











Figure 6.1. Proposed Inner and Outer Interior (Author, 2016)



CONCLUSION

"Architecture should speak of its time and place, but yearn for timelessness.

Frank Gehry, 2013

The rationale and design of oceanic vessels has **evolved** exponentially throughout the progression of history. What was **originally instigated** to deed as a mere **arrangement of freight conveyance**, progressed into a thriving **hospitality industry** (Wealleans, 2006:25). Parallel to the development of a ship's resolution, its **interiority was also adapted to suit habitual evolution**. Resembling "an **epitome of indulgence and hospitality**" (Le Corbusier, 1987:95), the edifice of these opulent liners **embodied engineering triumph** of the twentieth century. As verbalised by a ship's lifecycle, at some juncture in time the vessel will be **classified as being unseaworthy** - thus declaring it decommissioned. As **opposed to the mere demolition** of these exultant structures, this study proposed the introduction of a **fourth ship-recycling alternative**.

The selection of Robinson Dry Dock as host and the SS Nomadic as habitant, allowed for the spatial intervention of a retail-orientated and recreational facility to be envisioned that stimulates regional kinship and international association. As the act of nautical engineering dictates structural integrity, the envisioned spatial intervention commanded no less. Dividing the proposed intervention into two distinct areas, the design of an inner and outer interior was attained. The position of such an outlandish intervention within

its surrounding setting provided supplementary depth and stratum to the existing fabric - an architectural palimpsest. In order to heighten the theory of encrusted design, the theoretical premise governed the investigation of materiality. Furthermore, the fragile nature of materiality was amplified via the investigation of corrosion. As opposed to traditional stances which dread this form of degradation, this study encourages the prospect of corrosion as a tool of spatial beautification. Upon tentatively founded implementation strategies, all material constituents, both proposed and existing, were either protected against, preserved from or premeditated towards corrosion, contingent to the envisioned essence wished to be evoked. Subsequently, a Green-Star brand is fashioned that concedes the old and heartens the new through a holistic and sustainable methodology.

As a result, it is noted with clear realisation that material corrosion can act as a definite form of palimpsest, which can either migrate or overrule existing fabric with the passing of time. As contended by Fred Scott (2008:96), the deed of interior alteration should not merely embolden absolute restoration or inattentive demolition practices, but encourage methods of preservation that revel in the remembrance of what once was and possibility can be...



LIST OF REFERENCES

- Adiwijaya, M. 2015. Marketing strategies for targeted market segments based on shopping mall images. Petra Christian University Surabaya. PhD Thesis.
- Ahmad, Z. 2006. Principles of corrosion engineering and corrosion control. Oxford, UK: Butterworth-Heinemann.
- American Galvanizers Association (AGA). 2010. Performance of hot-dip galvanized steel products: In the atmosphere, soil, water, concrete, and more. [Online]. Available at: http://www.galvanizeit.org/uploads/publications/Performance_of_Galvanized_Steel_Products.pdf [Accessed on 19 October 2016].
- ArcelorMittal. 2013. Colorissime. Arval. [Online]. Available at: https://ds.arcelormittal.com/repo/AMC%20France/Colorissime.pdf [Accessed on 19 October 2016].
- ArcelorMittal. 2015. Material Selection Guide. Arval. [Online]. Available at: http://www.arcelormittalconstructionuk.com/upload/files/PDF/material_guide_2015_arcelormittal.pdf [Accessed on 19 October 2016].
- Avera, R.T. 1992. Method for producing faux finishes on non-porous surfaces. US patent 5 084 303. [Online]. Available at: http://capeinfo.com/useful-links/history/115-waterfrontdevelopment.html [Accessed on 19 October 2016].
- Ball, R. 1999. Developers, regeneration and sustainability issues in the reuse of vacant buildings. Building Research and Information, 27(3), pp. 140-148.
- Ball, R. 2002. Re-use potential and vacant industrial premises: revisiting the regeneration issue in Stoke-on-Trent. *Journal of Property Research*, 19(2), pp. 93-110.
- Bartes, R. 1973. Mythologies. London, UK: Paladin: First Published, 1957.
- Bjorneberg, B. 2016. Renovation, restoration, preservation, conservation. Conservation and Design International. [Online]. Available at: http://www.conservation-design.com/newsletter1_BA.html [Accessed on 19 October 2016].
- Breen, A. & Rigby, D. 1996. The new waterfront: A worldwide urban success story. London, UK: Thames and Hudson, pp. 5-9.
- Brinnin, J.M. 1982. The sway of the Grand Saloon: A social history of the North Atlantic. 2nd Edition. London, UK: Macmillan.
- Bullen, P.A & Love, E.D. 2010. The rhetoric of adaptive reuse or reality of demolition: Views from the field. Cities, 2010, pp. 215-224.
- Byun, L.S. 2006. Peculiarity of interior design materials for accommodation areas of cruise ships: A state-of-the-art review. Ships and Offshore Structures, 1(3), pp.171-183.



