OPEN RESEARCH

Research and Development Projects of CIAUD
(regarding the assessment process of the FCT in 2008)
# CONTENTS

<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
<th>Author(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>005</td>
<td>OPENING NOTE</td>
<td>Francisco José Gentil Berger</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The Dean Of The Faculty</td>
</tr>
<tr>
<td>007</td>
<td>INTRODUCTION</td>
<td>Jorge Cruz Pinto</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Head of CIAUD's Steering Committee</td>
</tr>
<tr>
<td>013</td>
<td>PRESENTATION OF CIAUD</td>
<td></td>
</tr>
<tr>
<td>049</td>
<td>ARCHITECTURE</td>
<td>Rui Barreiros Duarte</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coordinator of Architecture Group</td>
</tr>
<tr>
<td>052</td>
<td>PROJECTS</td>
<td></td>
</tr>
<tr>
<td>177</td>
<td>URBAN PLANNING</td>
<td>João Cabral</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coordinator of Urban Planning Group</td>
</tr>
<tr>
<td>180</td>
<td>PROJECTS</td>
<td></td>
</tr>
<tr>
<td>245</td>
<td>DESIGN</td>
<td>Fernando Moreira da Silva</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coordinator of Design Group</td>
</tr>
<tr>
<td>248</td>
<td>PROJECTS</td>
<td></td>
</tr>
<tr>
<td>307</td>
<td>EVALUATION OF THE INTERNATIONAL PANEL OF FCT (Fundação para a Ciência e a Tecnologia)</td>
<td></td>
</tr>
<tr>
<td>311</td>
<td>COMMENTARY OF THE EVALUATION</td>
<td>Jorge Cruz Pinto</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Head of CIAUD's Steering Committee</td>
</tr>
</tbody>
</table>
PRESENTATION OF THE DESIGN GROUP

The Research on Design Group within CIAUD has as its main aim to promote development and innovation of scientific, technical and artistic knowledge in Design and interact with other disciplines such as education and society as a whole.

Research activities in the area of Design began in the FA / UTL in 2002. In November 2005, the creation of LIID - Laboratory for Innovation in Design – was approved as an institutional structure to develop research projects in close liaison with industry, enterprises and civil society. At the time of formation of CIAUD, this Laboratory was included in the Research Centre, focusing on it all the research initiatives in the area of Design, within the general lines of research of Product Design (Industrial, Equipment), Communication Design (Graphic) and Fashion Design, both at the Applied Research and the theoretical research level.

The courses of Master in Design of FA / UTL began to be supplied regularly from 2002-2003, with specializations in product design, graphic design, design of exhibitions and ephemeral architecture, and fashion design. Till 2008, five editions of the Master of Design were developed. As a result of these Masters Courses, 25 students reached the degree of Master in Graphic Design, 11 in Fashion Design and 32 in Product Design. The objectives of these courses include the establishment of conditions to develop research activities in design, the definition of a network of personal relationships and of institutions of reference in the area, and to train a group of researchers capable of contributing to the sedimentation of the legacy of accumulated research by this School.

Following this process, in October 2006 was initiated the first Doctoral Course in Design, with a total of 43 participants. At the moment, the PhD Course in Design is in its 3rd edition with a total of 110 doctoral students in research, becoming CIAUD the Research Centre in Design with more students from across Europe.

Several research projects, in a close link to Civil Society, in general, and to industry and enterprises, in particular, have been implemented since 2002, highlighting among several the following ones: "Accessibility and Usability Conditions of ATM machines" (2002 - 2005), "National Inclusive Design Observatory" (2003 - 2006), "Accessibility and Inclusion at the UTL (2006-2008).

