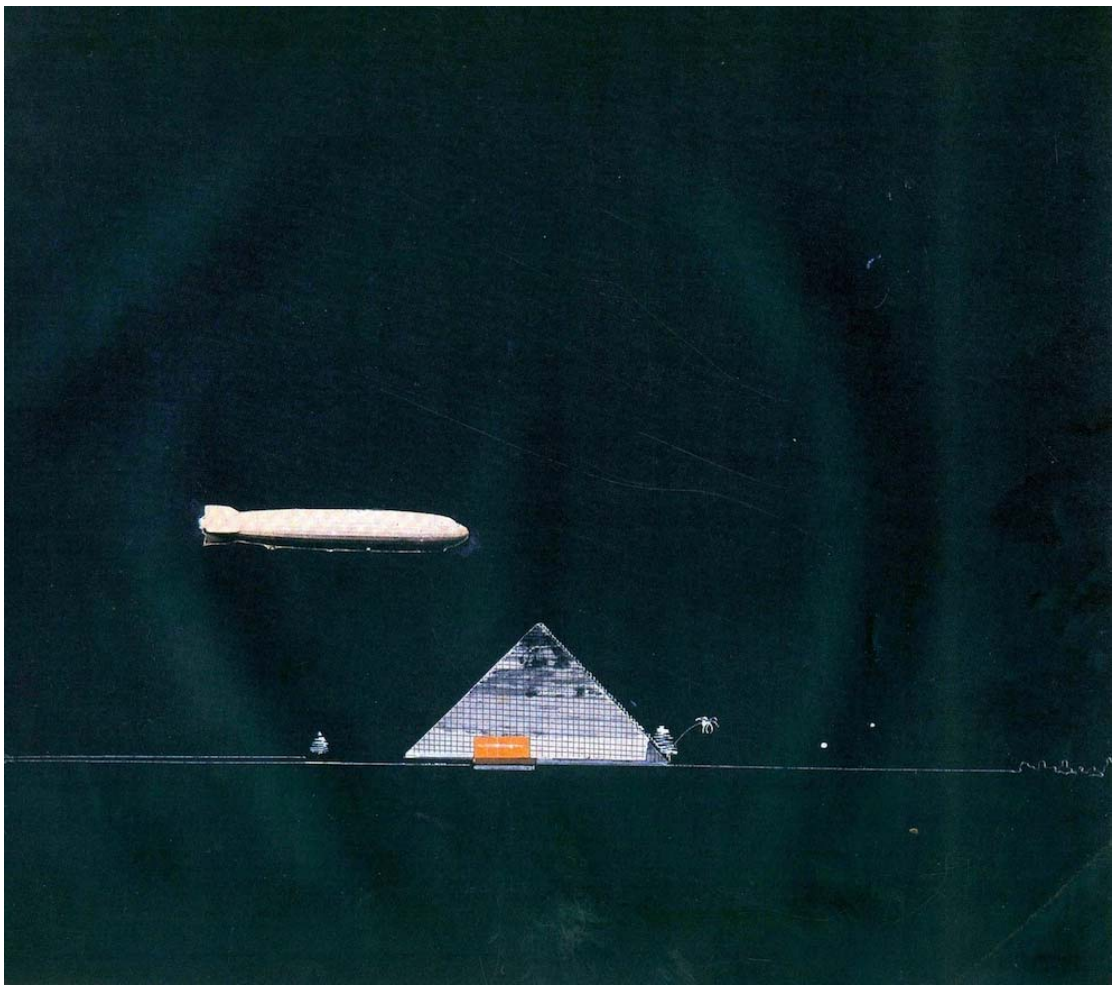
In his discussion on vastness, Burke came to a similar conclusion (Burke, II/VII):

"... as the great extreme of dimension is sublime, so the last extreme of littleness is in some measure sublime likewise... division must be infinite as well as addition; because the idea of a perfect unity can no more be arrived at, than that of a complete whole, to which nothing may be added."

Understanding that *"all estimation of magnitude of objects of nature is in the last resort aesthetic (i.e., subjectively and not objectively defined)"* (Kant, §25), is a precondition for any discussion on the sublime in architectural context. Discussing architectural paradigms relative to their size and scale, Kant quoted Napoleon's general Savary's account from the campaign in Egypt *"that in order to get the full emotional effect of the size of the Pyramids we must avoid coming too near just as much as remaining too far away"* (Kant, §26). What applies to the things in nature extends also to the products of our soul, mind and reason.

For Horace: *"Exegi monumentum aere perennius... regalique situ pyramidum altius"*, the pyramids challenging the transience of human condition were the measurements of time while Herodotus has bequeathed us with detailed accounts of how long it took Cheops and Chephren to build their pyramids, of their respective dimensions, even of the expenditures on food for workers who have built them. Obviously, the pyramids were at least as intriguing and fascinating already in Antiquity as they are in modern times. As far as we know, at least two scaled replicas of the Egyptian pyramids were erected in the antique Rome, but of much less imposing size. This fact, along with the quantity of similar structures: ziggurats, tumuli and mastabas, spread throughout the space-time of this planet, points to another issue very important in any discussion on the architectural limits of the sublime: it is also the abstract, primordial form of these artificial mountains that matters, not only their sheer size.





Figs.13, 14: ARCHITECTURAL PRETENTIONS OF REASON: Ettiene Louis Boullée, Cenotaph for Newton, 1784 (up); Ivan Leonidov, Palace of Culture, 1930- 1937 (down).

Probably the first architect to address consciously the Kantian mathematically sublime was Ettiene Louis Boullée (Graafland, 2000). Impressions from Napoleon's campaign in Egypt echo in his work. According to his own writings, he decided to work with his melancholic experience of nature in his architecture (Boulée, 1790 / Rosenau, 1953). His *Cenotaph for Newton* (1784) is clearly aimed to evoke the sublime. A century and a half later, again in the revolutionary context, same is evident of Ivan Leonidov's *Palace of Culture* (1930). But it is not only about void, shadow, astonishment, elevation of mind, and challenging the finite; what both projects and historic moments they stand for have in common is the pretend to physically represent reason and the aim to challenge the established order of things. They were designed to challenge the limits of the imagination as, similarly but from completely different grounds, the abstract volumes of Great Pyramids and the interior space of St. Peter's basilica do.

From the Kantian perspective, unlike judgements about painting and sculpture, a judgement about architecture can easily be non- conceptual, because representational aspects are not as important in architecture as they are in painting and sculpture (Mitrović, 2011, p87). In our contemporary world saturated with concepts, meanings and ideological presumptions, this judgement still holds.

Consequently, an architectural object, independent of any associated ideas, concepts and meanings, may address the Kantian/Burkean sublime:

(1) Directly, as a latent cause of the sublime emotion in the Burkean, and a trigger of the mathematically sublime experience in the Kantian sense:
- as an ARTIFICIAL MOUNTAIN (1A), by means of its absolute dimension, relative scale and position within the urban or the natural context, and / or
- as a PLATONIC SOLID or an EUCLIDEAN SPACE (1B), by inherent qualities of its form, devoid of representational intentions and expressive of its non-conceptual character.

(2) Indirectly, enabling to the dynamically sublime experience of something else:
- as a DEVICE (2A) magnifying the sublime properties of a natural or urban scene, explaining them within that scene, and / or
- as a Kantian TELESCOPE / MICROSCOPE (2B) providing the detachment from the sublime scene, itself without that scene.

(3) Beyond the scope of single architectural objects, architectural methods, principles and criteria may also be applied at the geographic scale, extended in a sequence of scales onto the vast area where the dynamical and the mathematical aspects of the sublime meet, not necessarily confined to the natural or artificial limits of our sight.

As we, moving our observation point, approach the geographic scale, questions arise:

Can the multitude of spatial and cultural relations be given an architectural form to encompass the wide satellite view?

Can architecture with its set of tools, methods and principles be instrumental in the production of knowledge on the vast scale of an entire geographic region?

How does such an enlargement of the usual architectural perspective influence the architectural perspective itself?

And, which consequences could this enlargement have for actual architectural projects, the ultimate objects of any architectural practice?

ARTIFICIAL MOUNTAINS, PLATONIC SOLIDS, EUCLIDEAN SPACES:

(1) ARCHITECTURE TRIGGERING THE MATHEMATICALLY SUBLIME

Kantian (*"bigness instigates the regime of complexity that mobilizes the full intelligence of architecture and its related fields"*) and Burkean ("*bigness transforms the city from a summation of certainties into an accumulation of mysteries*") preoccupations resonate in Rem Koolhaas' discussion on "the problem of large" in architecture (Koolhaas, 1994). Nineteenth century's great infrastructural works and utilitarian buildings, early American skyscrapers, contemporary train stations, airports and large scale urban interventions clearly qualify as objects which may trigger sublime emotions and experiences. From the pyramid to the skyscraper (which from a very low perspective anyway appears like a pyramid), such ARTIFICIAL MOUNTAINS (1A), with or without huge voids contained, are latent causes of the sublime emotion in the Burkean, and triggers of the mathematically sublime experience in the Kantian sense (Jacob, 2011). Perplexing our senses, their sheer size triggers the sublime experience. From a distant perspective, they assemble and dominate the scene. From a close view, we are incapable of encompassing them within a single sight. This is how architectural objects address the sublime in a most direct way. Sigfried Giedion's famous photomontage of the Rockefeller Centre seen from different angles and perspectives he used to define the Space-Time principle (1941) on the urban scale (Giedion, 1967), is well descriptive of this kind of sublime experience of architecture.

But sheer size alone is not enough. After size, Ruskin pointed at weight and quantity of shadow (Ruskin, p211). Specific qualities of volume, mass, form and materiality are essential to the sublime character of an artificial mountain. Faced with the first *Unité d'habitation* from a close perspective, Peter Blake described it in Burkean - Ruskinian spirit, thou without specifically mentioning the word "sublime" (Blake, 1960):

"The Marseille structure is all concrete- concrete in its crudest, most brutal form, le béton brut. Concrete poured into the simplest form work, to come out looking as rough and virile like rock, deliberately chipped and cracked, full of pebble surfaces here and sea- shell surfaces there, as beautifully textured as the now blackened travertine of the great roman ruins of Italy and Southern France.

Next to the Marseilles building, Lever House would look like the latest Cadillac- slick, thin-shelled, soon out of date. Next to the Marseilles building, every other modern 'curtain wall' structure would look as tinny as an oil can, and sure to rust away just as fast. For this massive piece of brute concrete could be of any time: it could be an Egyptian temple of 2000 BC or a vision of the 21st century."

Answering the Question: "What is Postmodernism", Jean François Lyotard (Lyotard, 1982, p77) stated that *"Modernity in whatever age it appears cannot exist without a shattering of belief and without discovery of the "lack of reality" of reality, together with the invention of other realities"*, describing the lack of reality as akin to Nietzsche's nihilism and to *"the Kantian theme of the sublime"*. For him, it was in the aesthetics of the sublime, where the modern art found its impetus and the avant-garde its axioms. Applying Lyotard's interpretation of Kant into discussion about architecture and urbanism, Arie Graafland (Graafland, 2000, pp79-100) translated Kant's notion that *"the sublime is to be found in an object even devoid of form"* (Kant, §23) to the formal in architecture deducing that *"the sublime does not permit decoration or ornamentation"* (Graafland, p56), expanding thus the domain of the sublime in architecture to objects less imposing in terms of scale and size. Already Ruskin's advice to an architect who chooses to work with the sublime: *"let him abandon decoration, for unless they are concentrated, and numerous enough to make their concentration conspicuous, all his ornaments together will not be worth one huge stone."* (Ruskin, p209) supported such a reading. A long sequence of quotes from the patriarchs of Modern architecture could be listed here too.

But the truth is that sublime is found in abstract geometry of PLATONIC SOLIDS and EUCLIDEAN SPACES (1B) divest of representational intentions regardless the material conditions and the actual age of their construction. Kant's invocation of the Decalogue which provoked Lyotard to discuss the unpresentable in modern painting (Lyotard, p78) has been applicable to architecture already before modern time (Kant, §29):

"Perhaps there is no more sublime passage in the Jewish Law than the commandment: 'Thou shalt not make unto thee any graven image, or any likeness of any thing that is in heaven or on earth, etc.' This commandment can alone explain the enthusiasm which the Jewish people, in their moral period, felt for their religion when comparing themselves with others, or the pride inspired by Mohammedanism.

The very same holds good for our representation of the moral law and of our native capacity for morality. The fear that, if we divest this representation of everything that can commend it to the senses, it will thereupon be attended only with a cold and lifeless approbation and not with any moving force or emotion, is wholly unwarranted. The very reverse is the truth."

Ruled by pure geometry and rejecting the figurative, but in relation to the pattern possibly positive, prayer spaces where the Second Commandment was applied are best possible architectural paradigms of the mathematically sublime. We may replace *"our representation of the moral law"* and *"our native capacity for morality"* with "architecture" and "space" in the citation above.

DEVICES, TELESCOPES AND MICROSCOPES:

(2) ARCHITECTURE EXPLAINING THE DYNAMICALLY SUBLIME

"A Greek temple", writes Martin Heidegger in *The Origin of the Work of Art* (1937), *"portrays nothing"* (Heidegger, 2006, p26):

"Standing there, the building rests upon the rocky ground. In this resting-upon, the work takes from out of the rock the darkness of its support, unwieldy and yet forced-to-nothing. Standing there the building holds its stand against the storm raging away above it, and so first shows the storm itself in its violence. The radiance and glow of the stone, themselves shining only by grace of the sun, first bring the light of day, the expanse of the sky, and the darkness of night, to appear in relief. The secure towering-up of the temple makes visible the invisible space of air. The unshaken work stands against the rolling sea, and in resting lets appear the surge of the tide…"

Heidegger's presentation of an ideal work of architecture *"that would not be counted as representational"* (p25) is clearly Kantian here. Its precise geometry explains the apparently formless rock underneath it, the heaviness of the material it was made of explains the wind and the air above it, while its rootedness in the ground explains the relentless sea that surrounds the scene (Kultermann, 1989). In other words, Heidegger's temple magnifies the dynamically sublime experience of nature. Still today, the explanations of natural elements by architecture are perfectly comprehensible, regardless the fact that the culture the temple originally made part of has disappeared.

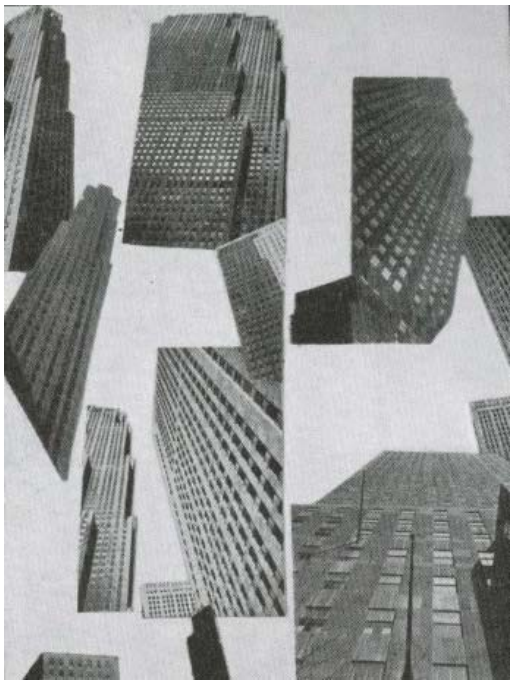


Fig.15: ARTIFICIAL MOUNTAIN PERCEIVED IN MOTION: Sigfried Giedion's photomontage of the Rockefeller Center from Space, Time and Architecture, 1941.

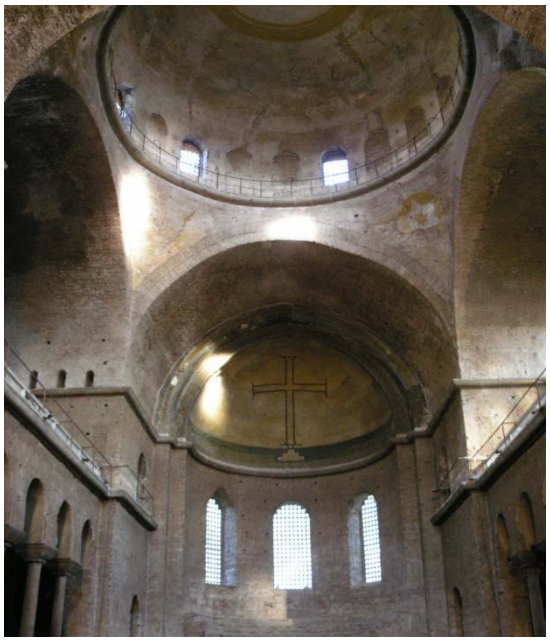
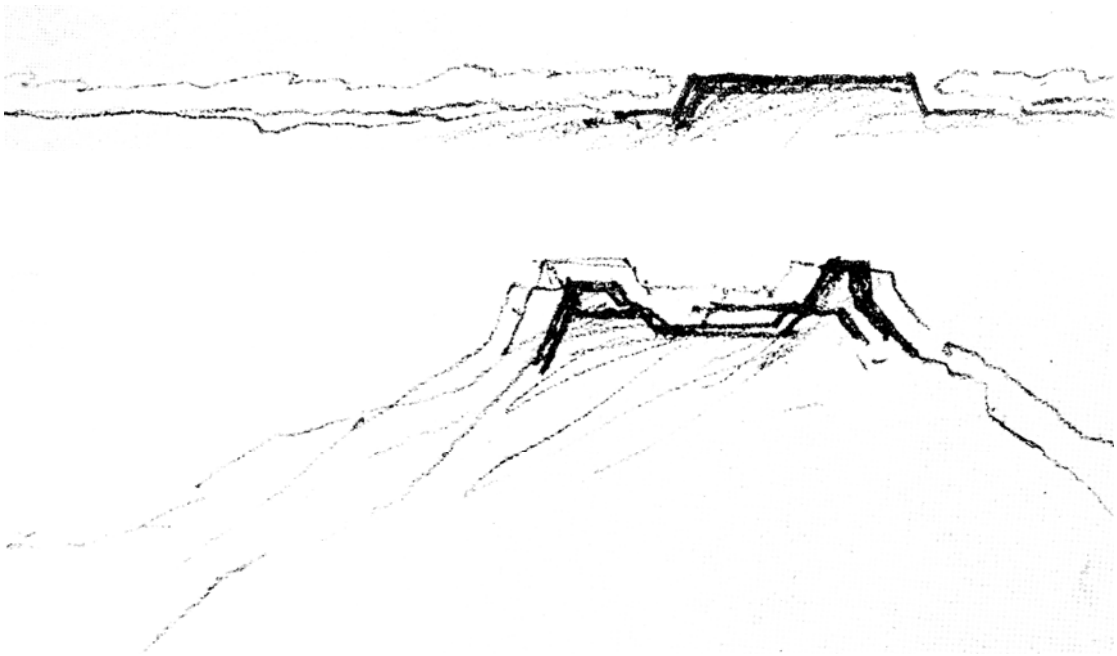


Fig.16: EUCLIDEAN SPACE DEVOID OF IMAGES: the mosaic cross above the main nartex where usually the Theotokos icon is placed, a rare preserved vestige of the Byzantine Iconoclasm, Hagia Eirene, Istanbul, around 740

Figs. 17,18: ARCHITECTURE EXPLAINING THE DYNAMICALLY SUBLIME: Jørn Utzon, Platform in Yucatan (up) and Plateau on Monte Albán (down), illustrations to Platforms and Plateaus, Zodiac 10, 1962.



Jørn Utzon has published *Platforms and Plateaus* in Zodiac 10 of 1962, when the Sidney Opera was in the last phase of construction (Utzon, 1962). He wrote about the artificial mountain with truncated top there: the giant platform in Yucatan, raised amidst the dark jungle, only to put a temple on its sunlit top. By raising the platform exactly in the height of the top of the jungle that surrounds it, a spatial condition was created that radically opposed the given natural surrounding: *"Suddenly the jungle roof had been converted into a greater open plain"* and Mayans were given the sensation of horizon. Before the platform was built, they could have no idea about it. Utzon discovered a totally different spatial condition on the Monte Albán where the natural mountain was modulated by construction of cascading buildings around the rim of the existing plane on its top. The plateau, completely detached from the surroundings was left empty in the middle: *"a completely independent thing floating in the air, separated from the earth... - a new planet."*

Platforms and *plateaus* are things greater than their surroundings: wild nature, picturesque landscape or big city. Still, the physical shape of the surroundings is their most important reference. Pediments for architecture, they are close to natural makes and infrastructural works. Relations they establish with their surroundings are similar to those of great engineering structures which driven by the pure engineering logic often occupy strategic positions. As a DEVICE amidst the dark jungle, the platform explains it in architectural terms: it magnifies the darkness of the jungle (2A) while providing a detached perspective on that jungle (2B). Similarly, the plateau on top of the mountain architecturally explains the nature of any mountain (2A). Pointing up to the universe, it is detaching the human perspective from this world (2B). In exactly that sense, an architectural object although referring to nature in every aspect, might be regarded as greater than nature, regardless its physical size.

Describing the scale shift between an architectural object and the totality of landscape in *Landform Building*, Stan Allen recalled Erwin Rommel's famous visit to Curzio Malaparte in his house on Capri (Allen, 2011, p33, p37), a mythical event in fact, recorded in Malaparte's non-fiction novel *The Skin* (*La Pelle*, 1952): When the general asked the writer whether he has bought the house ready-made or he has built it for himself, Malaparte replied that the house had been there and he has designed the scenery. *"Ach, so!"* the general reportedly exclaimed. As filmed in Jean Luc Godard's *Contempt* (*Le Mepris*, 1963), it completes the cliff, it provides the platform, and it gathers the view, addressing the sublime in direct and indirect ways.

Fig. 19: ARCHITECTURE ASSEMBLING THE ENTIRE LANDSCAPE: Le Corbusier on the Acropolis, 1911.

ELEVATING THE VIEW:

(3) ARCHITECTURAL CRITERIA APPLIED AT THE GEOGRAPHIC SCALE

Rommel and Malaparte anecdote is illustrative of how architectural limits of the sublime may be extended beyond the scale of single architectural objects. The idea that a single architectural object (or an ensemble of architectural objects) can gather (that is, measure, define, and explain) a truly vast natural or urban site is at the very fundament of modern architecture (Le Corbusier, 1987, p209):

"The Acropolis - this rock - rises alone in the heart of an enclosed frame. ... Hymmetus and Pentelicus, two very high mountain ranges, like two wide adjoining screens, are located behind us, orienting our sight in opposite direction, toward the estuary of stone and sand, the Piraeus. The Acropolis whose flat summit bears the temples, captivates our attention, like a pearl in its shell. One collects the shell only for its pearl. The temples are the cause of this landscape."

In other words, architecture is greater than nature.

In this famous note from his *Journey to the East* (*Le Voyage d'Orient*, 1966), young Le Corbusier described nature, like it was described by Kant, as sublime but insignificant before the ideas, in this particular case before the materialized ideas, of our reason (Kant, §23). The huge metropolis which has grown around this rock since his visit, filling the enclosed frame only contributes to this impression (Aesopos, 2009). Whoever has viewed the Acropolis from the multiple points in contemporary Athens and then visited it to enjoy the sublime view from its flat summit can easily believe Le Corbusier's sounding statement. Like in Kant's description of entering the St Peter's basilica in Rome (Kant, §26), a visitor is bewildered and his imagination is perplexed here. Only, in this case, the giant space extends at the vast metropolitan, territorial and geographic scales. The *acron* remains unmatched from any perspective. A group of architectural objects, not by quality of their size but by authority of their rightly chosen positions, proportions and mutual relations gathers the city, the metropolitan territory, and the entire landscape.

In many aspects, the geological makes with their intrinsic and extrinsic properties may be analyzed as if they were architectural objects: mountains not only have structurally functional shape but they also contain interior spaces within that shape.
Approaching architectural objects as if they were geological makes is a very interesting position too: according to Lewis Mumford in *The City in History* (1962), humans first settled in their interiors and first permanent architectural objects- regardless their size- resembled mountains (Mumford, 1968, pp8,9). But architecture is not simply a natural science. Neither is it a plastic art, enlightened gardening, instrumental archaeology, materialized theology, practical philosophy, nor a system of applied technologies. Architecture and geology (sculpture, landscaping, technology...) cannot be simply mutually translated. To really apply architectural criteria to the entirety of the physical world, a new, different and inclusive perspective was required. The space- time scope had to be radically changed first.

Sound and shape of Iannis Xenakis' compositions may be described as sublime. Drawing music "scientifically" like mathematical functions with form as function of time, Le Corbusier's collaborator produced musical notations visually similar to mountain range surveys. It is impossible to prove it, but given the composer's architectural background, the striking likeness to geological phenomena was probably not coincidental.

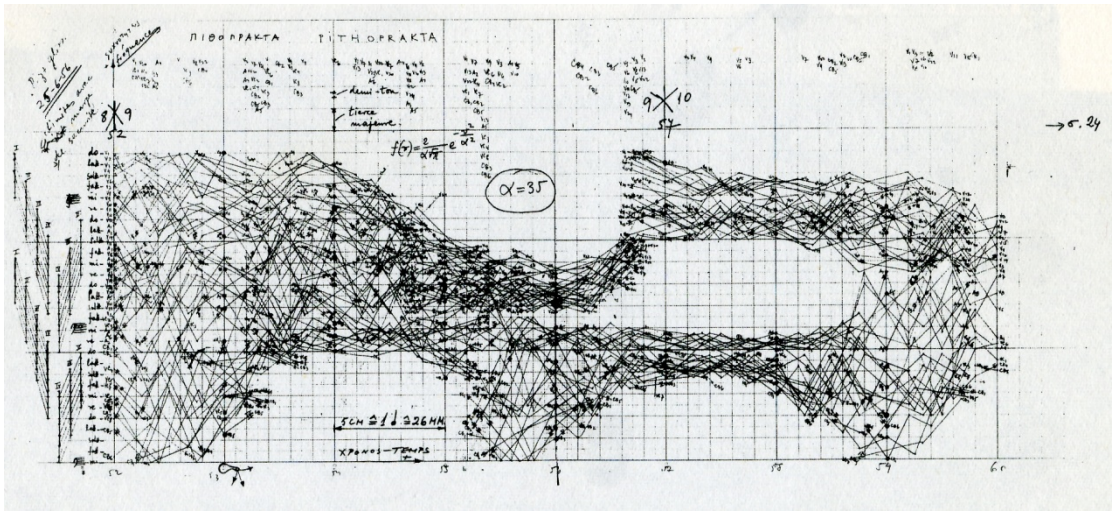


Fig. 20: GEOMORPHIC FORM AS A FUNCTION OF TIME: Iannis Xenakis, Glissandi from Pithoprakta for string orchestra, 1956-57. What looks as a three dimensional geodetic survey, is the graph representing the relation between velocity, "sonic temperature" and time in a Gaussian distribution. Glissandi are sounds in continuous variations; each line equals one string instrument- 46 in total.

Fig. 21: SYMBOLIC FORM AS A COMPRESSION OF GEOMORPHIC TIME: Leonardo da Vinci, Study of the Grand Deluge, 1515. Based on the close observation of the natural phenomena, but not an objective record of a real event, it is a mere symbolic visualizations of "how the heavens have descended to the earth".

Leonardo's studies of the Grand Deluge showing the upheaval of the elements were based on the close observation of the natural phenomena and they were produced with a precision that might be assigned "scientific" qualities too. Yet they are not objective records of a real event but a mere visualization of a mythical *"how the heavens have descended to the earth"* event as a symbolic image (Cremante, 2006, p428). Reminiscent of some actual relief formation, they may be seen as radical compressions of the endlessly slow geomorphic time. Empirical observations such as this one were given the scientific substance with progress of sciences aimed at the objective description of the form of the land, challenging in parallel our comprehension of time.

Observing and measuring the landforms, drawing the maps, appropriating them philosophically, scientifically, theologically, artistically... or architecturally, has most direct consequences to our reasoning about us and about things that surround us. For instance, to be impressed not only by the extraordinary relief formation of Metéora in Northern Greece but also by the effort employed to construct around twenty monasteries on their peaks we do not necessarily have to be humble pilgrims. Objectively, this relief formation can be described as a "forest" of giant mushroom-shaped sandstone rocks developed in the geological prehistory at the mouth of a great river that at this point flowed into a narrow but deep bay that covered the present plain of Thessaly. The ecstatic text from a tourist guide book (Anonym, undated) and the hesitant wonderment of Béla Hamvas (Hamvas, 2004) describe two possible more engaged impressions:

"The scenery suggests a vision of the world in first days of the Creation and puts one in mind of the lost state of human innocence and perfection, of the decay of human condition... Detached from the miracles wrought by faith, our thoughts turn to the infinite and the eternal and our souls commune with the silence. The scene rises sheer before us, drawing us into direct contact with the Creator..."

"... But this kind of challenging elevation and insolent retreat can be found nowhere on earth... No one has ever heard that in the Meteorons intensive, redemptive ascetism is practised, nor that these monasteries have generated a great spirit... More importantly: it was probably never different, not even hundred years ago, or five hundred years ago, or at the time of the monasteries' foundation."

Fig. 22: ARCHITECTURAL APPROPRIATION OF THE EXCEPTIONAL LANDFORM: Copper engraving of the Monastery of the Metamorphosis (the Great Meteoron) by the hand of the superior monk Parthenios from Elassona, 1782.