- Byun, L.S. 2010. Peculiarity of interior design materials for accommodation areas of cruise ships. Ships and Offshore Structures, 1(3), pp. 171-183.
- Chang, Y., Wang, N. & Durak, O. 2010. Ship recycling and marine pollution. Marine Pollution Bulletin, 60(9), pp. 1390-1396.
- Chang, Y.C., Wang, N. & Durak, O.S. 2010. Ship recycling and marine pollution. Marine pollution bulletin, 60(9), pp. 1390-1396.
- COR-TEN Steel. 2014. Nippon steel and Sumitomo metal. [Online]. Available at: https://www.nssmc.com/product/catalog_download/pdf/A006en. pdf> [Accessed on 19 October 2016].
- Curtis, J.R. 1985. Le Corbusier: Ideas and forms. Oxford, UK: Phaidon Limited Press.
- Davies, A. 2008. Guillermo del Toro's Cronos: The vampire as embodied heterotopia. Quarterly Review of Film and Video, 25(5), pp. 395-403.
- Dehaene, M. & De Cauter, L. 2008. Heterotopia and the city. Oxon: Routledge, pp. 4-9.
- El-Adly, M.I. 2006. Shopping malls attractiveness: A segmentation approach. International Journal of Retail and Distribution Management, 35(11), pp. 936-950.
- Feldberg, W. 2013. Unearthing eco dyes. Fiber Art Now. [Online]. Available at: https://pddblog.files.wordpress.com/2013/06/p28-32-ecodyeing-summer13-1.pdf [Accessed on 19 October 2016].
- Feldberg, W. 2015. Rust dyeing: Corrosion to creation. Fiber Art Now. [Online]. Available at: http://fiberartnow.net/free-article-rust-dyeing-corrosion-to-creation/ [Accessed on 19 October 2016].
- Foucault, M. 1986. Of other spaces: Utopias and heterotopias. Lotus, 48(9), pp. 9-7.
- Foucault, M. 1998. Different spaces. In: Faubion (ed.). Aesthetics, Method, and Epistemology: Essential Works of Foucault, 2, London, UK: Penguin, pp. 175-185.
- Goss, J. 1993. The "Magic of the Mall": An analysis of form, function, and meaning in the contemporary. Retail Built Environment, 83(1), pp. 18-47.
- Grace M, L. 2010. Brief history of the passenger ship and cruise industry. [Online]. Available: http://www.ukessays.co.uk/essays/design/postmodernism.php [Accessed on 29 November 2015]
- Hayman, B. & Dogliani, M. 2001. Technologies for reduced environmental impact from ships ship building, maintenance and dismantling aspects.

 Norwegian University of Science and Technology.
- Heger Dry Dock, Inc. 2005. Dockmaster training manual. [Online]. Available at: http://www.hegerdrydock.com/dockmaster_training_manual.pdf [Accessed on 19 October 2016].
- Hess, R.W., Rushworth, D., Hynes, M.V. & Peters, J.E. 2001. Disposal options for ships (No. RAND/MR-1377-NAVY). Santa Monica, CA: RAND Corporation.
- Hossain, Md.M. & Islam, M.M. 2006. Ship breaking activities and its impact on the coastal zone of Chittagong, Bangladesh: Towards sustainable management. Young Power in Social Action (YPSA), Chittagong, Bangladesh, pp. 1-54.
- ISO 12944, 2014, Protect your assets in three easy steps. Johannesburg, ZAR: Akzo Nobel. [Online]. Available at: http://www.international-pc.com/