At National level, the researchers who take part of the Group for Research in Design have established institutional partnerships with other schools of the UTL, such as the FMH and ISEG, several other universities, such as UBI, University of Algarve, Aveiro University, polytechnics institutes such as IPCB, IPLeiria, IPIlboada, laboratories and research centres, such as ERGOLAB, LNETI, in addition to other entities such as CPD, ODA, ACAPO, ACECIA, SIBS, etc.
In what concerns internationalization, several networks of schools at post-graduation, research projects and publications level have been set up. Within these initiatives, several personalities of international prestigious have given their regular contribution, including teachers of the Faculty of Fine Arts at the University of the Basque Country (Iñurrategui Leire Fernandez and Eduardo Fernandez Herrera), Faculty of Fine Arts at the Complutense University of Madrid (Juan José Gómez Molina), the University of Salford (Marcus Gregory Ormerod), European Institute of Design / Escuela Superior de Diseño Elisa / European Communication School (Joan Costa) and the Polytechnic Institute of Milan, School of Design (Benedetta Barzini, Marcello GALBIATI).

The projects included in this publication in the Design area are some of the research projects developed or under development within the several lines of research that have been implemented in this field.

In addition to continue all ongoing initiatives, one of the next steps is the implementation of post-doctoral research in the area of Design, which is believed to be realized in 2009, in addition to increased investment in the ways of research diffusion and dissemination through Seminars, Conferences, Meetings, Exhibitions and Publications.

Within CIAUD the area of Design pretends to continue contributing to the competitiveness of the Research Centre and FAUTL itself at academic and production circles level, national and international, as well as to make Design in one of our expertise and specialization areas.

Fernando Moreira da Silva
Coordinator of Design Group
Title (provisional): The enhancement of the time, and strategic adequacy management to ensure a controlled quality of the product design processes results

RELEVANT KNOWLEDGE FIELDS
Design; Management

TEAM
PhD student researcher: Rita Assoreira Almendra (MSc)

Supervisor:
Prof. Doutor Fernando Moreira da Silva (FA.UTL)

Co-Supervisors:
Prof. Doutor José Manuel Pinto Duarte (FA.UTL)
Prof. Henri H.C.M. Christiaans (TU.DELFT)

CONTACT
almendra@fa.utl.pt | + 351 213615081

OBJECTIVES
> The achievement of a description of design processes among design students and professional designers in order to identify both gaps and contact points;
> The development of a methodology that will improve time and strategic adequacy management in order to ensure a controlled quality in design processes final results;
> The definition of new tools and teaching methods that will better match company's expectations about design practices.
> The promotion of a more effective interaction between design's education and industrial Portuguese companies.

APPLICANT INSTITUTION
FACULDADE DE ARQUITECTURA
UNIVERSIDADE TECNICA DE LISBOA

FUNDING
FCT Fundação para a Ciência e a Tecnologia
MINISTÉRIO DA CIÊNCIA, TECNOLOGIA E EDUCAÇÃO SUPERIOR
reference SFRH/BD/30564/2006
PROJECT PRESENTATION

My PhD research aims to contribute to a deeper knowledge of product design processes. I seek to understand how knowledge is managed and decisions are made along the Design processes in order to create a new methodology that will guarantee a minimum quality level of the resultant solutions proposed at the end of those processes. It is noticeable, in general terms, a deficiency of coherence and consistency in final products and that, I suggest, can be partly attributable to the circumstance of the enormous investment in time and reflection being made without the use of methods that structure thought, stimulate reflection and conduct to the systematization of concepts and information that will better support decision-making. If that was done a good conceptual, functional and productive frame would be consolidated and that would free 'mental space' and time to creativity necessary to the generation of the best informed solutions.

The research's methodological design is seen in practical terms as an open process subjected to iteration during its course.

In methodological general terms I aim that this research will be able to translate the praxiological and hermeneutical aspects of product design processes.

The synthesis of the research framework is presented in Figure 1.

As it can be seen in Figure 1 part of the work is developed in the Education field, in the FA and has already started and part is done in the industry field. The work to be done with companies will be developed inside a research project planned for the next three years with the title "Design as a company's strategic resource: a study of the impacts of Design" that was funded by Science and Technology Foundation (FCT). This research project is developed by a multidisciplinary research team that includes the knowledge areas of economy, management, design, engineering, statistics, and artificial intelligence.