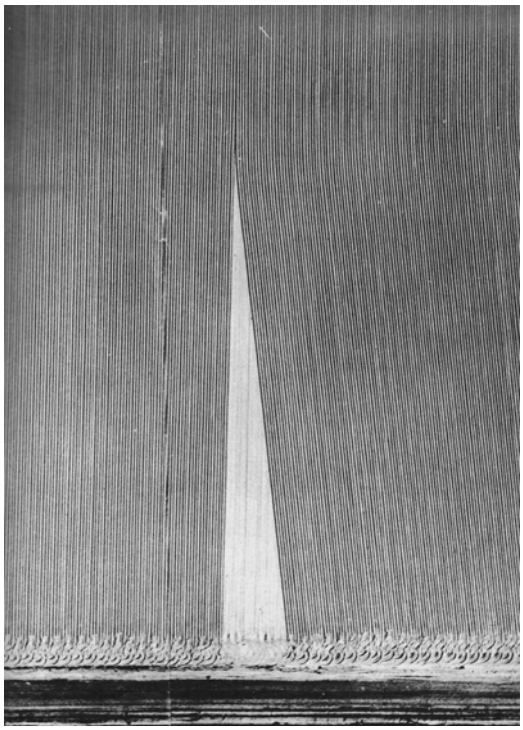
Indicatively, the ecstatic one concentrates on the landform while the hesitant one addresses the monasteries, wondering about the cause of the effort invested in their construction. Most importantly, the two cited impressions differ in their evaluations of time invested in creation of the totality of the form before us. The same that stunned Hamvas most, that here things had never been different is the most interesting thing about Metéora. The development of tourism has only emphasized what he failed to see, as tourists climb around the monasteries where monks and nuns continue to live in their space-time capsules repairing them according to their needs. From their detached, sublime perspective on this world, a recently built and fresco-painted chapel is equal to the one that survived since the early Middle Ages. What is “old” and what is “new” is of absolutely no importance. In comparison with the suspended rocks, cultural duration has absolutely no value.

Approaching the infrastructural ruins as if they were architectural monuments, Robert Smithson denied the short, cultural time too. Moreover, he went a step further as his artistic work may also be seen as an attempt in annihilation of differences between the “objective” geological and biological aspects of time. Announced not only by Ruskin’s opening to nature, Le Corbusier’s appropriation of machines and

engineering structures, and Siegfried Giedion's situation of architecture within the space-time frame, the Land Art movement and American Minimal Art in general contributed to the apparatus of architecture this disinterested, Kantian optic for observation of geological and infrastructural makes, archaeological findings, Roman ruins and the *Monuments of Passaic, New Jersey* with same eyes (Smithson 1967; Abalos, 2004), imposing the same, non-conceptual criteria to all the objects that constitute our physical world, that is, to the material reality we inhabit.

Ideas of timelessness and objective appreciation of the *plastic reality*; *"the world of lines, colour, spatial relations, remaining throughout the historic sequence of styles a priori to any particular comprehension of reality"* (Radić, 1959), again not without predecessors, were central to Bernard Rudofsky's appropriation of vernacular structures and natural makes in *Architecture without Architects* (1964), to Vittorio Gregotti's architectural cataloguing of relief formations, infrastructural objects, agricultural and settlement patterns in *The Form of Territory* (*La forma del territorio*, 1965), and to many a concurrent attempt to expand the "territory" of architecture i.e. the referential field where architectural criteria apply (Gregotti, 1966). The 1960's commodity of air travel to faraway places has not only brought amazing objects of our physical world closer together, it has opened a totally new perspective on the earth's surface too. Scale difference between a minute ammonite fossil and the giant Spiral Jetty constructed by Robert Smithson (1970) became obsolete. In a sublime view from above, like in Robert Smithson's *Dallas Fort Worth Airport* project (1967), a living landscape was easily turned into an abstract pattern.

But 1960s (also 1950s and 1970s) with pioneer jets and cosmic expeditions were not the first period in history that prompted humans to turn their efforts towards the sky to earn - in turn - the back view to the earth (Flaker, 2007): *"the aviation perspective of the world was promoted by the avant-garde of 1913, the year when Apollinaire's Zone went up to heavenly skies and reached Christ, superior to machine."* Announced already in Alexander Blok's poem *Aviator* (1912) and Sergei Tretjakow's description of the earth seen from the airplane *Through Unpolished Glasses* (1928), the *"aviography"* was promoted into literary genre by Antoine de Saint- Exupery, *"a line pilot who turned the authentic experience of flying as a heroic feat into lyrical prose, filled with admiration for the space loosened off the Earth and for the climatic and meteorological conditions below the clouds"* in *Night Flight* (1931) (Flaker).



Figs. 23, 24: EXPANDED "TERRITORY OF ARCHITECTURE": Pages from Edilizia Moderna 87-88 edited by Vittorio Gregotti, 1965: decorative soil tillage in Tofukij Zen temple in Kyoto; Maiden Castle in Dorset, England; agricultural terraces in Bell Country, Texas (left page); field in Napa, California (right page).

Fig. 25: ELEVATED VIEW: Robert Smithson, Spiral Jetty, Great Salt Lake, Utah, 1970, recent aerial photograph.

After years spent in Europe, young Jorge Luís Borges' returned to Buenos Aires by plane in 1921. The sublime perspective on his half-real, half-imaginary native city (Borges, 1923): *"diced in blocks/ different and equal/ all alike/ looking like they are all just/ dull multiplied/ repeated memories/ of one and the same block"* reads like a good example of aviography applied to the urban form (Ivanišin, 2003). But the truth is that the view from the airplane was not a necessary precondition for such a mathematical appreciation of the metropolis as cities diced in blocks were drawn, that is, looked at from the elevated position, long time before the air travel commodity. As natural forms are not so easily drawn as cities, the new perspective has influenced more radically the appreciation of landforms and landscapes.

Now seen from above, a landscape was not a mere realm of natural conditions any more. Landscape is not, and it never was nature. The word originated in (landscape) painting: it used to be a *"picture of dominantly natural scenery"* with territorial (land) and formal (shape) aspects. The new, dynamic perspective required a more inclusive definition: *"landscape is a perceptible piece of land, determined by the joint effects of natural forces and human intervention"*, the portion of territory we can capture with one sight, a painting or a photograph (movie, video...) showing some evidence of human intervention in it (Lorzing, 2001, pp35-37). While landforms are given physical facts that can be objectively classified and scientifically controlled, the domain of their artificial alterations depends on human perception to a larger extent: a landscape it is not just the scenery but also the way the humans see and interpret that scenery.

A consistent method of dealing with a really vast scale, first in formal and consequently in cultural terms, was conceived by the French anthropologist Fernand Braudel in *The Mediterranean and the Mediterranean World in the Age of Phillip II* (*La Méditeranée et le monde méditerranéen à l'epoque de Philippe II*, 1966). His definition of what is Mediterranean is surprisingly "architectural" inasmuch he considers the physical form as the very first and the ultimate condition of its cultural content. The Mediterranean is determined by its climate and its physical edge: the sequence of disproportionally high mountain chains that form the *"skeleton that is present everywhere and which constantly breaks through the skin"*, thereby yielding - in Braudel's words - the *"architectonic unity*" of the Mediterranean basin. Its *"human unity"*, shaped through the network of cities and trade routes between them is a consequence, governed by a sequence of landforms which provides higher homogenizing order and clear natural limits (Braudel, 1997).

Just like within an architectural object, those limits control and shape history evolving inside. The form precedes the content on the vast geographic scale too (Ivanišin, 2009). In the introductory chapter, Braudel wrote about the spectacular view from the airplane flying up the Adriatic Sea direction Greece to the sequence of Adriatic and Ionian islands with disproportionally high mountain chains in their back. It was again the commodity of air travel that provided this sublime view from above, this rectification of the perspective, and this detachment from the scene before his eyes.

Yet further augmentation of the observation field and further detachment of the observer was initiated already with Sir Isaac Newton's calculations of orbital routes. *Sputnik 1*, the first artificial satellite was launched into the orbit by Soviets in 1957, the first satellite photographs of Earth were made by US' *Explorer 6* in 1959, the first human saw the Earth from above in 1960, the famous *Blue Marble* photograph was taken in 1972, the first real time transmission of Earth's image from the orbit was possible in 1977...

Google Earth application has been providing ever more detailed satellite views a commodity granted practically everywhere to practically everyone since 2005. Opposite from the view through the telescope into the depths of the Universe, the satellite view is similar to the view through the microscope because it implies the possibility of infinite close ups. We shall use this ultimate view from above where Immanuel Kant's notions of the mathematically and the dynamically sublime meet, to test the limits of architecture as a discipline which may control and shape the state of things at the vast territorial envelopment of an entire geographic region: from the landform, down to the object scale.

Fig 26 (next page): OUR CONTEMPORARY WORLD: Eastern hemisphere, NASA, 2011.

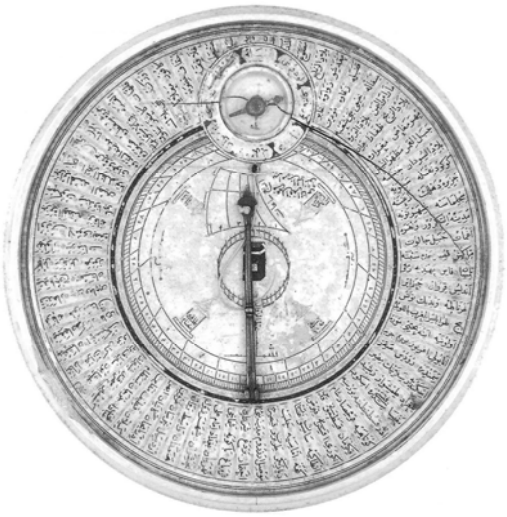


Fig. 27 (left): PICTURESQUE PROJECTION: CHRISTIAN IDEA OF THE WORLD: Ebstorfer Weltkarte, 1300, diameter ca 3,57m. In the centre of the world is Jerusalem, east is on top. Mappae mundi such as this one were founded on a systematically geometric projection based not on the geographical surveying but on the depiction of the harmonious order of creation.

Fig. 28 (right): SUBLIME PROJECTION: ISLAMIC IDEA OF THE WORLD: Qibla indicator and compass made by Bayram ibn Ilyas, 1582, diameter 11cm. In the centre of the world is the Ka'ba, around the rim are regions and cities of the Islamic world. Sacred geography developed in the ninth century onwards, to determine the direction of prayer from different regions of the known world.

SUBLIME PERSPECTIVE ON THE MIDDLE EAST

And Moses went up from the plains of Moab unto the mountain of Nebo, to the top of Pisgah, that is over against Jericho. And the LORD shewed him all the land of Gilead, unto Dan, and all Naphtali, and the land of Ephraim, and Manasseh, and all the land of Judah, unto the utmost sea, And the south, and the plain of the valley of Jericho, the city of palm trees, unto Zoar. And the LORD said unto him, This is the land which I sware unto Abraham, unto Isaac, and unto Jacob, saying, I will give it unto thy seed: I have caused thee to see it with thine eyes, but thou shalt not go over thither.

(Deuteronomy 34:1-4)

From the peak of Pisgah in Transjordan, at the rim of one of the most expressive landforms in the world, one can grasp within a single sight not only Jericho in the contemporary "West Bank", but also, if the weather is fine, the gilded Dome on the Rock in Jerusalem. The rock of Masada overlooking the Dead Sea from Cisjordan was the site of the 1st century epic battle between Romans and Jewish rebels while in the Second World War it was designed by the British military command as the ultimate defence line against the Field Marshal Erwin Rommel's troops in their drive into the centre of the Middle East in case they were not stopped in Africa. The Middle East features high density in such strategic promontories. In this part of the world the intensity of landform, the ancient, and the modern histories often coincide.

MIDDLE EAST is a geographic region at the tri-continental juncture of Asia, Europe and Africa, whose exact borders are defined differently. The term originates in the meta-language of the Anglo-American intelligence services as this region was located in the middle of the way to the British possessions in India and Indochina. The *Middle East* in English, Italian, French and Spanish translates as the *Near East* in German and in Slavic languages. Seen from Europe, the Middle East coincides with the *Asia Minor*, the *Outremer*, the *Levant* where the sun is rising, the *Morgenland* where the day begins as opposed to the *Abendland* where it ends; observed from within, it corresponds with the *Mashreq* as opposed to the *Maghreb*, or with the *Bilad al Sham* beyond and before the modern national borders and discourses. What exactly the Middle East is, it depends primarily on the perspective of the observer. But where the Middle East is, it is rather clear: As medieval world maps and pilgrims' itineraries clearly show, it has been in the middle of the Old World ever since the beginning of time. In the contemporary "world of flows", this central position is confirmed, first by the emergence of the Dubai International Airport, then the Dubai Stock Exchange, and finally the entire Dubai Phenomenon with its expressive physical manifestations, in the global scene.

Commonly accepted geopolitical definition of the contemporary Middle East includes the geographic region extending from the western border of Egypt to the Eastern border of Iran and from the Black to the Arabian Sea (Held & Cummings, 2011, p7). This definition includes countries in the Eastern Mediterranean and Mesopotamia: Syria, Lebanon, Jordan, Israel, Palestine, Cyprus, Iraq; countries on the Arabian Peninsula: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, Oman, Emirates, Yemen; and three big countries at the limits of the Middle East, each a world within itself: Turkey, Egypt and Iran.

Although one could argue that if not each country than certainly each group of the countries listed above belongs to regional designations different than the Middle East, this discussion will mainly stay within this delimitation of the region. Throughout history, physical limits of the empires that constituted the Middle East have been expanding and contracting physically and culturally beyond the limits of the region, but it never happened that all the countries listed under the contemporary notion of the Middle East were under the same political entity. Roman, Byzantine, Persian, Ottoman Empire and Umayyad Caliphate covered each vast portions of the Middle East and stretched beyond its geographical limits, but never included the whole of it.

Broader contemporary definitions of the Middle East may also include Caucasian countries: Armenia, Georgia, Azerbaijan; South Asian countries: Afghanistan, Pakistan; Central Asian countries: Kazakhstan, Uzbekistan, Turkmenistan, Tajikistan, Kyrgyzstan; countries of Maghreb and Nubia: Sudan, Libya, Algeria, Tunis, Morocco, Mauritania and Western Sahara and even countries on the Horn of Africa: Ethiopia, Eritrea, Djibouti and Somalia. Two seas are contained within the region: the Red Sea and the Persian Gulf. The Mediterranean, the Black and the Caspian Sea, and the Indian Ocean surround the region widening the scope, bringing and emitting the cultural influences. These peripheral areas interact intensively with the above delimitated region (pp 8,9). Therefore, this discussion will include some consideration of this broader region.

With its geomorphologic and geopolitical complexities, the Middle East is a perfect paradigm for an experiment in architectural observation of natural and cultural forms within a truly large spatial envelopment. One mayor topic comes clearly in focus: the region's multi-layered human history has been decisively conditioned by its physical shape, the perceivable landform and the abundance of natural riches below its surface. *Fertile Crescent*, transcending millennia of human history and stretching along the tectonic rifts and folds from the bottom of the Persian Gulf to the Gulf of Aqaba, is at its nucleus. In the contemporary world it is also known as the *Crescent of Violence*. Historical and cultural limits of this region, dotted with many forgotten, eternal or entirely new cities, have been shifting and its focal points changing, from the beginning of history until the actual present.

Real and mythical places converge at points of high concentration, packed with past, present and promised future; large areas between remain virtually devoid (at least on the surface) of any interesting content. But the situation could easily change, as we have often seen: many exciting stories have begun in the usually unstable centre of the Old World. Some came to dead ends but others have continued to evolve. Beside the objective physical form, great narratives, not only those referred to in the Scriptures, reaching far beyond the borders of this geographic region are central both to the ancient and to the contemporary notions and understandings of the Middle East. That they substantially concern architecture is clear from any course book on architectural history.

Fig. 29: ANCIENT NARRATIVE: Map for the History of the Old Testament, Wilson and Wright for British and Foreign Biblical Society, around 1900. The sites referred to in the Scriptures outline the Fertile Crescent stretching along the river valleys, between the deserts and the mountain chains from the bottom of the Persian Gulf to the Gulf of Aqaba and the mouth of the Nile.

Figs. 30, 31: CONTEMPORARY NARRATIVES: Attack on the Hijaz Rialway; Lawrence of Arabia by David Lean, 1962 restored by Robin Harris, 1989 (left); Discovery of oil; Black Gold by Jean Jacques Anaud, 2011 (right).

In *Genius Loci* (1980), Christian Norberg Schulz gave a detailed taxonomy of meaningful landscapes based on the formal analysis of their physical shapes and their psychological implications. While the form of landscape is related to the *genius*; the spirit of place, the purpose of its architectural elements is to explicate the ways that humans inhabit that form; the existential space extended between the earth and the sky. Typologies of landscape and architecture emanate from the character of *natural place* (Norberg- Schulz, pp23-49): *Romantic* (Nordic, Alpine) landscape is dominated by earth, fragmented in misty valleys always surrounded by high mountains, the sight is always framed. *Classical* (Mediterranean) landscape is where the elements are in harmony, the climate is moderate, and conditions for agriculture and permanent settlement are good. The ultimate *cosmic* landscape is the horizontal desert dominated by the sky; the single and total natural power.

DESERT is the crucial condition of the contemporary Middle-Eastern territories; more precisely, the radical proximity of the desert to the rare patches of the arable land and to the sublime monumentality of the growing metropolises: the sharp contrast between the void and the solid, the colourless and the green, the horizontal and the vertical. This striking collision of the extremely natural with the extremely artificial magnifies the actual presence of the exceptional material facts: the natural and the man-made ones. Monotheistic faith came from this radical, horizontal world where the conditions for permanent settlement are not inviting and yet, the humans have always been tempted to build artificial mountains, raise obelisks and measure time.

"It could not have been so very different in Ur 5000 years ago"

This is how Aldo van Eyck began his famous impression of the primitive settlements along the limits of Sahara (Parin, Morgenthaler & van Eyck, 1963, p30). In many areas of the contemporary Middle East, this impression would still apply. Touristic leaflets abound in images of *biblical* landscapes and *vernacular* places where time was stopped and nothing has changed ever since Abraham, who is believed to originate from Ur of the Chaldees, passed by. But whoever attempts to look beyond what is visible at the first glance will clearly see that the timelessness van Eyck wrote about is only one aspect of human existence along the rims of the desert.

As recorded in the Sumerian myths, for those who permanently settled along its limits first in history, desert was the primordial menace, that mysterious, unstable and unsecure space where the burning winds, sand storms and savage peoples come from (Gray, 1987). Desert nomads, in turn, saw the earliest big cities and mighty states the embodiments of moral corruption and decay menacing if not the very existence of this world, than at least the existence of the humankind. The prototypical Middle Eastern situation in Mesopotamia is geographically – consequently also culturally – more complex than the scarce situation of the Sub-Saharan Africa. As it will be discussed in detail later, beside the desert and the mountain slope it also included the fertile valley flooded at irregular intervals by two great rivers. Time was structured through the sequence of revelations or mythical events here, depending on the perspective; the illusive timelessness given the beginning and the end. Parallel physical existence of time capsules where nothing changed as five thousand years passed by and obvious proofs of the unstoppable flow of time - the permanence next to the transience - is another contrast which the proximity of the extremely natural and the extremely artificial physical facts so sharply magnifies.

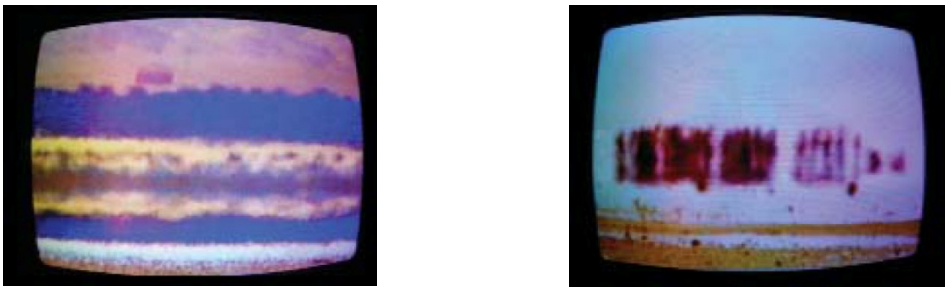


Fig. 32: FATA MORGANA: Bill Viola, stills from "Chott el-Djerid (A Portrait in Light and Heat)", 1979

According to the definition of natural place by Norberg Schulz, understanding the nature helps men to dwell. As their knowledge of their immediate physical surroundings grows, so do their mental faculties (Norberg Schulz, p23). Such natural understanding of physical things has several grades. At first, primitive men discover special, "sacred" places where natural elements and forces; a rock, a water spring and a tree, are in balance (p27,28). Then they look for cosmic order. It may be related to the local geographic feature as in the ancient Egypt where the south-north running stream of the Nile bound the earthy human condition to the completely visible east-west course of the sun: the western desert where the sun is descending was the domain of death while the east where the sun is rising was the domain of life (p28).

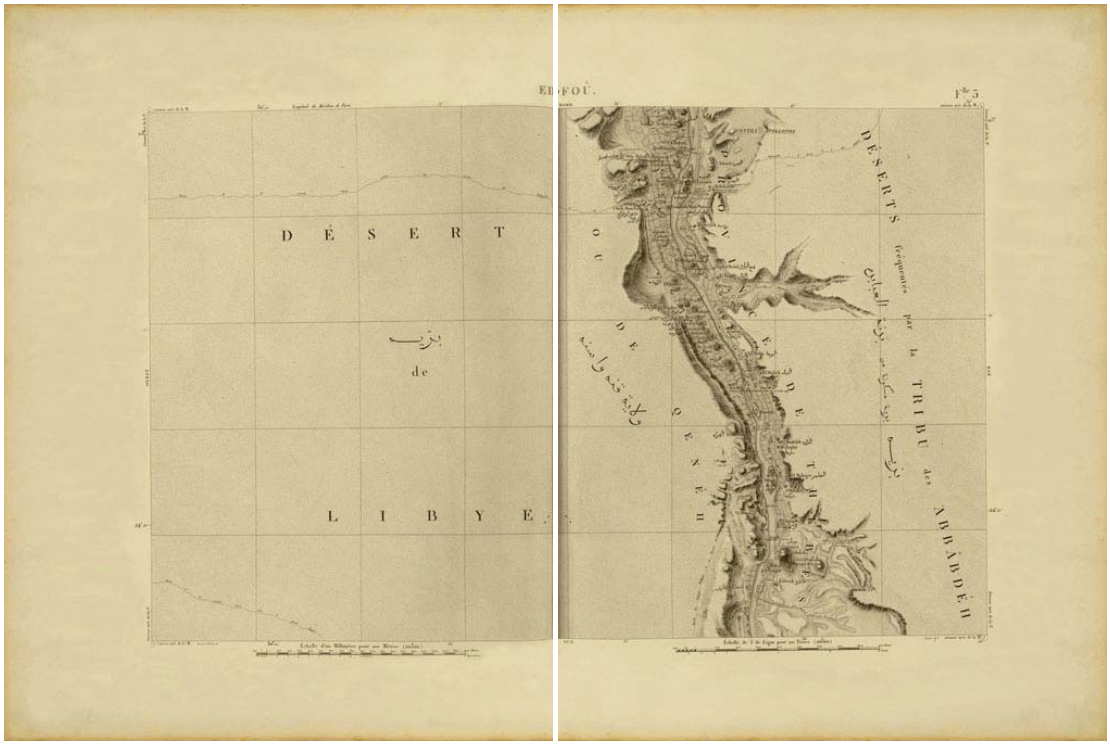


Fig. 33: DESERT FROM A DISTANT PERSPECTIVE: Table from Description de l'Egypte, 1809-1829: Lybian Desert (left) and River Nile (right). The desert side of the map is virtually empty; all the content is concentrated along the Nile.

Eventually, advanced humans look for their own traces in nature, discovering the "character" of their physical environment. Architecture emanates from understanding of that character (pp28-31). Consequence of the form of the land, the sight of the men of the far north remains bound to earth, only occasionally pointed to the starry heaven. Around the Mediterranean, it is harmonized with the open horizon by the comparatively gentle landform and the moderate climate. In the desert, the perspective is clear in all the directions (Asad, 2004, p145; Burckhardt, 2009, p7):

"The desert is bare and clean and knows no compromise. It sweeps out of the heart of man all the lovely fantasies that could be used as a masquerade for wishful thinking, and thus makes him free to surrender himself to an Absolute that has no image: the farthest of all that is far and yet the nearest of all that is near."
"The soil of Arabia, in its majestic monotony, was fitted by Providence for an existence entirely centered on tawhīd, the consciousness of Divine Unity."

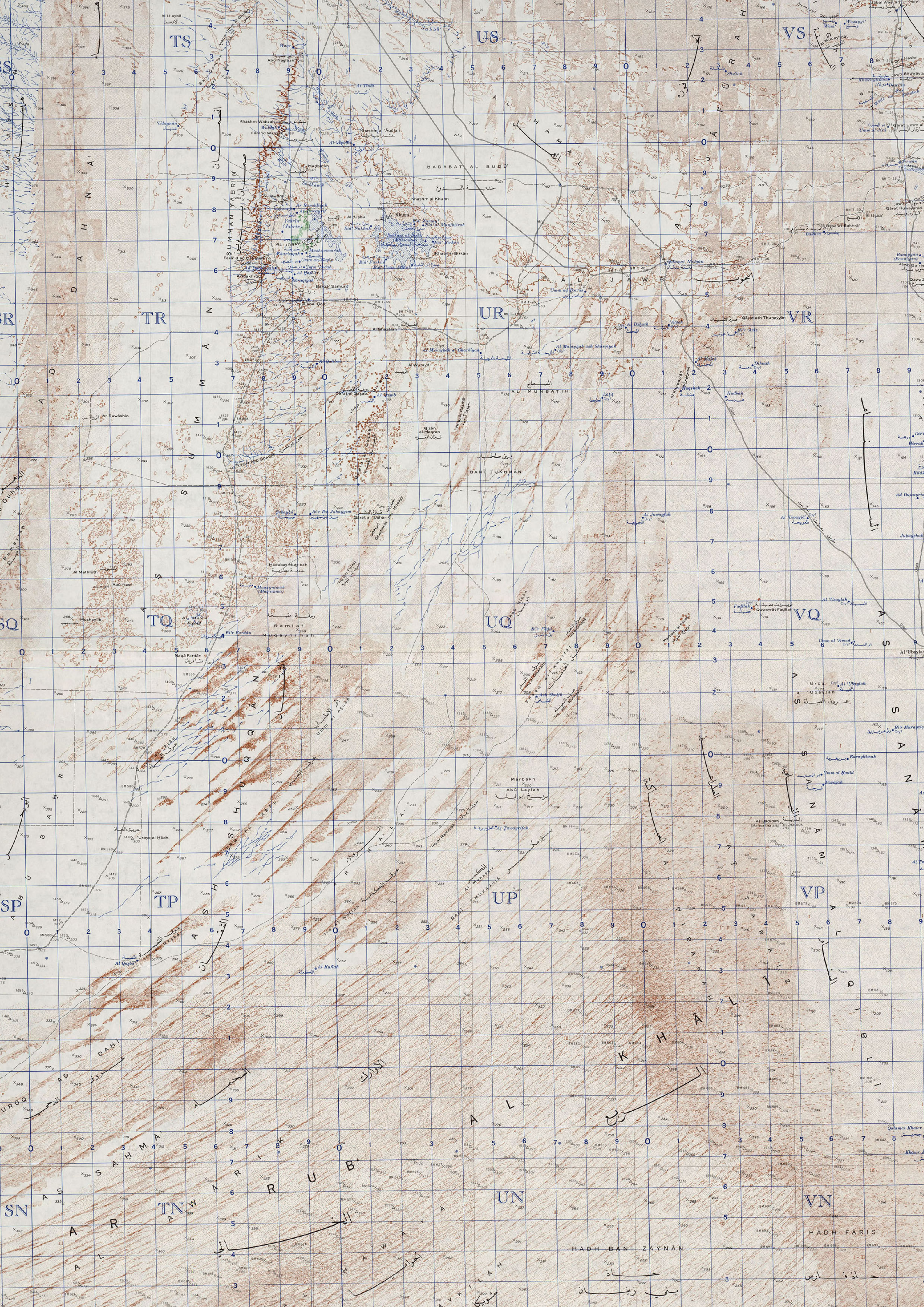
Desert appears virtually empty only from a remote perspective and to those who have no knowledge of it. It has never been barren for a Bedouin who knew how to read the signs in the ground and to look to the sky above, or for a petroleum engineer able to detect the precious content hidden under the surface of the barren land:

According to a popular narrative from the beginning of the petroleum extraction, American geologists used the binoculars to study, from the hills on the upturned strata of the Bahrain's structural dome, the Dammam dome on the Saudi Arabian mainland. Their conviction that an oil reservoir lay under it led to the foundation of the *Saudi Aramco* (1944), one of the most important oil extraction companies in the world (Held & Cummings, p161). In a close observation, even the proverbial Empty Quarter covering one third of the Arabian Peninsula is not empty at all. It is one of the world's largest oil reservoirs and water is to be found already three meters below the dry surface. Proofs of earlier geological, biological and cultural periods are to be found everywhere, from meteorite craters, to fossils and archaeological findings, as traces hardly vanish in the hyper- arid climate. Desert is a sort of keeper of memory and a very fragile eco-system at the same time (Aronson, 2008, pp18,19):

"Changes in the fragile surface of desert areas are very hard to heal. In Israel's Negev Desert, for instance, we still find scars on the ground from the time of the siege of Masada by the Roman Tenth Legion two thousand years ago... Even walking on some desert surfaces can destroy the 'biological crust', a mixture of minute living organisms that takes decades to grow and which may be centuries old."

Unlike extraordinary desert animals and plants, humans do not feature specific physiological adaptations to specific natural surroundings. Instead, we have developed specific technological solutions to fight the strong wind, the powerful sun and the scarcity of water. Our survival in the desert depends primarily on our reason meaning not only on the ingenuity and the labour invested in the maintenance and artificial enhancement of desert roads and rare inhabitable natural niches (pp15-19), but also the enhanced overall understanding of the harsh physical environment: the metaphysical content behind the illusive *Fata Morgana*: *"Ever since man began to think, the desert has been the cradle of all his beliefs in One God"* (Asad, p145). Dominated not by many incomprehensible *"natural forces"* but by the *"most absolute cosmic properties"* (Norberg- Schulz, p45), the desert sky appears an immense dome by day and by night. While in Judaism and in Christianity the Abrahamic Monotheism was not only, as Norberg Schulz has noted *"'humanized' by the more friendly landscape of Palestine"* (p45), but also infected by the strong polytheist heritage of antiquity, it remains unquestioned in Islam.