- markets/infrastructure/Documents/iso-12944.pdf> [Accessed on 19 October 2016].
- Johnson, P. 2012. Heterotopian studies: Interpretations of heterotopia. Pratt Institute. PhD Thesis.
- Kolberg, S. 2013. Constructing a 'democratic' dreamworld: Carnival cruise ships and an aesthetic of optimism. *Journal of Consumer Culture*, 0, pp. 1-19.
- Konvitz, J.W. 1980. Changing concepts of the sea, 1550-1950: An urban perspective. New York, US: Springer-Verlag.
- Kotler, P. 2004. Marketing management. 11th Edition. Englewood, NJ: Prentice Hall.
- Laffler, B. 1999. STAINLESS Stainless steel and their properties. [Online]. Available at: http://www.outokumpu.com/files/group/hr/documents/stainless20.pdf. [Accessed on 19 October 2016].
- Le Courbusier, C.E. 1987. Towards a new architecture. London, UK: The Architectural Press.
- Leedy, P.D. & Ormrod, J.E. 2014. Practical research: Planning and design. 10th Edition. London, UK: Pearson Education Limited.
- Maaß, P. 2011. Corrosion and corrosion protection. In: Maaß, P. & Peißker, P. (eds.). Handbook of Hot-Dip Galvanization. KGaA, Weinheim, Germany: Wiley-VCH Verlag GmbH & Co.
- Mackie, K. 2007. South African dry-docking. Civil Engineering, 5, pp. 48-56.
- Marcus, P. & Maurice, V. 2011. Fundamental aspects of corrosion of metallic materials. Materials Science and Engineering, 1(2011), pp. 1-11.
- Maxtone-Graham, J. 1972. The only way to cross. New York, US: Mackmillan.
- Mazille, F. & Spuhler, D. 2016. Desalination. Sustainable sanitation and water management (SSWM). [Online]. Available at: http://www.sswm.info/ [Accessed on 19 October 2016].
- McHale, B. 1992. Constructing postmodernism. London, UK: Routledge.
- Mikelis, D. 2009. The IMO ship recycling regulations a perspective. Presented at Cambridge Academy of Transport, Madingley Hall, Cambridge, 2 July 2009. [Online]. Available at: http://www.imo.org/en/KnowledgeCentre/PapersAndArticlesByIMOStaff/Documents/The%20IMO%20ship%20recycling%20regulations%20-%20N.%20Mikelis.pdf [Accessed on 19 October 2016].
- Mikulski, L. 2008. Taking beautiful things and making. Karen Oakley Faux real decorative painting. [Online]. Available at: https://static1.squarespace.com/static/56128cdfe4b0e5d9aa3dd924/t/5612aed6e4b0021af67abda9/1444064982708/INKMAGAZINE.pdf [Accessed on 19 October 2016].
- Miller, W.H. 1985. The fabulous interiors of the great ocean liners in historic photographs. New York, US: Dover Publications.
- Mittal Steel USA. 2004. A technical overview of weathering steels for bridges and general construction. [Online]. Available at: http://www.aisc.org/assets/0/672/1193338/1193340/b9e45595-1841-497e-9411-1cc81046bb17.pdf [Accessed on 19 October 2016].
- Occupational Safety and Health Administration (OSHA). 2015. Safe work practices for shipbreaking. [Online]. Available at: https://www.osha.gov/Publications/3375shipbreaking.pdf [Accessed on 19 October 2016].



