Abstract

Grounded in the research fields of (aero)mobilities and urban design this paper-based PhD project explores and investigates the passenger experience and airport design in Copenhagen Airport (CPH) from the situational (Jensen 2013) and mobilities design perspectives (Jensen and Lanng 2017). This means investigating the passenger experience and airport design beyond canons of efficiency and functionality by foregrounding and engaging materially with the space and the existential dimension of moving through the airport (e.g. passengers’ micro-practices, experience, motivations and preferences; spatial atmospheres and affordances; design decisions made by the airport organization). In other words, this PhD thesis explores how life on the move is performed and experienced in particular mobile situations in Copenhagen Airport. In addition, it aims to assess critically and creatively how this experience and this type of contemporary urban and city-like space can be re-designed from the situational, relational and human-centred perspectives and the implications of these perspectives for urban and mobilities design decisions.

By adopting a pragmatic and mixed-method approach, this research studies the situational passenger experience and airport design in CPH in three different levels that comprise the analytical, methodological and design concerns and objectives of this research project.

The analytical contribution of this research adds a ‘new’ vocabulary for understanding the passenger experience from the situational and mobilities design perspectives by developing a theoretical- and empirical-informed analytical framework of ‘becoming a passenger’ defined as process plus experience.

The methodological contribution explores the implementation and combination of tracking technologies, traditional and design methods to investigate the situational passenger experience from ‘outside-in’ (looking at the situation) and ‘inside-out’ (‘seen’ from the passenger’s point of view) perspectives. The ‘outside-in’ perspective comprises the usage of flow-tracking technologies (thermal cameras and Xovis sensors) and ethnographic studies. The ‘inside-out’ perspective comprises the application of attention-tracking technology (wearable eye-tracking glasses) and qualitative methods (interviews and surveys). Both perspectives are linked by the use of design as a method, which combines ‘design thinking’ (Cross 2006; Jensen and Lanng 2017) with the application of 1:1 scale design interventions in selected areas inside the airport terminal. This is done with the aim to explore the value of design methods as means for establishing ‘democratic conversations’ (Bueno 2019) between users and airport authorities that could enhance the city-like qualities of the airport space and its future development as a ‘mobile agora’ (Jensen 2020).

The design contribution comprises and utilizes the main findings obtained from the analyses of the staged (situational) passenger experience to develop an airport design manual for CPH. This manual provides design principles translated into design strategies and methods for the airport designers of CPH that can be subsequently tested and applied in situ. These strategies and methods are provided with the aim of helping designers make design decisions now and in the future that correspond to the changeability and unpredictability of passenger experiences and airport spaces, take seriously the human realities lived in airport spaces and thereby develop human-centric spaces of mobilities that in turn will improve passenger experiences.

The data analyses and triangulation of the different methods from both perspectives revealed which actual designed artefacts of the built environment, mobile situations and ‘critical points’ in the airport space triggered the hybridity of passenger types and particular passenger experiences and practices during the passenger journey inside selected areas of the terminal. These data have shown how different situational factors and actors shape the airport design decisions and stage the process of becoming a passenger and hence the passenger experience. This means that the passenger’s sense of autonomy and ‘airport literacy’ (Shilon and Shamir 2016), the ‘institutional airport complexity’, spatial affordances, and atmospheres are key elements to take into account when designing airport spaces from the relational and human-centred perspectives. Therefore, this research argues that the passenger experience and airport design should be analyzed and designed situationally, spatially and experientially rather than based solely on statistical models of flows and canons of functionality and efficiency, which in turn points towards the development of agile forms of airport design and organization.