Fig. 34 (next page): DESERT FROM CLOSER PERSPECTIVE: Northwestern Rub' Al Khali ("Empty Quarter") section of the 1:500000 American military map of the Arabian Peninsula, US Army Map Service, Series K462, 1956- 1962.


TS
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HADABAT AL BUDU
AL JAWB
AL MUNBATIH
BANI TUKHMAN
Ramlat Muqaynimah
HĀDH BANI ZAYNĀN
HĀDH FĀRIS

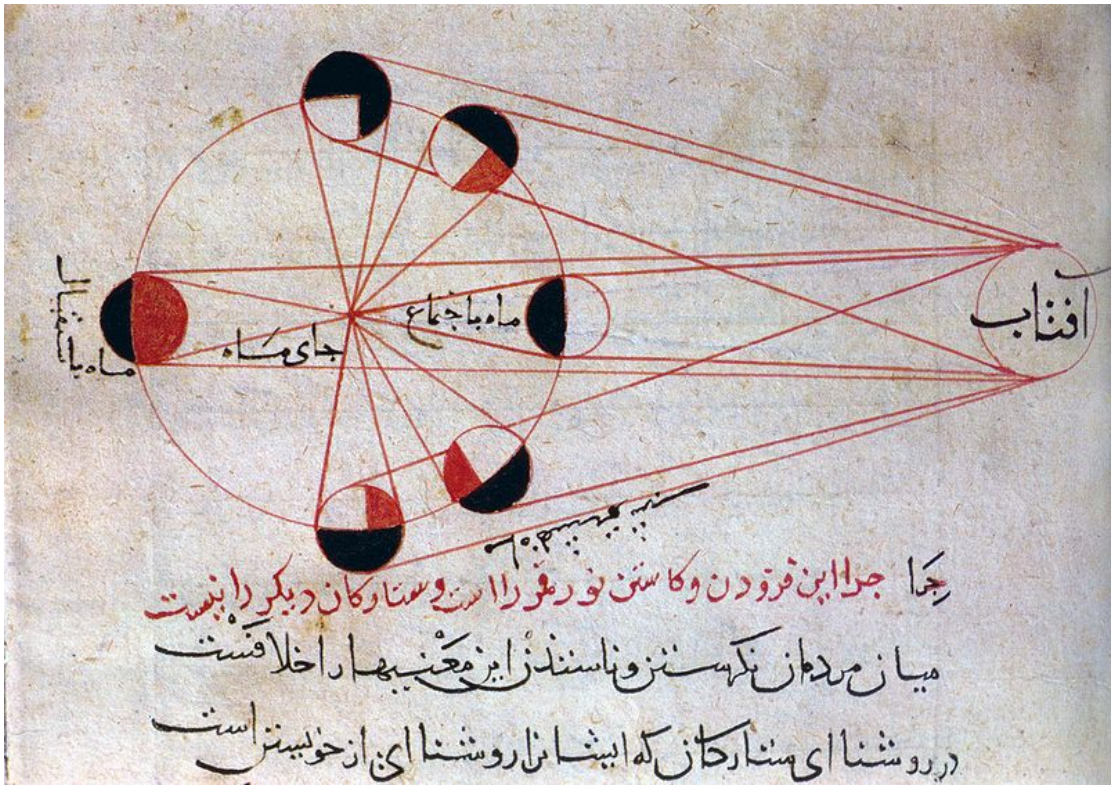
Tawhīd; the consciousness of the divine unity is explicated in words every Muslim should repeat at least five times a day eliminating any confusion between the relative and the absolute, separating the ephemeral from the eternal:

"there is no divinity save God; *lā ilāha illa 'Llāh".*

There was no chaos before cosmos; there was no primordial marriage between Gaia and Ouranos, Geb and Nut, the Earth and the Sky. There has always been only one immanent and transcendent God, omnipotent and omnipresent, who sees everything and who has created everything out of nothing. In the universe dominated by reason and order, ghosts and spirits (*of places*) evaporate under the burning desert sun.

Do they not look at the sky above them - how We have built it and made it beautiful and free of all faults? And the earth - We have spread it wide, and set upon it mountains firm, and caused it to bring forth plants of all beauteous kinds, thus offering an insight and a reminder unto every human being who willingly turns unto God. (Qur'an, 50: 6-8)

Fig. 35: ISLAMIC SCIENCE: 11th Century diagram of lunar eclipses by Al Biruni



Everything in heavens has a purpose: the sun, the moon and the stars, and so does everything on earth. There is no mystery in the desert, in any landform or in the whole of nature in general. Most importantly, this physical world in not accidental, it is dominated by reason and natural facts that constitute it are meant to explain the intentions of the creator:

He it is who has made the sun a [source of] radiant light and the moon a light [reflected], and has determined for it phases so that you might know how to compute the years and to measure [time]. None of this has God created without [an inner] truth. Clearly does He spell out these messages unto people of [innate] knowledge: for, verily, in the alternating of night and day, and in all that God has created in the heavens and on earth there are messages indeed for people who are conscious of Him! (Qur'an, 10: 5,6)

That contemporary natural sciences and philosophy owe much to the development of abstract thinking, astronomy and mathematics in particular, during the first thousand years of Islam, is a commonplace (Nasr, 1976, pp73-135): decimal fractions, algebra, trigonometry, geography, cartography, preservation of the major Greek treatises, and development of the Euclidean understanding of infinity... Al Khwarizmi (whose name was transliterated into Latin as Algoritmi), one of the most notable scholars from the Abbasside Baghdad's *House of Wisdom* alone not only invented algebra, enhanced the astrolabe, observed the movement of the sun, the moon and the known planets, but also improved Ptolemy's *Geography* correcting the latitudes and longitudes and indicating the oceans not as land- locked but as open seas. Practical application of this advancement in natural sciences onto the sacred geography aimed to determine the right direction of prayer associated the regions of the known world with certain astronomical phenomena by means of special maps and mechanical devices such as compasses and astrolabes (Nasr, p107; Haleem, 2012).

Within such "mathematical" and mechanically enhanced understanding of the world, the monotheistic idea about nature as non-conceptual and sublime appears strikingly similar to that of the rationalist, Newtonian natural science (Muftić, 1996, pp64-67).

MONOTHEISM may indeed be seen as disenchantment and rationalization of all nature. Its sacred places are no enchanted groves, holy springs, mysterious lakes or caves where mythical creatures and elemental spirits reside, but small number of special places where the earthly order was subject to the divine intervention through unusual cosmic and geological occurrences:

Ka'ba was built at the location where a meteorite hit the ground in times of Adam and Eve. According to a Moslem legend, it was first built by Adam, then destroyed by the Great flood and rebuilt by Abraham and Ishmael at the lower extremity of an axis which traverses seven heavens, marked at the level of each with another sanctuary frequented by angels (Burckhardt, p2). Moses was given the tablets with thunders and lightings in a thick cloud at the Mount of Sinai (Exodus 19). Jesus yielded up the ghost on Golgotha with a sun eclipse (Luke 23) and an earthquake (Matthew 27). Abraham attempted to sacrifice Isaac (Genesis 22), Solomon built the temple where the Lord appeared unto his father (2 Chronicles 3:1) at the Moriah Rock in Jerusalem, and Muhammad stopped in his Night Journey and ascended to heaven from here (Qur'an 17:1). Decisive events at the end of the world are to unfold at this place which is believed to be connected to the higher worlds by an axis too; a heavenly ray from the cave beneath the rock through the well opening at its top (Burckhardt p13). Extraordinary rocks and mountains are clearly exceptions in the horizontal desert world: *"firm"* (Qur'an, 15:19) in the unstable sea of sand, placed on earth *"lest it sway"* with humans (13:3, 15:19, 16:15, 21:31), and will be removed and earth left *"void and bare"* on the Judgement day (18:47).

Monotheistic idea about nature has consequences for human interventions in it. Most importantly, all human makes may be regarded nothing more than distant shadows of the Divine act. According to Titus Burckhardt in *Art of Islam* (1976), Islamic art, abstract and *"aniconic"* as it is, may be seen as the projection into a visual order of certain aspects of the *tawhīd*, displaying archaic, Platonic, military and barbaric impetuses at the origins of Islam (Burckhardt, 2009, pp7-26). It *"reflects no ideas, but transforms the surroundings qualitatively, by having them share in an equilibrium whose centre of gravity is the unseen. Its object is, above all, man's environment - hence the dominant role of architecture - and its quality is essentially contemplative"* (p29), comparable to that of virgin nature, especially the desert, which is likewise favourable to contemplation, although in another respect the order imposed by art opposes the apparent chaos of desert landscape (pp 30,31).

Depending on different local traditions and on the actual spatial and material conditions, this visual order can be revealed in architecture by means of some general principles which may be described as: *"expressive geometry, emphasize on the interior, equality instead of dominance of single elements, unity and continuity instead of distinction, symmetry and repetition of elements, dematerialization of buildings through abstract decoration and the denial of icon and idol"* (Porter, 1980). They govern architecture of prayer places in particular. Any clean space can serve that purpose (Maqsood, 2003, p113):

"The whole world has been made a place of prayer, pure and clean" (Hadith, Muslim).

Times of daily prayers: between dawn and sunrise, just after the height of the midday sun, just after sunset... deliberately avoid the exact times delineated by the daily natural cycle because of their pagan connotations (Maqsood, p56), while the lunar calendar denies the natural seasonal cycle of the solar year. The primary act of individual submission is paired with the physical experience, thus the cognitive rule of facing not east or west, not sun or moon, but the universal *omphalos* for believers anywhere in the world, the Kaʻba in Mecca, can be explained as the *a priori* ontological axis of prayer, the *qibla* (Kahera, 2009).

Practice of Islam indeed requires orientation in space and time, but this orientation is referential to the order beyond the easily perceptible, natural one. Consequently, the non-interference with nature should be the ruling principle beyond architecture of prayer spaces too. The monotheistic faith can have no associated symbolic form, hence the reluctance of investing an edifice with any symbolic, representative connotation. A mosque represents nothing. It refers to the actual physical surroundings only in terms of necessary adjustments to the actual topography. It relates to natural laws only in terms of load distribution manifested in bearing structure and adaptation to the climate.

Clear geometries and dominant horizontality govern the historical (proto) types: archaic presence of the Kaʻba, Platonic purity of the Dome of the Rock, expanding structural pattern of *La Mezquita* in Cordoba, hollowed mountains of the Ottoman realm. As by Burke, division, addition, rhythm, pattern and repetition deceive the senses. This is how the *"field"* of Cordoba can endlessly grow (Allen, 1999) or how a large dome and a chandelier suspended low over a field of colourful carpets can resemble the sky.

Like in Kant's definition of the sublime as non-referential to nature but to our reasoning about it, in terms of space, volume and form and in terms of its detachment from the immediate surroundings, an ideal mosque relates to the supreme abstract order.

With immanent void, not the solid as its main objective, any MOSQUE is the non-place: a paradigm of the non-conceptual architecture.

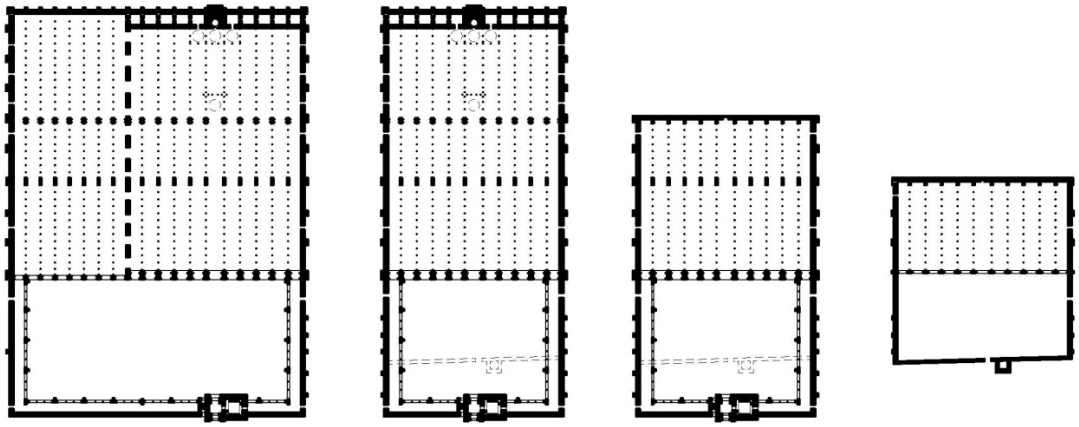


Fig. 36: HORIZONTAL WORLD: Phases of growth of the Grand Mosque (La Mezquita) in Cordoba, 786- 987. Ideally, this abstract orthogonal grid denying the rules of the perspective can expand to infinity.

Fig. 37: NON PLACE: Ara Güler: Eminönü, 1960. Two Istanbul mosques by Master Sinan: Süleymaniye, 1557, adapted to the sloping terrain in the second plan and Rustem Paşa mosque, 1562, elevated from the daily life on a platform above the dirty market in the first plan.

TENT, more precisely the culture of tent, emanating from the Asian steppe and from the Saharan and Arabian deserts has been playing historical role throughout the Middle East and to some extent it still does (Held & Cummings, pp83-92). As nomads can carry around only very limited quantity of artefacts, their eminent influence is exemplified primarily in the preservation of the archaic form of the Arabic language. Art of carpet weaving, adopted and sophisticated in urban cultures of the region, exemplifies their decisive contribution to the material culture.

Knotted Turkish carpets with axially and diagonally symmetrical geometrical motifs probably came to the Middle East with the advancement of the Seljuks, maybe also from the Bedouins of Sahara. On the other hand, all Persian carpets with their more sophisticated motifs resembling garden designs derive from the legendary Carpet of Springtime from the throne room at Ctesiphon, which Messenger's companions divided among themselves cutting it by the sword, which itself represented the Earthly Paradise (Burckhardt, p118),

"but the most perfect carpets represent nothing in particular; they reflect the cosmos on their own level."

For Gottfried Semper, the art of weaving was at the origin of the art of building, the woven carpet was the essence of the wall. The knot was *"an expression of the earliest cosmogonic ideas"*, the principle of *Bekleidung* at the origin of the spatial enclosure (Hvattum, 2004, p67). According to Titus Burckhardt, writing and weaving are substantially related in Islam. *"The symbolism of writing is cognate with that of weaving: both refer to the crossing of the cosmic axes"* (Burckhardt, p52). The weft representing the visible mundane cycle unites horizontally the invisible vertical treads of the warp representing the polar axes (p119): *The treads of the warp are like the Divine qualities underlying all existence; to pull them out from the carpet would mean the dissolution of all its forms"*. According to Immanuel Kant, the sublime is not a quality of the object observed but it lies within observer's reason. Complex mathematical equations which describe the infinite length of the seashore or fractal geometries which govern the apparent formlessness of mountain chains prove our own power of reason's superiority over nature. Contemplative geometric patterns which conform to the denial of idols and to the abandonment of representation inspire awe in a similar way.

If the art of calligraphy may be described as a distant shadow of the Divine text, the art of weaving may be considered a distant shadow of the creation.

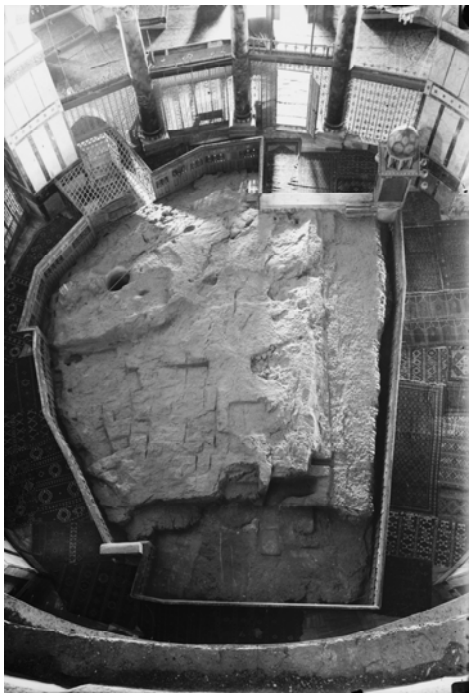


Fig. 38: FIRM LANDFORM CONNECTED TO THE HIGHER WORLDS: Moriah Rock under the Dome of the Rock, Jerusalem, photograph between 1900 and 1920.

Fig. 39: TRANSIENT HUMAN CONDITION AMIDST THE STONE DESERT: The Bedouin tent; Encampment on Pisgah's slopes, Palestine, photograph around 1911.

Fig. 40: WARP AND WEFT: 10.5 m × 5.3 m Ardabil carpet completed under the reign of the Safavid Shah Tahmasp I, mid 16th century, now in the Victoria and Albert Museum. The foundation is of silk with wool pile of a knot density at 47–54 knots per cm, about 26 million knots in total.

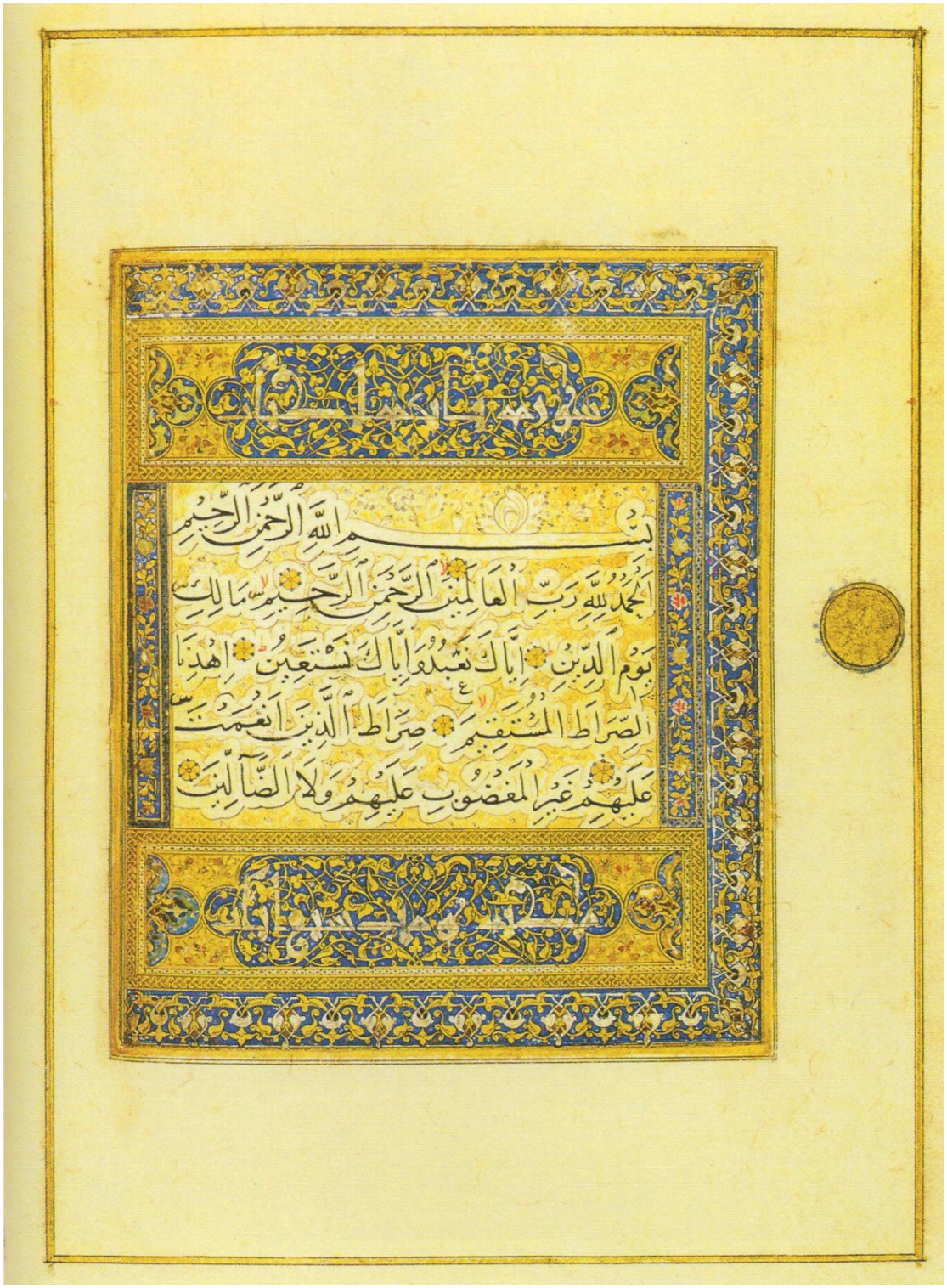
Moreover, the daring idea that an abstract geometric pattern may reflect the cosmic order links directly Immanuel Kant's notion of the mathematically sublime with the sublime religious experience; the disenchanted landform with its cultural explication in architecture.

If it is really *"the distance provided by the frame which makes the scene sublime"*, a fragile Bedouin tent, exposed to the elements somewhere in the endless desert, is another place, closer to the direct physical surroundings, where the dynamically sublime meets the mathematically sublime. With simple frame structure and pitched woven textiles, it denies the existence of any excessive *"interstitial space"* (Žižek, p96; Nadir, p13) between the inside and the outside. Colorless and without any definite shape from the outside but rich in colorful patterns on the inside, a Bedouin tent is another Middle Eastern paradigm of the non-conceptual architecture.

Recent history has widened the "architectural" idea of the Middle East from that of a petrified place where nothing ever changes to that of a site of immense opportunities where everything is possible. Places this notion encompasses do not rest in the domain of decent origins of our profession any more. To the contrary, they are the sites where its future, exciting possibilities are being tested. From the most ancient symbolic landscapes to the most daring contemporary developments, territories of the Middle East provide an abundance of material facts - ancient and recent, natural and artificial - which provoke extreme sublime experiences.

Consequently, it is in the aim towards the sublime essence of things, not towards their picturesque semblance, where driving forces of various origins, reasons and beliefs may converge, outlining what is specifically Middle Eastern in architecture while at the same time relevant on the global scope and in the present time. Gradual close- ups into the satellite view on earth open endless sequences of potentially sublime experiences. This hypothesis will be examined through a sequence of scales, going beyond the visible at the first glance.

Fig. 41(next page): SACRED ART OF CALLIGRAPHY: Qur'an 1: Al- Fātiha (The Opening); 15th century, Iraq or Persia.


بسم الله الرحمن الرحيم
الحمد لله رب العالمين الرحمن الرحيم مالك
يوم الدين ايّاك نعبد وايّاك نستعين اهدنا
الصراط المستقيم صراط الذين انعمت
عليهم غير المغضوب عليهم ولا الضالين

A VIEW FROM ABOVE:

LANDFORM SCALE OBSERVATION OF THE MIDDLE EAST

"Long ago, as is common knowledge, the illustrators of our Islamic realm, including, for example, the old Arab masters, perceiving the world the way Frankish infidels do today, would regard everything and depict it from the level of a vagabond, mutt, or clerk at work in his shop. Unaware of today's perspectival techniques, of which the Frankish masters haughtily boast, their world remained dull and limited, restricted to the simple perspective of the mutt or the shop clerk. Then a great event came to pass and our entire world of illustration changed."

(Orhan Pamuk, Painting and Time)

Figs. 42,43: ART OF MINIATURE PAINTING: Yūsuf and Zulaikha (Joseph Chased by Potiphar's Wife), early Safavid miniature, Kamāl ud-Dīn Bezhād, 1488 (left); Yūsuf Gives a Royal Banquet in Honour of His Marriage, late Safavid miniature from Sultan Ibrāhīm Mirzā's Haft Awrang, fol. 123a, 16th century (right)

In this chapter of *My Name is Red*, Orhan Pamuk (2001, pp83-91) traces distinctive qualities of the Ottoman miniature painting back to a very remarkable ancestral event, the Mongolian siege of Baghdad in 1258: Detached from the agonizing reality, an architecturally structured *"depiction of the world from an elevated Godlike position attained by drawing none other than a horizon line"* was discovered by a master calligrapher in the sublime view from the top of the minaret, whilst observing the ongoing plunder from a safe position. On one hand, this poetic allegory describes multiple origins and analytic character of the Islamic miniature painting and particular cultural conditions around the pictorial depiction in the Islamic world in general. On the other, it documents an early attempt at rationalization of the world and the monotheistic idea about that world behind this style of painting.

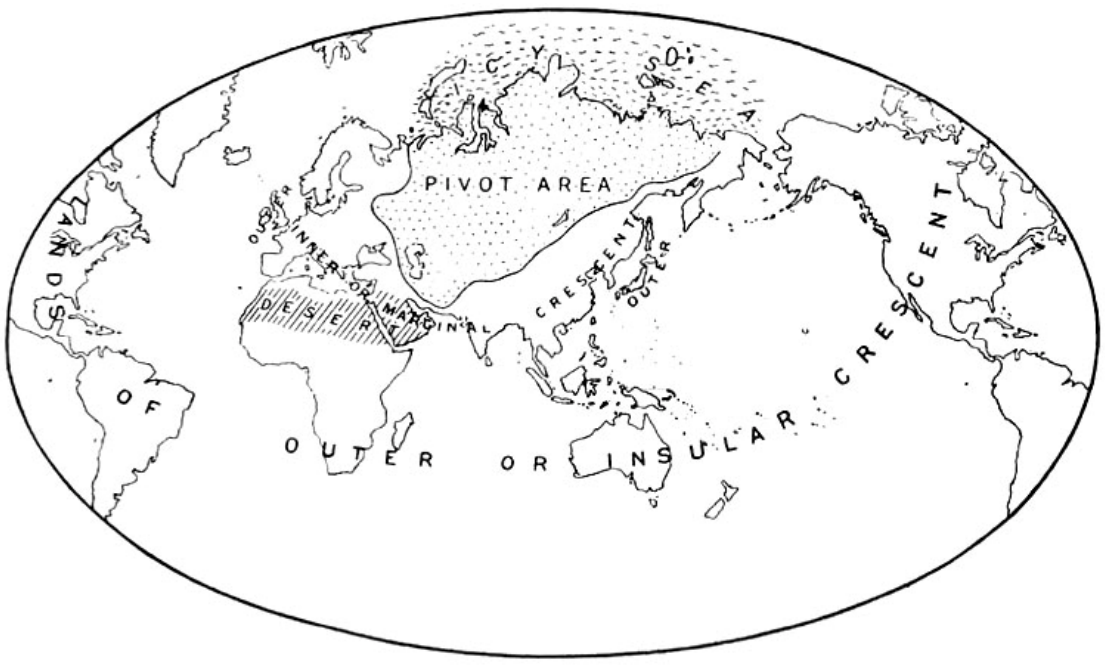
Although the prohibition of images, in the perspective of the Decalogue, applies strictly speaking only to the image of God, the representation of any living being is frowned upon in Sunni Arab circles because of the respect for the divine secret contained within every creature. But the fact that the Messenger condemned those who aspire to imitate the work of the Creator has not always been interpreted as a rejection pure and simple of all figurative art.

Islamic art should in principle not reflect any concepts or ideas, but qualitatively transform the surroundings and figuration has to be free from any claims to naturalism (Burckhardt, pp29-32). Things in our surroundings should be seen and depicted not as they look like but as they essentially are. The art of miniature, which has not been considered sacred, developed in culturally inclusive environment of Mesopotamia. Baghdad school of miniature painting, the ending of which Orhan Pamuk described, originated in translations into Arabic of the antique books on natural science. Sophisticated Persian art of miniature flourished under Shah Tahmasp in XVI century, the contemporaneous Ottoman miniature is considered its reflection with outer influences to the style, most importantly Chinese and European. While illustrating fictional narratives, military campaigns or scientific discoveries, the miniaturists avoided the mimesis of nature. Intentionally omitting the transient and the worldly, they obtained multiple elevated viewpoints showing different moments and perspectives of the same event in a single painting. Not attempting to *"portray the outward world of senses"* directly, but indirectly the *"immutable essences of things"* (p37), they entered their paintings as if drawing architectural axonometries, sections or plans. Such a detached perspective, multiple perspectives in fact, is not synonymous with an 'objective' vision of the world but (p38)

"perspective which in no way 'adheres' to things as such, but to the individual subject; things perceived are arranged in order according to the subject's 'point of vision'. The order of things as such is their hierarchy in the entire cosmic order, and this hierarchy is manifested qualitatively and not quantitatively."

The essence of things is immutable, but our physical environment does constantly change. Ways and means of its mental perception and pictorial presentation are changing accordingly. Technologically magnified, the satellite view from above where the mathematically and the dynamically sublime meet involves our reason and intellect first, and only secondary our senses. Enabling multiple perspectives, this elevated *"point of vision"* is substantially not very different from that of the XVI century miniaturists of the Islamic realm. Implying the infinite close-ups, it also corresponds with our time. Therefore, it may be considered an adequate departure point for an architectural analysis of the vast area stretching between the Persian mountains and the Libyan desert, the Black and the Arabian Seas and the Mediterranean (Held & Cummings, 2010, pp7-9).

Fig. 44: GEOPOLITICAL "POINT OF VISION": the world in Halford Mackinder's "The Geographical Pivot of History", 1904. The Middle East is in the middle of the "Inner Crescent" renamed as the "Rimland" by Nikolas Spykman in 1944.



Central position of the Middle East in the middle of the Old World is easy to prove. Tri-continental juncture was central to the medieval world maps and itineraries drawn from the European and the Middle-Eastern perspectives. From the earliest human migrations, the Middle East has been both the crossroad and the radiating centre. Earliest evidence of the intelligent human activity in the area is dated to one million years ago. This geographic region saw the beginning of the Neolithic revolution, the first ploughs, wheels and letters, the emergence of first cities and roads paved to facilitate the exchange of goods and ideas, connecting the cities into higher political systems. Radiating eastwards to the Indus Valley and westwards to the valley of Nile, the Mesopotamian culture was at the origin of the "Eastern" and "Western" civilizations. The ancient Egyptians adopted Mesopotamian influences transferring those further westwards to the Mediterranean basin. Great political systems with global ambitions developed there: Persian Empire, Hellenistic world, Roman Empire, Byzantium, Sassanian Empire, Umayyad Caliphate and Ottoman Empire.