- Outokumpu. 2013. Handbook of stainless steel. [Online]. Available at: http://www.outokumpu.com/sitecollectiondocuments/outokumpu-stainless-steel-handbook.pdf [Accessed on 19 October 2016].
- Partington, C.F. 1826. Ship-builders complete guide. London, UK: Sherwood, Gilbert and Piper.
- Petzet, M. 2006. Principles of preservation: An Introduction to the International Charters for Conservation and Restoration 40 Years after the Venice Charter. [Online]. Available at: http://www.icomos.org/venicecharter2004/petzet.pdf [Accessed on 19 October 2016].
- Pickard, A. J. 2013. Research methods in information. 2nd Edition. London, UK: Facet Publishing.
- Pires, E. & Brányik, T. 2015. Biochemistry of beer fermentation. Berlin, Germany: Springer.
- PricewaterhouseCoopers (PwC). 2014. Passport to Africa. [Online]. Available at: https://www.pwc.co.za/en/assets/pdf/hospitality-outlook-2014. pdf> [Accessed on 19 October 2016].
- Revie, R.W. & Uhlig, H.H. 2008. Corrosion and corrosion control: An introduction to corrosion science and engineering. 4th Edition. Hoboken, New Jersey: John Wiley and Sons.
- Roberge, P.R. 2000. Handbook of corrosion engineering. Hightstown, N.J: McGraw-Hill.
- Rosetta, P. & Siohan, N. 2008. Comfortable structure. 3rd High Performance Yacht Design Conference, Auckland, Australia.
- Ross, C. 2015. How to rust dye fabrics. Offset Warehouse. [Online]. Available at: http://sewobsessed.offsetwarehouse.com/2015/06/17/how-to-rust-dye-fabrics [Accessed on 19 October 2016].
- Rousmaniere, P. & Raj, N. 2007. Shipbreaking in the developing world: Problems and prospects. International Occupational Environmental Health, 13(4), pp. 359-368.
- Rousmaniere, P. & Raj, N. 2013. Shipbreaking in the developing world: Problems and prospects. *International journal of occupational and environmental health*. 13(2007), pp. 359-368.
- Schweitzer, P.A. 2003. Metallic materials: physical, mechanical, and corrosion properties. Boca Raton, FL: CRC Press.
- Schweitzer, P.A. 2005. Paint and coatings: Applications and corrosion resistance. Boca Raton, FL: CRC Press.
- Schweitzer, P.A. 2010. Fundamentals of corrosion: mechanisms, causes, and preventative methods. Boca Raton, FL: CRC Press.
- Scott, F. 2007. On altering architecture. New York, NY: Routledge.
- Smith, D. 2011. Microbrewing guide. [Online]. Available at: https://www.economigwynedd.info/download.ashx?r=1098&f=microbrewingGUIDEEnglish.pdf [Accessed on 19 October 2016].
- Stake, R.E. 1994. Case studies. In Denzin, N. K. and Lincoln, Y. S. (eds.). Handbook of qualitative research, Sage publications, London, pp.236-247.
- Steel, B. 1996. The prevention of corrosion on structural steelwork. Cleveland, UK: British Steel Publications. [Online]. Available at: http://resource.npl.co.uk/docs/science_technology/materials/life_management_of_materials/publications/online_guides/pdf/structural_steelwork.pdf [Accessed on 19 October 2016].



- SteelConstruction.info. Weathering steel. [Online]. Available at: http://www.steelconstruction.info/Weathering_steel[Accessed on 19 October 2016].
- Struwig, F.W. & Stead, G.B. 2001. Planning, designing and reporting research. Pinelands, CPT: Pearson Education South Africa.
- Stuer-Lauridsen, F. 2003. Shipbreaking in OECD. Denmark, Germany: The Danish Environmental Protection Agency.
- Stuer-Lauridsen, F., Kristensen, N. & Skaarup, J. 2003. Shipbreaking in OECD. Danish Environmental Protection Agency. [Online]. Available at: http://www.shipbreakingplatform.org/shipbrea_wp2011/wp-content/uploads/2013/03/Shipbreaking-in-OECD-Cowi-2003.pdf [Accessed on 19 October 2016].
- Sundelin, O. 2008. The scrapping of vessels: An examination of the waste movement regime's applicability to vessels destined for scrapping and potential improvements made in the IMO Draft Convention on Ship Recycling. Master's Thesis for the Master of Law Programme, Department of Law School of Business, Economics and Law University of Gothenburg. [Online]. Available at: https://gupea_2077_18245_1.pdf [Accessed on 19 October 2016].
- Terao, T. 2013. From shipbreaking to ship recycling: Relocation of recycling sites and the expansion of international involvement. *International Trade in Recyclable and Hazardous Waste in Asia*. Cheltenham, UK: Edward Elgar Publishing. [Online]. Available at: http://www.ide.go.jp/Japanese/Publish/Download/Report/2010/pdf/2010_431_07.pd [Accessed on 19 October 2016].
- Tomlinson, J. 2009. History and impact of the intermodal shipping container. Pratt Institute. PhD Thesis.
- Transport Information Service (TIS). 2016. Classification of corrosion protection methods. [Online]. Available at: http://www.tisgdv.de/tis_e/verpack/korrosio/schutz/schutz.htm [Accessed on 19 October 2016].
- Tupper, E. 1981. Introduction to naval architecture. Oxford, UK: Butterworth-Heinemann.
- Urban, V., Krivy, V. & Kreislova, K. 2015. The development of corrosion processes on weathering steel bridges. *Procedia Engineering*, 114(2015), pp. 546-554.
- Urry, J. 1995. Consuming places. London, UK: Routledge.
- Van Zyl, P. 2005. The story of the Victoria and Alfred Waterfront Development. [Online]. Available at: http://capeinfo.com/useful-links/history/115-waterfrontdevelopment.html [Accessed on 19 October 2016].
- Vardar, E. & Harjono, M. 2002. Ships for scrap V—steel and toxic wastes for Asia. Greenpeace Report on Environmental, Health and Safety Conditions in Aliăga Ship breaking Yards, Izmir, Turkey. [Online]. Available at: http://www.shipbreakingplatform.org/ships-for-scrap-v-steel-and-toxic-wastes-for-asia-greenpeace-2002/ [Accessed on 19 October 2016].
- Watkinson, D. 2010. Preservation of metallic cultural heritage. In: Cottis, R.A. (ed.). Shreir's Corrosion. 4th Edition. London, UK: Elsevier, pp. 3307-3340. [Online]. Available at: http://booksite.elsevier.com/brochures/shreir/PDF/Preservation_of_Metallic_Cultural_Heritage.pdf [Accessed on 19 October 2016].
- Wealleans, A. 2006. Designing liners: A history of interior design afloat. 3rd Edition. New York, US: Routledge.
- White, I. & Molloy, F. 2001. Ships and the marine environment. Maritime Cyprus.



