Contemporary versus traditional styles in architecture and public space: A virtual reality study with 360-degree videos

Highlights

- An experiment with <u>immersive virtual reality</u> and 360-degree videos was conducted.
- Visual appearance of traditional architecture is preferred by study participants.
- Traditional architecture scores significantly higher than contemporary architecture.
- Decisions on architecture should be driven by residents' needs and preferences.

1. Introduction

The visual appearance of the built environment contributes to emotional responses and psychological affect (Hanyu, 1997, 2000; Zhang & Lin, 2011), and can thereby influence happiness and life satisfaction (Mouratidis, 2018, 2019a; Negami, Mazumder, Reardon, & Ellard, 2019; Seresinhe, Preis, MacKerron, & Moat, 2019). Emotional response to the visual appearance of the built environment is one of the key responses induced by such environment (Nasar, 1987), since humans actively interact with their immediate environment in their everyday lives (Nasar, 1994). Considering these everyday interactions along with the increasing evidence linking visual appearance of the built environment to subjective well-being (Seresinhe et al., 2019), it becomes clear that understanding how the visual appearance of buildings and public spaces affects perceptions and emotions becomes key to successful urban development (Nasar, 1994; Zhang & Lin, 2011).

However, little is known on how the visual appearance of global contemporary trends in architecture and urban design is perceived and experienced by residents. Worldwide, contemporary architectural styles are rapidly spreading and overtaking the traditional (McNeill, 2009). Asymmetry, minimalism and lack of ornamentation, and industrial appearance now form the standard style in architecture and urban design. Traditional design styles with symmetry, ornamentation, and links to local history are being abandoned. Although there are strong theoretical debates over contemporary versus traditional architectural styles (Curl, 2018), empirical research on perceptions and experience of these styles is missing. Such research is necessary to inform urban planning decisions on the visual appearance of current and future development and provide critical insights for citizens willing to participate in local <u>urban governance</u>.

2. Literature review

2.1. Contemporary versus traditional architecture

Contemporary architecture, mostly inspired by postmodernism and high-tech architecture, is constantly spreading all over the world (McNeill, 2009). Global urbanization and urban densification, combined with globalization, result in a universal style of architecture that is taking over traditional styles linked to the history and traditions of each place. This global contemporary style of architecture is usually the style embraced by architecture schools worldwide. The effect of global "star architects", who are a source of admiration and inspiration for many young architects, is also contributing to the embracement of contemporary architecture as the prevalent architectural style (Ponzini & Nastasi, 2016). Eventually, cities across the globe are looking more and more alike. For example, the cityscapes of downtown Lagos, New York, or Shanghai are looking more and more similar, despite belonging to very different cultures. The spread of contemporary architecture seems unstoppable.

Contemporary architecture has been both praised and criticized heavily. Notable works of contemporary architecture by "star architects" have been glorified as contemporary city landmarks and symbols of the art of architecture. Such landmarks are often employed by national and local governments to attract tourism, businesses, investment, and capital (Orueta & Fainstein, 2008). These strategies, however, have been heavily debated for their social sustainability. There are several levels of criticism. They are criticized for being undemocratic and for favoring certain economic gains over providing social equity and covering the needs of local residents (Andersen & Røe, 2017; Ponzini, 2011; Tarazona Vento, 2017). Contemporary architecture and its developers and architects are criticized for being motivated by individualistic purposes inspired by the phenomenon of "star architecture". They are criticized for prioritizing individual glory and success through design rather than seeking to create livable built environments and cities. Moreover, contemporary designs are criticized by some for not being in harmony with the rest of the city, for being disruptive to local history, and for causing cities to lose their local identity (Curl, 2018).

The most obvious question on the debate between contemporary and traditional architectural styles is aesthetics. The asymmetry, lack of ornamentation, and industrial appearance in contemporary architecture are endorsed by some for being groundbreaking, interesting, impressive, while others consider it a barbaric process which spreads dystopias around the world (Curl, 2018). Nevertheless, what do residents think? Do they find global contemporary architecture aesthetically pleasant? What emotions does it generate for city residents? Is it more pleasant than the more traditional styles that are being abandoned?