Looking at the whole of the world from the elevated geopolitical perspective, early 20th century's geographical determinists Halford Mackinder (1904, 1919) and John Spykman (1944) recognized the importance of the Middle East for the industrialized modern world too. Observing the causal relations between the objective geographical conditions and the political power-struggle phenomena, Mackinder defined the *"Heartland"* bastion as Siberia, ringed by an *"Inner Crescent"* stretching from Europe through the Middle East to north-eastern Asia. Labelling the tri-continental Europe – Asia – Africa the *"World-Island"*, he stated: "*Who rules the Hartland commands the World-Island; Who rules the World-Island commands the World"* (Mackinder, 1904). During the World War II, Spykman challenged Mackinder's thesis stating that controlling the Heartland is only a defensive position, while the control of the *"Rimland"* corresponding to Mackinder's Inner Crescent is crucial, emphasizing the pivotal location of the Middle East in its centre. Dominating the Heartland and the Rimland would result in an unmatched power base, while the control of the Rimland or most of it by one power could offset the domination of the heartland by another.

From such global geopolitical perspectives, the Middle East's central position, additionally magnified by the global need for fossil fuels, acquired enormous strategic importance. The struggle for the Ottoman territorial heritage during the World War I and right after it, the World War II and its geopolitical consequences, the Cold War and its local echoes which continue to evolve until today are very illustrative of its global role (Held & Cummings, pp215-216). Its central position in our contemporary

network society (Castells, 2000) is proved by the considerably recent emergence of Dubai, itself without substantial natural resources, at the world scene (Adham, 2013): *"If you look at the world map, you will recognize that there was a geographic need for Dubai in this part of the world, considering the time difference between the stock market's opening in Japan and Hong Kong and those in Switzerland or London... when money was actually waiting to circulate."*

Central to the Old World from the historical and the contemporary perspectives, the Middle East itself has no single power centre. Fertile Crescent is in its core, but foci of political power have usually been outside it, shifting through centuries according to a surprisingly repetitive pattern with some stable geopolitical points and occasional interferences (Held & Cummings, pp80-82):

Four major power foci have appeared and reappeared throughout history: Anatolian Plateau (contemporary Turkey, Asia Minor, centre to Byzantine and Ottoman Empires), Iranian Plateau (contemporary Iran, centre to Persian and Sassanian Empires), Tigris – Euphrates Basin (contemporary Iraq, Mesopotamia, the native place of civilisations), and Nile Valley (contemporary and ancient Egypt), along with two minor power cores: the western Fertile Crescent where the outside interests have been coinciding (contemporary Lebanon, Syria, Israel, Palestine and Jordan; the South-eastern Mediterranean, the Levant, the Holy Land, the centre of the medieval Arab Empire) and the western Arabian Peninsula (Hijaz in contemporary Saudi Arabia, the centre of Islam). Historically, the only power core situated outside the Middle East from where a substantial portion of its territory was controlled was the imperial Rome. Two mountain-rimmed plateaus – Anatolia and Iran – have been most persistent power centres from which the most extensive areas have been controlled and occupied, corresponding to two of three most populous and powerful Middle Eastern states, Turkey and Iran. Nile Valley on the other hand, was controlled from the three northern foci at various times, but never has the power centred along the Nile controlled any of the other three major foci. Despite its enormous cultural importance, Egypt's historical expansion outside Egypt has always been limited to the western limb of the Fertile Crescent. Mesopotamia was the earliest power centre but its importance gradually weakened. Until the emergence of the contemporary Iraq it functioned as a focus of power only associated to the Iranian Plateau centre. History of the Middle East has often revolved around the cyclic interaction of powers occupying Asia Minor and Iranian Plateau, and Mesopotamia was often used as a springboard against the power on the other side of the basin.

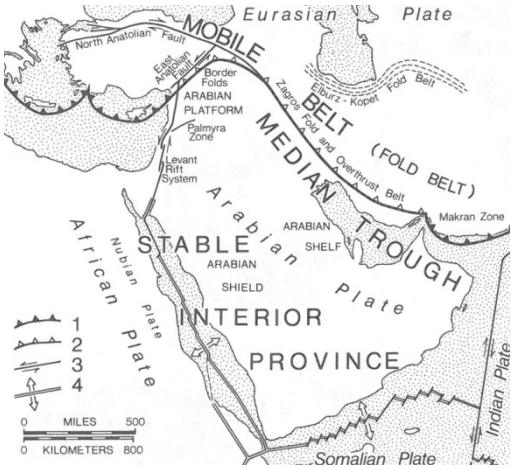
No one power focus, regardless the temporal extent of the given imperial power, has ever succeeded in conquering the entire Middle East. Najd, now centre of Saudi Arabia, in the interior of the Arabian Peninsula is the only area in the entire Middle East which has always been able to manage its relative independence. Smaller political and cultural entities appeared, reappeared and disappeared along the Western Fertile Crescent: Canaanite – Phoenician, Aramean, Hebrew, Moabite, Philistine and Nabatean. Lesser power centres at the periphery of the region are Yemen and Oman.

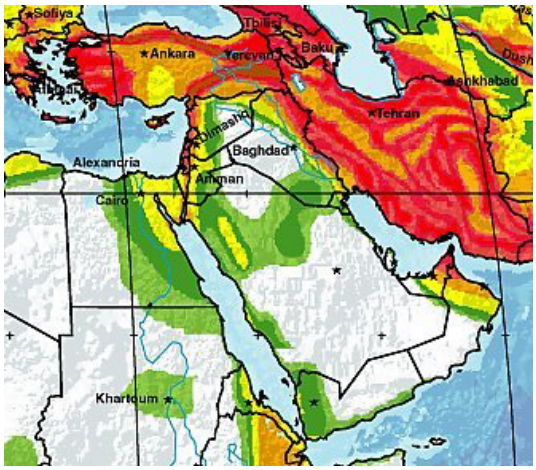
Partial colonisation after the fall of the Ottoman Empire and narratives of post-colonialism and modernisation that followed, the discovery of oil, the ideological uprisings, and the contemporary technological advancement have only increased the complexity of the general historic pattern. The unmatched density of cultural heritage and political tension resulted from the above described sequent and repetitive pattern of occupation and abandonment of same portions of the precious inhabitable and arable land, emphasizing, despite the manifold diversities, the political and cultural, historical-geographical unity of the Middle East.

Comparative analysis of geographical and historical patterns helps to relate the cultural and the natural aspects of this unity. Patterns of human works such as settlements, agriculture and networks are subject to permanent change. Patterns of fundamental natural elements such as landforms, mineral resources and climate also change, but comparatively slowly. Objective geographic facts do not simply translate into cultural artefacts but, as the geographical determinists like Mackinder and Spykman, and the historians concerned with the *longue durée* socioeconomic factors like Fernand Braudel have shown, they remain the most permanent and hence the most fundamental factors of history. Their arguments emphasizing the physical form of the land as the defining condition of the cultural content are supportive of this attempt to broach the sublime, vast landform phenomena from an architectural perspective.

The overall landform of the Middle East is consequence of tectonic shifting of large segments of earth's outermost crust over long periods of the geomorphic time. Slowly, the landform is still changing with seismic activity very strong along the major tectonic rifts and faults. Seen from above, it is expressive and irregular. From a distant perspective, it may be best described as a non-convex set of landforms with dents, hollows and promontories in alternation of sea and land: highlands and

depressions, tectonic faults, belts and rifts, and lesser landform elements. Evidences of geologically speaking recent tectonic movements found throughout the region, in scale-range from vast mountains to tiny marine-life fossils far from the seashore, still may trigger our imagination and challenge our reason. In closer perspective, the firm part of the land - sea alternation diversifies into a sequence of dry deserts, surface waters and mountain chains.





Figs. 45, 46: EXPRESSIVE LANDFORM: Tectonic map of the Middle East (left): (1)collision zone, subduction of sea floor, (2) collision zone, continental overthrusting, (3) horizontal displacement along transform faults, (4) seafloor spreading, the pulling apart of the ocean's crust; Seismic hazard in the Middle East (right): red colour indicates highest activity and no colour indicates no tectonic activity.

Mountain chains define the limits: folded Taurus and Zagros, the Alborz - Kopet Dag Belt around the Anatolian and the Iranian Plateaus, and the Red Sea - Dead Sea Depression and the Hijaz Range in Arabia resulting from the counter-clockwise rotation of the Arabian Plate along the Great African Rift and its local Levant Rift branch. Strategic promontories, narrow passes and straits such as the Hormuz Strait, the Bekaa Valley, and the Sinai Peninsula, are their most prominent features. Great rivers enabled the birth of the ancient civilizations along the shifting riverbeds of Tigris and Euphrates Basin, along the stable south - north flow of the Nile, and along the mountain-rimmed river Jordan. Quantity of still and running surface waters is now limited, but the landforms witness of earlier times when rainfall was greater, occasionally epic, and streams and erosion proportionally stronger. Erosion by water and wind and combined wind deposition and erosion in the dry climate are main factors behind the formation of two types of desert. The sand deserts of Arabia are reshaped deposits of sand blown from the great distances. The broad plains of desert pavements elsewhere are blanketed with pebbles left behind after the sand

particles were blown away by persistent winds. Local tectonic movements and long ago volcanic activity have left plenty of evidence in large and smaller scales too. The region features a considerable number of volcanic cones including the biblical Mount Ararat, the Al Wahbah explosion crater in the Western Arabia, and similar natural shapes such as the ancient Zoroastrian fire sanctuaries Takht-e Soleyman and Zendan-e Soleyman; Solomon's Throne and Prison in the West Azerbaijan.

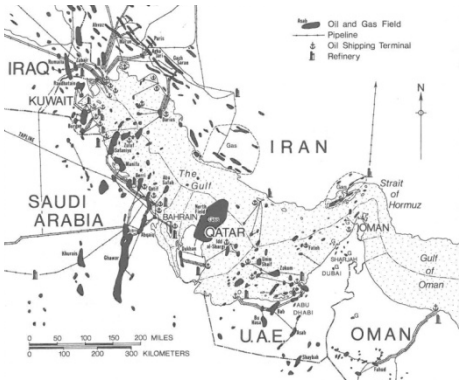


Fig. 47: EXPRESIVE LANDFORM: 18th century Ptolomeic map of the Holy Land (left)

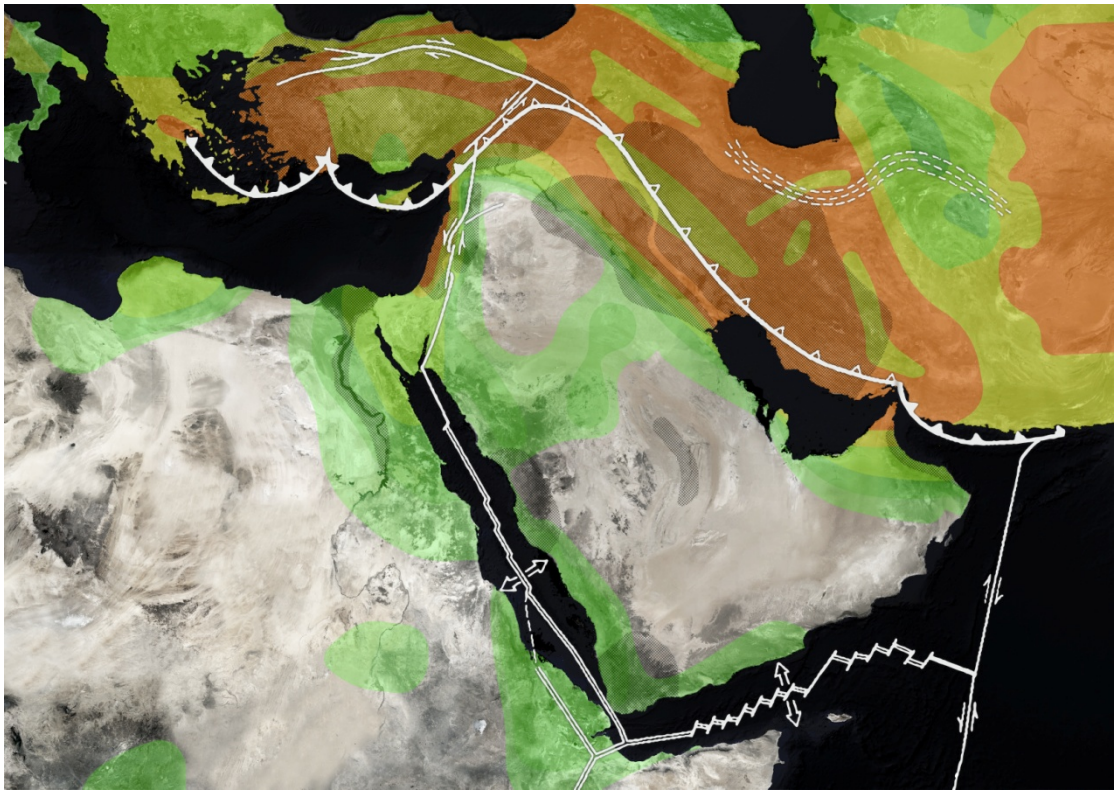
Fig. 48: INVISIBLE CONTENT: Petroleum and natural gas reserves in the Persian Gulf area (right)

Rarely found in nature, fire wells are perhaps the most exceptional among the exceptional Middle-Eastern relief formations. The *eternal fires* Marco Polo reported about, in fact the gas seepages near Kirkuk in Iraq may be identified as the biblical *"fiery furnace"* where Nebuchadnezzar threw Daniel's companions Shadrach, Meshach and Abednego (Daniel 3:6-26). Asphalt, gas and oil seepages from the underground hydrocarbon deposits known for millennia were only indicative of the otherwise invisible, now globally important riches hidden under the visible surface of the land. Early twentieth century's oil explorers drilled their first wells close to the *great fires* which, Zoroastrians believed, existed since the creation and originated from Ahura Mazda. The first contemporary (re)discovery of oil occurred close to the former fire temple in Masjed-e Soleyman; Solomon's Mosque in Khuzestan, identified as the ancient Parsomash, Achaemenian Kingdom's oldest capital.

Visible landforms and invisible riches under their surface constitute the framework for human history and provide the material for human works. It is indicative for instance, how the river, the mountain and the desert, recently also the riches under the surface of the land, feature in the history of the Eastern Fertile Crescent. The earliest cities in Mesopotamia: Eridu, Uruk and Ur were founded when the Neolithic farmers from the

slopes of Zagros settled along the flow of Euphrates which changed the course later. Ever since the Sumerians, the radiant Mesopotamian culture has been exposed to the migrations, the military attacks and to the import of ideas from Zagros and from Arabia. The fact that natural riches are the reason behind the contemporary military operations, behind the spread of ideas such as democracy or behind the religious upheavals, needs no further explanation. Eclectic and sequential character of Mesopotamian history is associated with the uncertain flows and shallow riverbeds of Tigris and the Euphrates. Nile, whose riverbed is deep and stable and rhythm of flooding regular, gave birth to completely different Egyptian civilization. Reflecting the visible, repetitive order in nature, ancient Egyptians' precise ideas about the world and about the unity of the entire cosmos resulted with a unitary social system resistant to change. It took Egypt almost two thousand years after the death of Cleopatra to regain its political independence, but it is still there, concentrated along the south-north axis of Nile, the only reference within the vast Libyan Desert except the burning sky.

Fig. 49: OVERLAPS AND DELIMITATIONS: a collage map showing how the landforms shape history: white lines indicate the movement of the tectonic plates, coloured shading indicate the seismic hazard and gray shadings indicate the historical power cores.



Many more examples could be listed here which would manifest, how the landforms have been shaping the history of the Middle East. Comparative mapping of the historic power cores, the contemporary areas of political stability and tension, and the trajectories of tectonic activity proves that the character of this form - content relation is essentially architectural, extended at the vast territorial scale. That tectonic faults, rifts and belts, deserts, mountain chains and great rivers delimitate and overlap with the greater and the lesser historical power cores of the Middle East is not a mere coincidence.

Geographical references of the Middle East are firm mountains and high mountain peaks with distant views, fertile but narrow river valleys below, and vast and arid deserts with lush oases resembling the relentless seas with safe islands that surround the region. Possible scenarios for a mirage are many, yet the Middle East can be rather clearly delimitated from the sublime, elevated perspective. Unlike in Fernand Braudel's architectural definition of the sixteenth-century Mediterranean associated with a giant, naturally-walled pond with the dynamic, liquid element at its centre (Braudel, 1997), the physical edge is not always clear here.

Contemporary Middle East appears a predominantly solid, territorial phenomenon: an expressive landform surrounded and penetrated by greater and lesser seas, a giant field structured and stabilized in patterns, controlled and gathered together by a vast system of natural and artificial networks and nodes.

PATTERNS, NETWORKS, EXCEPTIONAL OBJECTS:

LANDSCAPE SCALE OBSERVATION OF THE MIDDLE EAST

"From his high perch, one sees before him and below him, a wall of dreary mountains, shorn of vegetation, glaring fiercely in the sun; it fences in a level desert of yellow sand, smooth as velvet and threaded far away with fine lines that stand for roads, and dotted with creeping mites we know are camel-trains and journeying men; right in the midst of the desert is spread a billowy expanse of green foliage; and nestling in its heart sits the great white city, like an island of pearls and opals gleaming out of sea of emeralds. This is the picture you see spread far below you, with distance to soften it, the sun to glorify it, strong contrasts to heighten the effects, and over it and about it a drowsing air of repose to spiritualize it and make it seem rather a beautiful estray from the mysterious worlds we visit in dreams than a substantial tenant of our coarse, dull globe...

(Mark Twain, The Innocents Abroad, or the New Pilgrims' Progress; *continues at page 105→)*

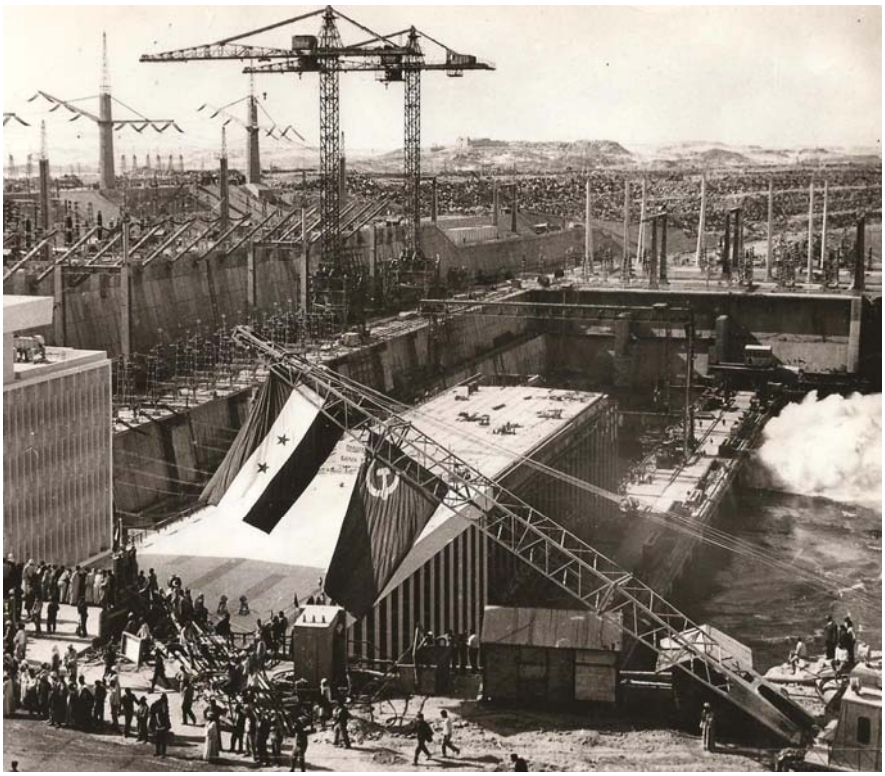


Fig. 50: GREAT INFRASTRUCTURAL OBJECT: Aswan High Dam in construction, 1968; perhaps the most important physical trace of the Nasserite modernization in Egypt, built with Soviet help between 1960 and 1970.

The mountain, the desert, the oasis, the *"great white city"*... the main features of the larger image are strongly present in closer and more levelled perspectives too. Yet, large as it is, when observed in greater detail, the contemporary Middle East appears a highly diversified geographic region. Objective physical characteristics of the landform such as relief, climate, soil composition and precipitation are subject to human intervention to an ever greater extent. Along with the strategic sites, the great infrastructural networks and objects such as roads, railroads and systems of pipelines for distribution and commerce of oil, and the large patterns of land-use for agriculture, mining, energy production, settlement and alike are main physical instruments for control of the fragmented territory, bringing the variety of Middle Eastern landscapes to form a coherent whole. Very often, their strategic performance surpasses the limits of the region.

Driven by the pure engineering logic, great infrastructural objects usually benefit from strategic positions they occupy, their visual impact being emphasised by the logical choice of site. Naturally positioned, sometimes they work as magnifiers of the natural properties of the site and, over the course of time, become native, blending with the site they were originally opposed to. Strategic screening is crucial by the positioning of military structures too. Moreover, military engineering is very often the driving force behind the large-scale human interventions upon the landforms, while some great formal performances upon the face of the earth usually reflect the desire to control the land. Not surprisingly, strategic positions today are same as in antiquity, as landforms change slowly, and qualities of splendid view and strategic importance usually coincide.

In *Innocents Abroad* (1869), Mark Twain travelled with a group of American tourists-pilgrims by land and by sea from Istanbul to Beirut, and then via Baalbek, Damascus, the Sea of Galilee, Jerusalem, and the Dead Sea to Cairo, to the Pyramids and to Alexandria. This amusing travelogue reads as an ideal and detailed landscape-scale section of the Middle East, in the passage from the Levantine Mediterranean coast, over the coastal mountain chains and valleys, the productive agrarian and free-range farming landscapes, through the historic cities, villages and archaeological sites far into the fertile oasis and the sterile deserts. Evidences of human intervention are sometimes almost invisible yet sometimes literally – the Pyramids – overwhelm the sight. Fascinated by the *"colossal ruins"* of Ephesus and Baalbek, the *"perfect monuments"* such as the Dome of the Rock at the Temple Mount, the *"beautiful"* historic cities such as Beirut and Cairo, and the timeless *"almost yesterday - as it were"*

biblical landscapes and sites dense with history, the writer was incapable to appreciate the *"war-like aspect"* of the vernacular architecture, the *"miserable villages"* built right next to the great ruins. In short, he was blind to the normal life of the Middle Eastern towns and countryside.

Prejudices, misconceptions and romantic ideas feature next to sharp auto-irony, refined cynicism and great precision, as Mark Twain was fully aware of the detached, sublime character of his and his companion's strange presence in the "TIMELESS LAND":

"But may be you can not see the wild extravagance of my panorama. You could if you were here. Here you feel all the time just as if you were living about the year 1200 before Christ – or back to the patriarchs – or forward to the New Era... the same impressive religious solemnity and silence rest upon the desert and the mountains that were upon them in the remote ages of antiquity, and behold, intruding upon a scene like this, comes this fantastic mob of green-spectacled Yanks, with their flapping elbows and bobbing umbrellas! ... My umbrella is with the baggage, and so are my green spectacles – and there they shall stay."

In spite or actually thanks to his green spectacles, some of Mark Twain's intelligent assertions still hold: how physically small is the actual Palestine, the land *"between Dan and Beer Sheba"* Moses saw from the Mount of Nebo, how great and heavy is its history, and how saturated it is with political and cultural tension. Mountain peaks and passes from where the writer observed the cities and the landscapes prostrated in the valleys underneath have been reappearing in the global history ever since, while the ruins of antique and medieval forts and castles he visited have been re-appropriated for their original, military purposes few times already. The great River Jordan whose actually modest dimension had not met great expectations of writer's childhood imagination has become even narrower following the excessive irrigation and massive migrations, while its global importance has grown beyond the biblical paradigm. In spite the growing masses of tourists, the out of scale ruins of the great empires he wrote about still remind of the fragility of the human condition while the said burial places of the patriarchs, just like the bunch of grapes Joshua and his companion spy brought from the land of Canaan, still feature much larger in children's Picture-Bibles than in the immanent space-time. Among the most interesting of Mark Twain's intelligent remarks are the ironic notions of the "*contrasted scenery"* and the *"denominational sightseeing"*:

Comparing the real Sea of Galilee before his eyes *"expressionless and unpoetical when we leave its sublime history out of the question"* (p507) with exalted descriptions of the same scenery from the guide books and itineraries his companion pilgrims carried along, Mark Twain concluded that beside the actual Palestine there exists the Presbyterian Palestine, the Baptist Palestine, the Methodist, the Episcopalian and the Catholic Palestine. When visiting famous places - if not already *"visited by St Paul"*, then certainly *"'mentioned' by Pliny"* - simple visitors see exactly what they are expected to see, incapable to detach themselves from concepts attached to the scenes before their eyes.

Seen from the "Western" perspective, the nineteenth century's "HOLY LAND" was a spiritual landscape of soul, a passage between Earth and Heaven, a set of places bound with meanings from the mythical past. In traditional Christian idea, nothing was supposed to change there as everything was considered finalized. In *Images and Metamorphosis of Erez* (*Imagini e Metamorfosi di Erez*, 1965) published by Vittorio Gregotti in Edilizia Moderna, Roberto Orefice contrasts this static idea of *"an international park of monotheism... a sort of enormous Disneyland"* to the dynamic projection of the "PROMISED LAND" of Israel which *"in 25 centuries in Diaspora never accepted to see in Erez the picturesque geography of a sacred story only"* (Orefice 1965, pp18-20), a view which finally resulted with promises from the Scripture brought alive by the resurrection of the modern State of Israel in 1948.

Figs. 51, 52: PROMISED LAND: Sakhne, Jezreel Valley, a saline spring artificially recreated into the Gan Haslosha National Park in 1960s (left); Shuneh refugee camp near the Dead Sea shores at the time of foundation of the modern state of Israel (right).

Metamorphosis of the landscape which immediately preceded and followed the foundation of the modern state was based on the pattern of new towns distributed upon the pre-existing network of Biblical sites linking thus the modern conquer to the mythical conquers of Joshua, itself morally justified by the encounter with the Land of

Canaan a couple of centuries earlier by the patriarchs Abraham, Isaac, Jacob and Joseph. Reasons behind this overlapping of the distant and the recent past were multiple (p17): millennia have left traces of different civilisations everywhere in this *"microscopic crossroad area defined already in the Proverbs of Salomon as the 'most antique layer of dust in the world'"*, archaeological campaigns discovering touristic attractions next to the new settlements offered possibilities for public works and new focuses of national reference for the settlers, micro topographies of the ancient settlements offered comparatively better climatic conditions than the surrounding barren land. Last but not least, there was the *"dramatic coincidence"* of the ancient and the new strategic positions for the military defence and attack.

Foundation of cities was paired by *"archaeological reconstruction"* and *"ecological – agricultural resurrection"* (pp34,35) of the agricultural patterns, again based on the archaeological traces: of the Nabataean irrigation systems in the Neg'ev desert and of the ancient stonewall terraces on the hillsides of Judea and Samaria. The imperative of military control of acquired areas has remained crucial until today, as the actual inhabitants of the "PRODUCTIVE LAND" who saw it primarily as a living landscape have not been willing to disappear. Disputed contemporary programme of illegal settlements at the West Bank may be seen as a perversion of the same logic of strategic screening and occupation of the land: As the hilltops were not suitable for agriculture, the Palestinians did not cultivate them and so they were seized by Israel and declared the state owned land. Overlooking the long-established Palestinian lowland communities, the new, purpose-built settlements are perched on the hilltops, intentionally laid out in order to maximize the beautiful strategic view (Weizman, 2003): *"There is a paradox in this beauty in that what is considered by the settlers to be a pastoral, romantic panorama is actually the traces of the daily lives and cultivation of the Palestinians, and the settlers both enjoy that view but simultaneously supervise it... On the one hand, the view creates for them a kind of biblical landscape that they admire, a way of life that seems to them more authentic. Yet they are, in fact, there to destroy and replace it."*

The dreamland, holy land, promised land or productive land of Palestine, *"no more of this work-day world, sacred to poetry and tradition"* (Twain, p 68) is a very important detail of the Middle East. It summarizes this complex *"geographical palimpsest"* of the region at large, which has been evolving over thousands of years of chronologically successive cultures and empires which have been partly erasing yet partly preserving the preceding patterns (Held & Cummings, p61).

Sequent possession, settlement and exploitation of the same territories by the successive empires and cultures throughout the Middle East has resulted in a complex heritage of the contested patterns overlapping geographically and historically, concerning (pp61-63):

(1) Culture and the overlapping religious, national, cultural etc interests concentrated around the sites and towns settled in ancient times: Jerusalem for Jews, Christians and Moslems, Mecca and Medina in Saudi Arabia for all Moslems, Karbala in Iraq for Shiite Moslems only..., along with many smaller pilgrimage destinations. The dispute over the visible archaeological or the invisible meaningful layers - which ones should be preserved, presented, reconstructed and recognized - may be illustrated with the Temple Mount, with *spolia* of the older structures preserved within the newer ones. On a much larger scale, it is indicative for instance, how the corridors of the ancient pilgrimage routes to Mecca, the mythical Hijaz railway whose construction by the Ottomans with the help of German and Austrian engineers was interrupted by Lawrence of Arabia, and the contemporary pipelines for distribution of oil all coincide;

Figs. 53, 54: CORRIDORS AND NETWORKS: Hijaz, Saudi Arabia: construction of the pipeline (left) and Hijaz Railway (right).

(2) Infrastructural corridors and networks: overlapping caravan routes, railways, roads and pipelines, irrigation systems and hillside terracing patterns developed over thousands of years into the productive landscapes. It is striking to which extent the modern economies rely on the ancient infrastructures and on the heritage of ancient technologies. The underground systems of Qanats in Iran proved durable throughout the millennia while the conquests by Hulagu (1258) and Tamerlane (1393) resulted not only in the plunder of Baghdad but also in the ravage of Mesopotamia so extensive that the roads and the open irrigation systems were not restored until modern times.

