Typing Theory in Post War Japanese Architecture Planning
Lessons for the Iraqi Post War Situation

Tara Abdulrazak¹, Suguru MORI²
1 Ph. D. student, Graduate School of Engineering, Hokkaido University
2Professor, Faculty of Engineering, Hokkaido University

Abstract
Iraq post-war situation is characterized by the dilemma of developing a suitable model for the reconstruction process that trade-offs between the pragmatic short term goals of immediate housing and the long term goals of developing a housing environment that reflect real people lives. Japanese Architectural Planning Research (APR) developed a pioneering post-war experience that makes it a suitable metaphor for the current post-war situation in Iraq. In this paper, we try to shed a light on the lessons learned from Japanese APR to deal with post war societies. So, we briefly discuss the social direction of post war APR concentrating on the typing theory that characterized post war APR presenting its different models or trends. The main result of this paper is the importance of change and individuality in APR. Change is highlighted by Japanese APR as the main problem of post-war situation. On the other hand, individuality as presented especially by APR social approach is a deciding parameter for meaningful social interaction and culture unifying pattern. Both of them will play a central role, when APR will be utilized as an approach to reflect the specialty of Iraqi social environment.

Keywords: Architectural Planning Research; Typing Theory; change; individuality

1. Introduction
Iraq suffered a series of huge destructive wars from Iraq-Iranian conflict (at beginning of 1980s) to the surrender to the Americans in 2003. Now, Iraq has a destroyed physical and social fabric of local community. Even, it is possible to say that Iraq is in the immediate need for a construction process not reconstruction one.
The current Iraqi built environment turns into a multidimensional problem that clearly represents the devastated results of wars. Technically, this sector reflects the damages to the critical infrastructure like roads, bridges urban facilities, as well as, the problems of water, electricity and sewer. Therefore, rebuilding and rehabilitating of the built environment constitute a major interest and challenge for the government and foreign aid organizations Cordesman (2007). At the cultural side, community damages affected the cultural identity and associated with problems of refugee, resettlement and the adaptation of the returnee. socially, emerged problems like disbanding militias, restructuring Iraqi-security forces and the main problems of ethnic separation and cleansing impose a challenge for reconstruction efforts by itself and by its by-products problems like immigrations of professional, tradesmen and owners of capital who left the country. Finally, the lack of trust in legitimacy and authority of state because of its arbitrary policies lead to the disintegration of political, social and economic sectors as factors of national cohesion.
This paper built on the assumption that in post war dilemma, social and cultural management get the primary importance over technical solutions. Fixing individual life and meaningful social interaction between each other are the first step for handling change accompanied with war mega events.
Finding a metaphor in other people experience for post war situation will be more helpful for the Iraqi case which characterized by unclear vision about rebuilding process. So, we adopt social approach of Japanese Architectural Planning Research (APR) and its experience for post war situation as a focus for developing a framework to analyze current post war situation in Iraq. The remainder of this paper is organized as follows. In section 2 we discuss briefly
post war APR. The development of type as a concept in APR is presented in section 3. Typing theory and its models will be presented in section 4. Most important lessons learned from post war APR experience are presented in section 5. Finally, we conclude the paper and highlight possible directions of future work in section 6.

2. Post War Architectural Planning Research APR

APR is a strong research field in Japanese architecture, had been developed mainly in academic circles of Architectural Institute of Japan (AIJ) (established in 1886).

Today, it is possible to identify three main fields in the Japanese APR, one of them concerned with the technology of production, while, other two fields are related, in a broad sense, to the relationship between (architecture and human being). They include mannerism (life and space) studies that include sub fields related the building type, based on amalgam of sociology, home economics, ergonomics and issues focusing on theories of design, human behavior, safety and security. However, we are concentrating mainly on the APR focuses on (life and space) due to its historical and societal aspects (Funahashi 1986).

APR is actually a decision making process constructed on the relation of historical background, as a theoretical base, and research background. The last provide the opportunity to deal with changes and sudden mutations of transitions and reinterpretations, which appeared so explicit after special situation of post war years and the high growth period (Waswo 2002).

Research background for post war APR focused on grasping continuous changes by fact recognition and finding method for planning development to clarify current situation and assumes view to the future. To accommodate theoretical perspective and continuous change within society, APR refused modern solutions of standardized model that neglect any changeable parameters of the context (AIJ 1989).

APR concerned with deciding ideals rather than standards for value Judgment, decisions making and evaluations according to the desired new direction. APR continuously modifies its ideals of value judgment, in the field of housing specially, according to the change in man perceptions and to the sudden mutation that always changes the demands of the age. Ideals of value Judgment served the purpose of aligning many contradicted relations of specific periods, developing typed models for decision making process to go with the deep structure of the society (Boudon 1986).

