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The Importance of Visual Connectivity in Ferry Terminals

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ABSTRACT: Ferry terminals serve as transportation hubs connecting land to water while also transporting people and goods. The design of ferry terminals has an impact on the travel experience of passengers and general efficiency of the terminal. This paper analyzes the concept of visual connectivity and its effect on enhancing user experience and operational performance. It elaborates on the importance of creating clear lines of sight, unobstructed views, and strategic placement ofarchitectural elements to facilitate visual connections. Peculiar elements and techniques are used to highlight the methods by which visual links can be created in the design of terminals. Furthermore, thepaper explores design considerations and strategies for achieving visual connectivity in ferry terminals.It discusses the importance of architectural elements such as windows, openings, transparent surfaces,and interior layout in establishing visual connections.

KEYWORDS: Ferry Terminal, Visual connectivity, Transparency, Architecture

I. INTRODUCTION

Ferry terminal is an essential facility for commuting between coastal towns; it is therefore necessary to ensure a smooth flow of passengers and freight cargo at the terminal. A ferry terminal is a structure in a port which services passengers boarding and disembarking water vessels such as ferries. They can be used as a means of commuting, recreational and maintenance of water vessels.

Terminal serves as an important points of access and departure for transportation, whether it be by land or sea. it provides essential services and infrastructure for travelers and boaters alike.

A terminal is a facility where ferries or water vessels load or discharge cargo and passengers. It is a center for ferry services providing ticketing booths, waiting areas, docks and other ancillary facilities such as restaurant, shopping outlets, parking spaces, maintenance, fueling stations, fire service etc. Ferry terminals can be found in coastal towns, along rivers etc and vary in size depending on the size of the town it is located. The operation of a ferry terminal requires careful planning and coordination to ensure the safety of passengers and crew, as well as the efficient movement of ferries in and out of the terminal. Many ferry terminals also have security measures in place to protect against threats of terrorism and other criminal activity.

II. LITERATURE REVIEW

Visual connectivity in ferry terminals play a crucial role in creating functional, welcoming and aesthetically pleasing spaces connecting the people, the waterfront and surrounding environment. Visual connectivity refers to the level to which there is clear and unobstructed visual links between different elements within a space or between spaces. It involves being able to visually connect with the environment; whether interior and exterior spaces or between different spaces in a building. Boat transport terminals are categorized based on the vessels servicing them and function of the terminal. Ferries are essential to the smooth running of ferry terminals; they vary in size and capacity depending on the intended use. Ferries have been in existence for a long time and have evolved from serving just as a means of transportation to means for recreation and entertainment purposes; they are used for cruise and onboard entertainment services for passengers. Ferries are designed based on the distance to be covered, passenger or cargo capacity, required speed and condition of the water.

Public transportation is characterized by limited capacity which results in increased waiting time at the terminals. Ferry capacity and frequency of travel increase transport capacity therefore reducing the time spent waiting. Therefore the waiting areas should be comfortable enough for passengers to feel at ease. Aesthetically pleasing visual scenes enhances passenger waiting times and

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ability to endure delay in departure time. One of the most important factors influencing user satisfaction with public transport is departure frequency. The importance of frequency is related to the negative convex relationship between the length of the time interval between each departure (i.e. headway) and frequency. Thus, increased frequency reduces travellers' hidden waiting time (i.e. time due to being unable to depart or arrive when they want) and their waiting time at the terminals (i.e. the time from arriving at the terminal until the time of departure) (Hanssen, Jørgensen, & Larsen,2019). Hence reducing passenger waiting time or enhancing the waiting experience is crucial to the overall user experience of visitors to the facility.

According to Ravena (2022), Visual connectivity refers to the tangible aspects of a space; extent to which a place can be viewed from other places. The view from a space has impact on an occupants health and has been proven in a variety of building types (Turan&Reinhart, 2018). Windows or glazed areas serve as a medium of showcasing the beauty of the outside environment from the inside while also allowing users to experience the calming and rejuvenating benefits of nature from within the building. This fenestration also helps in maximizing the amount of day lighting in a space which is beneficial to the mental health well being of the users. The quality of a view is dependent on two factors: visual connection to the surrounding environment, often with preference for the natural environment and visual interest or variation (Reinhart, 2018).

