

Technical and conceptual metaphor of architecture. ©

by

Barie Fez-Barrington:associate professor:Global University

www.bariefez-barrington.com

chrisbarie@yahoo.com

The Two Stasis to Architecture being an art: technical and conceptual metaphors

Three levels of axioms matching three levels of disciplines:

1. Multidiscipline: Macro most general where the metaphors and axioms and metaphors used by the widest and diverse disciplines, users and societies. All of society, crossing culture, disciplines, professions, industrialist arts and fields as mathematics and interdisciplinary vocabulary.
2. **Interdisciplinary axioms are** between fields of art **[I]** whereas metaphors in general inhabit all these axioms drive a wide variety and aid in associations, interdisciplinary contributions and conversations about board fields not necessary involved with a particular project but if about a project about all context including city plan, land use, institutions, culture and site selection, site planning and potential neighborhood and institutional involvement.
3. Micro Discipline: Between architects all involved in making the built environment particularly on single projects in voting relevant arts**[I]**, crafts, manufactures, engineers, sub-con tractors and contactors. As well as owners, users, neighbors, governments agencies, planning boards and town councils.

Axioms definitions:

Axioms (shown in Roman numerals) are self-evident principles that I have derived out of Ortony's *Metaphor and Thought*(Ortony,A). and accept as true without proof as the basis for future arguments; as postulates or inferences including their warrants (which I have throughout footnoted as 1._._). These axioms are in themselves clarification, enlightenment, and illumination removing ambiguity where the derivative reference (Ortony) has many applications. Hopefully, these can be starting points from which other statements can be logically derived. Unlike theorems, axioms cannot be derived by principles of deduction as I wrote: "*The metametaphor theorem*" published by *Architectural Scientific Journal*, Vol. No. 8; 1994 Beirut Arab University. The below axioms define properties for the domain of a specific theory which evolved out of the

stasis defending *architecture as an art* and in that sense, a "postulate" and "assumption". Thusly, I presume to axiomatize a system of knowledge to show that these claims can be derived from a small, well-understood set of sentences (the axioms). "Universality, Global uniqueness, Sameness, Identity, and Identity abuse" are just some of the axioms of web architecture. Francis Hsu of Rutgers writes that "*Software Architecture Axioms is a worthy goal. First, let's be clear that software axioms are not necessarily mathematical in nature*".

Furthermore, in his book titled *The Book of Architecture Axioms* Gavin Terrill wrote: "*Don't put your resume ahead of the requirements Simplify essential complexity; diminish accidental complexity; You're negotiating more often than you think ;It's never too early to think about performance and resiliency testing; Fight repetition; Don't Control, but Observe and Architect as Janitor*". In "Axiomatic design in the customizing home building industry published by *Engineering, Construction and Architectural Management*; 2002;vol 9; issue 4;page 318-324 Kurt Psilander wrote that "*the developer would find a tool very useful that systematically and reliably analyses customer taste in terms of functional requirements (FRs). Such a tool increases the reliability of the procedure the entrepreneur applies to chisel out a concrete project description based on a vision of the tastes of a specific group of customers. It also ensures that future agents do not distort the developer's specified FRs when design parameters are selected for the realization of the project. Axiomatic design is one method to support such a procedure. This tool was developed for the manufacturing industry but is applied here in the housing sector. Some hypothetical examples are presented*". Aside from building-architect's axioms directing that "form follows function"; follow manufacturers requirements and local codes and ordinances, AIA standards for professional practice architectural axioms are few and far between.

(Lakoff, G) ; Metaphorical language (building) is a surface manifestation of conceptual (program, design and contract documents) metaphor. The built metaphor is the residue, excrement, product and periphery of the deep and complex reality of the building's creative process and extent reality. As we don't know the inner workings of our car and yet are able to drive so we can use our buildings. What we design and what we read, not the metaphor, but a surface manifestation of the concept metaphor.

A concept which we can only know as well as we is able to discern metaphorical language. The construction and the metaphor beneath are mapped by the building being the manifestation of the hidden conceptual metaphor. To know the conceptual metaphor we must *read* the building.

Axioms:

Axiom VI. (*Gibbs, Jr., R. W*) Since metaphor is the main mechanism through which we comprehend abstract concepts and perform abstract reasoning: (Lakoff, G) what is built is first thought and conceived separately from building, as thinking and conceiving is separate from the outward expression, so metaphor is a process; and, architectural metaphor is a process, and what we see is what the process issues; not the manifest metaphor. If the metaphor were to manifest it would be a series of interacting feelings about thoughts, words, impulses and decisions.