(3) Natural resources such as water deposits and flows, fertile soils, mineral deposits, oil and gas, controlled by vast infrastructural networks from the Roman aqueducts to the modern oil and gas pipelines. In an area scarce with water, the control over the water reserves is strategically crucial. Hence the superhuman-sized irrigation and energy production systems: the GAP- Southeast Anatolia in Turkey, the Jazirah system with the artificial Lake Asad in Syria and the Aswan High Dam with the artificial Lake Naser in Egypt, and the recent projects of desalination of the sea water in the Emirates and Qatar and the Red Sea - Dead Sea project in Jordan and Israel aimed at *making the desert bloom*; the idea brought to life at the large scale only in the Israel's Neg'ev desert. How strategically important are the systems for commerce and distribution of oil is best illustrated with the case of Iraq. Initially the Iraqi oil was transported to Tripoli and Haifa, later to Iskenderun, then to the Persian Gulf on Iraq's own territory, and after the First Gulf War to Saudi Arabia and to Baniyas in Syria.

(4) Strategic features of the landform: seas, straits, coastal plains, river valleys, the major trade and invasion routes. Open views from the Krak des Chevaliers castle in Syria, the rock of Masada in Israel or the fort of Kerak in Jordan, for instance, encompass both the ancient and the modern transportation routes.

(5) Cultural heritage in range from the historic landscapes and the wondrous, superhuman monuments such as the spiral minaret in Samarra and the ruins of Ctesiphon in Iraq to the minute prehistoric traces such as the graffiti in the red rocks of Wadi Rum in Jordan, and all many artefacts kept in the museums all over the world.

(6) Political and military conflicts based on whatever claims on the same portions of land, manifested in vast migrations, high population pressure and growth concentrated in areas such as the Gaza Strip with one of the highest population densities in the world.

The ancient Dream Land Mark Twain and many other travellers wrote about and the affluent, super modern "LAND OF IMMENSE POSSIBILITIES" lubricated by oil and gas extraction related wealth may be seen as two extremes of the total perspective.

Fig. 55: CORRIDORS AND NETWORKS: Kings Highway in Wadi Mujib near Kerak, Jordan, the Biblical River Arnon. This is the desert where the faithful led by Moses had to spend forty years before they were allowed to enter the Promised Land, with an artificial lake and beginnings of agricultural appropriation of the desert in the second plan, photo KI, 2009.

Fig. 56: PATTERNS OF LAND USE: Salt harvesting at the Lake Maharlu in Fars, 1976, aerial photograph by Georg Gerster published in Paradise Lost, Persia from Above in 2008.

Figs. 57, 58: EXCEPTIONAL OBJECTS: Spiral minaret in Samara, Iraq, a postcard from Le Corbusier's collection (up); Ahvaz Oil Collector, Iran, aerial photograph by Georg Gerster, 1977.

Figs. 59, 60: EXCEPTIONAL OBJECTS: Christo and Jeanne-Claude, The Mastaba, scale model at the proposed site near Abu Dhabi, project since 1977 (up); Mukawir in Jordan, a typical low-truncated cone of an archaeological tell created by human occupation and abandonment of the site throughout millennia, photo KI, 2009 (down).

Figs. 61, 62: EXCEPTIONAL OBJECTS: David Roberts, Pyramids of Cheops and Chephren (up) and Mount Sinai (down), from The Holy Land, Syria, Idumea, Arabia, Egypt and Nubia, 1842-49.

Resulting from the convergence of objective natural conditions and above listed heritage of historic patterns, the actual physical patterns of land use throughout the region differ strikingly. Productive landscapes range from the irrigated plots along the Nile, the croplands and the orchards on the Mediterranean coastal and sub coastal plains, the extensive wheat fields in Anatolia, and the terraced agriculture in Lebanon and in Yemen, to the desert rangelands of the wandering herdsmen of Arabia. In many areas of the Middle East, the nomadism and the nomadic pastoralism continue to exist next to the most sophisticated technologies of reclamation of the arable land. Knife-sharp dividing lines between the irrigated crops and the barren desert in the river valleys and along the roads connecting the cities in the Emirates, low and wide truncated cones of disposed leftover material from the open-pit mining of the phosphates in Syria, Israel and Jordan, patterns of large-scale salt farming on the Lake Maharlu in Fars, and fire landscapes related to extraction and processing of gas and oil throughout the region are among the most distinct landscape features of the Middle East.

An archaeological *tell* exemplifies the complex *"geographical – historical palimpsest"* of the same total perspective within a single object (Held & Cummings, p65).

Tells are common features of the Middle Eastern landscapes whose singular forms assemble natural and cultural strata, i.e. the geomorphologic and the geopolitical aspects of the Middle- Eastern reality. Semitic word *tell*; Arabic تلّ and Hebrew תֵּל, equal to *tepe* and *chega* in Persian, *hüyük* in Turkish and *kom* in Egyptian usage, commonly denotes an archaeological mound set up by human occupation and abandonment of a geographical site throughout many centuries; a really ancient site on which successive settlements were established on the debris of earlier ones.

Looking almost natural, a tell usually resembles a low truncated cone with a flat top and sloping sides. This typical form is the consequence of series of natural and historical strata accumulated over thousands of years, that often overlap horizontally, vertically or both, the height of the mound indicating the extent of time the site was occupied. Thousands of such truncated cones are scattered over the Middle East. Jericho, Babylon, and Troy are perhaps the best known ones. Strangely regular exceptions of the vast Middle Eastern landscapes, they appear clearly artificial only to the trained eye.

In architectural terms, the tells may be best described as semi-artificial mountains, akin to the very peculiar family of primordial architectural forms with little or no void contained: the ancient ziggurats, pyramids and mastabas. As many popular photographs of American skyscrapers from below would demonstrate, Cartesian towers belong to the same family. And there are more members to it, mythical and real, of which the Middle Eastern territories shows no shortage. Emphasizing their strong physical presence, the extreme natural conditions magnify their potentially sublime qualities. It would not be difficult to prove that the growing cities in the Persian Gulf feature unusual density of such artificial mountains, modelled after the ancient and contemporary models and ideas.

Desire to attract visitors is certainly not the sole reason for this particularity. Christo's Mastaba for Abu Dhabi, just a little higher than the Great Pyramid of Giza, is an extreme example. Having no interior and no purpose, it is not an architectural object and usual architectural evaluation criteria can not apply to it. Yet, it illustrates two architecturally relevant things very well. One is the relativity of scale, in other words, the close shift between the landform, the landscape and the object scales within the emptiness of the desert. Other is the specific logic behind the principle of bigness in architecture when confronted with its infinity.

The sole purpose of this and similar artificial mountains, from the distant and from the close perspectives, is to cause the memorable, Burkean sublime emotions and to trigger the wondrous, Kantian mathematically sublime experience, as described in another passage from the Mark Twain's travelogue (Twain, LVIII):

"At the distance of a few miles the Pyramids rising above the palms, looked very clean-cut, very grand and imposing, and very soft and filmy, as well. They swam in a rich haze that took from them all suggestions of unfeeling stone, and made them seem only the airy nothings of a dream...

... A laborious walk in the flaming sun brought us to the foot of the great Pyramid of Cheops. It was a fairy vision no longer. It was a corrugated, unsightly mountain of stone. Each of its monstrous sides was a wide stairway which rose upward, step above step, narrowing as it went, till it tapered to a point far aloft in the air".

Great pyramids in Giza, stepped pyramid in Sakkara, ziggurats of Mesopotamia and Iran, and many smaller structures such as the spiral minaret in Samara exemplify the human attempt *"to reach unto heaven"* (Genesis 11:4) described with the Biblical story about the Tower of Babel. On one hand they oppose the given natural surroundings, best evident in case of Pyramids raised at the limit of the desert. On the other, they mimic natural forms; the *"firm mountains"*; *"pegs"* pregnant with meanings, repeatedly addressed in Bible and Qur'an. The Middle East abounds in massifs and solitary mountains set up against vast horizontal plains: Antilebanon between Libanon and Syria, Kopet Dag and Alborz in Iran, Hijaz in Saudi Arabia, Jabal Hafeet at the edge of the Empty Quarter... Among the most exceptional in form and proportion are the ones referred to in the Scriptures: the volcanic cone of the Mount Ararat in Turkey, and the sharp Jabal Musa; the Mount Sinai on top of the Sinai Peninsula.

As patterns of interwoven natural conditions and human works continue to evolve, ways of perception and methods of shaping the romantic, the heroic, the symbolic or ultimately the productive landscapes are changing too. Recent history has moved our understanding of landscape from the static, traditional one ("how many centuries were needed for a virgin landscape to degrade through agricultural use to a barren desert?"), where time was far out of reach of humans, to a radically dynamic notion of territory that is actually evolving in front of our eyes ("how many years do we need to reclaim a polder or to colonize a desert?"). Fast pace of modernization processes with their striking reflections in the objective physical reality is another common characteristic of the territories of the Middle East. Reclamation of the buildable land from the sea and reclamation of the arable land from the desert are now happening in the real time. Contemporary developments in the Gulf are best proof for this: cities, infrastructural networks, and electric green artificial oasis in the middle of the desert. Looking at aerial images of the fast growing cities in the Emirates, one may never be sure what is the immediate reality, and what is a mere mirage.

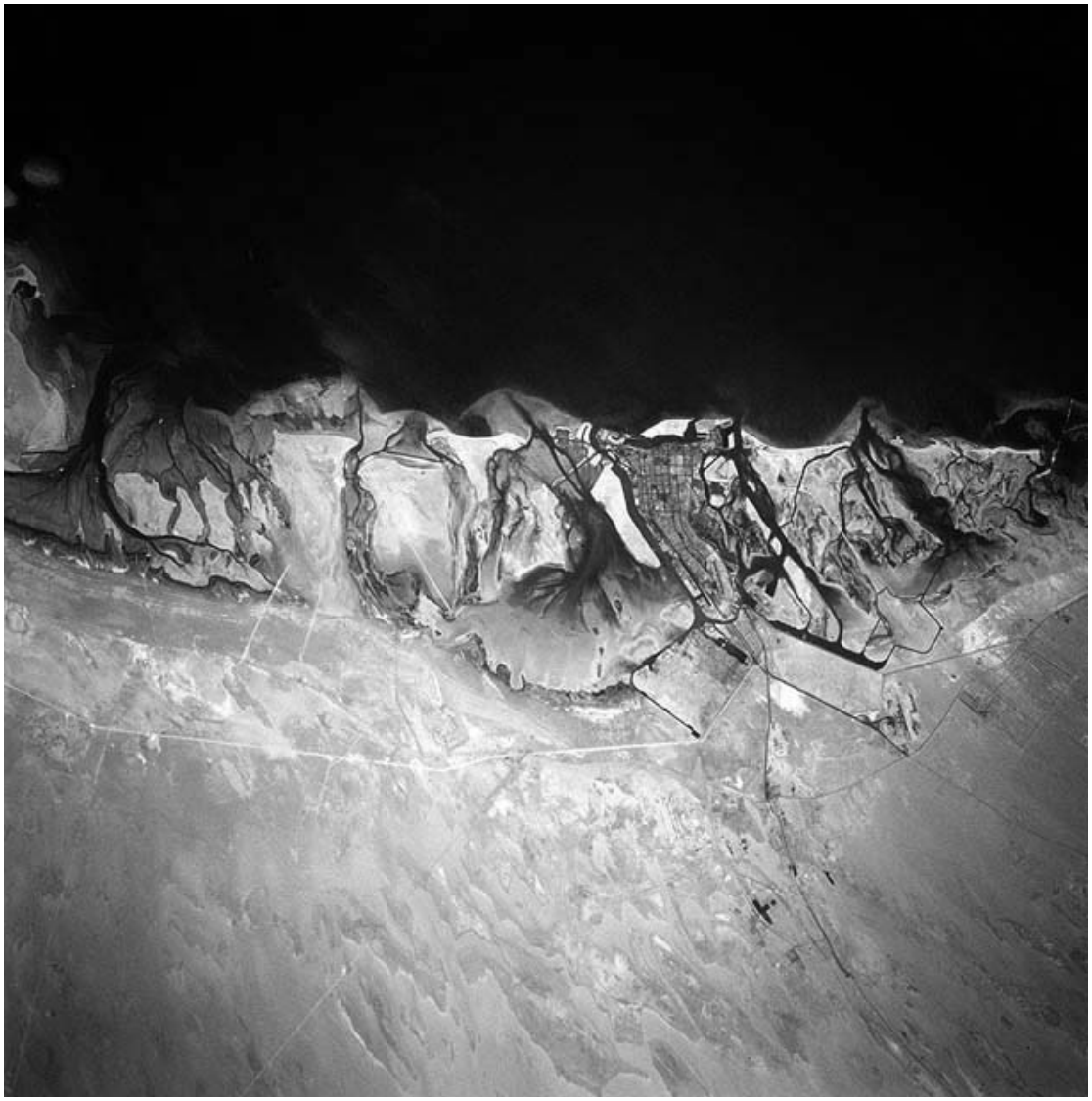


Fig. 63: REALITY OR MIRAGE: Abu Dhabi between the desert and the sea, a contemporary aerial view.

... And when you think of the leagues of blighted, blasted, sandy, rocky, sun-burnt, ugly, dreary, infamous country you have ridden over to get here, you think it is the most beautiful, beautiful picture that ever human eyes rested upon in all the broad universe! If I were to go to Damascus again, I would camp on Mahomet's hill about a week and then go away. There is no need to go inside the walls.

The prophet was wise without knowing it when he decided not to go down into the paradise of Damascus."

(Mark Twain, The Innocents Abroad, or the New Pilgrims' Progress, continued from page 91)

PERMANENCE AND TRANSIENCE:

URBAN SCALE OBSERVATION OF THE MIDDLE EAST

"'Is this the Damascus you've been telling me about, cousin?' Fawaz asked Suweyleh scornfully as they made their camels kneel. 'Shut up.' Suweyleh laughed. 'All places are the same.' He added, as if talking to himself, 'And this place is a lot closer than Damascus.'... It was like madness or magic. Men raced back and forth with the raging yellow machines that created new hills racing behind them. They filled the sea and leveled the land; they did all this without pausing and without reflection..."

(Abdelrahman Munif, Cities of Salt)

Figs. 64, 65: ON THE ROAD: Abu Dhabi, photo KI, 2011 (up) and Khartum from Christian Norberg Schulz's Genius Loci, 1980 (down): logical translations of the horizontal cosmic landscape into the urban skyline.

A very special network has been shaping human history ever since the beginnings of the permanent settlement. Extending to the most uninhabitable places of the planet, it dominates our age. Lewis Mumford claimed that the very first permanent settlement, moreover the first artificial landmark emerging from the nomadic culture *"mid the uneasy wanderings of Palaeolithic man"* was the city of the dead: *"a cavern, a mound marked by a cairn, a collective barrow"* (Mumford, 1968, p8), as recorded in Scriptures with the burial of Sarah in the cave before Hebron (Genesis:23). This intentional act, as Abraham insisted on purchasing the land and the cave on it for his wife's and his own burial, emphasized the stable and permanent physical form as opposed to the transient condition of nomadic life. Whether appropriated from nature or artificially constructed to mimic nature, such primordial forms are original manifestations of the complex dynamics which have been governing the patterns of human settlements until the contemporary, all-encompassing global network of cities.

Throughout history, all urban, that is cultural, political, and economical centres of the Middle East have been located in naturally fertile or artificially fertilized zones bordering huge deserts or similar arid zones: the urban culture in the close proximity to the culture of nomads. Titus Burckhardt described the parallel existence, the contrast and the occasional clashes between the sedentary and the nomadic cultures as one of the most important characteristics of the Middle East and the adjacent, predominantly Moslem areas spanning from Morocco to India (Burckhardt, p109):

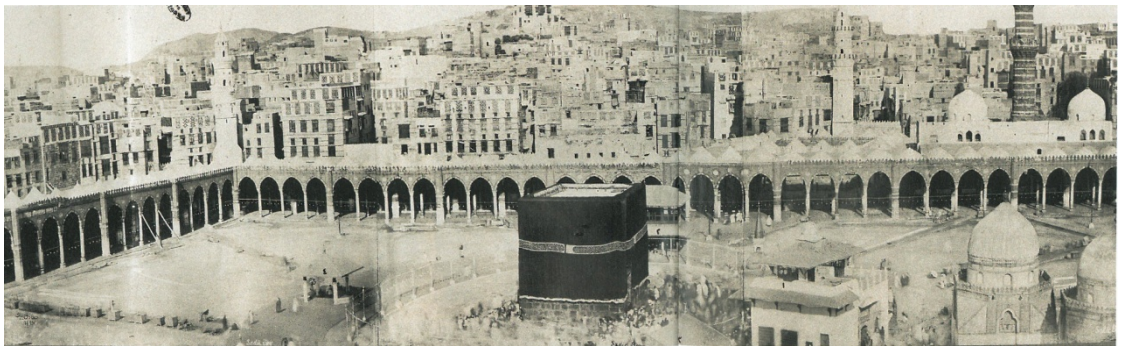
"The contrast between the sedentaries and the nomads is prefigured in the very geography of Islam".

Nomadic culture is detached from the ephemeral things; it is free in space, outside time and history, remaining always at the point where it began. Sedentary culture to the contrary is attached to the value of material things; it is restricted in space but it can rely on the recurrent terms of time. Nomadic and semi-nomadic invasions have been occurring within the overall demographic movements from the arid parts of the Middle East and the adjacent areas to the fertile ones, assuming the character of violent conquests *"only when the weakness on part of sedentary communities invites aggression"*. But the nomads are not the disinherited savages and their historical invasions never broke the continuity in the development of society, sciences and arts. To the contrary, they have strengthened it *"as if the breath from the desert has separated out what was most typically Islamic in them"* (p109).

Affirmatively, Burckhardt saw the nomad and the sedentary two different yet complementary halves of the totality that is humankind and the equilibrium between the two ways of life a cultural ideal exemplified in the HOLY CITY of Mecca (p110):

Surrounded by the fluctuating Arab tribes, it summarizes the true function of a city as an immutable stable point, while the yearly pilgrimage to Ka'ba at its centre transforms the transient human condition into a spiritual and spatial order which extends much broader than the immediate surroundings of the city to the whole of the humankind. Consequently, the Middle Eastern city must be seen as an artificial consequence of the extreme natural conditions, at the same time opposite and complementary to the nomadic way of life.

Figs. 66, 67: URBAN CULTURE SURROUNDED BY NOMADS: First known photographs of Mecca and Medina taken by the Egyptian photographer Mohammad Sadik Bey in 1881, with Ka'ba in the centre of Mecca and pilgrims' tents outside Medina.



Narrow line where the desert meets the sea: with all technical possibilities we have at our disposal today, it is hard to imagine a better place to solidify a mirage. Pure manifestations of architecture - primordial and *"ultimate"* (Koolhaas, 1994) at the same time - appear the most logical choices here, amidst the broad and horizontal cosmic landscape with little variation. In *Cities of Salt* (1978), Abdelrahman Munif writes of the disruption and diaspora of an oasis community of Bedouins following the discovery of oil in an unnamed Persian Gulf kingdom. The plot develops around the foundation of a coastal city in a place *"that no longer had a name since the houses had been destroyed and all the landmarks obliterated"*. New life starts from the scratch with bright future promised to everybody, radical changes happen practically overnight. Naturally, serious problems surface and great losses happen along that path. *"Damascus has seen all that has ever occurred on earth, and still she lives. She has looked upon the dry bones of a thousand empires and will see the tombs of a thousand more before she dies"*, wrote Mark Twain (p458) about the city which was already a couple of thousands years old when its end in a pile of ruins was prophesied by Isaiah (Isaiah:17). At first glance, something yet to become a city, such as the mythical Harran Munif writes about and any of the idealized Damascuses of the Old World have very little in common. However, processes usually implied under the vague notion of "modernization" that both paradigm- cities and cultural landscapes they belong to have undergone during the last decades, have brought them much closer, in terms of their contents and the material contexts they constitute.

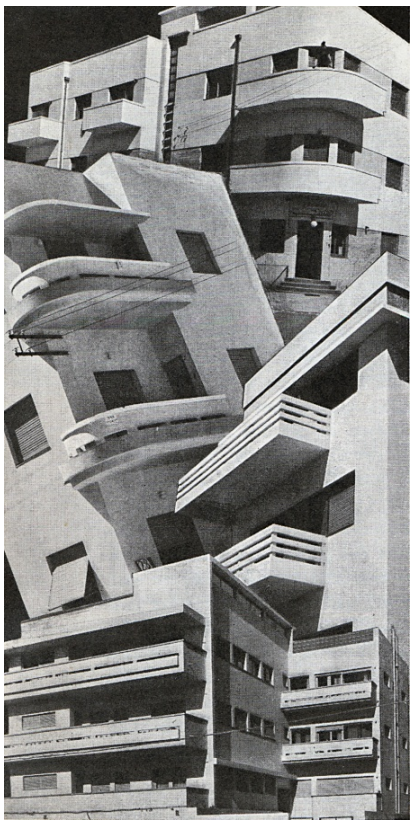
Growth of cities, construction of infrastructural networks, and the advent of the urban and territorial planning are some of the physical manifestations of the modernity, but are not its inventions. Moreover, the facts that cities are growing in a planned manner and roads and bridges are being constructed that connect them do not imply that the given society is modern in all its aspects. At least in the early stages, modernization processes often increase social disparities just like rapid industrialization and large-scale construction increase environmental perils. Modernization indeed has its victims and it provokes controversies at global and very local scales. Its effects can be disastrous for the traditional social structures and its often irreversible physical impacts can be disastrous to the urban and to the natural surroundings. Yet, the notion that modernized societies are wealthier and that their citizens enjoy higher standard of living and human rights with national wealth being spread more evenly still holds. Fast but discontinuous pace of modernization, with striking manifestations in physical reality is another common characteristic of different territories encompassed under the notion of the Middle East.

Very often, but not always, modern architecture and modernization have been closely related. Recent developments in supposedly modernizing societies once again challenge this historical affiliation. Relations between the modern, global architectural culture architecture and the Middle East have always been very complex and not free from prejudices regarding the issues of origin, authenticity, identity and alike. Some of the intensive encounters have left remarkable physical evidence:

Cairo was founded by the Fatimid dynasty in 962 close to the early Islamic Fostat and the ancient Memphis, meaning that its urban history dates back to at least 3000 BC. The “SUN CITY”, Heliopolis, was among the earliest urban landscapes of modernization in the Middle East. This district of Cairo was founded as a joint commercial enterprise of a Belgian industrialist and a member of the Egyptian social establishment in 1905. Originally populated by wealthy Egyptians and European nationals, after the Nasserite revolution it became home to Cairo’s educated middle class. Supposedly genuine “Heliopolis style” was developed as a highly eclectic combination of the Persian and the Moorish revivals, the neoclassical and the traditional Arabic architecture (Dobrowolska, 2006). But essentially, Heliopolis is not much different from any quarter of any European city that has undergone fast growth during the late nineteenth - early twentieth century globalization period.

Tel Aviv grew from the scratch without much organic relation to the history of the actual place where it was founded, on the beach close to Jaffa in 1909. The “WHITE CITY” founded to house Jewish immigrants from Eastern and Central Europe was built by architects-immigrants in what is today popularly referred to as the “Bauhaus style”, in fact the prevailing, standard 1920s to 1940s way of building in the countries where the immigrants came from. Still, facing the beach, some of its typical features associated with the beauty of the machine and with the sensations of velocity and travel such as the ribbon windows paralleled with the balconies that provide shadow, the flat roofs, and the general absence of colour fit logically into the dry and warm Mediterranean climate (Albert, 2003). Given the fact that much of modern architecture’s set of forms was derived from the observation of the vernacular architecture of the Mediterranean and the Middle Eastern regions, construction of such white cities along the Mediterranean shores was actually the return to the origins at least as much as it was the import of architectural forms from a completely different part of the world.

Fig. 68: HELIOPOLIS: Baron Empain's Palace photographed around the time of foundation, the eclectic "Helipolis Style"



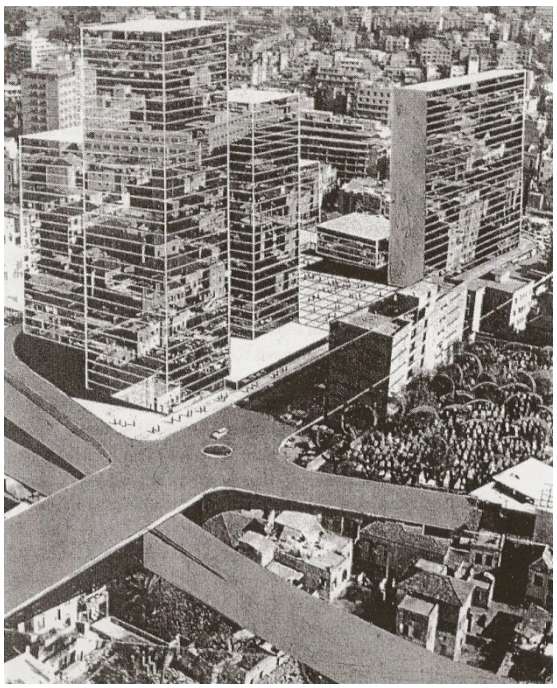


Fig. 69 (left): TEL AVIV MODERN: collage of white modernist buildings from the 1930s, the "Bauhaus Style".
Fig. 70 (right): BEIRUT MODERN: urban reconstruction "International Style" project by Michel Ecochard, 1963.

Beirut was first mentioned already in the *Tell el Amarna letters* around 1500BC. After the Romans, the Arabs, the Ottomans and the French mandate, in the fifties, the sixties and the seventies of the past century, the city has undergone fast development, thanks to its special ("Gate to the East", "Paris of the Orient") strategic position. The "International style" of this "MODERN CITY" was neither imported nor unauthentic to the specific place, especially because it was developed mostly by local architects, who more or less successfully, adapted the international-modernist set of forms and topics to the specific, tourism and leisure-related uses and to the Mediterranean climate (Arbid, 2005). The end of the Beirut modernism was only catalyzed by the breakup of the civil war as the modernism of this type ended elsewhere in the world around the same time. Yet the fact that modernist buildings have provided the suggestive scenery for the brutal war and that they were exposed to destruction first during the war and then to make place for newer constructions, emphasized the nostalgic understanding of modernist architecture. In Beirut, it reminds of the progressive times before the catastrophe, encouraging the renewed political – national modernization programme at the same time (Malkoun, 2013).

Heliopolis was a modern prosthesis to an ancient city; Tel Aviv was constructed from the scratch while the modern Beirut may be seen as a phase in the continuous development of the same historic city. *"The actual ruins, abundant and from multiple epochs, standardize the setting, giving it the tone of urban continuity characteristic of any historic city, traditional yet generic, understandable to everyone"* (Mateo 2013).

The ancient Philadelphia of the Decapolis system of cities at the Eastern border of the Roman Empire, destroyed in wars and natural catastrophes and forgotten for more than thousand years, re-appeared a century ago as a mere consequence of territorial disputes and political acts as the contemporary Amman. That an important city may withdraw from the physical reality into the legend, only to re-establish itself many centuries later as a metropolis struggling for the regional and global importance is possible only when natural and cultural conditions are brought to the extreme. The non-monumental character of this contemporary "CONCRETE CITY" (Al Asad, 2013) and its modest, surprisingly uniform "domesticated modern style" (Daher, 2013) are expressive of the events behind its modern foundation and the subsequent periods of the explosive growth. The refugee-camp reality preceded any planning here as its metropolitan area has been increasing horizontally and vertically with each political crisis in the surrounding countries: Palestine, Israel, Lebanon, Syria and Iraq.

Fig. 71: BEIRUT INTERRUPTED: Gabriele Basilico, Beirut 1991 (2003), ruins that standardize the setting

Fig. 72: CONCRETE AMMAN: a view from the ancient citadel of Philadelphia at the contemporary city built in the uniform, "domesticated modernist style" KI, 2009

As this short overview of some paradigm-cities situated in parts of the Middle East dense with history demonstrates, something like the "typical Middle Eastern city" never existed outside the touristic guide books. Yet, whether ancient and eternal, forgotten and then rediscovered, or entirely new and built from the scratch, the cities described here share some common characteristics. Traditional or modern, their overall forms are consequence of the complex sets of factors some of which such as geographical position and climatic conditions are relatively stable. Others, such as technological capability, social structure, political system and spatial requirements of the dominant religious system are revolving, sometimes also drastically changing over time. Mutable or permanent, those factors have strong physical imprints to the urban forms which can be recognized beyond the strictly typological terms.

Arguably, the common physical characteristics of the cities dating back millennia, those founded in the Medieval age or those founded just recently are consequence of the similar, extreme natural conditions and of the similar tradition expressed in the strong dichotomy, if not opposition, between the permanent and the transient, between the public and the private; one may say, between the domestic and the public parts of life (Khatami & Tawa, 2012). As any comparison between the black and white maps would prove, with mosques, palaces, citadels, bazaars and most of all with the inward-oriented residential quarters (Al Sayyad, 2009), the traditional Middle Eastern city represented a sort of spatial negative of the traditional European city, with solid – void relation turned inside – outside. Vast majority of black and white maps of the traditional Islamic cities displays on one hand the division between their commercial, representative and residential parts and on the other the strong but detached formal presence of *souqs*, *bazaars* and *awkaf* [2]; private endowments with public buildings of different kinds.

Continuity of form is most strongly expressed in the residential areas with labyrinths of narrow streets between houses oriented to courtyards or atriums, or between high garden walls. The absence of great open squares, except the mosque courtyards is the rule with very few exceptions. Measuring 160 to 508 metres, the Maidan Square of the Safavid Isfahan with the great gateway of the Shah Mosque at its end is an extreme example. But even there, the prayer hall is protected from the daily life of the immense square as it may be reached only at the end of the axial sequence of spaces inclined from the central perspective of the square to the *qibla*.

