Floating architecture: A brief study of structural systems and building aaterials kajian terhadap sistem struktur dan bahan bangunan.

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Abstrak

Menurut hidrologi, lingkungan tempat hidup manusia dapat dikelompokkan menjadi lingkungan akuatik dan lingkungan non-akuatik. Biasanya, manusia lebih memilih membangun di lingkungan non-akuatik bersifat stabil karena relatif aman dari gangguan banjir. Namun, bukan berarti membangun di lingkungan akuatik atau lingkungan akuatik bersifat labil tidak aman dari gangguan banjir. Kegiatan membangun bangunan di lingkungan semacam itu dengan memperhitungkan kondisi lingkungan terkait disebut floating architecture. Banyak hal yang perlu diperhatikan saat membangun di lingkungan akuatik atau lingkungan akuatik bersifat labil seperti karakteristik air, tipologi bangunan, sistem struktur, pemilihan material, utilitas sampai masalah korosi dan mobilitas. Penulisan skripsi ini mengkaji penerapan sistem struktur yang sesuai dengan karakteristik lingkungan. Kemudian, dikaji dengan studi kasus dari beberapa contoh bangunan floating architecture dan ditarik kesimpulan bahwa floating architecture potensial untuk dikembangkan, terutama di negara kepulauan seperti Indonesia.

.....Based on hydrology, the surroundings in which human lives can be classified into aquatic sphere and non-aquatic sphere. Build on a stable non-aquatic sphere is commonplace because it is low flood risk areas relative to others. However, build on an aquatic sphere or a labile non-aquatic sphere can be as safe as on a stable nonaquatic sphere. Designing and constructing buildings taken place on those spheres with several adaptations are called floating architecture. There are several things need to be considered when build on an aquatic sphere or a labile non-aquatic sphere, such as water characteristics, building?s typology, structural systems, buildings materials, utility, corrosive and mobility problems. This final term paper examine the application of structural systems suitable. Continued with the case study of some related buildings that brings to a clear conclusion that development of floating architecture has a great potential, especially for a country consisting of many islands such as Indonesia.