Axiom VII. (*Gibbs, Jr., R. W*) the metaphor-building clarifies our place, status and value.

As metaphor is the main mechanism through which we comprehend abstract concepts and perform abstract reasoning so works of architecture inform our social, psychological and political condition.

Architects as many other arts as well as users and connoisseurs can find sufficient satisfaction with only the aesthetics of the technical before ever considering the conceptual metaphor. The building, song, ballet, painting, poem has an intrinsic beauty satisfying the five senses leaving thought and concepts for a later time. For example today we can relish in the great royal residences of France leaving aside the sociopolitical concepts they expressed. Voices in harmony to soft music are a background as may be a cityscape of buildings designed in harmony with one another; both being perceived as technical and not conceptually.

On the other hand, after my studies at Columbia and arriving in Rome I ran to see my conceptual metaphor of St. Peters; the form and its dazzling scale only later came into focus. The same can be said for my first visit to Rome's coliseum, Spain's bull fight arenas, Bloir Valley palaces, English castles where I first saw the concept and later reiterated the details and architectural orders.

Conceptual metaphors are exemplified by a game where you name a string of common characteristics and the challenger then may answer:” things that are on animals, in buildings, etc. In other words people can identify the metaphor once given a set of common characteristics. What has windows, doors, is in Manhattan, symbol of New York and houses office workers: “the Empire State building”. The challenger makes a metaphor between the words and association best suited to those words. When naming the thing and it coincides with the proponents the challenger is correct. Neither the referent image nor the correct answer is the metaphor. What is the metaphor but the process of making the association between the words and something stored in the mind. Whether automated, instinctive, educated, licensed, indigenous or cultural the fact remains that a bridge that transfers one from another permeates all forms of thought. In fact the artifact that we see is a remnant of the technical and conceptual metaphoric processes. To say that art is a metaphor and then that architecture too must be a metaphor assumes that the art is the manifest work and not what it represents. Early classic music in the age of Mozart known as the Rocco period was a music of technique; it wasn’t until Tchaikovsky, symphonies and the romantics that conceptual metaphor in music was born.

One 93 year old lady once remarked that she knew when she remembered some thing came to mind but where was that thing stored. She even could accept the associations that brought the recollection; but where was it until then. That was a question which remained unanswered till she departed. Let us leave all of that to other monographs but now concentrate on the wonderful coincidence of these two different characteristics of the metaphor occurring simultaneously, and separately. What’s happening? To explain this operation we refer to the axioms of metaphors of architecture and presume the workings of the conduit.

Axiom III (Gibbs, Jr., R. W) (Reddy. M. J) *A conduit is a minor framework which overlooks words as containers and allows ideas and feelings to flow, unfettered and completely disembodied, into a kind of ambient space between human heads.* Irregardless of the details the overall concept is “transferred “from one to the other, irrespective of sub-dominant and tertiary design elements.

Six principles are at work.

Explained by applying axioms (shown in Roman numerals)

Predicate to six principles at work:

Axiom XIII. .(Gibbs, Jr., R. W): *Commonalities are the keys to mapping across conceptual domains*; sifting through the program the architect seeks the “commonality” between the reality and experience to make the metaphor. *Mapping* is only possible when he knows the “commonplace”, the commonality, the characteristic common to both, the terms that both the source and the target have in common in which the mapping takes place. The architect’s design agenda and the user’s requirements find both their commonalities and differences.

As the architect structures his program, design and specifications he simultaneously structures the metaphor of his work of architecture. Architecture consists of program specifics where the conditions, operations, goals and ideals are from heretofore unrelated and distant contexts but are themselves metaphors “*mapped across conceptual domains*”.

Architects translate their architectural conception from philosophy, psychology, sociology, etc into two dimensional scaled drawings and then to real life full scale multi dimensions conventions consisting of conventional materials, building elements (doors, windows, stairs, etc). (Lakoff, G) ; As maps are the result of cartographers rendering existing into a graphics for reading so is mapping to the reading of metaphors where the reader renders understanding from one source to another. As the cartographer seeks lines, symbols and shadings to articulate the world reality so the reader’s choices of heretofore unrelated and seemingly unrelated are found to have an essence common to both the reality and the rendition so that the metaphor can be repeated becoming the readers new vocabulary. As the reader can describe the route he can identify the building.