[2] plural of *"wakf"*

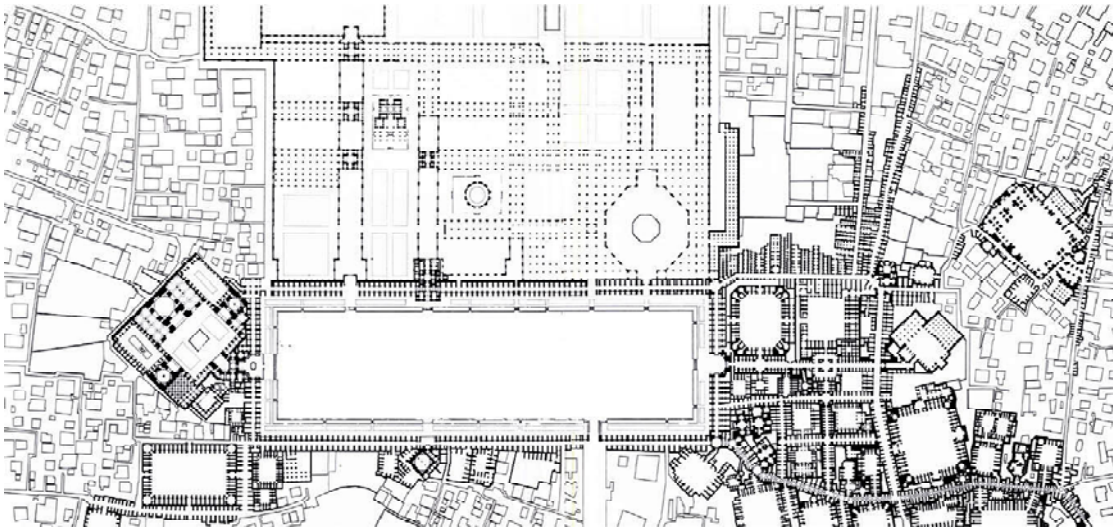
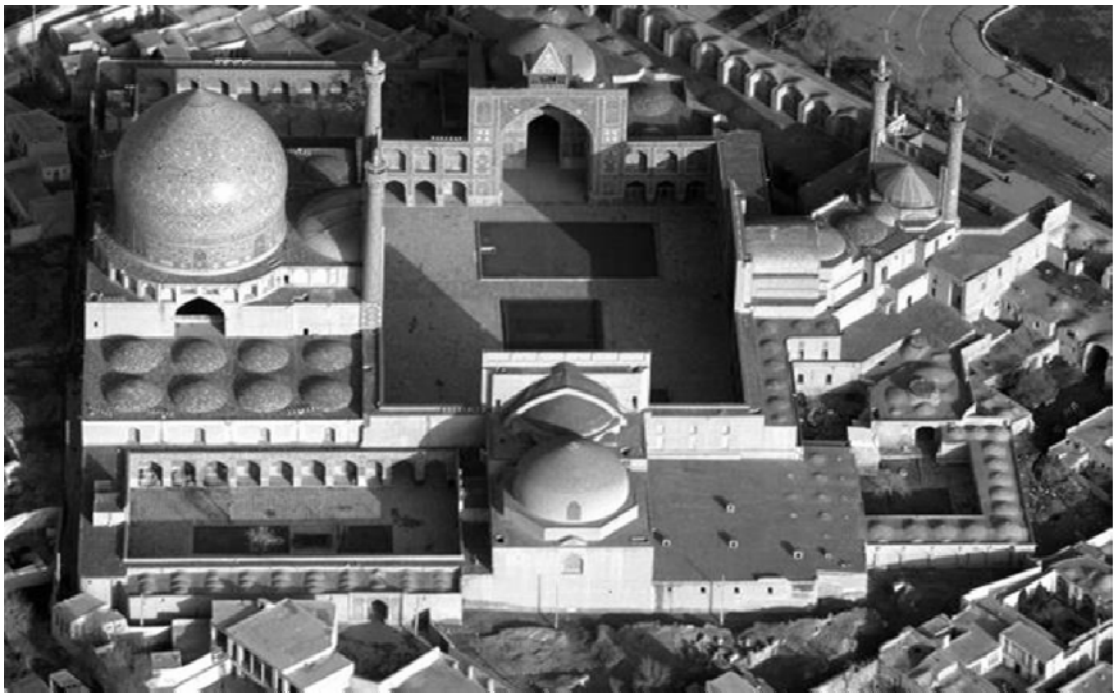


Fig. 73: SPATIAL HYERARCHY: The Maidan Square in Isfahan in the centre of the great urban scheme of the Shah Abas I, in fact a polo ground surrounded by a gallery of iwan niches with the Shah Mosque at the southern end (left in the image), the royal residence to the west (up in the image) and the bazaar at the northern end of the square (right in the image).

Fig. 74: SPATIAL HYERARCHY: The Shah Mosque, 1628 -1629, in an aerial photograph by Georg Gerster, displaying an inward oriented axial sequence of open and closed spaces connected by wide open bays and inclined from the axial perspective of the square towards the qibla. The prayer hall under the dome is at the end of the sequence.



If the "solid – void relation turned inside – outside" needs to be exemplified in a single building, the best example would be the Topkapi Palace Harem. This *"labyrinth of several hundred rooms, few of them very large, on half a dozen levels, of passages, stairways,*

courts and gardens, without any apparent plan" (Freely, p171) displays an architecture without exterior, more precisely without graspable outer shape but with very complex life and sensational materialization of the zenithal light inside (Torres, 2009).

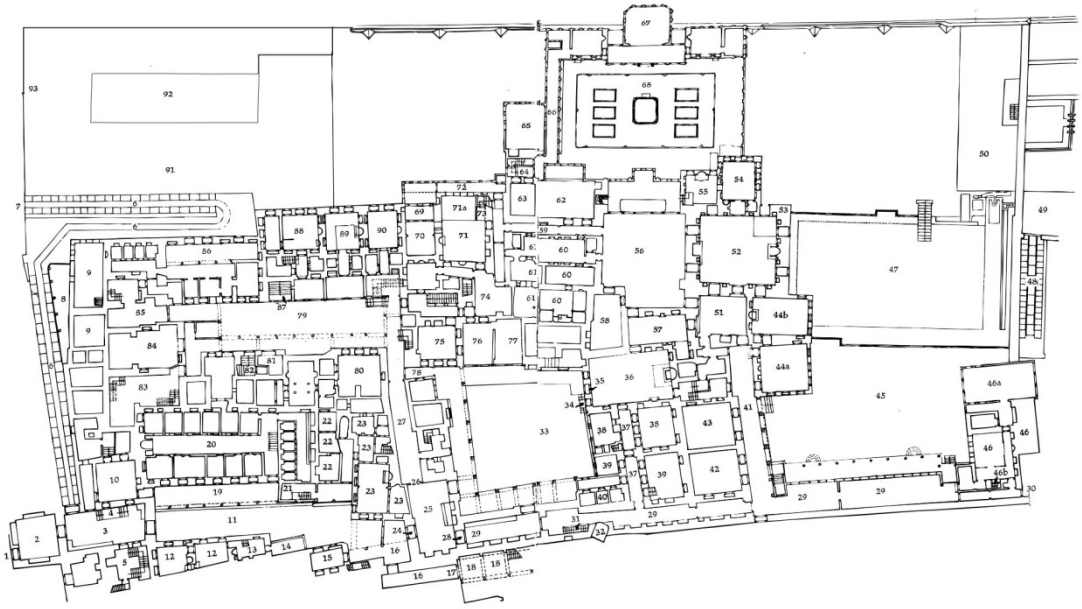
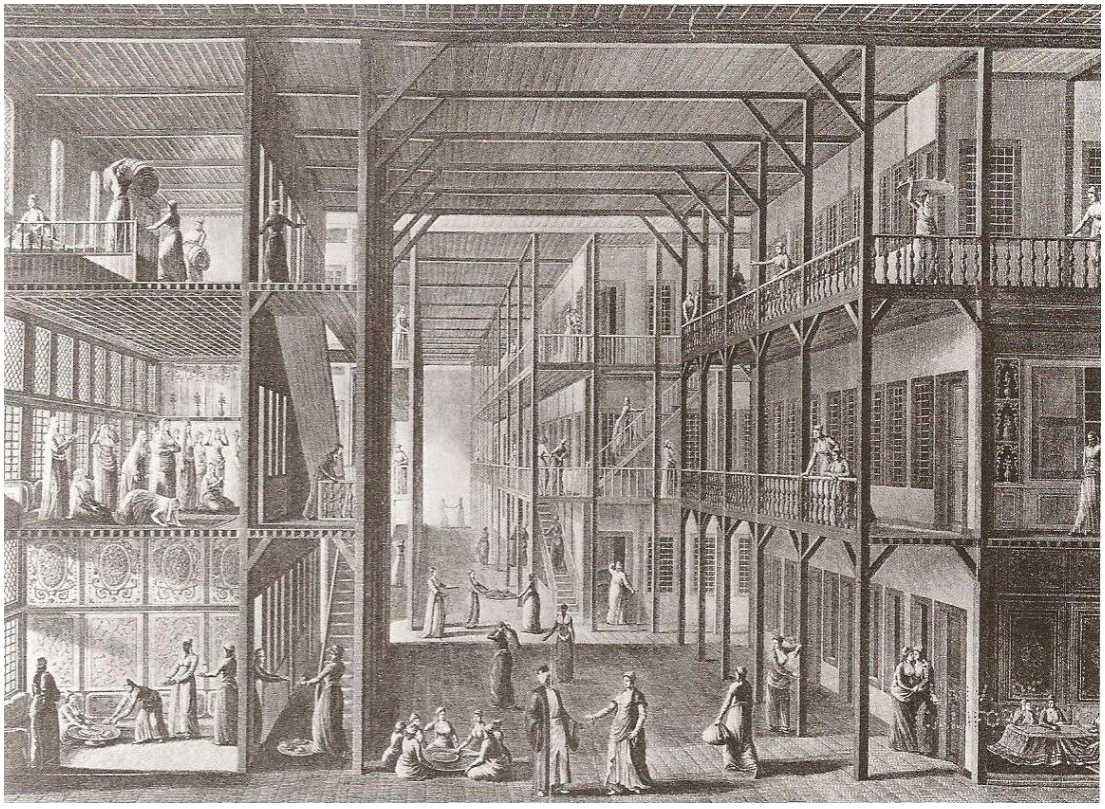


Fig. 75: ARCHITECTURE WITHOUT EXTERIOR: Topkapi Palace Harem in Istanbul, floor plan displaying an inward oriented labyrinthine system of open and closed spaces (up).

Fig. 76: ARCHITECTURE WITHOUT EXTERIOR: Anton Ignaz Melling, The Royal Harem, etching reproduced in Views of Constantinople and the Bosphorous, ca. 1815; an idealized interior perspective of the Topkapi palace Harem rendered by the architect appointed to the sister of the Sultan Selim III, explaining the inward oriented system in three dimensions (down).



Figs. 77, 78: EMERGING CITIES: On the Road Series: Saadiyat Island, Abu Dhabi, photo KI, 2011 (up); Earth Works Series: West Bay, Doha, photo KI, 2012 (down).

Such spatial generalizations apply to the traditional urban forms. In a more contemporary context, the permanent – transient, public – private, solid – void, transparent – opaque equation takes a more ambiguous guise (Kenzari & Elsheshtawy, 2003). Extreme natural conditions have not changed significantly, but technological advancement has made them far less immanent. On the other hand, the fast pace of modernization has strongly influenced the way of life.

Focal points of the Middle East have been constantly changing from the very beginning of time. Real and mythical places converged at points of high concentration, packed with promising future and glorious past, large in between areas remained virtually devoid – at least on the surface – of any interesting content. But the situation in the unstable centre of the Old World is likely to change, as we have seen many times. Discovery of oil, general technological advancement, and political pragmatism are only some of the reasons behind the shift of interest from the now *"struggling"*, most ancient cities in the world stretched along the Fertile Crescent and the Mediterranean shores to the *"emerging"*, artificial-breed cities in the Persian Gulf (Elsheshtavy, 2008). While Cairo, Damascus and Bagdad may have been the urban and cultural models for Kuwait or Abu Dhabi in 1950s and 1960s, the development model of the Gulf cities had great influence on the development in Beirut, Amman and even Istanbul over the past twenty years (Adanali; Adham; Arbid; Daher; Samhouri, 2013).

In the context of the last chapter of modernization, new cities in the Gulf were in the focus of architectural discourse until the inception of the 2008 financial crisis - Dubai in particular. Approaches to the *Dubai phenomenon* were basically two: the affirmative and the negative one. On one hand, it was promoted as a paradigm of our times by messiahs of neo-liberalism; on the other it was heavily criticized from the "leftist", socially concerned positions (Mateo, 2010). That a mere paraphernalia - an article published in a trendy magazine - provoked reactions from the most prestigious leftist intellectuals was possible only in a highly charged ideological discourse: *"If Rome was the 'Eternal City', and New York's Manhattan the apotheosis of twentieth century congested urbanism, then Dubai may be considered the emerging prototype for the 21st century: prosthetic and nomadic oases presented as isolated cities that extend out over the land and the sea"* (Katodrytis, 2005) vs. *"Yet the future that he* (the ruler) *is building in Dubai- to the applause of billionaires and transnational corporations everywhere- looks like nothing so much as a nightmare of the past: Speer meets Disney on the shores of Araby"* (Davis, 2006). *"The mirage"* vs. *"no mirage"*.

"It is a world without future", Tariq Ali replied when specifically asked, in the financial crisis context, if Dubai can survive (Ali, 2010). But the fact is that both radical positions share a common characteristic: they are easy to disregard for their one-dimensional, exclusivist understanding of the material facts. A more inclusive and form-based conclusion was promoted by Rem Koolhaas (2010):

"It is impossible to witness dawn across the Palm's organized tentacles without being moved by their sheer beauty, their weird poetry in numbers. The eye's journey from the Burj's base to its pinnacle has to traverse such a vast number of 'perspectival' conditions as have never before been offered in the history of mankind: a building where top and bottom belong to literally different worlds... Dubai's vision contained profound levels of reality... it has reached a point where it can only have a great future."

"FUTURE CITY" or "CITY WITHOUT FUTURE?" When drama is staged on the narrow coastal belt between the sea and the desert, its worldwide echoes acquire dramatic proportions. In a retrospect, the most interesting characteristic of the Dubai phenomenon was that it preceded the narrative. Before architects, planners, social scientists, prophets and theorists came, the city was already there. Reality came before any theory. The city and the strong myth around it were constructed, marketed, and sold globally by somebody else. No wonder then, that at its peak, the "Dubai model", including all the controversies, was simultaneously embraced as a developmental dream and disregarded as a frightening social nightmare, in "old" and "new" cities throughout the Middle East.

Logical and rational form of the Burj Khalifa tower which has made obsolete all other towers may indeed be seen as a *post- festum* conclusion of an era. Words of the ruler who enabled its construction inscribed by the visitor's entrance refer to the very existence of humans in this world, celebrating and banalizing it at the same time: *"From the earth to the sky; Aspiration and achievement – a shining symbol of what Dubai strives for and what we can accomplish"*. Sublime ambition behind the construction of this entire city is not readable in some authoritative urban plan, because there was none. But we see it – intentioned or accidental – in multiple *"perspectival conditions"* which unfold as we approach the city from the desert and our focus – the tower – remains unmatched till the moment we reach its base, from the moment it appears in the sight. Like the master calligrapher from Orhan Pamuk's novel, a visitor to the Burj Khalifa's panoramic terrace may finally enjoy the non-faked, *"promising new opportunities"* view of the giant *"oriental carpet"* prostrated before him (Angélil, 2006):

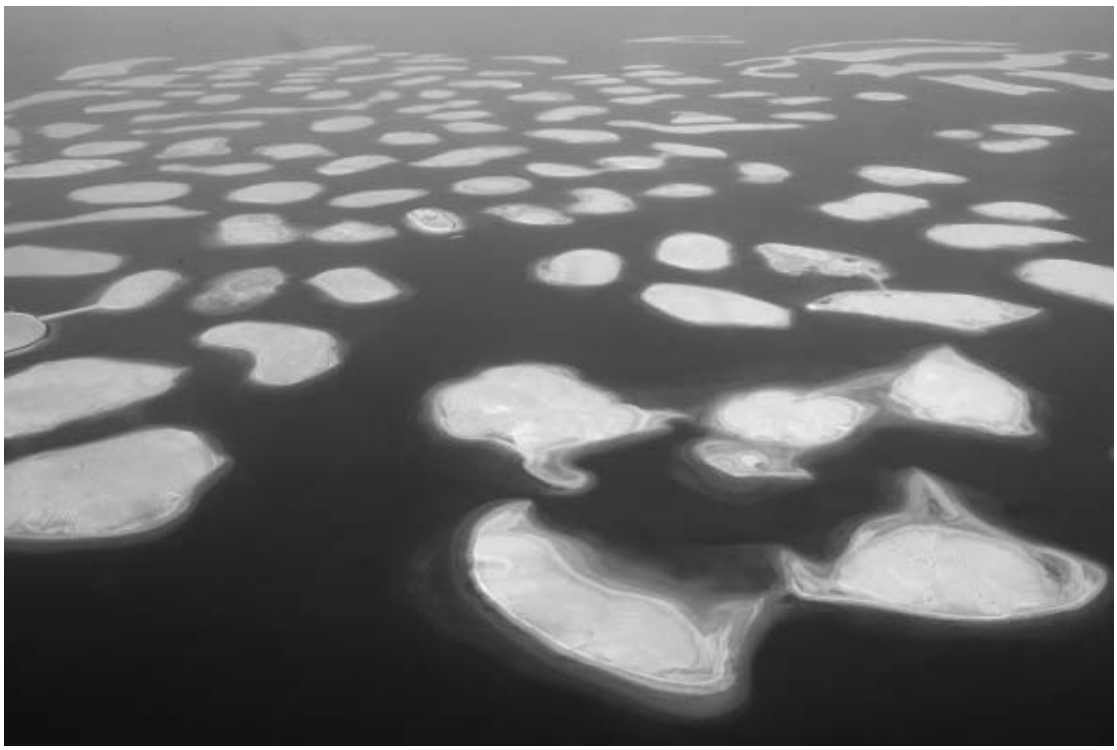
"Politics, economy and city converge. Just as the oriental carpet represents an idealized picture of the world, the urban fabric may be interpreted as a projection of the institutionalized worldly order... The flagship project par excellence is the so-called Palm, The Palm Jumeirah, whose media presentation insists on seeing the facility as an icon from a satellite orbiting the globe. The view from above, even if faked, underscores the sublime position of the viewer: the sublime perspective that allows one to look down on the world".

The tower gathers the city, the desert and the sea, extending the scope of architecture over the totality of the extreme landform, beyond the single object or the social model it stands for. On the other hand, the dust coming from the desert, the evaporation of the warm sea, and the dissolving World archipelago add to the sublime perspective a specific, uncanny flavour of decay (Qur'an 17:37):

And walk not on earth with haughty self-conceit: for, verily, thou canst never rend the earth asunder, nor canst thou ever grow as tall as the mountains!

Along with the exaltation, the Kantian "negative pleasure" is included in this large-scale, technology-dominated staging of the popular sublime.

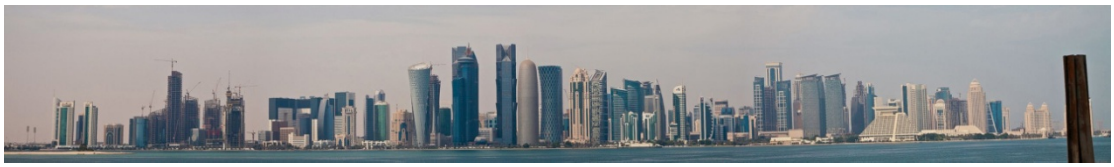
Fig. 79: "NEGATIVE PLEASURE" PERSPECTIVE: the decomposing World archipelago, Dubai , 2010s

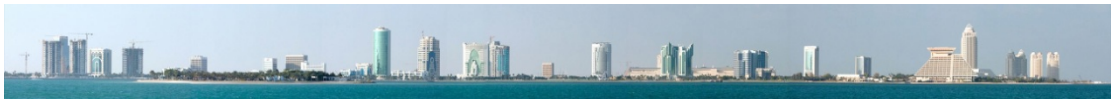


Arguably, Doha is the most artificial among the emerging Gulf metropolises with global ambition. The landform is low with almost no variation and naturally potable water is really scarce, the northwest-southeast wind *shamal* and the sandstorms are strong, the desert is sterile and extremely dry, and the vegetation is scant on *"the semi-island, peninsula of Qatar, a barren land inhabited by people who, throughout history, have always been able to support and rediscover themselves, by finding a product from the sea to sell: pearls, oil, natural gas, and today real estate"* (Adham, 2008).

Figs. 80-82: SPACE OF FLOWS: "DOHA AFTER"; an expressive urban form consisting of a moderated group of verticals, West Bay Business District skyline in 2013, 2010 and 2005.

Fig. 83: SPACE OF FLOWS:"DOHA BEFORE"; an inward oriented, horizontal and homogenous urban form, growing organically from the desert towards the open sea, Doha in 1946.





Natural riches under the shallow waters are really vast: the surface of the undersea North Field gas reservoir is approximately same as the surface of the peninsula, with proven reserves allegedly sufficient to support planned production of natural gas for the next two centuries! Qatar's drive from the extreme poverty to the abundant prosperity was radically short and fast; by the late 2000s its small population enjoyed the world's largest income per capita. Yet, Doha has not tried to rival Dubai quantitatively in the superlatives of the tallest building, the largest shopping mall, and alike. One may say that the gathering role of the single tallest tower in Dubai was distributed more evenly here, in construction of an ambitious but "normal" contemporary city. Ashraf Salama has compared Doha's recent development to a theatre performance (2013):

"Doha keeps positioning and re-inventing itself on the map of international architecture and urbanism with different expressions of its unique qualities in terms of economy, environment, culture, and global outlook... A narrative of Doha's contemporary architecture resembles a drama for theatre with performers contributing to scenes exhibited to the local public and the global spectator."

Beside the commercial real-estate developments, its global ambitions took actual physical forms in the establishment of the internationally recognizable cultural and educational institutions, in the development of the internationally relevant electronic media, and – most interestingly from an architectural perspective – in the construction of an expressive skyline and in the successful attempt at understanding and contemporary reconstruction of the vernacular (Jaidah, 2009).

Regardless their respective scales, both the homogenous West Bay skyline composed of steel and glass verticals and the homogenous horizontal pattern structured by the uniform adobe walls, *Doha After* and *Doha Before* (the discovery of oil), may be seen as group forms of the mathematically sublime: *"the space of flows instead of the space of places"*. While the contemporary, global, post-industrial growing city is a physical embodiment of *"the network society"*, the lost, traditional one emerged at the limit of what Manuel Castells designed as *"the fourth world"*: the nomadic way of life beyond the global dynamics and industrial society norms (Castells, 2000), including the spatial ones. The horizontal urban form is a continuation of the horizontal landform with clearly established limits of the inside while the dense agglomeration of the verticals may be seen as an artificial reference point, the compensation for the lack of natural elevations in the outside. Both inward-

oriented urban geometries resulted in the spatial negatives of the European city with solid – void relation turned inside – outside. They should be regarded as logical translations of the given physical conditions: the narrow line where the desert meets the sea in the harsh, extremely dry climate.

Emerging metropolis is magnified in multiple views from other parts of the city to the West Bay skyline and simultaneously in views from artificially conditioned interiors, where the windows cannot and should not be opened, of the towers which constitute that skyline. Firstly, there is the elevated position. Secondly, just like in King Vidor's movie staging of Ayn Rand's *The Fountainhead* (1949), there is *"the space of flows"*; the emerging city with other similar towers and the continuous low dense urban pattern behind. Finally, there is the overwhelming desert, and the tiny sheet of glass between the observer and the omnipresent particles of the desert dust: like in that fragile and transient Bedouin tent, formless from the outside and colourful from the inside - this time technologically magnified - the dynamically sublime meets the mathematically sublime.

Fig. 84: A VIEW FROM MY HOTEL ROOM SERIES: Renaissance Doha; technologically magnified encounter of the mathematically and the dynamically sublime, photo KI, 2011.

From the very beginning with Napoleon's military campaign in Egypt in 1798 and early Ottoman and Iranian modernization programmes to the contemporary developments in the Gulf, in Turkey or in Saudi Arabia, the Middle Eastern modernization has been predominantly an urban phenomenon and its physical form was predominantly urban. The modernization took its first large-scale urban form with Khedive Ismail's mid-nineteenth century "Paris on the Nile" construction of the new Cairo downtown (Adham, 2013). Its centre - the Tahrir Square - has been reappearing in the centre of the global media attention, at the safe distance on the other side of the screen, ever since the beginning of the "revolution" in January 2011.

Allegedly, it was the urge to expose the masses of people and thus prevent the revolution that prompted Baron Haussmann to rearrange and systematize the traffic, cutting the original boulevards and *étoiles* through the tortuous, medieval urban fabric of Paris. Some hundred and fifty years later, the global exposure of an *étoile* in the centre of the largest city, in many aspects the cultural centre of the Middle East, catalyzes a turbulent change whose outcome and scope remain unclear. As already seen in history, the physical, this time urban form, structures the linear progress of time.

Fig. 85: GLOBAL EXPOSURE: Tahrir Square, Cairo, February 2011.

SENTIMENTAL JOURNEYS:

FROM THE PICTURESQUE...

„Wer sich selbst und andere kennt, Wird auch hier erkennen:
Orient und Okzident sind nicht mehr zu trennen.“

(Johann Wolfgang von Goethe, West-östlicher Divan, 1819)

“Oh, East is East, and West is West, and never the twain shall meet, Till Earth and Sky stand presently at God's great Judgment Seat...”

(Rudyard Kipling, The Ballad of East and West, 1895)

Figs. 86-89: “THE LEARNED”, PICTURESQUE IDEA ABOUT THE MIDDLE EAST: Nicolas Poussin: Four Seasons, 1660-1640: Spring or The Earthly Paradise; Summer or Ruth and Boaz; Autumn or The Spies with the Grapes from the Promised Land; Winter or The Flood.

A very specific, picturesque idea about the Middle East existed in the European tradition ever since the Antiquity, especially since the spread of Christianity within the Roman Empire. Idealised mental projections of the Middle Eastern landscapes and cities constituted physical and meaningful contexts of the Old and New Testament's chapters and miraculous episodes from the lives of saints. Nativity scenes with landscape and architectural elements, sometimes entire cities, have been built every December as mock-ups or theatrical sets in churches and in open public spaces ever since the first, living nativity scene was set up by St. Francis of Assisi upon his return from the Holy Land in 1223. Depending on the historical period and on the mastery of the artist, depictions of the Middle Eastern landscapes bound to the religious themes range from very naive and symbolic to very accurate and realistic ones. Until the beginning of modern times, very familiar elements of these symbolic scenes were shaped upon very vague ideas of the actual places they resembled.

Experienced in arrangement of symbolic scenes and therefore rightly named *"the learned"* by James Thomson in *The Castle of Indolence* (1748), Nicolas Poussin painted *The Four Seasons* cycle shortly before the end of his life. Four biblical landscapes dense with iconographic references evolve in the four canvases not only through the four seasons but also through the four times of a day. *Spring* depicts a morning scene in the Earthly Paradise before the original sin was committed with Adam, Eve, the Tree of Knowledge, and the Creator, detached from the scene about to happen, up in the clouds, surrounded by light. In *Summer*, Ruth the Moabite kneels before Boaz in the scenery which could be best described as a harmonious, classical landscape under the midday sun. *Autumn* with long afternoon shadows is illustrated with the iconic picture-Bible image Mark Twain wrote about, of Joshua and Caleb bringing the monstrous bunch of grapes from the Promised Land. As a logical end before the new beginning of the day-year-life-history cycle, *Winter* is illustrated with a night scene of the Great Flood amidst the dreary, stone desert landscape with drowning sinners and snake omitted in the Earthy Paradise scene in the front plan. Far away, appearing from the darkness is the Noah's Ark.

All four paintings feature very similar compositions of masses: the rocks, the trees and the architectural elements surrounding the biblical event. The middle plan is always left open, only to frame the mythical mountain (the Mount Sinai, the Mount Ararat...) in the back. As if in an oversized eighteenth century garden, the sublime detail is ending the perspective. The might of nature lurks behind the scenes as the "*rude Mountains frown amid the skies"* (Thomson, 1748).

This *"learned"*, picturesque perspective was given a more accurate, scientific substance with Napoleon Bonaparte's campaigns in Egypt (1798–1801) and Syria (1798- 1799). Like in European lands conquered by Napoleon's armies, French rule in the Levant and in Egypt was short but its impacts were far-reaching. An important aspect of the military expedition to Egypt was that it included a great number of scholars. *Institut d'Égypte* with Napoleon as vice president was founded in 1798, and its epochal scientific findings about geography, history, natural and cultural heritage published as *Description de l'Égypte* between 1809 and 1829.

Such an unprecedented deployment of intellectual power in a military campaign was interpreted either as an indication of Napoleon's dedication to the principles of Enlightenment or as an essentially imperialist act of *"describing, classifying, settling and finally ruling over the Orient"* (Said, 2003). It marks the beginning of narratives about the scientific rationalization of the Middle East from the European and the insider's own perspectives. The modern, scientific "discovery" of *Orient* increased the interest for everything *Oriental* among the general public, especially among the European artists, writers and intellectuals. Nineteenth century's Romanticist literature, art and architecture are hard to imagine without the idea about the Orient around them, institutionalized in a number of *Oriental Institutes* and *Oriental Collections*, described and classified in *Oriental itineraries* and *Oriental catalogues*. One of the most prominent Romanticists' interests was the interest in the origin of things including the origins of architecture. Europeans of the period saw the Middle East a place different and exotic yet adjacent to Europe; the source of their own civilization.