Until now 2 papers were presented and integrated in the Proceedings in an international conference that occur in Cape Town in 2007 and one will be published during the first semester of 2008 in the "The International Journal: Design Principles and Practices".

Science and Technology Foundation (FCT) also gave me a scholarship under its Doctoral Research Program with the reference SFRH/BD/30564/2006 to develop this doctoral study.
Condições de Acesso e de Utilização dos Equipamentos designados por "Caixas Automáticas" (ATMs)

ÁREAS DO CONHECIMENTO MAIS RELEVANTES
Caixas Automáticas (ATMs) - Design

EQUIPA
FACULDADE DE ARQUITECTURA
- António Raposo Cordeiro
- Fernando Moreira da Silva
- Jorge Telo Pacheco
- Eduardo Afonso Dias
- Manuel Tibério
- Ricardo Soares

FACULDADE DE MOTRICIDADE HUMANA
- Leonor Moniz Pereira
- Cristina Espadinha
- Graça Morgado
- João Cordeiro

INSTITUTO SUPERIOR TÉCNICO
- João Brisson
- Mário Rui Gomes

FINANCIAMENTO

ENTIDADES PARTICIPANTES
APD | ACAPO | ADFA | Câmara Municipal Cascais
Câmara Municipal Lisboa | CECED
Centro de Recursos para a Deficiência Visual ME
CERCI LISBOA | Cooperativa de S. Pedro
Liga Portuguesa de Deficientes Motores | SNRIPD
UMIC | APPACDM - Marinha Grande

CONTACTO
Fernando Moreira da Silva
Rua Sé Nogueira | Pólo Universitário
Alto da Ajuda | 1349-055 Lisboa
Tel. 213 615 818 | Fax 213 625 138
lid.fa.uitl@gmail.com

OBJECTIVOS
- Avaliação crítica dos equipamentos existentes e das condições de instalação e o seu impacte sobre os grupos de utilizadores;
- Checklist de verificação das condições de localização, acesso, e utilização dos ATMs;
- Recomendações relativas à localização instalação, design e construção dos equipamentos;
- Recomendações relativas ao desenvolvimento de diálogos e interacção.
APRESENTAÇÃO

- O presente projecto assentou na identificação e caracterização sistemática, das condicionantes que estrangem a utilização universal dos equipamentos ATMs, e na elaboração de recomendações que visam a resolução dos problemas identificados.

- Os trabalhos foram orientados para a diversidade do desempenho humano tendo em consideração a população com deficiência, ou idosa, e procurou desenvolver um interface (físico e comunicacional) que satisfaça as diversas características de utilização requeridas.

- A metodologia utilizada integra-se na perspectiva do Design Inclusivo (desenho para todos) tendo por base o modelo de funcionamento humano (proposto pela Organização Mundial de Saúde em 20-01). Participaram na fase de diagnóstico 356 pessoas com problemas de desempenho muito diversificados (sendo 206 utilizadores de pelo menos um serviço MB, 138 não utilizadores e 12 pessoas que desistiram de o usar. Na fase de avaliação do banco de ensaios participaram 24 pessoas representativas dos diversos tipos de desempenho que poderiam ser consideradas próximas de "casos limite" face às características da tarefa.
MEANS AND EXPRESSIONS OF VISUAL COMMUNICATION IN PORTUGAL
Contribution to the Study of the Visual Culture of the XXth Century through the Periodical Publications

RELEVANT KNOWLEDGE FIELDS
Design, Cultural Identity, Visual Communication, Portugal, 20th Century

TEAM
Ana Margarida de Bastos Ambrósio Pessoa Fragoso

CONSULTANTS
Supervisor: Professor Doutor Fernando José Carneiro Moreira da Silva;
Co-Supervisor: Professor Arquitecto José Pedro Roque Gameiro Martins Barata

APPLICANT INSTITUTION
FACULDADE DE ARQUITETURA
UNIVERSIDADE TECNICA DE LISBOA

FUNDING
PCT Fundação para a Ciência e a Tecnologia MINISTÉRIO DA CIÊNCIA, TECNOLOGIA E INNOVAÇÃO

CONTACT
marfragoso@netcabo.pt

OBJECTIVES
To survey and understand the main lines of evolution of visual communication in the period under study by detecting factors of stability and continuity within the unfolding of this evolution, as well as the moments of rupture and agents of change. Such study was based on the hypothesis that visual expression on whatever form, is conditioned and interacts with the cultural, economical political and technological paradigm its age.