(Lakoff, G) *Each mapping* (where mapping is the systematic set of correspondences that exist between constituent elements of the source and the target domain).

Many elements of target concepts come from source domains and are not preexisting. To know a conceptual metaphor is to know the set of mappings that applies to a given source-target pairing. The same idea of mapping between source and target is used to describe analogical reasoning and inferences, for example, reception area to receive people, doors and door frames, columns as vertical supports, parking spaces for cars, Iron and stained glass design patterns, and typical design details appropriated for a given building system.

(Lakoff, G) *Aside from articulating a program architects carry-over their experiences with materials, physics, art, culture, building codes, structures, plasticity, etc. to form a metaphor.* Identifying conditions, operations, ideals and goals are combined to form plans, sections and elevations which are then translated in to contract documents.

Later the contractors map this metaphor based on their schemes of cost, schedule and quality control into schedules and control documents. It is not until equipment, laborers and materials are brought to the site that the metaphor starts to form. Once formed the only evidence for the user (reader) are the thousands of cues from every angle, outside and inside to enable use and understanding. An informed user can read the building's history from its inception to opening day.

Six Principles at Work:

First: Inform one another

The two inform each other; that is the technical and conceptual learn from each other. That is the aspects of the craft, building technology, shape and form, geometry, strength of material, and Dimensions Bridge, carry-over to ideas about people, places, events, social status, scale, significance and moods. Contrarily ideas of pomp, pageant, royalty translate into techniques producing large scale, great height, decorations, symbols, etc. (Reddy. M. J) *Conduit of City-wide metaphor: Geometry of urban blocks and the location of building masses that reflect one another is a scheme to sharply define the volume and mass of the city block and experience of city streets (Vincent Scully).* In New York City the grid and this insistence on buildings reflecting the geometry of the grid is a metaphor of city-wide proportions.

The streets are defined by the 90 degree corners, planes and tightness of the cubes and rectangles to the city plan. In this way the metaphor of the overall and each building design no matter where it's location on the block; no matter when or in what sequence the metaphoric constraint of appropriateness or zoning formulas, all lead the ideas to flow from one to another architect. Furthermore, the reader is able to "appreciate" (to attach importance to a thing because of its worth) the street, its geometry, limits and linearity as an idea on the (Reddy. M. J) conduit from the architect, through the metaphor and to the reader. In formulating the architectural program with all its general and specific dimensions the architect summons his technical knowledge conditioning the clients stated requirements to determine site selection, budget, building program, financing, construction applicable government regulations traffic, transportation and utility availabilities. At this stage both the technical and conceptual of each metaphor of each must be articulated, valued and their implications to each other determined. Financial access, value and importance must be determined both by itself as what Weiss calls a(Lakoff, G) "*emphatic against the sky*".

How will the financing affect the budget and the budget affect achieving the program's goal. The admixture of financial, budget and business planning all inform one another as well as the other technical and conceptual process.

At work is technical knowledge and abilities in banking, book keeping, estimating, budgeting, construction contact cash flows, etc. All of these to establish the very money available to program, plan and design. Yet establishing the cost relative to the type of project, location, and context tests the interaction of concept to technique and proving just one of the conditions of the program as well as the value of the ideal and the extent to which operational and building goals can be achieved. The technical metaphor contains conceptual metaphors and their combination informs the conceptual metaphors of the each subsequent metaphor and their sub-metaphors. Each is bridge, each expresses one thing in terms of the other and each expresses itself in terms of another. An estimated bill of quantities will be expressed as a budget, a bank loan as a draw schedule, etc.

Second: Prioritizing where one comes before the other.

(Miller, G. A) “In principle, three steps, recognition, reconstruction, and interpretation, must be taken in understating metaphors, although the simplest instance the processing may occur so rapidly that all three blend into a single mental act.” When we face a new metaphor (building) a new context with its own vocabulary is presented, one which the creator must find and connect and the other which the reader must read and transfer from previous experience.

Axiom IV. (Gibbs, Jr., R. W) Architecture shapes the culture. Building shapes and forms tend to reflect common geometry; building types tend to share common facilities; building code use designations influence the selection of applicable code requirements, architecture, forming clusters and community spaces create opportunities for neighborhood identity and nurturing cultural identity. (Conrad, U) “It’s a strange thought, that culture is a product of man-made, unnatural things, that instead of culture shaping the architecture, architecture shapes the culture. I. *Parte, model and concept*: After assimilating the program in the process of making a habitable conceptual metaphor, the very first step in the design process is to develop a “*parte*” as (presumptive) *resolutions* of the argument.