A long sequence of scientific discoveries and sentimental journeys, recorded, published and sold in ever more popular travelogues, maps and itineraries, was to follow. British traveller Claudius James Rich visited Damascus around 1806, begun the archaeological excavation of Babylon in 1811–12 and visited Persepolis in 1820. German orientalist Ulrich Jasper Seetzen travelled to Smyrna, Aleppo, around the Dead Sea and to Transjordan where he discovered the ruins of Gerasa in 1806, then to Sinai, Cairo and Fayum, from Egypt by sea to Jidda, ending his travel in Mecca in 1810. Among the earliest modern travellers to the Middle East was also Johann Ludwig Burckhardt, Swiss scholar who has left detailed accounts of his travels to the Levant and to Arabia around 1810. He visited Lebanon, Damascus, Palmyra, Egypt and the Sinai Peninsula, rediscovered the ruins of Petra forgotten for Europeans ever since the Crusades, and made the pilgrimage to Medina and Mecca following the traditional Hijaz route.

Revived interest in biblical archaeology and geography was paralleled by foundation of various Catholic, Protestant and Orthodox institutions; American, British, German, French and Russian foundations in the Holy Land. American scholar Edward Robinson's exploration of Palestine from 1838, published as *Biblical Researches in Palestine, the Sinai, Petrae and Adjacent Regions* in 1841 restored their Biblical names to the actual sites. Scottish painter David Roberts visited Biblical lands in 1830-40s, and became internationally famous for his lithographed views published as *The Holy Land, Syria, Idumea, Arabia, Egypt and Nubia* in 1842-49. His drawings executed in much the same watercolour medium on buff or grey paper that Ruskin favoured not only established the *"prototypical language for the rendering of desert subjects, using ochre washes over the mid-toned ground for the sandy landscape, and opaque white highlights for the reflection of a glaring but muffled sun"* (Wilton, p34) but also associated meaningful names with very accurate images, bringing the Middle Eastern places closer to the general public in Europe and in Americas.

In 1831, Rifa'a al-Tahtawi returned from his studies in Paris where he was sent with a group of students by Muhammad Ali, to be appointed the director of the *School of Languages* in Cairo. He was involved in translating the European books into Arabic and in writing about the Egyptian pre-Islamic history there, introducing to the modern Egyptians the ideas of the Enlightenment and international modernity together with the enlightened understanding of their own past. In 1861, while on a military duty, the Egyptian army colonel and photographer Muhammad Sadiq Bey gave a detailed description of the pilgrimage route and the Hijaz coast and mountains, and took the first known photographs of Medina and Mecca...

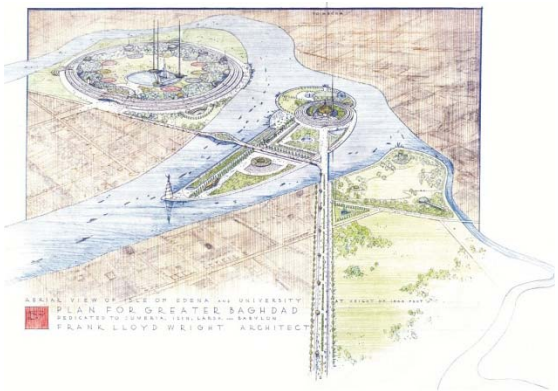
Although vast portions of the Middle East were left "undiscovered" until far into the twentieth century - the Empty Quarter was scientifically described only in 1930s by British explorers Bertram Tomas and St. John Philby, for instance - by the time Mark Twain visited the Holy Land, the idea about the Middle East consisting of different, parallel and crossing narratives was already constructed by innumerable humble pilgrims, romantic adventurers, brave soldiers, dedicated scientists, common tourists, disguised spies, *Wanderers* and *Orientalists* of all kinds, who have seen and described the places dense with history from many different, often contrasting perspectives. But unlike explorers, conquerors and missionaries in the New Word who never knew what to expect, the modern explorers of the Middle East were visiting places anything but empty and already known. The modern "rediscovery" of the Middle East required more complex perspectives.

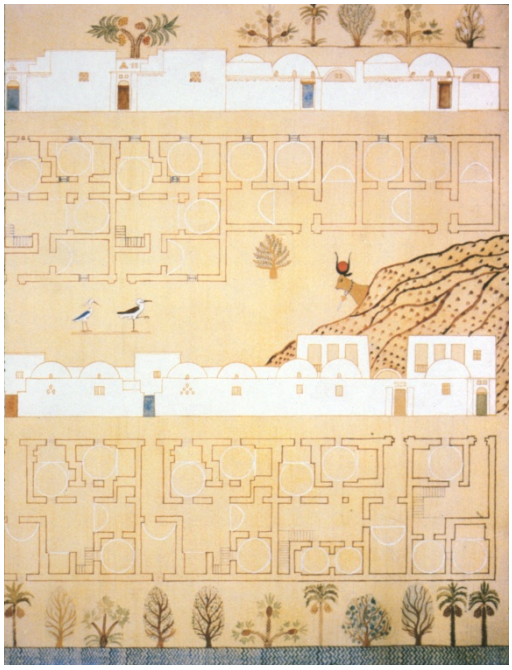
Johann Wolfgang von Goethe's and Rudyard Kipling's words illustrate two opposite, early-modern relations to *the other* which worked to define *the self*, according to the post-modern critique such as Edward W. Said's *Orientalism* (1978). The other and the self converge to eventually become a more complex one, or stay in separate compartments forever, as if human reality could be divided into clearly different cultures, traditions, and societies or even into completely separate histories. Said criticized the Orientalist approach - *"None of the Orientalists I write about seems ever to have intended an Oriental as a reader"* - as a colonialist way of coming to terms with the Orient based on the Orient's special place in the European, "Western" experience. In the afterword to the 2003 edition, a sort of reflection to many interpretations of his book, Said quoted Giambattista Vico's *"human history was made by human beings"* (Said, 2003, p329), pointing that whoever controls history controls future, and that the struggle for historical meaning mimics the struggle for actual territory. Indeed, the orientalists were *"anxious to bring everything down to the historical level"* (Burckhardt, 2006). The same applies to the post-modern critiques of Orientalism too.

In the Middle East, the twentieth century has begun with the decomposition of the Ottoman Empire and the struggle for its heritage but the modernization of newly established national countries did not run continuously. By the 1970s, the Middle East was drastically changed: from the petrified place frozen in biblical times where nothing ever changes to the site of superpower struggle and great economic opportunity where everything is possible (Wright, 2008; Pappé 2009). Parallel development of architecture could be described as a discontinuous transition from the "Orientalist" (*Levantine*) architecture associated with the colonial times first to the "Modern" architecture associated with liberation movements and modern nation-building, and manifested in construction of new metropolises, with "Regionalist" variations in transformations of the historical sites, and later to the "Post-Modern" rediscovery of historical narratives which ended either in the "generic" – "iconic" opposition related to the fast economic growth enhanced by the rise of the globalized economy, or in the formalist "Islamic" architecture with strong emphasis on "tradition" and supposed "authenticity" opposed to the annihilation of the past. Certain moments of this exciting development (Khan, 2000) outlined here only briefly, had global resonance.

Two dynamically sublime views through window frames of machines in motion marked the beginnings of two architectural narratives with global scope which have been shaping the Middle- Eastern landscapes and cities ever since:

In the initial chapter of his *Architecture for the Poor* (1973), Hassan Fathy gave a very picturesque account of his early childhood's *discovery of the countryside*: *"I had always had a deep love for the country, but it was a love for an idea, not for something I really knew. The country, the place where the fellaheen lived, I had seen from the windows of the train as we went from Cairo to Alexandria for the summer holidays…"* (Chapter 1. Prelude: Dream and Reality). His social- architectural experiment in New Gourna was only partly successful and yet, Hassan Fathy's *ideal vernacular* was parent to an important trajectory in the development of the Middle- Eastern contemporary architecture. It should not be disregarded as pathetic or unconscious of the objective material reality. Beside its social aspects, beside the sound criticism of the construction industry and land speculation, beside the revival of the craft, with this and later projects, Fathy has put a strong emphasize on the issue of sustainability seen as an ancient wisdom incorporated in forms of vernacular architecture.





Figs. 90, 91: ARCHITECTURAL NARRATIVES: Frank Lloyd Wright, Plan for Greater Baghdad, 1958 (left); Hasan Fathy, New Gourna from Architecture of the Poor, 1969 (right).

Shortly before the military coup of 1958, King Faisal II has invited an international group of architects to "*bring back the city of Harun al Rashid today"*. Frank Lloyd Wright was assigned a site for an Opera house in the downtown Baghdad. *"But as he flew over the city, Wright spied a low island in the Tigris, and soon asked if he could use that instead. Reportedly, the king replied, 'The island, Mr. Wright, is yours!'"* (Matthews, 2003). Wright's *discovery of the metropolis*, a truly grandiose project for much more than just an Opera house, he was hoping would encourage democracy in a (re)emerging

society, was aborted by a sudden political change (Pappé, p148). Yet, it was precedent to a long series of *iconic projects* based on the enormous wealth related to the discovery of oil throughout the Middle East. Echoes of Fathy's and Wright's "discoveries" still linger, both in the discourse on architecture and in the physical world of construction, much closer to reality but too often devoid of noble concerns and utopian aims of the pioneer Wanderers.

From Edward Said's and for his followers' perspective, the sole purpose of Orientalist's interest in the Orient was, if not to colonize, then to dominate it. From this positions, the post-colonialist critiques of the understanding of the other as "exotic" often take architectural mock-ups of the Orient in the Fairs and Exhibitions popular at the time as a proof of colonialists' unholy intentions, although, associated to the Orient or to the institutions dealing with it, in terms of symbolic form being structurally detached from its content, the "Orientalist" architecture of the late 19th Century was not substantially different from the contemporaneous, historicist mainstream. Thirty years after the first publication of *Orientalism*, the "Orientalist" and the "Post-Orientalist" (Post-Colonialist, Post-Modern etc.) discourses still dominate politics, economy, and humanistic studies (Pappé, p4):

"The modern history of the Middle East has begun with Napoleon's invasion of Egypt in 1798, and then entered what modernizationists define as 'transitional' period – in between tradition and modernity. Here it remains stuck today."

Social concerns do not translate into architecture directly, but contemporary discourse and practice of architecture in the Middle East cannot be immune to the explosion of narratives concentrated around the set of oppositions such as "enlightenment" vs. "tradition", "modernization" vs. "authenticity", "universal" vs. "regional" or "local" identity (Adanali et al., 2013). This is perhaps the reason why the representational aspect is so strongly present in the contemporary "Middle-Eastern" architecture, enclosed within its own, hermetic set of oppositions such as "new" vs. "old", "generic" vs. "iconic", "high- tech" vs. "vernacular" etc.

As if blind to the immediate context, unable to detach themselves from such conceptual simplifications, vast majority of architects practicing in the area remains stuck within the representational, picturesque pastiche. A more drastic opposition to the given natural conditions and to the positive architectural tradition specific to the Middle East would be hard to imagine.

... TO THE SUBLIME

„Intellektualistische Vorstellung“

(Le Corbusier, under a sketch of an Ottoman tile depicting the Ka'ba , 1911)

Figs. 92, 93: WARP AND WEFT: Typical early 20th century “warp and weft” woven carpet with abstract geometric patterns from Serbia or Bulgaria (up) and Le Corbusier’s Contemporary City for Three Million Inhabitants, an ideal “warp and weft” urban plan displaying abstract geometric patterns of cruciform skyscrapers, orthogonal meandering blocks and greenery, axially and diagonally symmetrical, 1922 (down).

Fig. 94: ELEVATED PERSPECTIVE: "Ville Contemporaine", Le Corbusier's perspective of the Contemporary City for Three Million Inhabitants; vertically extruded "warp and weft" plan, 1922.

More *useful* than *sentimental*, a very special journey to the Orient was at the origin of modern architecture: Le Corbusier was only in his early twenties in May 1911 when, after the trip to Italy, the practice in Paris and the trip to Germany, he set off for the final part of *le voyage utile*; the memorable one-year journey which was going to determine his perspective on things and fundamentally influence his architecture. He filled small sketchbooks along (Jenger, p25):

"The reason for drawing is to interiorize something one has seen, to make it part of one's personal history. Once things have been absorbed by means of the pencil they remain inside one for life; they are written indelibly, inscribed".

As we know from the history of modern architecture, his personal perspective on things was about to attain the global scope far beyond the *"personal history"* of a single human. It was a journey not exactly to the Middle East but to the Central-Eastern Europe, to the Balkans, the South of Italy and to the Asia Minor, but not further than Bursa. Perplexed by the ardent Mediterranean sun, Le Corbusier discovered vernacular architecture of Ottoman countryside in Serbia, Romania and Bulgaria, precise geometry of Ottoman mosques in Istanbul, simple austerity of the monastic life on the Mount of Athos, perfection in proportion and form on the Acropolis of Athens. He photographed and collected artefacts, and produced a vast plenitude of writings, drawings and watercolours, perspective sketches, elevations, sections and plans.

His travelogues were printed in local newspapers in Chaux-de-Fonds already during the journey. Collected and edited, he published his notes, articles and illustrations in the book entitled *Journey to the East* (*Voyage d'Orient*) only in 1966 (1987). Ever since, architects, architecture historians and other Le Corbusier enthusiasts have been investing great efforts into comparative interpretations of his formative years' sketches and notes related to the actual buildings, projects, paintings, lectures and manifests produced during his fruitful lifetime (Jencks, 1973; Çelik, 1992; Kries, 2007):

Origins of Le Corbusier's *Five Points* (*Les 5 points d'une architecture nouvelle consequence des techniques modernes*, 1933) were found in his drawings of the cantilevered Ottoman mansions of Istanbul or in inspiration taken from the limewhite houses of simple peasants in Bulgaria while his large scale compositions of basic volumes were associated to the sphere – cube geometry of the great mosques built by *Mimar* Sinan. His watercolours of the Doric orders of Parthenon were compared to the massive *pilotis* of his *Unités*, exemplary models for the picturesque collection of forms on the roof terrace of the Marseilles block were found in the collection of vases Le Corbusier purchased in Serbia. From the elevated, sublime perspective of this dissertation, some other comparisons and relations come to mind. Exemplary models for his radical urban schemes with Cartesian skyscrapers and even for the floor plans of the skyscrapers (cruciform, lens-shaped etc), may thus be found in abstract and colourful geometric patterns of woven carpets he has seen and purchased while travelling the former Ottoman realm, in towns and countryside of Greece, Turkey, Serbia and Bulgaria. Le Corbusier has admired the Serbian folkloric art: kilims from Pirot (*"Pirottenteppiche"*), peasant costumes and pots in the Etnographic Museum in Belgrade at the very beginning of his journey (Blagojević, 2003, pp4-5), as very suggestive lines from The Decorative Art of Today (*L'Art décoratif d'aujourd'hui,* 1925*)* read (Le Corbusier, 1987, pp198-200):

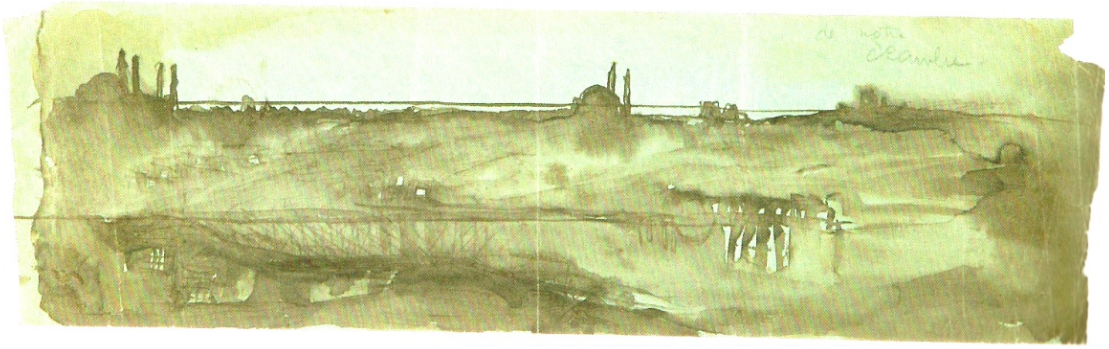
"The popular arts, pots and carpets at the Etnographic Museum of Belgrade... what lessons, what lessons! What drawings, conscientiously putting and then answering questions with the precise outline of an eloquent form."

However, from our particular perspective, of all his *"useful"* experiences, the encounter with Istanbul was certainly the most significant one.

Situated at the north-western edge of the Middle East, contemporary Istanbul stretches along the Bosporus and far into the hinterlands on the European and on the Asian sides, with more than fifteen millions inhabitants. Its population was less than half a million a century ago. The ancient Byzantine capital on the Golden Horn with great Ottoman mosques, domes and minarets crowning the heights was still there when young Le Corbusier, in different techniques, repeatedly drew its skyline (Le Corbusier, 2002; Carnet 3, pp37-41). Just like Mark Twain's *Pilgrims*, he knew what to expect and his expectations were high (Le Corbusier, 1987, p85):

"I want Stamboul to sit upon her Golden Horn all white, as raw as chalk, and I want light to screech on the surfaces of domes which swell the heap of milky cubes, and minarets should thrust upward, and the sky must be blue..."

Figs. 95, 96: FIGURE-GROUND vs. SKYLINE: Istanbul at the time of Le Corbusier's visit: Le Corbusier's watercolour of the Golden Horn skyline from 1911 (up)and a black-and-white city plan from 1906 (down).



... thus he made it sure that his first impression of Istanbul be from the seaside. Reportedly, the he sky was grim as it rained that particular day and Le Corbusier was disappointed at first (Çelik, p61): *"I had to work at it... and most of all I wanted to love this place"* (Le Corbusier, 1987, p88). But, at closer observation, his curiosity and great expectations were satisfied. Paired with the expressive topography and the exciting skyline, the figure-ground plan of Istanbul displayed a specific urban reality completely different than that of any other contemporaneous European capital. We may find its reflection in Le Corbusier's theoretical urban scheme for the centre of Paris, the *Plan Voisin* (1925), a sort of spatial contextualization of his earlier *Ville Contemporaine* scheme for a contemporary city for three million inhabitants (1922).

Firstly, there was the separation of the representative, the commercial and the residential areas with the late composed of the continuous urban fabric of gardens and houses hidden behind the high walls. Le Corbusier could have observed the figure - ground relation turned inside - outside also at the bazaar, an old and rotten but still working *machine* for commerce in its own right. Then there was the old royal palace on the strategic peak of the peninsula, and finally, the detached presence of mosques and their endowments with schools, hospitals, markets and *hammams* in scales ranging from the small-town neighbourhood to the metropolitan skyline. In final years of the collapsing Empire, the Ottoman capital resembled a cluster of towns of wooden houses fragmented by ruins from different epochs and towered by heavy stone masses of great mosques surrounded with their *kulliyāt* (Burckhardt p203). In Le Corbusier's words (1987, pp98-102):

"Stamboul is a closely knit agglomeration; every mortal's dwelling is of wood, every dwelling of Allah is of stone… it hangs against the side of this great hill like a suspended carpet of violet wool blended with tints of emeralds; the mosques on the crests are its prestigious fasteners. Here are the only two types of architecture: the big flattened roofs covered with worn tiles and the bulbs of the mosques with minarets shooting up."

Sharp delineation between *"wood"* and *"stone"*, the transient and the permanent, is best illustrated with Le Corbusier's photograph of the great fire over the Golden Horn which he witnessed from the safe distance of his room's terrace in Pera (Kries, p174). From this sublime perspective, the skyline is reduced to the fragment of the expressive topography, with a silhouette of a single dome and two minarets *"shooting up"* against the terrifying source of light.

Fig. 97: TRANSIENT vs. PERMANENT: Le Corbusier's photograph of the fire over the Golden Horn taken from the terrace of his room in Pera, 1911. The skyline is reduced to a fragment of the topography with a single dome and two minarets set against the terrifying source of light.

Mosques of the Classical period of Ottoman architecture (Freely, 2011), especially those designed by Sinan and the *Imperial Body of Architects* during the reign of Suleiman the Magnificent and his heirs indeed surpass their immediate surroundings by all criteria. Reflecting general concerns around the construction of mosques discussed earlier, their overall forms rely on the precise geometry adapted to the actual topography, on the logical distribution of loads, when observed in greater detail also on the dematerialization of the heavy mass through the volumetric composition and the surface treatment, and on the careful mediation of light. Hierarchical pyramidal composition of masses, resulting with the mountain-like appearance from the distant and from the close perspectives is paired in Sinan's capital works by the lightness of the vast void contained inside.

One of the aims beyond the construction of Süleymaniye was to match the greatness and the splendour of one thousand years older Holy Wisdom, itself a pyramidal, *"corrugated mountain of stone"* (Mark Twain's description of the Pyramids in Giza, LVII) with one central dome, two lateral semi-domes and subordinated load distribution members, spatially appropriated into the Islamic realm by sole replacement of the Pantocrator fresco in the central dome by the *Surah of Light* (*An-*

Nūr, Qur'an 24; Burckhardt, p162). Hence the plan was chosen, allegedly upon the request of the client (Günay, 2006, p76), and the site on the hill which is topographically closing the Golden Horn peninsula. Disposition of the courtyard, the schools, the *hammams* and other buildings of the complex surrounding the mosque, alternating heights of the minarets… everything contributes to the sublime sensation of a sphere sitting on top of a hill. This artificial mountain detached from the daily perspective on things dominates the skyline.

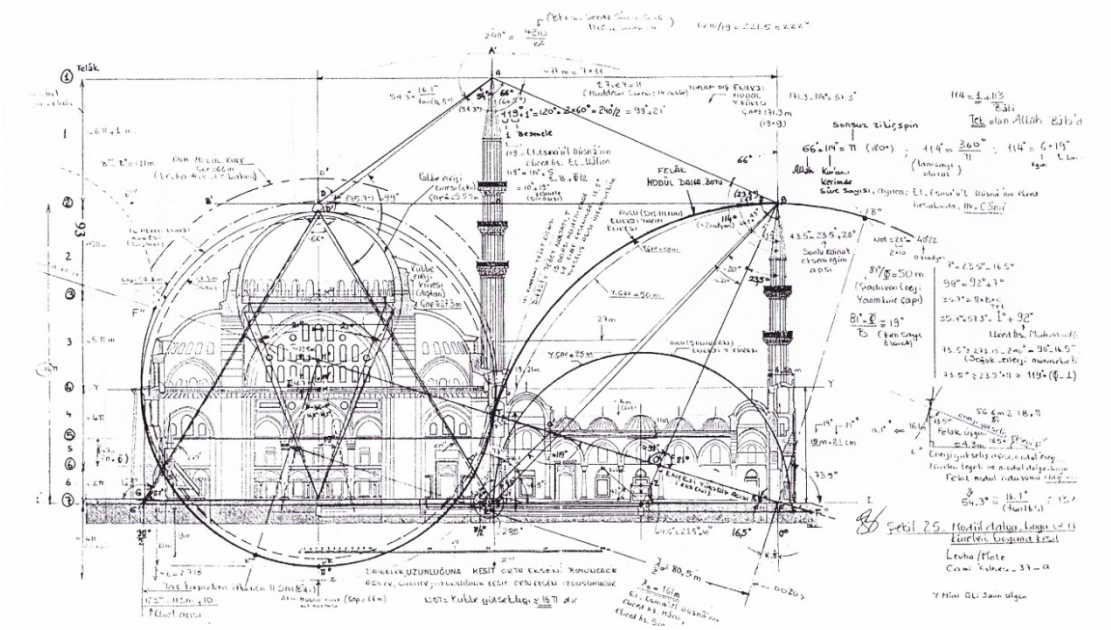
Its interior is a vast, almost square room with plan indeed similar to that of Hagia Sophia but without galleries and, because the columns are so high and so far apart, without any real barrier between the walls and the central area. Le Corbusier described it as *"an immense and definitive impression owing to the perfect square that one beholds in its entirety"* (Kries, p171). Calculated to perplex the imagination, the space is centralized and continuous, and not cut in sections like that of Hagia Sophia (Freely, p251). As narrated in the first volume of famous geographer Evliya Çelebi's *Book of Travels* (*Seyâhatnâme*, 1630), it demonstrated the improvement of knowledge and wisdom, the domination of reason over our senses (Freely, pp 246-247):

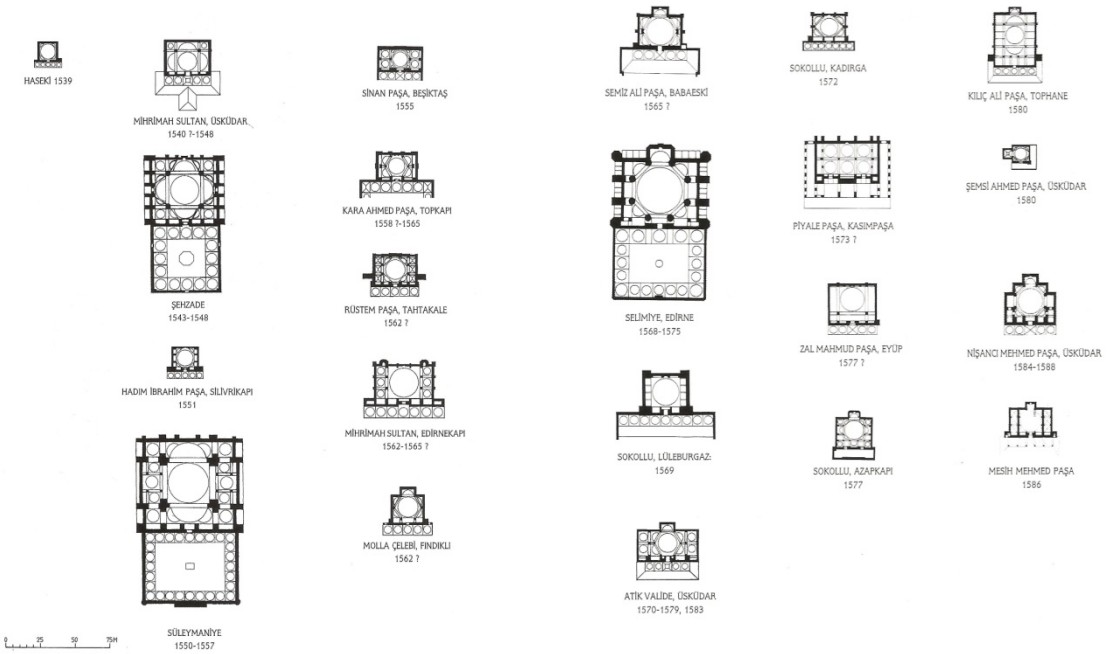
"The humble writer of these lines once himself saw ten Frank infidels, skillful in geometry and architecture, who, when the doorkeeper had changed their shoes for slippers and had introduced them into the mosque, laid their fingers on their mouths, and each bit his finger from astonishment when they saw the minarets; but when they beheld the dome they tossed up their hats and cried Maryah! Maryah! and on observing the four arches which support the dome … they could not find terms to express their admiration, and the ten, each laying his finger on his mouth, remained a full hour looking with astonishment on these arches…
… I then asked them what they thought of this mosque compared to Ayasofya; they answered that Ayasofya was a fine old building, larger than this and very strong and solid for its age, but that it could not in any manner vie with the elegance, beauty and perfection of this mosque."

In Sinan's words (Günay, 2006, p94):

"There is one thing that is well known by engineers and those deal with architecture. While buildings in the style of the Ayasofya have lacked elegance, I, the subject of Süleyman Han, have completed the construction of the Şehzade Mehmed Mosque, a pioneering example for his glorious buildings (the Süleymaniye). In this building, all of the fine arts have been put to the service of this project in perfect harmony."

Buttresses are incorporated into walls and masked with ornaments and with arcaded galleries between the buttresses to emphasize the unity of the interior space, while bright carpets and suspended chandeliers emphasize the continuous horizontal extension…





Figs. 98, 99: "PERFECT HARMONY" and PERFECTION OF TYPE: Geometric relations and ideal proportions found in the section of Süleymaniye: the pyramid contained within the interior space, geometric centres of the composition, relations between the minarets, the mosque and the courtyard (up); scale comparison of the centralized floor plans of the mosques designed by Sinan or under his control, 1538 – 1588 (down).

… the *"perfect harmony"* may be found in numerical proportional relations between the main elements of the composition, revealed in the analysis of sections and plans of the mosque, the minarets and the courtyard, or in the comparison of the base angles of the void pyramid contained within the vast interior space and the actual, solid pyramids of Giza: the number π, the earth's curve angle, the natural e logarithm, the Fibonacci sequence… the golden ratio *"symbolizing the optimum equilibrium wave length of the entire universe and providing the movement of all occurrences at optimum conditions"*… one anonymous, ecstatic text found on the internet even states that the *"measurements of the spaces within the mosque demonstrate that these spaces are the same as those using in the calligraphic writing of the word 'Allah'"* (Anonym, 2014). Curiously, Le Corbusier recorded the particular materiality of the sound of this word with sketches he drew along the notes about his visit to the Dervish lodge in Üsküdar (Le Corbusier, 2002, Carnet 2, pp93-97). Such speculative readings of actual architectural forms may speak less of real intentions towards the sublime from the side of the architect or the ruler who ordered the construction of this mosque, than of the sublime experiences of the enthusiastic observers.

A much better proof that Sinan really attempted at the perfect harmony, better proportions, lighter interiors, and the overall spatial unity is revealed in the comparison of this mosque and mosques he built for other members of the royal family. This extended mental and spatial exercise into perfection of the centralized type reflects the determination of the architect to substitute the acquired idea of the universal space with ever more reduced solutions with ever more emphasized structural members (Radović, 1989, p68): Şehzade mosque (1548) has four lateral semi-domes, Mihrimah Sultan mosque in Üsküdar (1548) has three, Süleymaniye (1557) has two while the Selimye in Edirne (1575) has none, just a single central dome with small niches on the sides.

Sinan was already fifty years old in 1538, when he took the head position in the Imperial Body of Architects, an institution attached to the Royal Court, in charge of practically everything related to the Empire's civil engineering, urban development and architecture: water supply and sewage systems, roads and pavements, building regulations, permits and control, fire safety, standardisation, quality and price control of building materials etc. The chief architect was assisted by the water supply chief, the chief of apprentices, the chief lime-worker, the warehouse director and first secretary, the first architect, the deputy architect, the director of repairs and many

master architects, qualified builders and artisans, as well as stewards an foremen employed to monitor their activities. The Imperial Body of Architects functioned as an educational institution too, responsible also for construction of bridges, forts and other military structures in war times (Günay, p11). Given the quantity of bigger and smaller mosques and other public buildings to be constructed by Sinan or under his control during the next fifty (!) years throughout the Ottoman realm, his attempt at the perfection of an architectural type must also be seen as instrumental in a much larger attempt: architecture employed in rationalization and formalization of the vast expanding Empire.