Yin, R. K. 2013. Case study research: Design and methods. 5th Edition. Thousand Oaks, CA: Sage publications.

Žáček, O., Miroslav, L. & Kateřina, K. 2009. Development of new structural weathering steels. Hradec nad Moravicí, 5(2009), pp. 1-12.

Zhang, X. G. 2011. Galvanic Corrosion. In: Revie, R.W. Uhlig's Corrosion Handbook. 3rd Edition. Hoboken, NJ, USA: John Wiley and Sons.



APPENDIX A - EXAMINATION & POSTERS





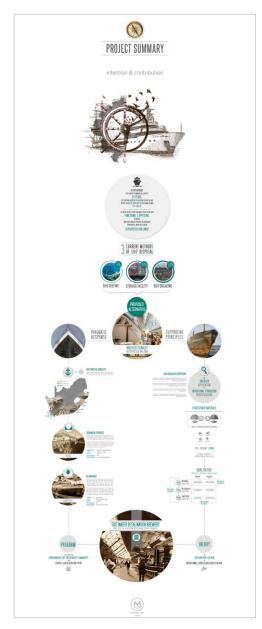










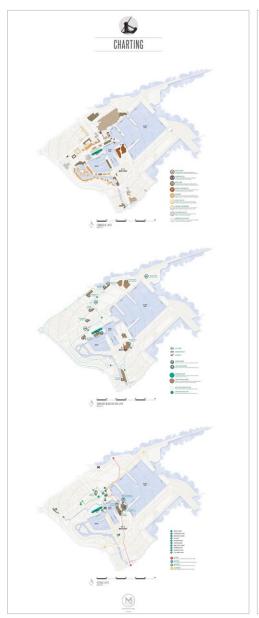


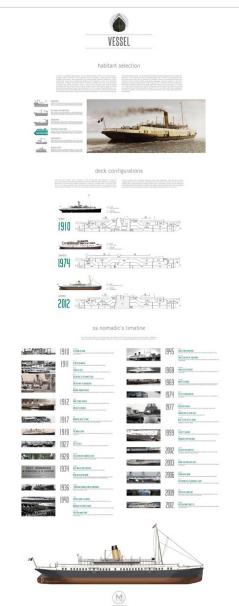


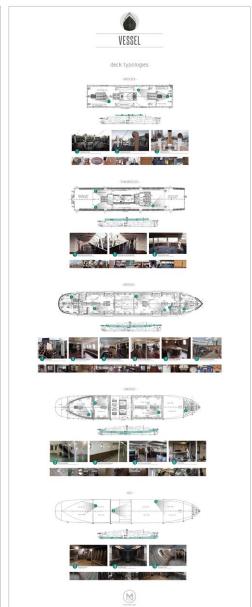






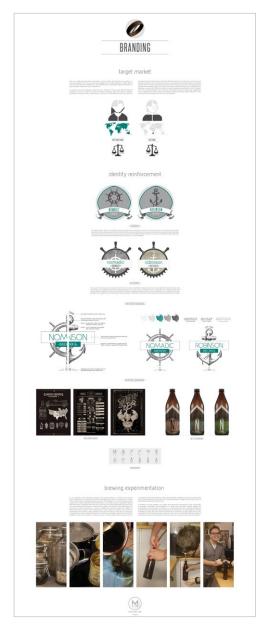


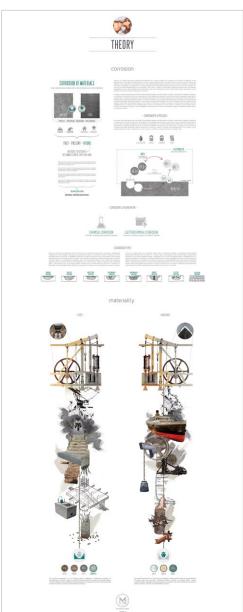


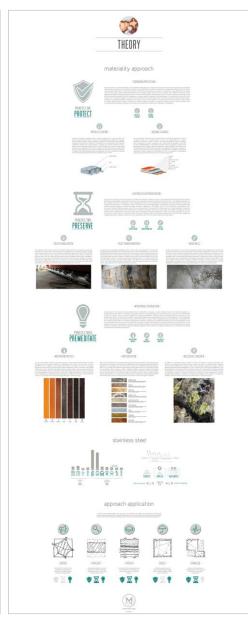






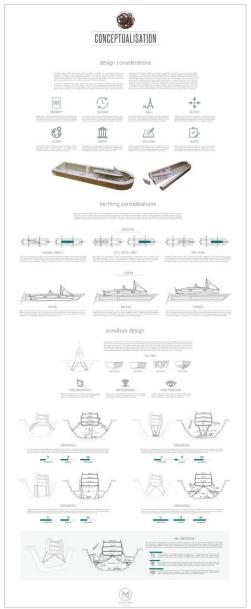


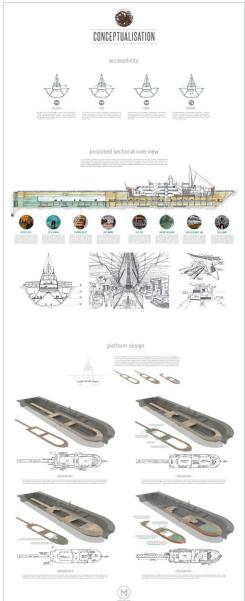




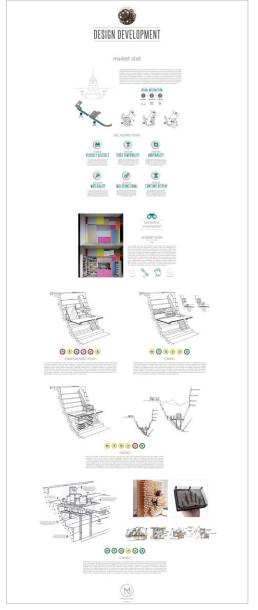






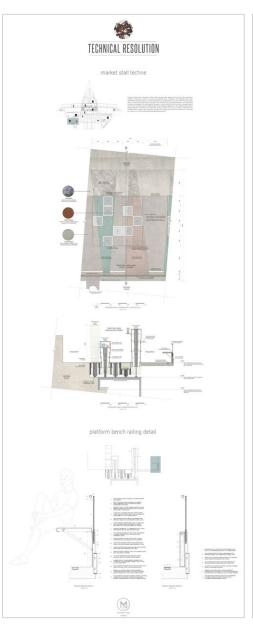


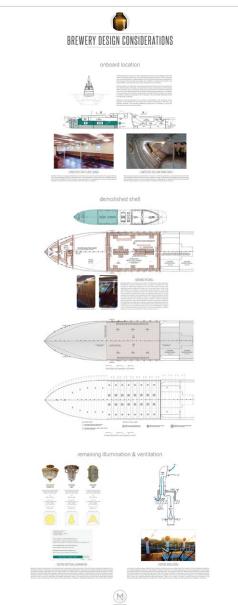