3. Developing the concept of type in APR

Idea of type in APR emerged to accord both democracy and advancement as source of change within fixed presentness moment of functionalism. Prototype research here accompanied rationalism with predominance of the common sense of value. To answer main demand of the age, like housing shortage and the need to spread up construction (Yasushimizu Yoshitake 2007).

The origin of type idea in APR is found in the work of Uzo Nishiyama who worked on a process aiming at materialization of planning objective (Urushima 2007) and Yasushimizu Yoshitake who on the same trend worked on objectivistic of the analysis of planning research process. Nishiyama built his objectification on (やどどこ) yoridokuro for floor planning according to people class. He introduced idea of reproduced law that can be discovered from studying usability of past constructions (Syouzi 2007). Using scientific theory to chose from repeatedly constructed phenomenon then modify it as a type for the inevitable selection that give the possibility to achieve and predict A.P.R in the future.

Such ideas in APR developed the beginning of what is called prototype of (How to use it) research, a term appeared in Nishiyama lab. This term is variously interpreted but for Nishiyama aligned with induction as important feature to grasp continuous change within historical development.

From another side, Yoshitake views on APR handled change with typed movement of history. Connected with historical view that sees the phenomenon as a flow at time, independent from any effected relations. According to such law, phenomenon repeated in independent continuous sequence, without any effect of change from past and future. His idea is nearer to law than a type to grasp change.

Yoshitake seemed to be more faithful to scientific law with idea of continuous sequence and neglecting effect of change. For him even the phenomenon can be forecasted and the scientific law of its repetition completely grasped. However, Yoshitake denied that the phenomenon can be treated as an amount, for him the good cannot be judged.

He insisted that always new facilities penetrated, so objectivity is in the way of obtaining change, by systematic knowledge and continuous observation .Connecting with Nishiyama, this will entrust experiencing and intuitions of the researcher.

From another side Suzuki and Aoki methods are slightly different. While Yoshitake tried to catch the phenomenon statistically, they both tried to catch it as an appearance in movement and development within whole process of change and continuity (AIJ 1989).

4. Typing theory

In this paper, we will borrow the terminology of typing theory from computers science to describe APR methodology to deal with change. Here, typing theory is used to describe rationalization of working process but with functional differentiations, in another word
Typing theory looked to the effect of advancement of life on the society and individual. It is built in historical view to recognize this advancement as a motivation of change. In contrast to the scientific dialectic, that does not recognize any contradiction within development.

Problem of typing theory is the doubt about the unitary face of a type and the way to find the relativity. Boudon (1986). Within typing theory APR faced with problem of diversification and changes of living demand, in another word individuality of living demand.

Typing theory is working on estimating the value of relativity of change, trying to connect advancement and rapid improvement of living, individuality, and unitary face of common type. From the most dominant faces of typing theory are model type and regional type. Model type firstly appeared in Nishiyama lab mainly as an answer to the continuous change in life style, it works on giving precise description to reality by comparing types of house and types of life. Grasping complex reality as a standpoint for working process, started by recognizing whole images and then extracting a type.

While, the regional model worked on admitting the relativity of advancement within diversification and changeable type of living by studying shared actions within life. Regional model deals with change in the structure of individual behavior. Individuality within sociological aspects of APR was discussed in a broad way in Nishiyama plan type (will be explained in detail later) and in Suzuki work AJI (1989). According to Suzuki view, Individuality is developed within environment. Individuality is where man grows up, when original development worked on and at the same time new development tried to accomplish individual environment. Home and space composition are preferable point according to resident mind, such view to Suzuki is criticism to unifying pattern of standardization.

According to the typing theory, issues of private matter and change, involved within individuality or other motivators of the period, give an indication to what coming next and then develops firmly from separation to common public sense. According to such view Sugiyama and Shigeru Suzuki developed (research of adaptable house).

It is possible to state the most significant and important models of typing theory built on the idea of individuality and generalization of the type as follows.

**Adaptation Type** is always in conflict with past or current type and tried to rearrange it with change and the demand of new growth. Adaptation type is a matter of relieving final utopia. APR worked on receiving final utopia and adapts it as motivation to the next age AJI (1989).

On the other hand, Nisiyama in his plan type regarded the house as a result of examining and considering society. Standardization appeared in his attempt to specify a predominant plane type. He tried to draw analogy between laws of life process in popular dwelling with modern way of living. Yasuhide al (2007), Nishiyama plan type was an answer to the need of a large amount of popular dwelling. His methodology of plan type is presented by triangular process of the analysis of current state position, establishing of appropriate plan, than to standardize design. In spite of the fact that the tentative of plan type is standardization; it is also a fed back process depending on the change of the condition working on it. So, as long as the process keep certain as standardized idea, it done with conformity with the change in individual concrete condition.

