Tradition vs. Modernity:
The Quest for a Cultural Identity

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In the quest for a more sustainable environment, there appears to be a need to confront issues of tradition vs. modernity and culture vs. technology in a world where boundaries once dividing these issues are collapsing, and differences once separating them are disappearing. This study demonstrates, through examination of a series of built examples, the successful integration of tradition and modernity as they are reflected in Muslim cultures. In practice, the notion of culture and technology is addressed through the built context, ultimately establishing the identity of a society through its architecture. This paper argues for the preservation of a culture through understanding the level of symbolism established in its built environment: the higher the level of symbolism, the further detached an artifact becomes from its place of origin. This research focuses on possible scenarios involving the conscious application of past and present typologies of form and technology in search of a recognizable cultural identity.

In his book *History and Truth*, Paul Ricoeur wrote that "The phenomenon of universalization, while being an advancement of mankind, at the same time constitutes a sort of subtle destruction, not only of traditional cultures, which might not be an irreparable wrong, but also of what I shall call for the time being the creative nucleus of great cultures, that nucleus on the basis of which we interpret life, what I shall call in advance the ethical and mythical nucleus of mankind."

The advancement of mankind is portrayed through the advancement of technology within a culture. In this instance, culture becomes "a general process of intellectual, spiritual, and aesthetic development," an abstract notion belonging to a society that provides it with an association and identity. And technology is "a system of all production": a crucial implementation of technics (tools), techniques (processes), and theories that releases mankind from the bondage of labor in order to create opportunity for the pursuit of higher
activities. Consequently, the utilization of universal technology becomes an indispensable element toward progress and achievement, and culture becomes a necessary means of formulation and recognition.

Discussions regarding specific technologies and their application are always accompanied by discussions of the cultural context in which the technology in question is adopted. In principle, this approach becomes an argument for the differentiation between the knowledge and practice of technology. Within this distinction, knowledge is a theoretical science which, in this case, is technical; practice, on the other hand, is the empirical and experimental application that becomes technological. In essence, the implication is that knowledge is universal, but its practice is cultural. For example, the use of computers is conceivable in the United States as well as Mexico. But in reality it is almost impossible to turn Mexico into a computer-operating culture. Neither is Mexican society as it exists today structured to accept high technology, nor is Mexican culture accommodating to such a capital-intensive, labor-saving orientation. The proposition of widespread use of computers is not considered feasible, appropriate, or successfully applicable. Of course, examples need not go to such extremes. Even in the industrial world there is an underlying distinction between technological applications in Europe and the United States. The former is capital-saving, labor-intensive; the latter is a capital-intensive, labor-saving society.

Thus, what determines technology's realistic application is its cultural context. Cultural aspects are perceived through goals, values, ethical codes, and belief in progress, awareness and creativity. Consequently, technology is synonymous with cultural values in some aspects, and it is value free in others. The notion that needs to be addressed further is the means in which culture and technology come together within a given context.

Architecture, as one form of representation of the integration of culture and technology, is an exceptional vehicle to investigate the end result of this coming together. Architectural artifacts are strongly embedded in and formulated by a particular culture, and yet they are also exposed to technology at large.

In today's architectural practice there exist distinct camps of conservatives and liberals, advocating two limited and confined positions in which culture and/or technology are mis-presented, even distorted. On one side are the conservatives, who promote a built environment in which both means and ends are traditional — a position that accepts existing forms and technologies, rejecting in the process development and novelty. On the other side are the liberals, who promote a built environment in which both means and ends are modern — a position that invites innovation and invention, yet denies historicism and origins. In both cases the means concern the technologies implemented, and the ends concern the forms created.

In reality, the two opposing camps encompass between them less rigid positions. In general, the relationship between culture and technology can be encompassed concisely in four formulations within the context of tradition and modernity:

I. Traditional technologies applied to traditional forms.
II. Traditional technologies applied to modern forms.
III. Modern technologies applied to traditional forms.
IV. Modern technologies applied to modern forms.

