THE KEY CONSIDERATIONS TO ACHIEVE DESIGN EFFICIENCY FOR FUNCTIONAL USE OF DOMESTIC EARTHENWARE IN SRI LANKA

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09/8054

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Degree of Master of Philosophy

Department of Integrated Design

University of Moratuwa Sri Lanka

September 2012

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Thesis submitted in partial fulfillment of the requirements for the degree Master of Philosophy

Degree of Master of Philosophy

Department of Integrated Design University of Moratuwa Sri Lanka

September 2012

Declaration

I declare that this is my own work and this thesis does not incorporate without acknowledgement any material previously submitted for a Degree or Diploma in any other University or institute of higher learning and to the best of my knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

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Acknowledgements

I feel it is my bounden duty to express my deep appreciation and gratitude to my supervisor, Senior Prof. Nimal de Silva for the valuable guidance and encouragement given to me at all stages of this research. I owe special thanks to my co-supervisor Prof. Harsha Munasinghe, Faculty of Architecture, for his valuable contributions which enabled me to carry out this study successfully.

I would like to take this opportunity to thank, Dr. Sepani Senarathne, Director of postgraduate, Faculty of Architecture, Dr. Upendra Rajapaksha, senior lecturer, Dept. of Architecture and Mrs. Sunethra Weerasinghe, University of Moratuwa for the cooperation and assistance extended to me to make this project a success. My sincere thanks are also due to Mr. AMS Attanayake Administrative & Technical coordinator, Faculty of Architecture, University of Moatuwa.

I am indeed grateful to people in kandy and Colombo for providing all the valuable data for my research. This research would never have been possible, without their support. I owe my thanks to the rural pottery manufacturers and their families too for their kind gesture.

My heartfelt thanks go to my beloved amma, appachchi & sister for their moral support and encouragement. Last but not least, I should thank my husband and son who have been the enduring sources of inspiration throughout this study.

Finally I would like to thank all those who helped me in numerous ways to make this project a success.

Abstract

Sri Lanka is famous for 'Clay Cooking Pots' from the historical days. Earthenware clay cooking pots have been used in each and every household as the main cooking utensil. However with the time these clay products became less popular. It has been found that they have not paid proper attention and concern during the process of manufacturing. This has resulted low quality clay products which make people dissatisfied of them. Therefore, it is obvious that clay cooking pots should be given due recognition, as they possess many good qualities which are unique to them only.

This study on 'Clay Cooking Products' reveals that these clay cooking utensils do not cater to the needs of present society, due to less design qualities. Although there are cooking utensils made out of other materials, they do not possess the qualities which belong only to the clay products. However it has been identified that people live in the present society are willing to use clay cooking pots, if they are up to standard with good design qualities which fulfill their needs.

Design Elements and Design Principles are very important factors which play a vital role in producing clay products. Other important factors that have to be considered are Shape, Form, Texture, Value and Balance of the products. Design elements and design principles are very important as they contribute a lot to produce a good designer product. Questionnaire survey was carried out with a view to finding out the effectiveness of those factors on present clay cooking pots. Main attempt was to collect information regarding the orifice, belly and base of the specific product which has been used in the study. The earthenware cooking pot "*Hattiya*" and the lid was used as sample objects in this study. Questionnaire survey was carried out in selected urban areas in the country (Kandy & Colombo). The data was studied and analyzed through the Chi-Square testing method in order to find out the most important factor.

According to the analysis of data, and other investigations it has now been found out that the specific clay cooking pot ("*Hattiya*") which is in use presently has to be developed paying attention to the design development of the product. Through the data analysis it was proved that factors such as Shape, Form, Texture, Balance and Value are key considerations of making "*Hattiya*". These factors are important to achieve design efficiency when product is functionally used. Those factors have to be considered according to the mentioned order and they are important to the other clay cooking pots as well, in the process of manufacturing them.

Keywords : Functional, Efficiency, Design Element, Design Principles

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LIST OF ABBREVIATIONS

- **BL** Balance
- **BRW** Black and Red Wares
- BW Black Ware
- **DE** Design Elements
- **DFM** Design for market
- **DP** Design Principles
- GW Graphite Ware
- H- Height
- MCW Mica Coated Ware
- N- Negative
- **P** Positive
- **PR** Proportion
- **Q** Question
- RW Red Wares
- $\boldsymbol{SH}-\boldsymbol{Shape}$
- TE-Texture
- VA- Value
- W- Width



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