Way-finding and Maritime Emergency Signs

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Abstract

Some visual and semantic problems in emergency signs and maps on passenger ships will be discussed using examples from Danish ferries that were studied as part of a European project on design for Mustering and Evacuation of Passengers (“MEPdesign”). Starting point are earlier findings on the effectiveness of signs versus (You-Are-Here) maps for wayfinding in buildings. Focus is on problems with the interpretation of emergency signs in the context of other signs, and in the physical layout of passenger areas. Passengers understand the ship in terms of meaningful places, landmarks and schematic paths and cannot be expected to be familiar with the different systems of signs and maps used on ships. Possible improvements in the efficiency of evacuation associated with active way-finding systems (dynamic Low Location Lightening or directional sound alarms) are discussed.

Way-finding: the map versus sign issue

Maps and signs are generally used to assist way-finding in buildings. They serve three distinct functions: to identify places and routes, to direct occupants to routes, and to map the layout of an area (O’Neil, 1999). It has been demonstrated that a system of signs (in the form of pictographic symbols) is generally more effective than maps (“you-are-here” maps) in assisting way-finding of newcomers in complex buildings (Butler, 1993). To be effective signs should be placed at decision points in the environment (Best, 1970). The reason for the superiority of pictographic symbols over maps is that local signs place the directional information directly in the environment – in fact as a kind of “augmented reality” – whereas the directional information of maps have to be inferred from diagrammatic map information. On a ferry or a passenger ship, many passengers will be in a similar situation, i.e. not knowing the spatial layout in advance, although some will already be familiar with the general layout of decks on the ship from previous journeys. The designed environment of ships will typically use both types of information presentation: pictographic symbols to direct passengers in case of emergencies and you-are-here maps to assist passengers in emergencies as well as in general way-finding tasks.