It is a “top-down” approach later followed by designs which meet the *parte*. Alternatively, the *parte* may follow the design process and be presented to defend the design.

The (Schon, D. A) *generative metaphor* is “carrying –over” perspectives from one domain of experience to another where you build one thing in terms of another where the other is the model, and, what you build is the application, the model being the “ideal” of the proposed design. While architects may initially state an ideal, it most likely evolves and even radically changes by the time the design process yields an architectural configuration (building manifestation).

Once achieved the “*parte*” (concept/gestalt) manifests and can be articulated.

“Form follows function” is such an order of priority where architect first organizes the operations of the program prior to shaping the building. It also implies that the ultimate form will somehow reflect the operations and function of the building.

Third: Sequencing where the first dominates the second.

Just the evolution of a design, deciding on what to build, where, how and then assembling the team each affects the other. Project managers schedule process which may continue in parallel with others while others are critical to the overall and the next step occurring.

Making an architectural metaphor with out an agreed program can be both expensive, disappointing and result in a metaphor which is neither compatible to the metaphoric expectation of the users, within the limits of the finance and a nightmare to the contactor. To one degree or another is the subject of why there are so many “change orders” during the course of the design and constitution process because the first metaphor was incomplete, not comprehensive and not coordinated. The affect of the first on the second is pronounced. Where as a well conceived and approved program including all the technical and conceptual metaphors will only lead to the perfect start of a controlled design process. A process which begins with a parte, schematic, preliminary and then final design. The technical metaphor of the allocation of spaces, building materials, and building systems all was being coordinated with the cost of construction and building schedules. Metaphorically the value of the design meeting the budget is dominates the conceptual as a parameter to manifest the metaphor as a building. A design which begins with line drawing allocation, organizing functions as well as sketches of the possible building configuration, once agreed can be overlaid and developed into more detailed technical ideas and conceptualizations of the metaphor until the architects and the owners agree on one acceptable metaphor.

(Jeziorski, M.) “Central to the mapping process is the principle of “systematicity: people prefer to map systems of predicates favored by higher-order relations with inferential import (the Arab tent), rather that to map isolated predicates. The systematicity principle reflects a tacit preference for coherence and inferential power in interpreting analogy”.

(Jeziorski, M.) “No extraneous associations: only commonalities strengthen an analogy. Further relations and associations between the base and target- for example, thematic consecutions- do not contribute to the analogy.”

Axiom V. . (Gibbs, Jr., R. W) Metaphor is a mental image. (Lakoff, G) Metaphor *maps the structure of one domain onto the structure of another*”. (Lakoff, G) for

example, the “*superimposition of the image of an hour glass onto the image of a woman’s waist by virtue of their common shape*”.

As before the metaphor is conceptual; it is not the works themselves, but the mental images. In this case metaphor is a mental image. “Each metaphorical mapping preserves image-schema structure:”

In acting it is called a” handle” where your whole character’s peculiarity is remember by one acting device (accent, slang, twang, wiggle, walk, snort, etc) ;in architecture the building’s roof top, cladding, silhouette, interior finishes, lighting, gargoyles, entrance, rounded corners, etc.

If the facade of a building is designed in one order of architecture you can presume the other parts are in like arrangements where the whole may be of that same order including its’ plan, section and details because of mapping and channeling one idea from one level to another.

Frank Lloyd Wright designed his prairie architecture with dominant horizontal axis thrust to his structure as common to the horizontal axis of the land upon which the building sat. In geometrical formal parts of an architectural metaphor we note those common elements where fit, coupling and joints occur.

Forth: Interactive Chain where the technical begets the conceptual begets the technical and so forth.

(Lakoff, G) A conceptual system contains thousands of conventional metaphorical mappings which form a highly structured subsystem of the conceptual system. Over the year’s society, cultures, families and individuals experience and store a plethora of mapping routines which are part of society’s mapping vocabulary. As a potential user, when encountering a new building-type, such as a hi-tech manufacturing center, we call upon our highly structured subsystem to find conceptual systems which will work to navigate this particular event.

(Lakoff, G) *Architecture as a surrogate is accepted at face value.* As a surrogate (a work of architecture) is "a replacement that is used as a means for transmitting benefits from a context in which its’ user may not be a part”, architecture’s metaphor bridge from the program, designs and contactors to a shelter and trusted habitat. The user enters and

occupies the habitat with him having formulated but not articulated any of its characteristics. Yet it works.