In the photograph showing the Rustem Paşa Mosque elevated on the platform over the profane daily life of the dirty market in the first plan and the Süleymaniye sitting on the top of the hill and dominating the skyline in the second plan (page 60), Ara Güler has captured the detachment of the mosques from their immanent physical surroundings. His photograph of the steep passage leading to the courtyard in front of the mosque Sinan made for the grand vizier Mehmet Paşa Sokollu in Golden Horn's Kadirga area proves that the flatten perspective of the Ottoman miniature painting characterizes the best works of the classic Ottoman architecture too.

"Intelektualistische Vorstellung" (Kries, p180; Çelik, p63); this is how young Le Corbusier described this rational and analytic way of spatial depiction of the world seen from above. We read this note under his sketch from yet another of Sinan's mosques, of a ceramic tile presenting the Ka'ba from an elevated perspective. Here, at the very origin of modern architecture, we find the sublime, penetrating and rectified view from above, detached from the *"simple perspective of the mutt or the shop clerk... attained by drawing none other than a horizon line"* (Pamuk, p83). We find it in many of Le Corbusier's projects too and, finally and not coincidentally, in *Mise au point*, the last Le Corbusier's statement issued only a couple of weeks before he died (Le Corbusier, 1965):

"The straight line linking the fundamental laws – biology, nature, cosmos – must be rediscovered. Like the sea's horizon, this line can be inflected..."

Le Corbusier has put a postcard with it in *La Ville radieuse* (1933), but it was not only its *"simple, cubic form"* (Çelik, p63) which attracted young architect to the Ka'ba.

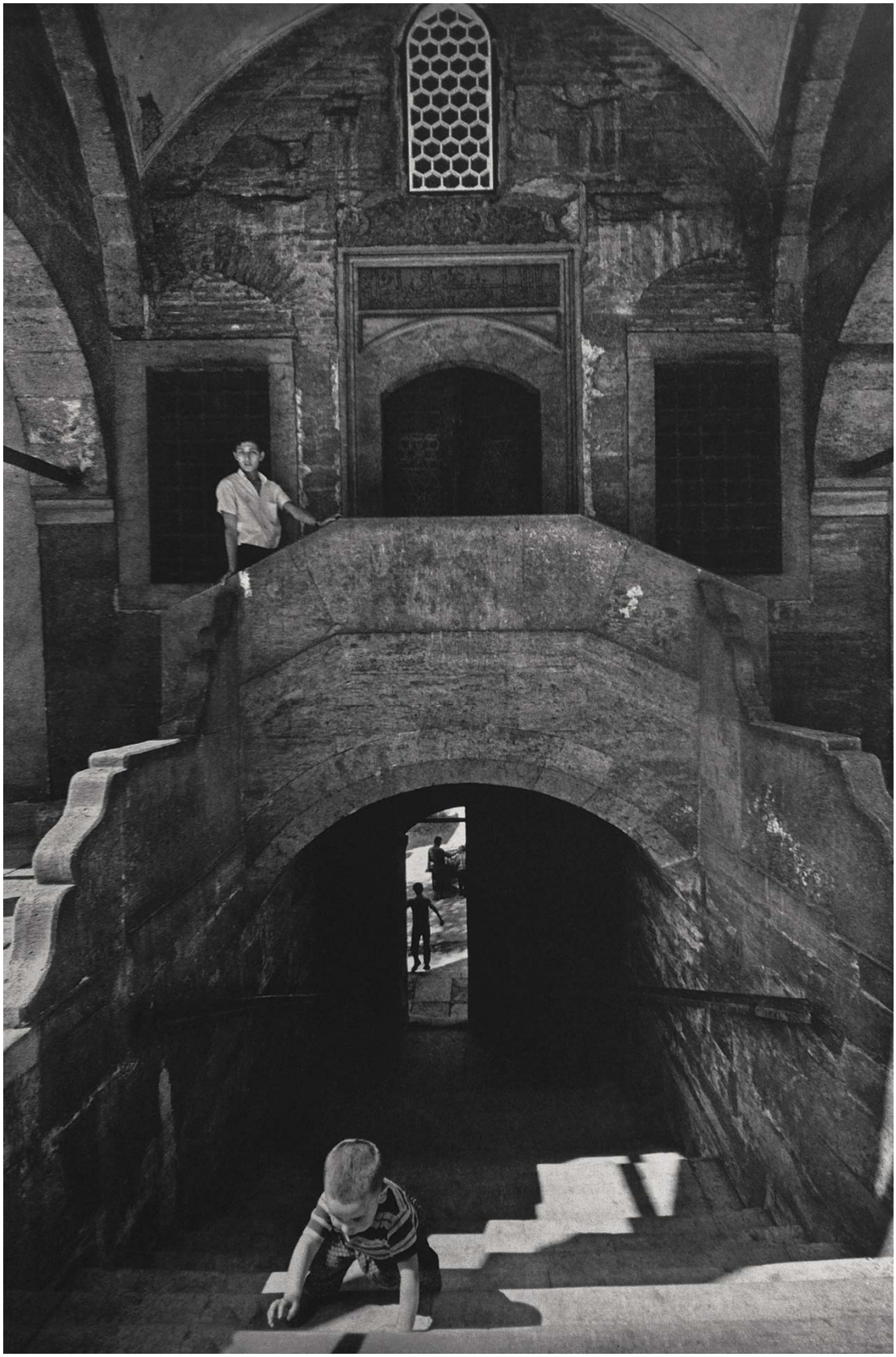
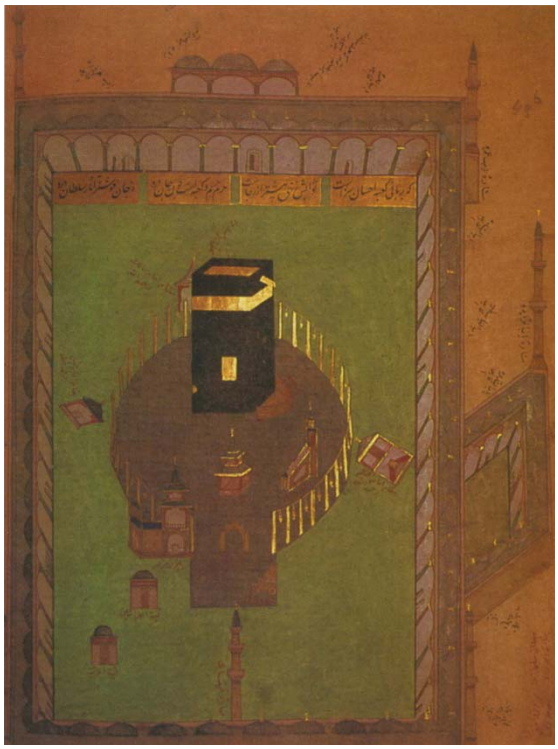
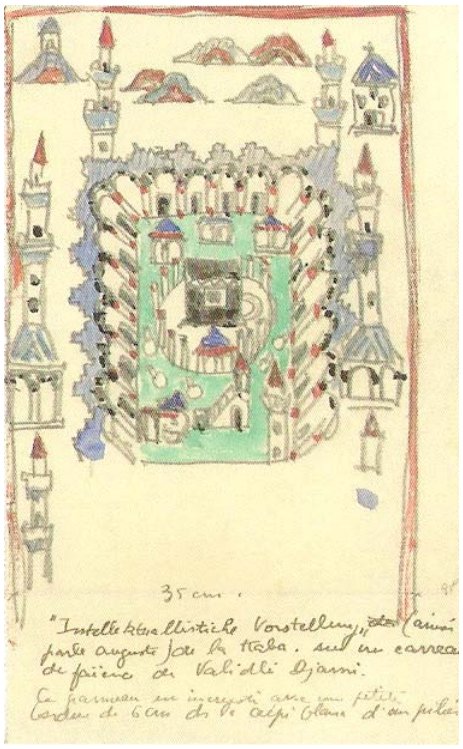


Fig. 100: FLATTEN PERSPECTIVE: Ara Güler: Sokollu Mosque, Kadirga, 1988. The elevated "point of vision" of the Islamic miniature painting characterizes Ottoman architecture and Islamic architecture in general.





Figs. 101, 102:"INTELLECTUAL PRESENTATION": Ottoman miniature from the manuscript Le Livre de Rois, 16th century (left) and Le Corbusier's sketch of the ceramic tile from the Valide Mosque, Istanbul, 16th century (right) , both depicting the Ka'ba from the elevated perspective.

According to the oldest written history of Mecca, when the Messenger had conquered the city, he first performed the circumambulation, riding on his camel and overturning with his riding stick one after the other 360 idols, one for each day of the lunar year, the pagan Arabs have placed around the sanctuary, reciting: *The truth has now come [to light], and falsehood has withered away: for, behold, all falsehood is bound to wither away!* (Qur'an 17:81). Then he entered the Ka'ba and, protecting the icon of the Holy Virgin with Child by his two hands, ordered all other images to be effaced. The icon of the Virgin was later destroyed by fire (Burckhardt, pp4-5).

Before this *"aniconic"*, rather than *"iconoclastic"* act (p5), Ka'ba was an Abrahamic sanctuary in no man's land, lost in the desert and forgotten by two great religious communities and political powers of the time - the Byzantine and the Persian Empires - which the nascent religious community soon had to fight. *The first temple ever set up for mankind... rich in blessing, and [source of] guidance unto all the worlds, full of clear messages...* (Qur'an 03:96,97), repeatedly destroyed and rebuilt since the beginning of time, is an irregular cube of simple masonry, covered in black cloth with golden lettering, measuring approximately 12x10x16m. Its four corners, not sides, face the cardinal points referring to the four corner pillars of the universe.

The meteorite is not in its centre but, close to the meridian angle, built in the outer wall. Holy of the Holies in the Temple in Jerusalem had the shape of a cube too, and contained the Ark of the Convenant. The Ark of the Convenant itself contained the two Tablets of the Law inside it, while the space *between the two cherubims which are upon the ark of the testimony* from where God spoke to Moses (Exodus 25:22) was left empty. Ka'ba, except three pillars and a curtain, contains nothing physical (Burckhardt, pp1-6).

But the void at its centre must not be confused with the void Hans Sedlmayr in *Loss of the Centre* (*Verlust der Mitte*, 1948) found at the centre of our modern time (Sedlmayr, 2001), nor should the abstract character of Islamic art and architecture be confused with the purely *"rationalist abstraction"* (Nasr, 2009) or the *"irrational impulses from the sub-conscious"* (Michon, 2009) we find in contemporary art, in spite the apparent formal semblance. Because, according to myth or to revelation (depending on the point view), this particular void is the ungraspable essence of the terrestrial world and contains everything spiritual (Burckhardt, pp1-6).

CONCLUSION

Arguably, the clothed cube of simple masonry in the centre and at the origin of the Islamic monotheism and of the city of Mecca may be regarded as the detached centre of the Middle East too, situated far from the main historical power cores of the region. Its pivotal power emanating far beyond the Middle East arose exactly from that physical detachment (Held & Cummings, pp80-82; Burckhardt, p2). In many aspects, it summarizes the characteristics of the region at large:

It is a stable (permanent, urban) centre, situated at the safe distance from the sea, in an infertile valley at the limit of the expressive landform of the Southern Hijaz, itself set up against the endless desert on the other side. Surrounded by fluctuating tribes, it is also a dynamic centre to which the actual and the ideal nomads converge for the obligatory pilgrimage, every year and once in the life time, bringing thus the order to the unstable (transient, nomadic) existence of humans. This most ancient place was among the last "discovered" parts of the Middle East and yet, even the technological Kantian *"negative pleasure"* is present here as the construction boom is revolving in the closest proximity of the Ka'ba. The desert and the city, the transience and the permanence, the nomadic and the sedentary culture, the cyclic timelessness and the linear time, the "timeless land" and "the land of immense opportunities"... meet in this most exceptional place: the mathematically next to the dynamically sublime.

Protecting the void at its centre from the extreme natural elements in its immanent surroundings, emanating from the horizontal desert world and gathering it architecturally, Ka'ba is an eminently archaic and eminently artificial architectural form, central to the culture whose spatial expression is detached from the evanescent semblance of things and primarily architectural. The circumambulation around it reproduces the rotation of the universe, *"the seven heavens"*, around its polar axis (Burckhardt, p2): *"the straight line linking the fundamental laws"* (Le Corbusier, 1965). Referring not to some particular microcosmos but to the totality of the universe around us, it also refers to some fundamental questions about architecture:

(1) Does architecture, archaic and artificial as it is in its Vitruvian - Semperian definition, just like a rock, a mountain or a tree, not grow towards the sun, the sky, and the stars? And does it, again like that rock, that mountain and that tree, not remain firmly bound to the earth: the *axis mundi*?

We are born with this elemental consciousness: Little children indeed look upon the magnificence of the world and their eyes point to the starry heaven, but while drawing people, they see only heads and eyes with legs extended until the lower limit of the frame. Intuitively, they project the *"existential space"* extended between the earth and the sky (Norberg-Schulz, p10). The position of architecture and architects in this space is famously verbalized with Ludwig Mies van der Rohe's paradigm (1924): *"While we want to stand with both feet firmly on the ground, we want to reach with our head to the clouds"* (Neumeyer, 1991, p250). In fact, we do not have much choice. Architecture has immanent physical roots and the gravitational force anchors it firmly into the ground.

(2) Is the distant shadow of the transcendental void not to be found at the centre of any architectural project? Its material existence indeed becomes certain when rectified into a coordinated set of drawings, the abstract "space" brought down to earth, but once constructed, does it not become more than just the air contained within the solid walls?

Gottfried Semper designed the hearth as the central, *"moral element"* of architecture, around which *"the roof, the enclosure and the mound"* assemble; *"the protective negations"* of the natural elements aggressive to the artificial *"hearth fire"* [3] (Semper, 1851, p55). Already Vitruvius designed it as the origin of architecture: it was the heat of fire that brought people together to form the society and *"having from nature this boon beyond other animals, that they should walk, not with the head down, but upright, and should look upon the magnificence of the world and of the stars"*, as *" they also easily handled with their hands and fingers whatever they wished"*, construct their first shelters out of the matter at their disposal (Vitruvius, II:I). Hence the daring idea, natural to humans, about architecture as greater than nature, the idea that an architectural

[3] *"Er* (der Herd) *ist das erste und wichtigste, das moralische Element der Baukunst. Um ihn gruppiren sich drei andere Elemente, gleichsam die schutzenden Negationen, die Abwehrer der dem Feuer des Herdes feindlichen drei Naturelemente; namlich das Dach, die Umfriedigung und der Erdaufwurf"*

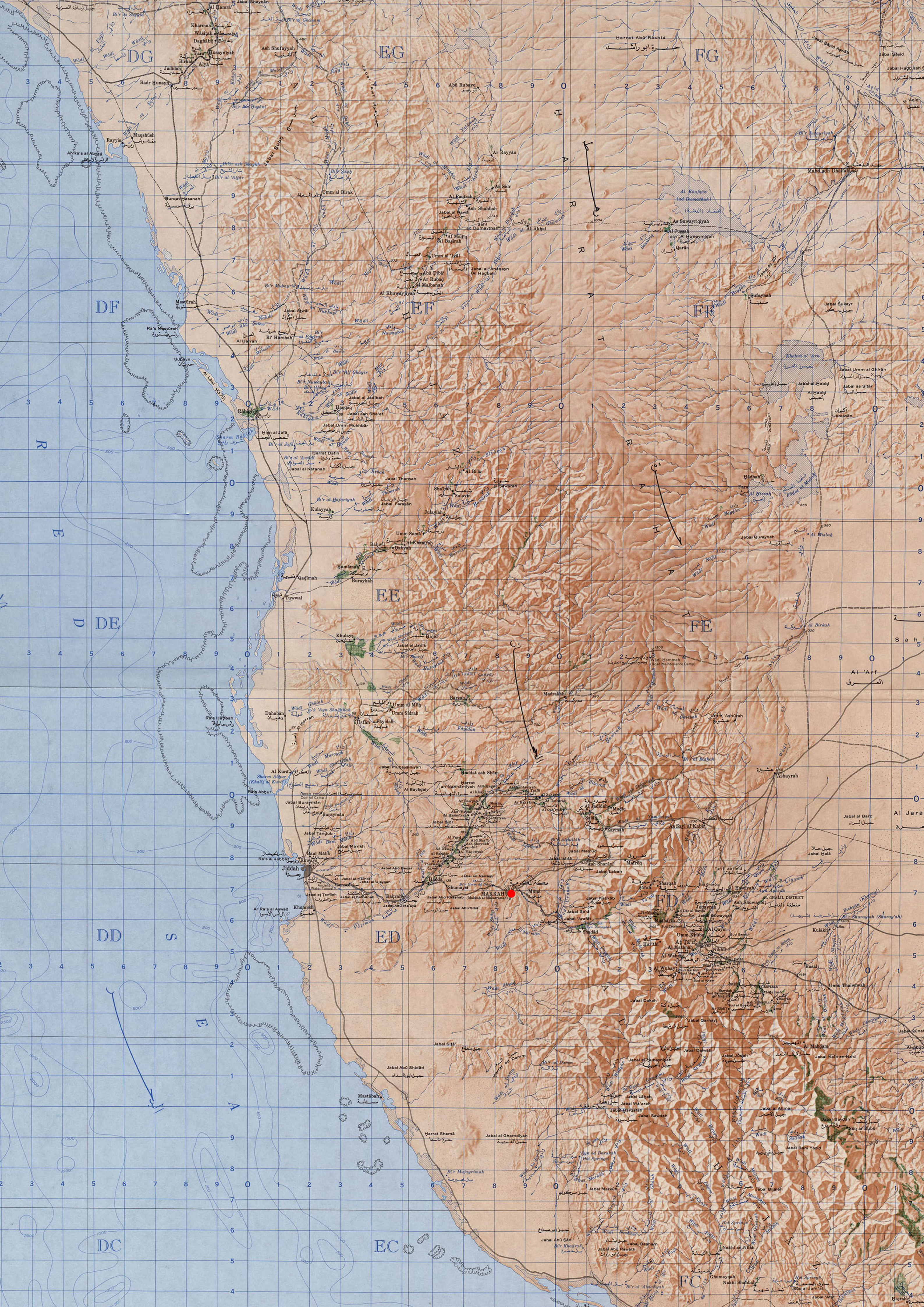
object regardless its size and its exposure to erosion and decay, may gather, define and explain the sublime world around it: a solid wall, a piece of woven textile or just a tiny sheet of glass between us and the upheaval of the natural elements outside. It is indeed fire that provides the detachment from nature and helps our heads – occasionally – reach the clouds.

(3) But behold: given the spatial and the cultural context of this dissertation, is it also not justified to ask who provides the fuel when we light our fire?

Have you ever considered the fire which you kindle? Is it you who have brought into being the tree that serves as its fuel - or are We the cause of its coming into being? (Qur'an 56: 71,72)

Architecture is a very serious matter. The way of looking at things, the way of drawing and the way of building are causally related. As by drawing an analytic cross section or a transparent axonometric projection, when we think about our projects, we should be interested not in the evanescent semblance of things: in what they stand for or how they look like, but in their immutable essence: in what the things constituting our constantly changing physical surroundings substantially are. Let this simple truth be the conclusion of this extended mental exercise into the sublime qualities found in and beyond the Middle Eastern landforms, landscapes, cities and objects, on the global scope and in the present time.

Fig. 103 (next page): Section of the 1: 500 000 American military map of the Southern Hijaz Range, US Army Map Service, Series K462, 1956- 1962.



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Masturah
Al Kharrar
Mastabah
Al 'Arj

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Fig.1: *NASA and the European Space Agency, Hubble Deep Field, 2003- 2004*, retrieved 13 October 2012 from http://upload.wikimedia.org/wikipedia/commons/5/5f/HubbleDeepField.800px.jpg
Fig.2: *Sun – Earth – Moon, movie still from the opening sequence of 2001: A Space Odyssey by Stanley Kubrick, 1968*, retrieved 25 June 2014 from http://www.2001aspaceodyssey.org/articles/The%20Film%20Begins.asp
Fig.3: *Caspar David Friedrich, Der Mönch am Meer, 1808- 10*, Alte Nationalgalerie, Berlin, retrieved 10 September 2009 from http://upload.wikimedia.org/wikipedia/ commons/a/ab/ Caspar_David_ Friedrich_029.jpg
Fig.4: *Caspar David Friedrich, Der Wanderer über dem Nebelmeer, 1818*, Kunsthalle Hamburg, retrieved 10 September 2009 from http://upload.wikimedia.org/wikipedia/ commons/8/8b/Caspar_ David_ Friedrich -Der_Wanderer_% C3% BCber_dem_Nebelmeer_-_WGA08251.jpg
Fig.5: *William Turner, Rain, Steam and Speed, the Great Western Railway, 1844*, National Gallery, London, retrieved from 11 September 2009 from http://commons.wikimedia.org/wiki/File:Joseph_Mallord_ William_ Turner_-_Rain,_Steam_and_Speed_The_Great_Western_Railway_-_WGA23181.jpg
Fig.6: *Nuclear explosion, movie still from the closing sequence of Dr. Strangelove by Stanley Kubrick, 1964*, retrieved from the internet, source unknown
Fig.7: *Pages 26, 27 from Life Magazine July 20 1962 reporting about the H-bomb test above the Pacific*, photographer not indicated, scanned from the original, collection KI
Fig.8: *Pages 28, 29 from Life Magazine July 20 1962 reporting about the H-bomb test above the Pacific*, photographer not indicated, scanned from the original, collection KI
Fig.9: *Pages from 81, 82 Life Magazine July 20 1962*, retrieved 02 June 2014 from http://1.bp.blogspot.com/ _5Nzo2ZD9uBc/SwwT6fd9q_I/AAAAAAAAAQM/ yB92mF8E44s/s1600/Humble+Ad.jpg
Fig.10: *The End of an Eventful Year, A view of the tallest building in the world from Gulf News, 1 January 2012*, © Arshad Ali, scanned from the original, collection KI
Fig.11: *John Ruskin, Study of Gneiss Rock, Glenfinlas, 1853-54* , © University of Oxford - Ashmolean Museum, retrieved 02 June 2014 from http://ruskin.ashmolean.org/ collection/9006/ 9037/9360/ all/per_page/25/offset/0/ sort_ by/seqn./object/14350
Fig.12: *John Ruskin, Northern Arch of the West Entrance of Amiens Cathedral, before reconstruction, 1856,* © University of Oxford - Ashmolean Museum, retrieved 02 June 2014 from http://ruskin.ashmolean.org/collection /8990/9165/9209/13849
Fig.13: *Ettiene Louis Boullée, Cenotaph for Newton, 1784, cross-section ("at night with daylight effect"), pen and brown ink and wash ,* © BnF, Department of Prints and Photographs, Bibliothèque Nationale de France, Paris, retrieved 02 June 2014 from http://mini-site.louvre.fr /saison18e /_commun/antiquite_revee/zoom_jpg/ar43.jpg
Fig.14: *Ivan Leonidov, Palace of Culture, 1930- 1937, Sovremennaia arkhitektura*, 1930, no. 5, pp2,3, retrieved 02 June 2014 from http://thecharnelhouse.org/2013/02/25/soviet-avant-garde-blueprint-negative/
Fig.15: *Sigfried Giedion, photomontage of the Rockefeller Center, 1941*, scanned from Sigfried Giedion, 2004: *Spazio, tempo ed architettura*, Milano: Ulrico Hoepli, p742

Fig.16: *Hagia Eirene, Istanbul* , photograph by Gryffindor, retrieved 02 June 2014 from http://commons.wikimedia.org/wiki/File:Hagia_Eirene_Constantinople _2007_003.jpg
Fig.17: *Jørn Utzon, Platform in Yucatan, Zodiac 10, 1962, p114,* scanned from the original
Fig.18: *Jørn Utzon, Monte Albán, Zodiac 10, 1962, p115,* scanned from the original
Fig.19: *Le Corbusier on the Acropolis, 1911,*© FLC-ADAGP, retrieved 02 June 2014 from http://gwen-photoblog.blogspot.com/2013_07_01_archive.html
Fig.20: *Iannis Xenakis, Glissandi from Pithoprakta for string orchestra, 1956-57*, scanned from Iannis Xennakis, 1976: Musique: Architecture, Paris: Casterman, p167
Fig.21: *Leonardo da Vinci, Study of the Grand Deluge, 1515,* Royal Collection Trust/© Her Majesty Queen Elizabeth II 2014, retrieved 02 June 2014 from http://www.royalcollection.org.uk/collection/ 912380/ a-deluge
Fig.22: *Copper engraving of the Monastery of the Metamorphosis, 1782* , contemporary print purchased in 2008, scanned from the original, collection KI
Fig.23: *Page 48 from Edilizia Moderna 87-88 edited by Vittorio Gregotti, 1965, decorative soil tillage in Tofukij Zen temple in Kyoto; Maiden Castle in Dorset, England; agricultural terraces in Bell Country, Texas* scanned from the original
Fig.24: *Page 87 from Edilizia Moderna 87-88 edited by Vittorio Gregotti, 1965, field in Napa, California*, scanned from the original
Fig.25: Robert Smithson, Spiral Jetty, 1970, recent aerial photograph, retrieved 24 June 2014 from http://www.tropolism.com/2006/01/spiral_jetty_cleanup_report.php
Fig.26: *Eastern hemisphere, NASA, 2011,* retrieved 02 June 2014 from http://eoimages.gsfc.nasa.gov
Fig.27: *Ebstorfer Weltkarte, 1300,* contemporary reconstruction by Kolossos, 2007, retrieved 02 June 2014 from http://de.wikipedia.org/wiki/Ebstorfer_Weltkarte#mediaviewer /Datei:Ebstorfer-stich2.jpg
Fig.28: *Qibla indicator and compass made by Bayram ibn Ilyas, 1582,* © The Trustees of the British Museum (1921, 0625.1), scanned from Venetia Porter, 2012: Hajj: Journey to the Heart of Islam, London: The British Museum Pres, p66
Fig.29: Karta za historiju Starog zavjeta zajedno sa Zemljama robovanja, © C.W.Wilson, kap. Condor & W. Wright for British and Foreign Biblical Society, scanned from Sveto Pismo Staroga i Novoga Zavjeta, Croatian edition, 1909: Budapest: Britansko i inostrano biblijsko društvo, not paginated
Fig.30: *David Lean, Lawrence of Arabia, 1962, restored by Robin Harris, 1989*, movie still
Fig.31: *Jean Jacques Anaud, Black Gold, 2011*, movie still
Fig.32: Bill Viola, Chott el-Djerid (A Portrait in Light and Heat), 1979, video stills, ©Bill Viola
Fig.33: *Northwestern Rub' Al Khali, section of the 1:500000 military map, US Army Map Service, Series K462, 1956- 1962*
Fig.34: *Description de l'Egypte, Atlas Geographique 014, Table F5, 1809-1829*, © Biblioteca Alexandrina and L'Institut d'Égypte retrieved 31 July 2011 from http://descegy.bibalex.org
Fig.35: Al Biruni: Lunar Eclipse, 11th Century, scanned from Seyyed Hossein Nasr, 1976: Islamic Science, London: World of Islam Festival Publishing Company, p106
Fig.36: *Grand Mosque of Cordoba, 786- 987*, ©Aga Khan Trust for Culture, retrieved 02 September 2011 from http://archnet.org/ system /publications/contents/1238/original/ FLS1286.jpg?1384750163
Fig.37: *Ara Güler: Eminönü, 1960*, ©Ara Güler, scanned from Ara Güler, 2013: Oko Istanbula, Zagreb: Galerija Klovićevi dvori, p49
Fig.38: *Moriah Rock under the Dome of the Rock, Jerusalem, photograph between 1900 and 1920,* American Colony, Jerusalem, ©Library of Congress Prints and Photographs Division Washington D.C.
Fig.39: *Encampment on Pisgah's slopes, Palestine, photograph around 1911*, American Colony, Jerusalem, ©Library of Congress Prints and Photographs Division Washington D.C.
Fig.40: *Ardabil carpet, mid 16th century*, Victoria and Albert Museum, London, retrieved 30 May 2014 from http://commons.wikimedia.org/wiki/File:The_Ardabil_Carpet_-_Google_Art_Project.jpg
Fig.41: *Qur'an 1: al- Fātiha; 15th century, Iraq or Persia*, ©The British Library, London, scanned from Titus Burckhardt, 2009: Art of Islam, Bloomington, Indiana: World Wisdom, p61
Fig.42: *Yūsuf and Zulaikha, Kamāl ud-Dīn Bezhād, 1488 ,* ©National Library and Archives of Egypt, Cairo, retrieved 20 May 2014 from http://www.artbible.info/art/large/809.html

IZJAVA O AVTORSTVU

Podpisani Krunoslav Ivanišin izjavljam, da sem avtor doktorske disertacije z naslovom “MERILA VELIČASTNEGA: ARHITEKTURNA DEFINICIJA BLIŽNJEGA VZHODA”, ki je rezultat lastnega znanstvenoraziskovalnega dela pod mentorstvom prof. Tadeja Glažara z uporabo navedenih referenc.

DECLARATION OF AUTORSHIP

Herewith I declare, that I am the author of the doctoral dissertation entitled “SCALES OF THE SUBLIME: AN ARCHITECTURAL DEFINITION OF THE MIDDLE EAST”, which is the result of my own scientific research mentored by Prof. Tadej Glažar and based on the listed references.

KRUNOSLAV IVANIŠIN

Ljubljana, 30/06/2014

APPENDIX:

PAGES FROM

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collage of interviews by Marianne Baumgartner and Krunoslav Ivanišin with:

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