

学位論文題名

Post-war Housing Reconstruction in Iraq: Social Principles and Planning Methodologies

(戦後イラクの住宅復興における社会原理と計画的 метод論に関する研究)

学位論文内容の要旨

This dissertation mainly focuses on the newly initiated public housing reconstruction process in the post-war era in Iraq, which, specifically, starts from 2003. Post-war era governments in Iraq announced promising plans to support a large number of public housing projects to rectify the severe post-war housing shortage. However, this ambitious process is associated with a variety of major drawbacks and shortcomings. The decision-making process, for example, ignores the importance of developing emergency housing plans; such oversight neglects the priority of clearing out post-war victims' slums. Furthermore, the economic model of newly constructed projects is inappropriate. Most importantly, however, the reconstruction process itself is characterized by a discouraging slowness in achieving its targets. In conclusion, it is proposed that housing projects in Iraq lack suitable models necessary to guide their execution.

The main purpose of the dissertation is investigating, analysing and evaluating the architectural experience of the post-war era public housing projects, and considering the social principles of Japanese architectural planning as a guiding model. This thesis is predicated on an assertion that post-war housing planning should create and make available socially acceptable housing solutions which respect inhabitants' unique lifestyle demands. The present research aimed to investigate the answer to two fundamental questions: 1) What is the Iraqi architect's general concept and image regarding specific characteristics of the Iraqi home, and 2) what is the influence of inherited social customs of living and people's preferences in the functional relation or space order of designed housing units.

This dissertation is structured into six chapters, as per the following outline:

Chapter One: Presents a background to the post-war housing sector in Iraq based on survey work which includes institutional information about the housing shortage, main housing problems, governmental housing legislation and the rate of housing production. The chapter ends with a formulation of the dissertation objectives and hypothesis.

Chapter Two: Investigates a possible approach to overcome the difficulty of lacking a suitable model for the reconstruction process in Iraq. An appropriate metaphor from countries or nations that faced similar large challenges is identified. Specifically, the Japanese Architectural Planning Research (APR) approach was adopted with a special emphasis on the social approach of Uzo Nishiyama, in particular his emphasis on studying people's lifestyle. In this chapter, main definitions of the APR and its thematic principles are reviewed, and a Nishiyama methodology of thinking is presented; for him, public housing layout is a matter of questioning how the image of family life is construed, and how to then tie this image to the housing planning. He developed "how to live research" to resolve the contradictions between social change and new cultures of living on the one hand, and the housing functions as adopted in ordinary people's homes on the other. This chapter focuses on Nishiyama's notion of "Kata Keikaku" (型計画) which is based on investigating ordinary people's housing, critiquing their way of living according to new lifestyle cultures, and then formulating guiding principles for design. This chapter also investigates the adaptation of Nishiyama's ideas in the work of Yasumi Yoshitake and Shigefumi Suzuki, and the realization of his Functional Diversion Theory in 51C housing in Japan.

Chapter Three: In this chapter, the above theoretical theme of "Kata Keikaku" (型計画) is explored further, whereby mass production of public housing is understood within the frame of housing typification rather than standardization. The theoretical dimension of Nishiyama's methodology is investigated more deeply, focusing on notions of surveyism, evaluating architecture for architecture, and the definition of planning principles. Nishiyama's concept of type is discussed by comparing it with the idea of type as it appears in Western literature and secondly by locating it within the concept of social structure. The discussion ends by offering three premises: 1) Nishiyama's type making question has been mainly neglected in the literature of Western society. 2) Type according to Nishiyama

is a bearer of meaning –establishing architectural definition and historical continuity, while type in Western studies is mostly represented as a formal tool to classify the architectural products that reflect the same formal properties and belong to a specific historical period. Finally, and most importantly, overcoming post-war problems is found in deducing models for ways of living by valuing the ordinary or poor people's way of living as sources of ideals and meanings.