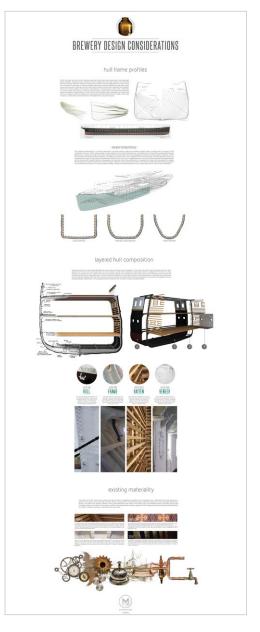






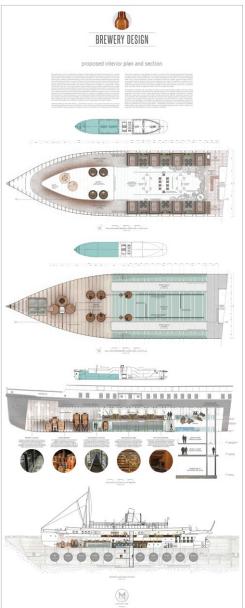


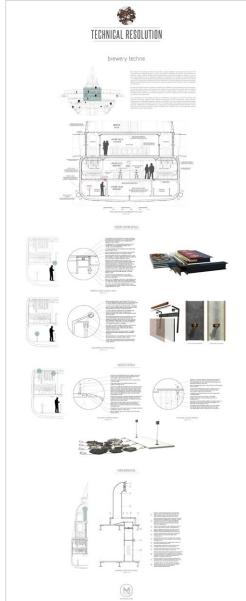






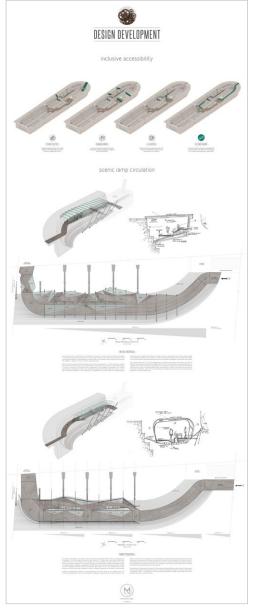


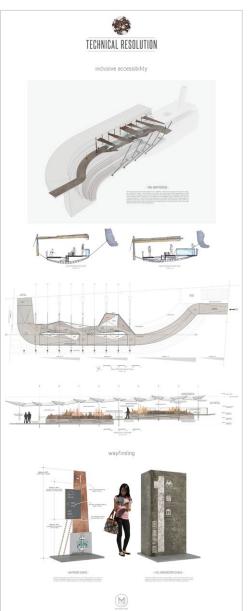


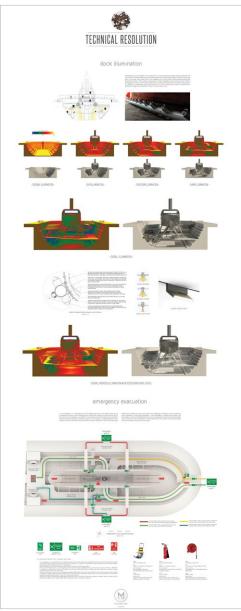


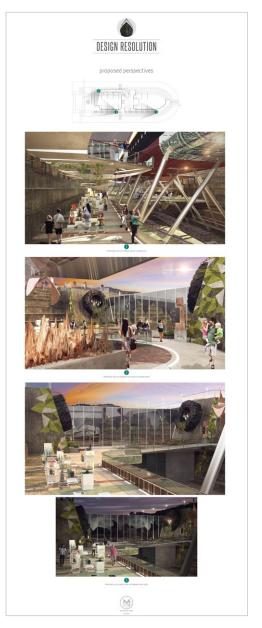








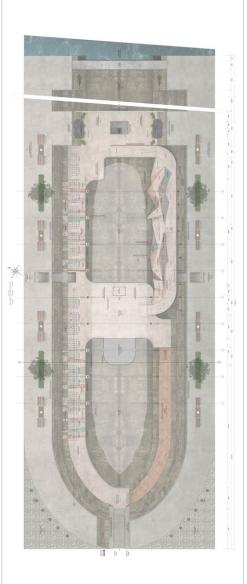


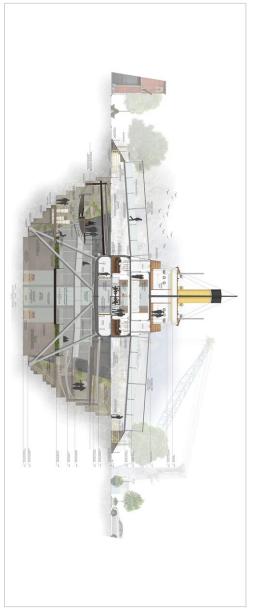














APPENDIX B - MODELS















APPENDIX C - BEER PACKAGING









