

## Discussion Note

### *Concept of Universal Balance and Order*

Sami M. Angawi <sup>a\*</sup>, Karim Daghbouche <sup>b</sup>

<sup>a</sup> Amar International Center For Architectural Heritage, Jeddah (Saudi Arabia)

<sup>b</sup> Hanover (Germany)

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### ABSTRACT

In an ever-increasing environment of cultural, economic, and political globalization, the concept of universal balance and order offers a holistic and comprehensive approach to discover the constructive power of fundamental antagonists such as *continuity* versus *change* and *unity* versus *diversity*, which up until today, polarize and disintegrate the world community more dramatic than ever before. In order to sense *equilibrium* and finally reach peace, the underlying principles of the necessary dichotomy of *constancy* and *variation* is exemplarily explored and illustrated in the context of an Islamic concept of universal balance and order, applied on aspects of *Hajj* (Muslim pilgrimage), *Makkah*, and *Madinah*.

**Key words:** *Makkah, Madinah, Hajj*, continuity, change, unity, diversity, equilibrium

## 1. INTRODUCTION

Conceptualizing “balance and order” relies on an appropriate analytical framework.

Over the past century, day-to-day perception of the world surrounding us was subjected to various changes, most important of it by a deep revision of common *Cartesian* categories in analytical thought:

1. Complementarity
2. Recursion

1. The concept of *complementarity*, which originated from physical studies describing *quantum mechanical* phenomena at the beginning of last century, proved up until today its heuristics to assess and validate any kind

of dichotomies which, in light of physical realities, turn out to be necessary and constructive antagonisms.

While quantum mechanical formalism suggests the impossibility to describe a simple physical system such as “light” without complementary notions like “particle” (photon) and “wave” (electromagnetism) [cf. Bohr 1928], it became evident that any constructive concept of semantically complex notions such as “balance” and “order” calls for thorough analysis of systemic terms like “constant” and “variable”.

2. With *complementarity* referring to the way complex phenomena are described, the concept of complexity itself is bound to the way subjective perception materializes in general. With this regard it is important to acknowledge the generic recursive function which lies beneath any complex notion such as

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\*Corresponding author: s.angawi@gmail.com

beneath the dual pairs “diversity” and “unity”:

Here again quantum mechanical analysis may provide a glimpse on how any measurement necessarily interacts with the object of measurement itself, i.e., how the key interdependence of subject and object can and must be regarded as another fundamental but constructive antagonism. [cf. Bohr 1928]

**1.1 The challenge**

Any single-sided attempt to provide concepts for “universal order” cannot meet the claim. Classic attempts based on linear causalities not only overlook complementary aspects but also recursive, non-linear realities, which eventually not only represent a theoretical but also a major practical shortcoming. The challenge faced by any approach to overcome the problem lies in providing a balanced solution, which fully anticipates the complexity, non-linearity, and duality of universal systems.

**1.2 The approach**

This discussion note is an addendum to various projects at *Amar International Center for Architectural Heritage* on subject matter. It briefly elaborates a perspective to satisfy complex universal systems addressing them with an Islamic concept of universal balance and order by applying it on aspects of *Hajj*, *Makkah*, and *Madinah*.

**2. FORMAL PART**

**2.1 Equilibrium**

Any synthesis of, e.g., the following dual notions, bears balance [Figure1]:

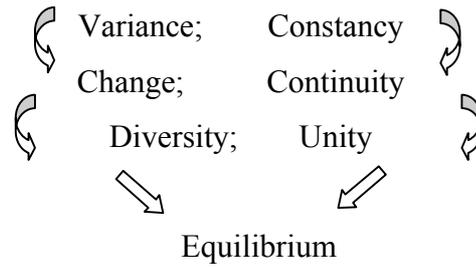


Figure 1

It is evident, that constancy alone could only yield nothing whereas variance alone would lead to chaos.

A balanced order implies “change” and “continuity” leading to “diversity” and “unity”.

The “Equilibrium” could now be regarded as the balanced interaction of any complementary notion, as well as both, necessarily and sufficiently.

**2.2 Order**

Having identified an adequate systemic tool with an understanding about seemingly contradictory, dual notions, which eventually turn out to be necessarily complementarities, it is evident that semantically broad conceptions such as “order” should be based on an universal concept of balance which anticipates the fundamental dualities rather than only reposing on one or the other antagonist.