(Lakoff, G) “It makes sense, therefore, to speak of :

a. Two sides to a surrogate, the user side and the context side (from which the user is absent or unable to function). “Each of us uses others to achieve a benefit for ourselves. “We have that ability”.

b. “None of us is just a person, a lived body, or just an organism; we are all three and more. We are singulars who own and express ourselves in and through them. As Weiss proclaims

c. *that we cannot separate these three from each other so that it follows that we may find it impossible to separate us from the external metaphors.* Inferences that are not yet warranted can be real even before we have the evidence.

d. *Metaphors are accepted at face value and architecture is accepted at face value.* Accustomed to surrogates architecture is made by assuming these connections are real and have benefit. Until they are built and used we trust that they will benefit the end user. Assembling the ambulatory we assume the occupancy, frequency and destinations. We each are surrogates to one another yet fitted into one message. When this passage had been used as read as had been other passages, corridors and links.

e. *Like a linguistic, the building stands, like a great, stone dagger, 1.4.11 emphatic against the sky.* The stair, the exit, the space calls, gives emphasis and is strongly expressive.

Fifth: Triangulation where the technical and the conceptual combine and form a single cognition containing the characteristics of both technical and conceptual.

(Nigro, G) Metaphor is in the mind: So while *architecture is the making of metaphors* and *architects are making metaphors*, their works, though metaphoric, are not themselves the metaphors but the shadow of the metaphor which exists elsewhere in the minds of both the creator and the user, and, it is there that the creator and the user may have a commonality (not commonplace). Ideally, if one designs one’s own house, decorates one’s own room there will likely be that commonality. If an architect is selected from a particular neighborhood his metaphor will likely be sympathetic

(common) to the culture of the area. Or, a concerted effort on the part of the design team to assemble the relevant and commonplace information.

(Nigro, G) Architects make a *spatial representation in which local subspaces can be mapped into points of higher-order hyper-spaces and vice versa is possible because they have a common set of dimensions*. Architects organize broad categories of operations and their subsets seeing that they are different from each others so as to warrant a separate group and that their subsets fit because they have common operational, functional conditions, operations, models and object is. Hotel front and back-of-the-house operations; Hospital surgical from outpatient and both from administration and offices are obvious sets and subsets.

Sixth: Co-mingling of vocabulary between technical and conceptual

Stratification and leveling where either the conceptual or the technical characteristics simultaneously exist on separate levels.

A. Diagonal association may occur between conceptual and technical on different levels as a technical on one level finding commonality with conceptual on another level.

(Fraser, B.) "A metaphor involves a nonliteral use of language". The building design and the program cannot be a perfect mapping. A non-literal use of language means that what is said is to have an affect and but may not be specific. *At each moment in its use the metaphor may mean different things, least of which may be any intended by its authors.*

Axiom XIV. Elegant architectural metaphors are those in which the big idea and the smallest of details echo and reinforce one another. Contemporary architects wrapping their *parte* in "green", "myths" and eclectic images" are no less guilty than was their predecessors of the Bauhaus exuding asymmetry, tension and dissonance as were the classics and renaissance insisting on unity, symmetry and balance. The architect's *parte* and the user's *grasp of cliché parte* were expected and easy "fill-in" proving the learned mappings, learned inference trail and familiarity with bridging.

(Nigro, G) *People ascertain the deep metaphor that underlies one or more surface metaphors by filling in terms of an implicit analogy*". A unique building metaphor may be reckoned by its apparent similarity to another from a previous

experience. As a grain silo is to a methane gas plant and to oil tank storage; what may be implicit are the shapes, appurtenances, and locations.

(Nigro, G) We see the architectural metaphor, we read its extent, we synapse, analogies and metaphorize absorbing its information, contextualizing and as much as possible resurrecting its reasons for creation. The architectural metaphor only speaks through its apparent shape, form, volume, space, material, etc that the concepts which underlie each are known to the user as they would to a painting, poem, or concerto.

(Nigro, G) Architecture is often more suggestive and trusting rather than being pedantic; it leads and directs circulation, use recognition while abstracting shapes and forms heretofore unknown, but ergonomic. Furthermore as observation, analysis and use *fill in the gaps* users inference the locations of concealed rooms, passages and supports; the user infers from a typology of the type a warehouse of expectations and similes to this metaphor from others. In this way there are the perceived and the representations they perceive which represents when explored and inert what we call beautiful, pleasurable and wonderful. Upon entering a traditional church in any culture we anticipate finding a common vocabulary of vestibule, baptistery, pews, chancel, and choir area including transepts, chapels, statuary, altar, apse, sacristy, ambulatory and side altars.