Present in this dialogue between technology and typology of form is the opposition between the want for "universalization" and the need for "contextualization." While universalization is sought through the application of modern and global technologies or forms, contextualization is sought through the application of traditional and local technologies and forms.

The four positions stated above are clearly expressed in the following representations of Muslim culture from around the world. This study concentrates on a culture that is more practice oriented than ritual specific. Its constructs which are based on a universal understanding of daily behavior through faith and belief, are an integral part of the architecture of the place. Yet even within this unifying faith, there exist diversities and multiplicities due to distinct regional habitat conditions and cultural practices — a condition that opens up possibilities for a more colorful display of distinct regional expressions.

TRADITIONAL TECHNOLOGIES APPLIED TO TRADITIONAL FORMS

While the use of traditional technologies applied to traditional forms is understood to represent a position that is more or less of the past, such practices continue to be adopted in many regions of the world. For example, the architect Hassan Fathy, an advocate of indigenous/local building techniques and forms, initiated a return to the "trinity" of owner, architect and craftsman. Using traditional building techniques (in this case the vault, the dome, and the vocabulary of mud brick), Fathy built the village of New Gourna to accommodate 900 families. His choice of mud brick was derived from its availability as an inexpensive local building material and its adaptability to the specific roof forms of the vault and the dome. In turn, the size and scale of building elements were limited by the choice of material. Fathy pointed out the importance of the fact that the peasant "won't be able to escape the severe restraint imposed upon him by his material." (FIG.1).

The resulting molded plastic forms were a direct reflection of the nature of mud brick, and they imparted to New Gourna a sense of purity. Such forms do not require the architect to prepare conventional production drawings. Design is conceived as construction is in progress, and floor plans are the only drawings required from the architect. Craftsmen, once provided with the dimensions of a space, know where to begin the springing points of an arch and vault, and where to end them. The end product is guaranteed. Past experience and skill were the only tools necessary to accomplish the task. According to Fathy:

"...
It is important to understand that this search for local forms and their incorporation in the new village was not prompted by a sentimental desire to keep some souvenir of the old village. My purpose was always to restore the Gournis their heritage of vigorous locally-inspired building tradition, involving the active cooperation of informed clients and skilled craftsmen:

In spite of the project's failure to bring people back to the village, New Gourna remains an experiment that is studied and emulated throughout the world today.

TRADITIONAL TECHNOLOGIES APPLIED TO MODERN FORMS

The Yaama Mosque in Niger utilized similar traditional mud-brick construction techniques as those employed at New Gourna, and yet it ventured into experiments with nontraditional forms (FIG.2). One design jury wrote that it expressed “...a manifest will to use traditional techniques in a creative manner, to experiment with them and to achieve results that induce a new awareness of their possibilities.”

This Friday mosque was built in stages between 1962 and 1982. Its exterior walls and interior columns are of mud brick; its main roof is composed of wood branches and matting covered with earth; its central dome is a composition of arches made of bundles of sticks bent into shape and covered with mud mortar; and its exterior and interior walls are surfaced with a lime wash to which are applied the decorative motives. Thus, its construction employed techniques that were local and evident in all the structures of surrounding villages. Yet the final form of the mosque was based on the mason's observations during a two-year pilgrimage to Mecca.

MODERN TECHNOLOGIES APPLIED TO TRADITIONAL FORMS

Other than massive mud-brick structures, some of the most successful shelters erected in hot climates have been tents. This type of structure has been perfected by the nomadic tribes residing in the deserts of Arabia. The traditional tent encampment of this culture has inspired the design and construction of a far-from-traditional building, an airport terminal in Saudi Arabia (FIG.3). According to one critic: “The Hajj Terminal structure has pushed known building technology beyond its established limits while demonstrating that such a massive structure can still be light and airy, a twentieth-century echo of the traditional tent structure that have worked so well in desert climates.”

Covering 40.5 hectares, the Hajj Terminal consists of two
identical tent-roof pavilions separated by a landscaped mall. Each pavilion is divided into five modules, consisting of 21 tent units. Viewed from above, the pattern gives the terminal the image of a tent encampment in the desert.