Accordingly, the following practical part emphasizes an Islamic perspective where the syntactically different notions “balance” and “equilibrium” are unified with the semantics of the *Arabic terminus technicus* for “balanced way”. This “balanced way” constitutes the practical imperative for Muslim perception and action as reminded severally by the Islamic prayer schedule.

**3. PRACTICAL PART**

Applying the concept states of equilibrium and order on *Hajj* and *Makkah*, the identification of their

constants and as a complement, their variables, provides a sense of the underlying principles.

Constants and variables interact as an interdependent system with, e.g., the constants of:

- *orientation* (*Kibla* - universal direction (*Kaaba* - House of *Abraham*) for prayer)
- *area* (sanctuary area around *Kaaba*)
- *space* (*Al Haram* - Holy Mosque in *Makkah* ← *Kaaba*)
- *point* (black stone in *Kaaba*)
- *taste* (*Zem Zem* - water source in *Al Haram*)

And variables of:

- *construction* (materials, dimensions, ratios, locations, style)
- *transportation means* (camel vs. car)
- *ethnicity* (diversity: American, Caucasian, Ethiopian, Malayan, and Mongolian)
- *time & culture* (style, pace, traditions, values)
- *technology* (static and dynamic)

#### 4. CONCLUSION

Future city- and landscape planning in *Makkah*, as a Holy City in the center of Muslim’ pilgrimage (*Hajj*), may take advantage of being planned as a true, balanced sanctuary (*Al Haram*) versus an ordinary city as anticipated and ruthlessly executed to-day.

With, e.g., “prayer” being coupled to the *constants* of “orientation”, “area”, and “space”, in addition to the *variable* of “time”, city planning should enable pilgrims to pray in exclusive pedestrian areas with appropriate traffic solutions as successfully implemented in many metropolis’ around the world already.

Regarding *Makkah* land- and cityscape planning, it would be advantageous to consider absolute height and the basic

ratios of the *Kaaba* for any construction ranging from buildings to tunnels and bridges as it was respected and implemented from the founders’ days (*Abraham*) thousands of years ago, over the first 150 years of *Hidschri* (Islamic (moon) calendar bound to first Muslims exile in *Gregorian* July 622), until the beginning of the past century [Figure 2]:

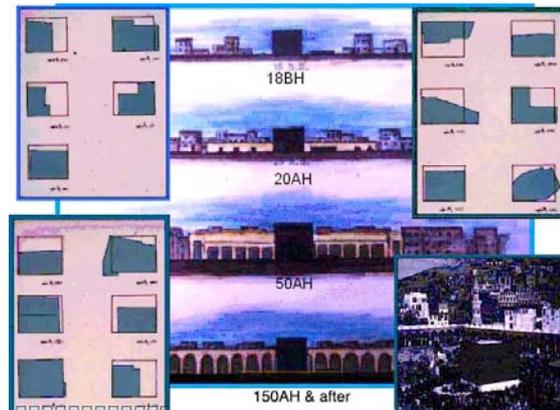


Figure 2

As for the construction height of buildings, the angle to the *Kaaba* should act as a constant value whereas materials would vary according to cultural variance in relation to ethnic diversity. This could be achieved by applying the height angle of the *Kaaba* to the height of constructions and with the surrounding landscape such as mountains as an absolute constant height limit leading to the function of height increase over distance to the *Kaaba* [Figure 3]:

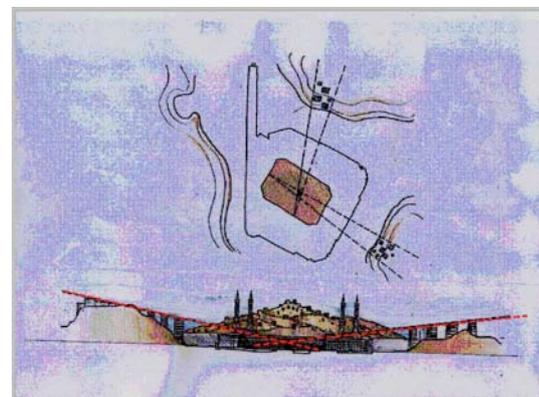


Figure 3

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