Additionally, to deepen further the understanding of Nishiyama type planning, it is reconsidered in this chapter in the light of Bertrand Russell's theory of type as it appears in his work *The Principles of Mathematics* (1903). It is proffered that Nishiyama's methodology to answer the question of "what a type is" and "how to a type" are well represented within the philosophical stance of Russell Type Theory. Type is by definition the relations between entities. Accordingly, Nishiyama considered function as a basic entity of architecture. Most importantly, architectural design is about distinguishing appropriate working mechanisms between these entities. The chapter ends by clarifying research strategies for the post-war public housing experience in Iraq, which are, firstly, surveying ordinary people's houses, and secondly, investigating, analysing and evaluating the overall architectural experience of the public housing according to the influence of the post-war social changes and the specific criteria extracted from the surveying of ordinary homes.

Chapter Four: This chapter is devoted to discussing the results of research into the living experiences of residents in Arbitrary Houses (AH), a distinctive housing settlement phenomenon which appeared after the war in Iraq. Through interviews and an investigation everyday life in Arbitrary Houses, it was found that arbitrary housing represents a fertile environment for discovering ideals of Iraqi housing design. Reflecting the particular characteristics of living patterns in this environment, we termed this particular environment an "Ethno Typed Built Environment" (ETBE). As a basic theoretical background, ethnomethodology was adapted, in particular using a documentary method, to analyse scenes of life in arbitrary housing. The analysis revealed ETBE as mainly governed by deciding principles such as religiosity, privacy, and gender separation. These social schemas characterized residents' modes of living and shaped the meaning and relation of the housing function.

Chapter Five: This chapter investigates the place of the social principles of design in the space arrangement of public housing units. Space syntax theory was utilized to investigate the public housing built in the period from 2003 to 2011. The chapter aims to evaluate family social life and movement within these houses in the light of the spatial configurations of the traditional courtyard-bound Iraqi house. The space arrangement was syntactically investigated; accordingly, housing units in public housing were classified into two mean genotypes according to the plot of the inside-outside transition and the distribution of spaces within the units. Comparisons were drawn between the arrangement of space and the designed family movement in a traditional home, and that of public housing units, according to the syntactical principles of permeability, scope of vision line, and space intelligibility. In the conclusion, it is possible to argue that the typical housing unit fails in clearly separating the line of movements of the inhabitant from that of the visitors. The natural sequences of spaces from the most public to the most private are changed in the way that affected the social character of every function.

Chapter Six: This chapter presents the main conclusions as follows. Firstly, it is argued that the dilemma of the post-war crisis housing needs and management demands must not be excuses for the abstracted and unidentified public housing units. Social identity, people's unique ways of living and functional differentiation must be respected even if they were typical of the poor and every-day person. Following the Japanese model, the phenomena of arbitrary housing was analysed, with the finding that social customs of living exert a strong influence on the ordering of the overall housing functions. Secondly, the distribution of spaces within public housing units were analysed and evaluated. Two main genotypes appeared within the housing units' design. The social aspects of these genotypes were compared with those which appear in the traditional Iraqi courtyard houses. The main conclusion here is that the functional space in the public housing are arranged in a way that reflect an alien living environment, and disturbs the unique housing social lifestyles as perceived by common Iraqi people, especially those from the lower income class. Specifically, the genotypes of public housing are an unclear mix between the regularity of the modern housing and the inherent common sense of the desire to imitate the deformation of the court house.

