IOP Conf. Series: Materials Science and Engineering 949 (2020) 012063 doi:10.1088/1757-899X/949/1/012063

Community-based behaviour towards Affordances in Conservation of Hanoi Old Quarter in the Vietnam context

Ngo Minh Hung

Ph.D., General Director, Institute of Cultural Heritage and Development Studies Head, International Cooperation and Scientific Research Department, Van Lang University, Ho Chi Minh City, Vietnam

Email: hung.nm@vlu.edu.vn, hungnm_vn@yahoo.com

Abstract. The 36 Old Street Quarter is a downtown area of Hanoi City, which has over 1000 years old and contains such traces of history and architecture. The grid structure gives it a significant character that is a part of the local heritage facing phenomenon of replacing settings of ancient spaces, stoning the streets and concretizing old buildings due to anti-conservative interplay from its users. Therefore, this paper examines the user's behaviour in optimizing different settings of Hanoi Old Quarter (HOQ) towards conservation efforts. Theoretically, the research was conducted by making use of 'affordances' terminology of Gibson (1986/1979) to understand interactions between the spatial settings and its user. Methodologically, the purposeful method of local people and layout-based sketch of the blocks, and analysed images of outdoor and shared places have been employed for three survey sites respectively. The results of community-based behaviours, its patterns and 'verb-ability' are fundamental factor to develop ground-up programs on urban and architectural conservation in the Vietnam's contextualisation.

Keywords: affordances, community-based behaviour, behaviour pattern, old quarter

1. An updated conservation trend in Vietnam

Locally, the concept of conservation is learned from the Soviet Union in the 1980s. More than last 20 years, the bottom-up approach had been practiced by communities to repair and replace damaged wooden structures of the communal houses, the pagodas and temples. At first, early conservation in Vietnam was described as 'patchy repairs' [1], using folk- traditional construction ways as what handed over from previous carpenters and the building proprietors. It shows that 'thước tầm' [2], a bamboo ruler made from finger or hand-span principles of the house owner, was the most important things in constructing and repairing old houses. No body, without the ruler, is unable to (re)produce wooden elements when repairing the housing structure (replacement) and attachments.

In recent years, international organizations such as JICA (Japan), SIDA (Sweden) and research institutions like Waseda and Tokyo Universities from Japan, Toulouse from France, Tongji University from China, shared different behavioural ways to the local stakeholders on how to preserve national heritages and old downtowns in Hanoi City and the provinces (Bac Ninh, Thua Thien Hue, Quang Nam). However, the preservation techniques adopted from the West seemed not to be successfully applicable to the present circumstance and local context, the heritage's user and the urban manager. The heritage built in Vietnam with the characteristic of 'tropical-vernacular' styles normally was small scale-

Content from this work may be used under the terms of the Creative Commons Attribution 3.0 licence. Any further distribution of this work must maintain attribution to the author(s) and the title of the work, journal citation and DOI.