

The Difficulty and Significance of Using 'Subjective Interpretation' in Conjunction with Bayesian Network Analysis in Arts and Cultures

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“ – In the same field, how can the two sides be so different? The guys over there are dead serious, while you guys are cheery and breezy.

One Paddy Youth, still dancing to the wind, swiftly replies,

– Sir, it’s because our circumstances are different. Our bunch is light and free, while those guys spend all day long worried and guarding their ripe grains. What a terrible waste of time! Beautiful sunny days are for singing, dancing, and chattering away...”

In “Light and Free”; [The Kingfisher Story Collection](#) (2022)

Art and Culture are very important aspects of humanity. However, due to their abstract nature, attempts to quantify the value of such fields have been the challenges for the scientific community. Recently, a new work of Vuong et al. (2019) presents an approach that sheds light on the possibility of applying Bayesian networks analysis to clarify the connection between architecture, for example, the design of the house façade and cultural evolution in Vietnamese city in the early 20th century.

Coding and creating a database in Social Sciences and Humanities have long been practiced to explore the patterns and information from ageless sources, such as folklore, rituals, norms, religions, and institutions (Turchin et al., 2019; Vuong et al., 2018; Whitehouse et al., 2019). However, the paper of Vuong et al. (2019) provides a new but plausible approach to construct the data of cultural evolution through subjective interpretation. Through this approach, the authors find evidence from the Franco-Chinese house designs in Vietnam to support their study of cultural evolution, an elusive phenomenon in the course of history.

The practice of this method can be applied to examining relevant abstract values. For instance, replicating to the procedure used in the study of architectural designs of old houses in Vietnam, the exploration of cultural evolution can be expanded to other cultural values among society such as folk songs and traditional music. For that reason, the new approach can be a promising tool in bridging understanding from both sides: physically measurable data and data of intangible, subjective feeling. Through the examination and interpretation of the change of subjective perception upon art and beauty throughout history, the culture of our society can be reflected in a clearer way.

There is still one thing that should be taken into consideration. That is whether the practice of this method limited by the condition of the research target? In fact, when studying about the cultural evolution of humanity, especially in more ancient time, the physical objects (architectures, e.g.) and intangible properties (folk music, e.g.) in most cases are partially lost and forgotten. In contrast of the scarcity and loss of research targets from the ancient time, the research targets in the modern time are usually complemented from multiple different or similar cultures, which greatly increase the complexity for interpretation. As a result, the subjective interpretation of these targets will be incorrect and distorted in both cases.

By being able to overcome the struggles when dealing with the research target, the approach constructing data through interpretation might be an immensely useful tool for social scientists, especially when employing Bayesian networks analysis (La & Vuong, 2019). The final remark should be made on the type of abstract information and data used in the study. The data exemplify emerging opportunities in considering other elusive, yet historically rich, reading and artistic phenomena or manifestations in East Asian societies, for which the Bayesian approach will become increasingly powerful and suitable, making science more affordable to both researchers and the public at large (Vuong, 2018). These types of study will also open up interesting debates and re-considerations of previously performed research studies, under the light of a new quantitative method, such as those in Whitehouse et al. (2019).

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