(Searle, J. R) A *“problem of the metaphor concerns the relations between the means of expression and design meaning, on the one hand, and architect’s meaning or sketch meaning, on the other” “Whenever we talk about the metaphorical meaning of a word, expression, or sentence, we are talking about what a speaker might utter it to mean, in a way it that departs from what the word, expression or sentence actually means”*.

(Searle, J. R) a. What are the *principles which relate built design meaning to metaphorical design meaning*” where one is comprehensive, complete and coordinated while the other is merely an incomplete scanty indication of a non specific.

(Searle, J. R) How does one thing remind us of another? *The basic principle of an expression with its literal meaning and corresponding truth-conditions can, in various*

ways that are specific to the metaphor, call to mind another meaning and corresponding set of truths". Unlike a legal brief, specification and engineering document a work of architecture with all its metaphors tolerates variety of interpretations, innuendo and diverse translations. Building owners are asked to translate a two dimensional set of drawings ass fulfilling their design requirements to what might eventually be built.

Post script

In another time when kingdoms created their dynasty's iconic buildings, the architect and artisans took their ques from the reigning monarch. In our modern pluralistic society the free reign of ideas and opinions as to contexts and their meanings are diverse. As the doctor takes the Hippocratic oath, the lawyer vows to defend all so there is one whose call is to capture the ethos (The Oxford English Dictionary, is defined as "the characteristic spirit, prevalent tone of sentiment, of a people or community") of his time into built metaphors, he is called architect.

Not only is my childhood quest relevant but the essence of the responsibility of today's architect who not only reasons the technical but individually reasons the conceptual. It is to the architect that society turns to be informed about the shape and form of the context in which life will be played. With this charge the need *to know that we know* and do by reasoning what science verifies by the scientific method to *know that we know* about the buildings, parks, and places we set into the environment.

It is a public and private charge included in the contract for professional services but unspoken as professional life's experience; to prove the relevant, meaningful and beneficial metaphors that edify encourage and equip society as well as provide for its' health, safety and welfare. So it is critical to realize, control and accept as commonplace that the role of the architect is to do much more than build but *build masterfully*.

References cited

Boyd, Richard; Metaphor and theory change: What is" metaphor" a metaphor for?
Conrad, Ulrich; In Programs and Manifestoes on 20th-Century Architecture about
Glasarchitektur

Fraser, Bruce; Interpretation of novel metaphors

Gentner, Dedre; The shift from metaphor to analogy in Western science by

Gibbs, Jr., Raymond W.; Process and products in making sense of tropes

Glucksberg, Sam; How metaphors work

Gordon, W.J.J.; *The Metaphorical Way: Synechisms*; Cambridge Press

Jeziorski, Michael; The shift from metaphor to analogy in Western science

Kuhn, Thomas S.; Metaphor in science

Keysar, Boaz; How metaphors work

Kriesberg, Irving; C.. the American painter was born in 1919. He studied painting in America at The Art Institute of Chicago and the University of Chicago from 1938-1941 and later in Mexico from 1942-1946. Kriesberg began his interest in art as a cartoonist in high school in Chicago. In the 1930's he spent many days sketching the work of the great masters Titian & Rembrandt when visiting The Art Institute of Chicago. In the late 1930's he came under the influence of modern art via School of Paris exhibit.

Lakoff, George; The contemporary theory of metaphor

Mayer, Richard E.; The instructive metaphor: Metaphoric aids to students' understanding of science

Miller, George A.; Images and models, similes and metaphors

Nigro, Georgia; Metaphor, induction, and social policy: The convergence of macroscopic and microscopic views

Ortony, Andrew; *Metaphor and Thought*: Second Edition; 1993; Published by Cambridge University Press: School of Education and social Sciences and Institute for the learning Sciences: North Western University

Oshlag, Rebecca S.; Metaphor and learning

Petrie, Hugh G.; Metaphor and learning

Pylyshyn, Zeon W.; Metaphorical imprecision and the "top down" research strategy

Reddy, Michael J.; The conduit metaphor: A case of frame conflict in our language about language:.