The form of a tent is synonymous with the traditions of Arabia, with its sandy deserts and hot-dry climate. However, in order to transform this traditional form into a modern functional space (i.e., an air terminal) state-of-the-art technologies became indispensable. This fact was acknowledged by the lead designer of the Hajj Terminal’s tent-roof structure, Fazlur R. Khan: “This tent does not copy tents of the past — it is a form for the future, and here it caters for today’s needs — air travel.”

The simple canvas, animal hides, and rope of a traditional tent were here replaced with fiberglass fabric, steel pylons, and cables. And the tent edge was raised approximately 20 meters above ground to accommodate the various functions of a modern terminal (immigration, baggage claim, food facilities, support services). Nevertheless, the spirit and aura of a tent in the desert was never lost. Enclosed only on the upper level, the structure was designed so as to be open to air circulation, while the fabric was manufactured to allow 7 percent of sunlight to penetrate to the interior, eliminating the need for artificial lighting during the day. The structure also succeeds in providing a shaded area at 80 degrees Fahrenheit when it often reaches 130 degrees Fahrenheit outside, and it resolves acoustical problems through volume heights and material applications. In essence, the structure provides the visitor with a spatial and environmental experience similar to that of traditional tent structures, and yet the design is far from traditional.

MODERN TECHNOLOGIES APPLIED TO MODERN FORMS

The Hajj Terminal is an example of how a symbol of place may be adapted to a new context of application within the same culture. In spite of its technology, its literal symbolism is clear and convincing. In contrast, l’Institut du Monde Arabe (IMA) represents a highly abstracted symbolic approach to the design and execution of a building (Fig. 4). This edifice is heavily layered with symbols, icons, and formal solutions, but these speak to a broader cultural context removed from the specifics of place. According to one design jury: “[the IMA building] aspired in its
architecture to serve as a place of thought about Islamic culture and admiration for its artistic heritage and, alone outside of the Muslim world, it has given importance to contemporary arts from Arab lands. This statement addresses two major dichotomies: the representation of both the traditional and modern frame of reference in one structure; and the re-presentation of Arab and Muslim cultures in a European context.

In form, the building is a modern high-rise office structure of steel and glass. The parti is based on an open-court plaza, resembling the sahn/courtyard of a mosque. This is flanked by a rectangular block that gives way to a curved north wing, emphasizing the flow of the adjacent street. Here the contemporary Western building type has borrowed individual building elements and gestures from traditional Muslim and Arab architecture, and then transformed these into integrated forms that complement the building as a whole. For example, the hypostyle hall on the ground floor resembles ancient Egyptian halls; the eastern book tower is reminiscent of the spiral minarets in Cairo and Samara; and the elevator shafts allude to the wind towers popular in vernacular buildings of the Middle East.

The most prominent borrowed feature, however, occurs on the building’s south facade. Here, in a manner typical of Arabian solutions to south facades, the wooden mashrabiyya of traditional Middle Eastern architecture is first adopted, then adapted to the vernacular metal sun screens of Western architecture. Innovative technology reaches its finest accomplishments in this 30m. x 80m. wall. It is built of 16,000 moving parts, which operate on the principle of a camera iris diaphragm, opening and closing electronically in response to the readings from a photovoltaic sensor, regulating the amount of light that may penetrate the wall. While shadow patterns are usually secondary to the control of daylighting in a building, in this instance the act of reflecting shadows takes on a substantially symbolic role as a pattern-language element expressing the traditional architecture of the Arab countries. As perceived and executed, the IMAM building is a highly symbolic example of modern technology and form that succeeds in expressing a traditional culture admirably.

THE SYMBOLIC CONTEXT OF MODERNIZATION

In his essay “Art and Technology,” Paul Valery argues that the “ease of unmaking,” as signified in the contemporary prac-
tice of the arts, is suggested by the “evident ease of the making”; by contrast, tradition sets up defense mechanisms through conventions and constraints, imposing formal conditions and perfecting details. Thus, emphasis on means or technology, rather than ends or forms, has created a protective aura around today’s traditional technology and typologies of forms that has ensured its power to resist change. Modern technology and form, on the other hand, have broken the constraining barrier of exact requirements and methods of application and production to concentrate on pure self-expressions and imagery. This has been a stance that has freed and isolated the individual from collective society; yet at the same time, it has exposed individuals to pure value judgments, alienating them, and leaving them defenseless.

