

# Aesthetic Consideration in Ship Design

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## Opportunity

The naval architect has mastered the art of engineering large-scale ocean-going vessels. However the ever-changing regulation, propulsion and material technologies have meant secondary functions such as habitation, passenger experience and aesthetic consideration have been systematically engineered out of the core routine.

## Research Objectives

To catalogue fundamental, principle and valued aesthetic aspects of a ships architecture, and develop a contemporaneous design philosophy, from this, through a language. Lending theoretical resources from the human sciences, i.e. 'Functional Beauty' and 'Natural Beauty', using grades and scales of beauty and pleasure that categorise mental well-being, comfort and happiness.

In the identification of a ships essential visual geometry, architectural relationships of sheer-line, bow-line, stern-line and freeboard, use massing and positions of superstructure forms to study and understand the context between sailing technology and habitat. Community, human scaled design, space, sculptural form, proportions, and layout.

Schools of thought from psychology and philosophy will be used to structure discussion on the meanings and our feelings towards a ships geometry.

## Theoretical Resources

### Natural Beauty:

Universal laws, scales & categories of the organic, using the 'Golden Ratio', i.e. natures sharing out of the parts. (Balance, Harmony and Symmetry.)

Sensory experience of environment, shapes and colour, focal points and tactile sculptural form, of nature and of animals, i.e. morphology and the classification of species and D.N.A.

Theatre of travelling through spaces, colours, temperatures and from perspectives in nature.

### Functional Beauty:

How function gives meaning to primary function, i.e. sails funnel, hull or propulsion.

Connection between secondary function of habitation, (Natural selection / perfect beauty)

Knowledge of going to sea, of indoor and outdoor living, perspectives and experience.

Theatre of travel through the built environment of colour, temperature and of perspectives.

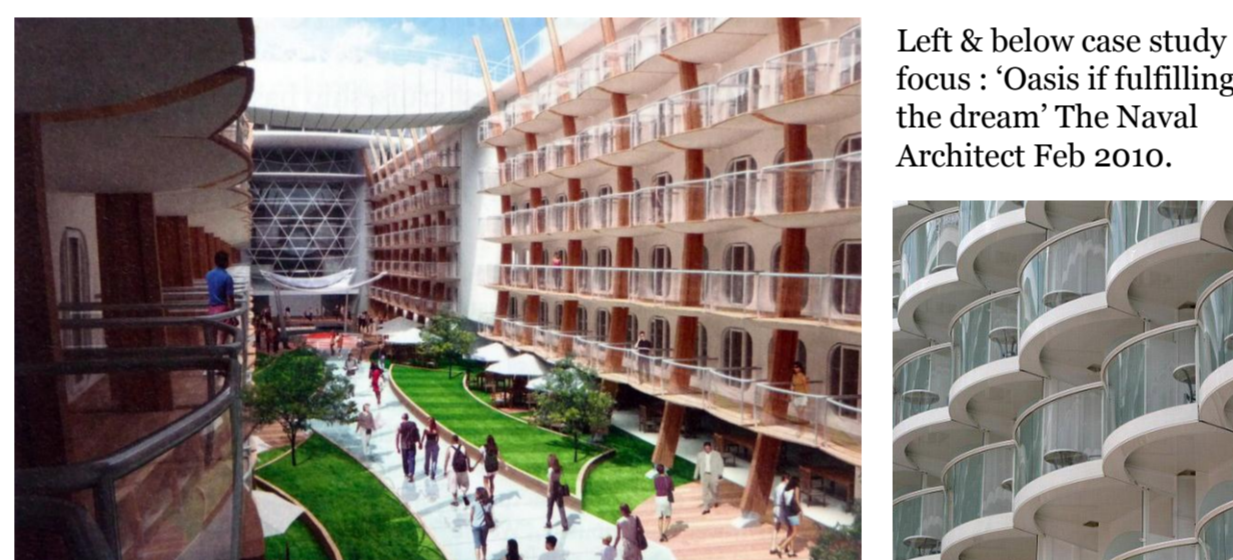
## Aims

To develop a design philosophy that considers the social and human elements of ship design through aesthetic consideration.

To supply the Naval Architect with an opportunity to synthesis the higher pleasures and desired experiences into the core design routine. Routine that reacts and develops along side the 'means of production' which also adheres to the already established design synthesis.

## Research Focus

Using the hypothesis that more complex ships are the indicators of aesthetic success or failure, case studies examine the visual meanings of their superstructures.



Left & below case study focus: 'Oasis if fulfilling the dream' The Naval Architect Feb 2010.

Case study extract: The Elbe SWATH a Passenger Perspective: "A short bulwark looks more like a balustrade than a protective sheer-line, obviously not to stop large waves.... as she accommodates trained experts in the ways of the sea, who know how to act on high seas."

By learning the more efficient and purest aesthetic criteria from craft that unify form by single purpose, i.e. such as a racing yachts, high performance or deep sea craft, commentary compares common aesthetic features to the essential makeup of the secondary roles of ship architecture.

Examination of the overall external form or the 'gestalt' of the vessel and how it embodies functional meaning, looks to supply the wider issues of social and communal contexts, especially of above the waterline. (Including investigation of the sense of protecting, of indoor and outdoor living, their functional relationship to one another and of the experiences, notions and perspectives of the passenger and crew.)

Ship design is unique, the ship is a free world, yet its passengers travel in a completely self-contained environment.

## Summary

The contemporary and complex art of ship design can be enriched with further thought and consideration towards aesthetics. Not only to improve the appearance of a ship, but also to add to function and functionality.

In terms of beauty and pleasure, all types of vessels can benefit from aesthetic consideration, to address 'crew retention' make 'sea days' more attractive or to improve overall visual appeal, helping us reclaim the Naval Architect as 'Artist' and as principal 'Architect' of the ship.

Enabling the designer to tailor aesthetic criteria to each case or type, throughout all features and philosophy, improving commercial and ethical value throughout design, promoting 'good-design', that appeals to the wider audience as a classic or significant ship, attracting sponsors, owners and passengers to design with 'good taste'.

## Conclusion

Using a design philosophy based on natures sharing out of the parts and functions, the humanities and the philosophy of aesthetics can help us understand the ineffable, mysterious and sometimes taboo topics of whether a ship is beautiful or not.

