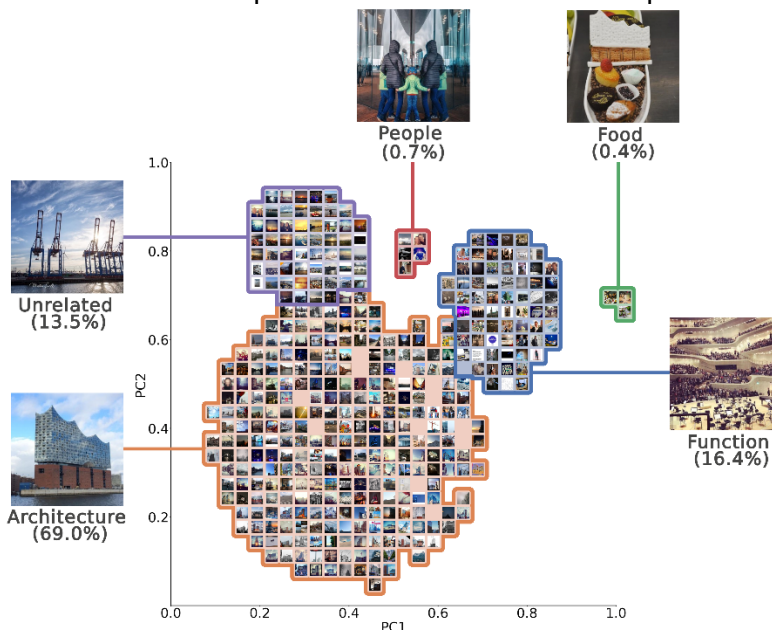


# The mediated lifespan of urban architectural icons - An empirical investigation using Instagram data

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A common, yet unsubstantiated assumption in scholarly discussions of iconic architecture is that architecture can support desired shifts in volume, scope, and content of media attention for a city. Testing this assumption is hindered by the elusiveness of the concept of iconicity, as it often remains unclear how the iconic character of architecture arises and develops over time, especially in relation with media representations of architectural projects. Although an important role for a building's achievement to reach iconic status is allocated to media exposure, it remains unclear whether, and if so how, evolving circulations of images and content, particularly on social media, reflect and support the status of a building as an icon. This article fills part of this research gap by collecting and analyzing empirical data of social media posts content, shared via Instagram between 2011 and 2019, on sixteen architectural projects that were commissioned to become new icons of their cities. Using an automated pipeline, we collected and processed 264k posts and 140k images on Instagram for the sixteen selected case studies. By studying post activity through time series analysis and examining post content using image classification and topic modeling, we report on the development of users' capturing and reception of iconic buildings on the social media platform over time. Our analysis yields two primary findings. First, we identified two distinct patterns of post evolutions: instantly popular buildings that fade over time and buildings that gradually gain popularity. Second, we discovered differences in media content, with some projects being primarily covered for their architecture and others for their function as cultural facilities. Notably, a correlation emerged between these two identified patterns: projects primarily posted for their architecture gained instant popularity and faded over time, while more function-focused projects slowly gained popularity. The empirical findings raise further questions about the nature and significance of architectural iconicity, as a stable versus dynamic state, and the influence of particular media forms as compared to others.



*This plot shows a 2D visualization of 400 Instagram images featuring the Elbphilharmonie. The visualization was created by extracting high-dimensional image descriptors and reducing them to two dimensions using principal component analysis. The plot shows clear spatial separation of different motifs, such as the architecture and function as a concert hall.*