With the recent trend toward universalization among the cultures of the world, one can applaud the openness, welcome the broadening of horizons, and look forward to the possibilities of interaction and novelty. Yet one cannot but question whether there might also be a rising danger of uniformity and repetition over time. If one accepts symbolism as the specific representation of a culture, then the means to maintain a regional identity can only be achieved through the level and extent of symbolism engaged in and practiced within that region.

In essence, the symbolism presented in a building must be adopted in relation to the culture in which the chosen symbolism is applied. The higher the level of abstraction, the further the culture is removed from its context. Thus, the success or failure of reconciling culture and technology is not a function of what to implement, but rather how to implement it in a given context.

The four positions regarding culture and technology outlined above raise a fundamental question: is technology culturally neutral? That is, which aspects of technology are tied with cultural values, and which aspects are, in some respect, value free? In referring to Muslim communities at large, Michael Sorkin acknowledges that:

...while countries must follow their particular paths, free from the repressive colonizing of the West, uter sequestration is naive given the global realities of an ever more common commercial and technological culture. This imperative to share puts even more strain on the sources (such as architecture) of individuation. The issue is especially pertinent in cultures — such as Islam — with recent histories of militancy on behalf of their own autonomy.

Sorkin continues:

For building, the symbolic core of this problem lies in the relationship of modernization and Modernism. In its typologies, architecture arises from the logic of precedent: traditional societies have no ready, formulated solutions to the problems of airports, steel mills, office towers. Modernism, likewise, has no precedent way with a mosque or a neighborhood.

Therefore, for traditional societies to enter the modern era, they must adopt certain building types. Yet in order for them to maintain their sense of identity, they must sustain their tradition (in its various forms of representation).

The argument presented here stresses the existence of several levels of symbolism. These were demonstrated through the four representations from Muslim cultures — from the literal application of symbolism, as in the case of New Gourna, to the literal abstraction of symbolism, as portrayed in the office building in Paris.

All human endeavors hold rational and irrational characteristics. Yet they gradually lose their symbolic ritual connotations as invention transforms a chain of events into a single act. Richard Neutra illustrated this phenomenon through the ritual of lighting a fire, a celebrated act symbolizing warmth and brightness. But today, turning on a switch instantly provides us with light or heat. No longer does this carry with it the symbolism originally associated with the act, nor does the act proceed in time and place to encourage it. Similarly, processes of production no longer hold the association they initially held in the past.

Nevertheless, both symbolism and invention are crucial to society; they bring together a continuation of a civilization’s contributions, maintaining in the process a sense of familiarity associated with the past and of achievement associated with the present. Neutra wrote:

[It] seems somehow pleasing to see the primitive and the modern side by side; it stimulates the mind. An old piece of furniture in a modern house may serve as a window, opening up a perspective from one age into another, an outlook from our own enclosed little moment onto the broad landscape of history.

The notion of “place-making” in this age of universalization can be viewed as a conceivable project — in which the extent of its possibilities are limited only by its context of application. Neither culture nor technology are capable of restraining the collective memory from interpreting symbolism in the built environment. “Placelessness” is a situation that should be viewed as an impossibility — that is, a nonexistent option.

2. Raymond Williams presents a comprehensive etymological search into “culture” and “technology.” These terms are introduced within their historical evolution and contemporary development. Refer to R. Williams, *Keywords* (London: Fontana, 1983), pp.87-93 and pp.315-16, respectively.


4. All case studies are highly acclaimed and much-publicized projects. Three of the four case studies received the Aga Khan Award for Architecture. Hassan Fathy’s project was instrumental in winning him the first Aga Khan Award for a Muslim Architect.


6. Ibid., p.43.


9. Ibid., p.126.