Rumelhart, David E.; Some problems with the emotion of literal meanings

Sadock, Jerrold M.; Figurative speech and linguistics

Schon, Donald A. ; Generative metaphor: A perspective on problem-setting in social policy:

Searle, John R.; Metaphor

Sternberg, Robert J.; Metaphor, induction, and social policy: The convergence of macroscopic and microscopic views

Thomas G. Sticht; Educational uses of metaphor

Tourangeau, Roger; Metaphor, induction, and social policy: The convergence of macroscopic and microscopic views

Weiss,Paul; "Surrogates," published by Indiana University Press; Empatics; and the Metaphorical Process published in Main Currents in Modern Thought 1971

Zarefsky,David; "Argumentation: The Study of Effective Reasoning, 2nd Edition; Northwestern University and published by The Teaching Company, 2005 of Chantilly, Virginia

References:

A. "Argumentation: The Study of Effective Reasoning, 2nd Edition; by Professor Dr. David Zarefsky of Northwestern University and published by The Teaching Company, 2005 of Chantilly, Virginia

B # =Wikopedia on the www.

C. 4WWW

D. "*Difference and Identity*": 4.0 Gilles Deleuze (French pronunciation: [\[ʒil dəløz\]](#)), (18 January 1925 – 4 November 1995) was a French philosopher of the late 20th century. Deleuze's main philosophical project in his early works (i.e., those prior to his collaborations with Guattari) can be baldly summarized as a systematic inversion of the traditional metaphysical relationship between identity and difference. Traditionally, *difference* is seen as derivative from identity: e.g., to say that "X is different from Y" assumes some X and Y with at least relatively stable identities. To the contrary, Deleuze claims that all identities are effects of *difference*. Identities are neither logically nor metaphysically prior to difference, does Deleuze argue, "given that there are differences of nature between things of the same genus." That is, not only are no two things ever the same, the categories we use to identify individuals in the first place derive from

differences. Apparent identities such as "X" are composed of endless series of differences, where "X" = "the difference between x and x'", and "x" = "the difference between..." and so forth. *Difference* goes all the way down. To confront reality honestly, Deleuze claims, we must grasp beings exactly as they are, and concepts of identity (forms, categories, resemblances, unities of apperception, predicates, etc.) fail to attain *difference* in itself. "If philosophy has a positive and direct relation to things, it is only insofar as philosophy claims to grasp the thing itself, according to what it is, in its *difference* from everything it is not, in other words, in its *internal difference*."

In analyzing a metaphor we ask: "What are its commonalities and significant *differences* and what are the characteristics common to both".

E. Webster's standard dictionary

F. Identifying Metaphor in Language: a cognitive approach Style, fall, 2002 by Gerard J. Steen

G. The Contemporary Theory of Metaphor: a perspective from Chinese by Ning Yu

H. Axiom Roman Numeral references: Metaphor's Architectural Axioms monograph by Barie Fez-Barrington

I. *Art* is the intentional and skillful act and/or product applying a technique and differs from natural but pleasing behaviors and useful or decorative products in their intent and application of a developed technique and skill with that technique. Art is not limited to fields, persons or institutions as science, government, security, architecture, engineering, administration, construction, design, decorating, sports, etc. On the other hand in each there are both natural and artistic where metaphors (conceptual and/technical) make the difference, art is something perfected and well done in that field. For example, the difference between an artistic copy and the original is the art of originality and authorship in that it documents a creative process lacking in the copy.

Barie Fez-Barrington

Is the originator (founder) of "Architecture: the making of metaphors(architecture as the making of metaphors)"

First lecture at Yale University in 1967

First published in 1971 in the peer reviewed learned journal:"Main Currents in Modern Thought";

In 1970, founded New York City not-for-profit called Laboratories for Metaphoric Environments (LME) and has been widely published in

many international learned journals including Springer publications, MIT, and Syracuse University.

The book "Architecture: the making of metaphors" has been published in February 2012 by Cambridge Scholars Publishing in New Castle on Tyne, UK..