学位論文審査の要旨

主査	教授	森	傑
副査	教授	瀬戸口	剛
副査	准教授	小澤	丈夫

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本研究は、イラクにおいて 2003 年よりはじまった公共住宅の復興の過程に着目したものである。イラクでは、戦後の厳しい住宅不足を解消するため、政府が多くの公共住宅事業を促進する計画を発表した。しかしながら、この計画には重大な障害や欠陥が付随している。例えば、被災者のスラム街を解消するという優先事項を怠っている点、非常時における住宅計画のあり方についての検証を軽視している点などである。これら諸問題を解決する施策を検討することが、戦後イラクの復興における喫緊の社会的・学術的課題である。

本研究の目的は、戦後イラクの公共住宅復興事業の経緯を調査・分析・評価し、その社会原理と住宅供給の計画的 method 論について、日本において第 2 次世界大戦後の住宅供給で大きく貢献した建築計画学を先駆的モデルとして参照し、イラクにおける応用可能性を論考することである。そして、その成果を踏まえ、戦後の住宅計画は居住者の個々の生活要求を尊重した社会的に受諾し得る住宅の解決策を提示すべきであるとの提言を行っている。

第 1 章では、イラクにおける復興住宅の背景について資料収集調査にもとづき解説し、論文構成および本論の位置づけを示している。

第 2 章では、イラクの住宅復興において適切なモデルを提示するための方策を分析している。同様の重大な課題を経験した地域の既往研究として、日本の建築計画学の成果をレビューしている。具体的には、西山卯三による社会的な研究方法、一般庶民の生活様式の研究に着目している。西山による「住み方調査」および庶民住宅の調査に基づき、人々の新たな生活文化に照らし合わせたデザインの指針を策定する「型計画」について論考している。

第 3 章では、既述の「型計画」の理論的テーマを詳細に分析している。公共住宅の大量生産を標準化というよりも類型化の枠組の中で整理すると同時に、西山の型概念を欧米文献に見られる諸概念と比較し、社会構造概念の中に位置付けている。例えば、西山による型は建築的定義と歴史的継続性を確立している一方で、欧米研究における型は同質の秩序立った特性を反映し特定の歴史的期間に属する建築物を分類する形式的ツールとして提示されている点などを明らかにしている。加えて、西山の method 論をより理解するためにパートランド・ラッセルの型理論を再考し、建築デザインとは構成要素間の適切な作用メカニズムを識別することにあることを指摘している。

第 4 章では、戦後イラクに現れた特徴的な居住現象である非計画的な自主建設住宅 (AH: Arbitrary Houses) における居住者の生活経験に関する調査結果を整理している、AH は、イラクの住宅計画理念を発見するための創意に富んだ環境の一例となり得ることを示している。この独特の生活環境

について、社会学の理論の一つであるエスノメソドロジーの視点からドキュメンタリーメソッドを採用して生活実態を分析することで、宗教やプライバシー、男女区分などの既定原則により決定している空間原理を解明している。

第5章では、公共住宅の空間配置にみられる原理的なデザインについて分析している。スペースシンタックス理論を用いて、2003年から2011年の期間に建設された公共住宅を対象とし、各住戸を2つの標準的な類型に分類している。イラクの伝統的な中庭型住宅と新たな公共住宅について、スペースシンタックスにより空間配置と動線を比較分析することを通して、典型的な公共住宅は居住者の動線と訪問者の動線の明確な区別に欠けている点を指摘している。

第6章では、前章までを総括として、第一に、日本の戦後住宅計画モデルとAHの分析を通じて、社会的生活慣習が住宅機能の要求に強い影響を及ぼしていることを指摘している。第二に、公共住宅内の空間配置についての分析を通じて、公共住宅での機能的空間の配置は性質の異なる生活環境を反映しており、地域固有の住宅のもつ社会生活様式を継承し得ていない問題について指摘している。特に、公共住宅の型には、外来的な生活スタイルの志向性と伝統的な形式への慣習的要望が不明瞭に混合していることを論じている。

これを要するに、本論文は、戦後イラクの復興における公共住宅に関わる諸問題と今後の課題解決に向けての住宅計画・住宅供給の方策についての科学的な説明と分析についての新しい知見を得るものであり、建築計画学に対して学術的な開拓として貢献するところ大なるものがある。

よって著者は、北海道大学博士(工学)の学位を授与される資格あるものと認める。