**Cooperative House or Neighborhood Protest Movement (NPM)** was accompanied with simple expectation for democracy and advancement that mostly questioned after the war defeat. NPM model aimed to achieve what is called (よどろすべく) yoridokuro sesubeku or the democratic diffusion of value according to people and dwellers stand point. NPM built on social paradigm especially after the high growth period when the resident demand bundled off with general disagreement with the construction of highways and environment destruction.

APR in NPM tried to catch resident developing demand and defiance of the resident life through resident participant and native experiencing planning. NPM (こいこうのじゅうみうんどう) resident participant in planning by deciding the communal facilities and even the appearance and construction process. In another word in the NPM cooperative house, resident achieve the demand by their self voluntarily that is what NPM called self aid thought AJI (1989).

5. **Learned lessons from APR post war experience**

According to APR Change is the main characteristic and problem for post-war societies. Especially, those went under long period of conservation and isolation. This was evident for Japanese pre-war society. It is also the apparent phenomena for current post war Iraqi society.

In traditional Iraqi society, Architectural space composition was in harmony with social, environmental and cultural responses of the Iraqi individual mentality. However, change started by the new modernity features that affected the traditional Iraqi society at the beginning of the last century. The
early signs of change were the appearance of the cars, roads, more freedom to women to study and work, more contact and openness to the foreign countries. Society mainly changed from closed internal one to more open society.

At the begin such changes successfully absorbed into a more fashionable unitary face of architectural work of the 1980s and 1990s with the false stability of the individuals within the dictatorial political dominance, which isolated the society from the outside world development like (mobile phone, internet--). However, the problem of change becomes challenging after the catastrophic changes in the last war results. So, here APR experience with change can greatly benefit the current situation in post war Iraq.

According to the APR, change has its main effects on society direction (ideas and view) as a result of change in man perception. That appeared in the Iraqi society in the cut with pre-war period lines of thought that had some kind of trend (mainly worked to reflect nationality and borrowing from traditional architecture). Besides, the escalating tension of cultural struggles and ethnic problems, as a result of the lax in society structure and individuals interaction with it.

APR dealt with the change by deciding ideals for the coming working process. According to Nishiyama plan type, individuals get permanent role in handling society change and deciding its ideals. Where individual regarded as the epistemological source for the ideals of typing model. Importance of individual as discussed in individualism theory is when he or she regarded as link between circumstance changes and decided ideal Udehn (2001). Actors’ behavior mostly related to the circumstance especially with the new democratic political agenda when the individual get the freedman to decide what is ideal to be developing as utilitarian, cognitive or strategic type Schelkle (2000).

In APR, especially in Nishiyama work, individual behavior and thought grasped by studying and surveying workers dwelling and farm villages according to which space was a real exchange for the change in the parameters of life. Using the idea of type to imply and reflect the ideals.

So, this highlighting for the individuality gives an objective face for typing theory and makes APR more applicable as working process. So, individuality represents a focal point to handle the difficulties arisen from the differences exist between Japan and Iraq along cultural background and architectural disciplines. Besides, the time span difference between post war APR experience which belongs to the 1950s of last century and current post war situation in Iraq.

6. Conclusion and Future Work
The current housing situation in post war Iraq is in immediate need for a new framework for rebuilding process. Japanese APR, which led a pioneering experience post war experience, is a suitable metaphor for Iraqi case. In this paper, we discussed post war APR briefly, we concentrated on typing theory as concept and as a theory, presenting its different models of adaptation type, plan type and NPM. Finally, we highlighted that the main learned lessons from post war APR is its attitude toward change, as main challenge that faces post war societies, and individuality that make it objective and transferable to other societies.

As a possible future work for this research line, we will depend on field work and survey for the after war arbitrary slums and immediate housing solutions maid by ordinary people appeared in current Iraqi societies. Although it always connected with bad picture, it reflects the new current need at least for the poor, refugee, and postman homeless people. Slums provide the freedman to modify, rebuilt and adding according to the real changes in life. So it may provide the material to extract ideals applied according to APR objectivity of model types.

7. References
[1]. Architectural Institute of Japan AIJ, 1989, History of architectural planning research on multiple-unit housing in Japan [Shitō jūtaku keikaku kenkyū-shi],
[7]. Schelkle Waltraud, 2000Paradigms of social change: modernization, development, transformation, Frankfurt, Germany, Campas Verlag Gmbh.
[8]. Smith Ronald w., Valerie bugni,2006,symbolic interaction theory and architecture, in symbolic interaction .pp123J155