All glory and honor goes to Jesus Christ who is my Lord and Savior

Researched Publications: Refereed and Peer-reviewed Journals: "monographs":

Barie Fez-Barrington; Associate professor Global University

1. "**Architecture the making of metaphors**" ©
Main Currents in Modern Thought/Center for Integrative Education; Sep.-Oct. 1971, Vol. 28 No.1, New Rochelle, New York.
2. "**Schools and metaphors**"
Main Currents in Modern Thought/Center for Integrative Education Sep.-Oct. 1971, Vol. 28 No.1, New Rochelle, New York.
3. "**User's metametaphoric phenomena of architecture and Music**":
"METU" (Middle East Technical University: Ankara, Turkey): May 1995"
Journal of the Faculty of Architecture
4. "**Metametaphors and Mondrian:**
Neo-plasticism and its' influences in architecture" 1993
Available on Academia.edu since 2008
5. "**The Metametaphor© of architectural education**",
North Cypress, Turkish University. December, 1997
6. "**Mosques and metaphors**" Unpublished, 1993
7. "**The basis of the metaphor of Arabia**" Unpublished, 1994
8. "**The conditions of Arabia in metaphor**" Unpublished, 1994
9. "**The metametaphor theorem**"
Architectural Scientific Journal, Vol. No. 8; 1994 Beirut Arab University.
10. "**Arabia's metaphoric images**" Unpublished, 1995
11. "**The context of Arabia in metaphor**" Unpublished, 1995
12. "**A partial metaphoric vocabulary of Arabia**"
"Architecture: University of Technology in Datutop; February 1995 Finland
13. "**The Aesthetics of the Arab architectural metaphor**"
"International Journal for Housing Science and its applications" Coral Gables, Florida. 1993
14. "**Multi-dimensional metaphoric thinking**"
Open House, September 1997: Vol. 22; No. 3, United Kingdom: Newcastle upon Tyne

15. **"Teaching the techniques of making architectural metaphors in the twenty-first century."** Journal of King Abdul Aziz University Engg...Sciences; Jeddah: Code: BAR/223/0615:OCT.2.1421 H. 12TH EDITION; VOL. I and "Transactions" of Cardiff University, UK. April 2010

16. **"Word Gram #9"** *Permafrost*: Vol.31 Summer 2009 University of Alaska Fairbanks; ISSN: 0740-7890; page 197

17. **"Metaphors and Architecture."** © ArchNet.org. October, 2009.at MIT

18. **"Metaphor as an inference from sign";** © University of Syracuse
Journal of Enterprise Architecture; November 2009: and nominated architect of the year in special issue of **Journal of Enterprise Architecture**. Explaining the unique relationship between enterprise and classic building architecture.

19. **"Framing the art vs. architecture argument";** Brunel University (West London); BST: Vol. 9 no. 1: Body, Space & Technology Journal: Perspectives Section

20. **"Urban Passion":** October 2010; Reconstruction & **"Creation";** June 2010; by C. Fez-Barrington; <http://reconstruction.eserver.org/>;

21. **"An architectural history of metaphors":** ©AI & Society: (Journal of human-centered and machine intelligence) Journal of Knowledge, Culture and Communication: Pub: Springer; London; AI & Society located in University of Brighton, UK; [AI & Society](http://www.springerlink.com/content/j2632623064r5ljk/). ISSN (Print) 1435-5655 - ISSN (Online) 0951-5666 : Published by Springer-Verlag;; 6 May 2010 <http://www.springerlink.com/content/j2632623064r5ljk/>
Paper copy: AIS Vol. 26.1. Feb. 2011; Online ISSN 1435-5655; Print ISSN 0951-5666; DOI 10.1007/s00146-010-0280-8; : **Volume 26, Issue 1 (2011), Page 103.**

22. **"Does Architecture Create Metaphors?;** G.Malek; Cambridge; August 8,2009
Pgs 3-12 (4/24/2010)

23. **"Imagery or Imagination":**the role of metaphor in architecture:Ami Ran (based on Architecture:the making of metaphors); :and Illustration:"A Metaphor of Passion":Architecture of Israel 82.AI;August2010pgs.83-87.

24. **"The sovereign built metaphor"** © monograph converted to Power Point for presentation to Southwest Florida Chapter of the American Institute of Architects. 2011

25. **"Architecture:the making of metaphors"**©The Book;
Cambridge Scholars Publishing
Published: Feb 2012
12 Back Chapman Street
Newcastle upon Tyne

NE6 2XX

United Kingdom

Edited by

Edward Richard Hart,

0/2 249 Bearsden Road

Glasgow

G13 1DH

UK

Lecture:

[http://globaluniversity.academia.edu/BarieFezBarrington/Books/1449761/Architecture The Making Of Metaphors](http://globaluniversity.academia.edu/BarieFezBarrington/Books/1449761/Architecture%20The%20Making%20Of%20Metaphors)