A building never stands alone; articulating the place, urban life and relations are always necessary intrinsically. Public spaces are significant spaces for citizens to come together and experience the fill space with voids around (Pinar & Asli, 2019). Designing a facility with visual connection to the outside environment incorporating openings, transparency, sight lines etc establish visual relationship that enhance the user's experience and create a connection and maximizes the amount of sunlight the building receives thereby reducing the need for artificial lighting.

In ferry terminals, the waiting area is an integral part for travelers. This areas should be strategically placed near areas with panoramic views to enable passengers to appreciate the waterfront or harbor scenery wile awaiting departure. Other areas such as terraces, balconies, observation decks and waterfront promenades also provide opportunities for users to have unobstructed views of the water, boats and surrounding landscape. The ability to enjoy the view, access natural light and have connection to the outside world while waiting can make waiting more enjoyable and reduce perceived waiting times. Incorporating well designed landscape elements such as gardens, trees or water features enhances visual interest and a calming atmosphere, contributing to a sense of place and connection with the surroundings. Visual connectivity creates lasting impressions on passengers. A well designed and visually appealing terminal that offers stunning views and a sense of connection to the surroundings can leave a positive and memorable impression, thus, enhancing the total travel experience.

III. ELEMENTS OF VISUAL CONNECTIVITY IN TERMINALS

The eyes can be said to be the door to the human body; It allows one to appreciate the immediate environment. Visual connectivity promotes fusion between parts of a building without stepping into the space by creating visual links.

Certain architectural elements contribute to visual connectivity.

a. OPENINGS AND DOORWAYS: Openings such as doorways, windows, archways connect interior and exterior spaces while providing natural light, serving as transition points and creating visual cues to outdoor views.
b. ATRIUMS AND COURTYARDS: Atrium is an open central spaces within a building usually connected vertically to multiple parts of the building. Courtyards provides a sense of openness and focal point between between different areas of a building.
c. BUILDING MATERIAL: The use of transparent and translucent materials like glass, acrylic or screens allow visual relations between spaces. These materials separate spaces while promoting openness and transmitting light.
d. CREATING SIGHT LINES:Sight lines create connections by using well designed focal points within and outside a building. Proper arrangement of elements create deliberate visuals cues and guide the user's gaze.
e. INTERIOR DESSIGN ELEMENTS: elements such as open floor plans, mezzanines or layout of a space contribute to visual connectivity.
f. LANDSCAPING DESIGN: The arrangement of outdoor spaces, landscaping features, and architectural elements on the exterior of a building can establish visual connections with the surrounding environment. This integration blurs the boundary between indoor and

outdoor spaces, creating a harmonious relationship.

IV. CONCLUSION

Visual connectivity plays a crucial role in enhancing the experience of ferryterminals and marinas. By strategically designing spaces to maximize natural light, incorporating transparent elements, and creating a seamless connection between the terminal and its surroundings, visual connectivity creates a visually engaging and immersive environment for passengers. This enhances the overall user experience, creates a sense of belonging, encourages relaxation, and promotes social interaction.The use of transparent facades and large windows, open floor plans free from barriers etc allows passengers to enjoy unobstructed views of the waterfront,promote a sense of spaciousness, ease of navigation, and a feeling of freedom. It also contributes to attracting visitors, promoting tourism, and increasing the economic value of the terminal and surrounding areas.

In conclusion, visual connectivity in ferry terminals and marinas is not merely an aesthetic consideration, but a fundamental aspect of design that enhances the overall passenger experience, creates a sense of place, fosters relaxation, and promotes engagement. By prioritizing visual connectivity in the design and development of ferry terminals and marinas, we can create environments that leave a lasting impression on passengers, enhance the surrounding community, and contribute to the success of these important transportation hubs and recreational destinations.

REFERENCES

[1]. Hanssen, T.S., Jørgensen, F., & Larsen, B. (2019). Determinants affecting ferry users ' waiting time at ferry terminals. 8049, 1–28. https://doi.org/10.1007/s11116-019-09979-5

[2]. Pinar Oktem Erkartal and Asli Uzunkaya (2019). Transparency as A Component of Public Space

[3]. https://doi.org/10.1088/1757899X/471/9/092026

[4]. Raveena Bathija, (2022). Visual connectivity in Architecture https://www.linkedln.com/pulse/visual connectiviity-architecture-raveena-bathija

[5]. Reinhart, C. (2018). Daylighting Handbook II: Daylight Simulations, Dynamic Facades. Publisher: Author.

[6]. Turan, I., & Reinhart, C. (2018). A New Framework for Evaluating Indoor Visual Connectivity in Open Plan Workspaces. November.