PROJECT PRESENTATION
The historical framework that characterized Twentieth Century bears witness to social systems in constant and intense transformation. In the area of visual communication, the expressions of a cultural complex in permanent flow that reflects an age of extremes, ranging from the stable forms of the early century to the multiple and ephemeral contemporary forms of visual expression were examined.

The aims of this study To analyze the main lines of evolution of visual communication in the period under study by detecting factors of stability and continuity within the unfolding of this evolution, as well as the moments of rupture and agents of change. Such study was based on the hypothesis that visual expression on whatever form, is conditioned and interacts with the cultural, economical political and technological paradigm its age.
The multi-area approach to the various contexts that conditioned the historical evolution of visual communication in the twentieth century, was based on the relevant documents, images and testimonials from important and meaningful actors. These allowed an understanding and clarifying the interconnecting of the different relations: the daily life, culture and zeitgeist, the social and economic conditions, and how these were expressed by visual communication throughout last century.

Striving for greater rigor and depth in the study on the visual expression understood in its cultural framework, an objective and practical base for an understanding of this evolution was the periodical publications; relating the development of techniques, training skills, foreign influences and the cultural, social, economical contexts.

From this study of visual expression understood within its cultural framework, the following results are inferred: visual expression is as revealing of societal values and evolution as the written, literary expressions; the evolution of the visual expression as attested by the different forms that support it, is “interior” to the its own historical process, being nonetheless defined by a system of influences within the cultural complex; the “authors” and “actors”, are also acted upon by the dynamics of the cultural complex; the technologies available at every period or historical moment are not mere passive carriers of expression, but condition its very evolution.

From the study of the evolution of this complex social system, expressed by visual communication, new angles present themselves for inquiry: to detect and understand the dynamics underlying the evolution of visual expression in terms of complexity, and try to assess where they might lead as far as the future of form is concerned.

---

**CALENDAR AND CHRONOGRAM**

Results | Passed
Working out the thesis

Current State
In attent of the presentation

Foreseeing | Future
Research development in the lines of the thesis
Colour in the City – a factor for signage, orientation and identification

RELEVANT KNOWLEDGE FIELDS

TEAM
PhD student:
Mestre Margarida Maria Allen Gamito
Supervisor:
Professor Doutor Fernando Moreira da Silva

FUNDING
FCT Fundação para a Ciência e a Tecnologia

APPLICANT INSTITUTION
FACULDADE DE ARQUITECTURA
UNIVERSIDADE TÉCNICA DE LISBOA

CONTACT
Margarida Gamito
Rua São João de Deus, 10, 1º D
1495 - 747 Dafundo
e-mail: margamito@sapo.pt

OBJECTIVES
This research pretends to define the importance of colour application on signage and urban furniture, taking in consideration that a pertinent application of colour may contribute for a better visualisation and, consequently, ameliorate its utilisation. The city population is constituted from a wide variety of people, with more or less visual limitations and, therefore, to have better visibility conditions, and in order that urban furniture and signage could be part of inclusive design, they must present a good chromatic and luminosity contrast.
The chromatic unification of these elements for every city zone, with colour options related with local history and symbolism, will allow the identification of the different zones, without prejudice for the legibility. This zonal chromatic unification will also contribute to a better orientation of the urban population, being them permanent or visitors, by the act that each zone will be chromatically differentiate and, therefore, easily identifiable.

PROJECT PRESENTATION
This research aims to establish that colour application to signage and urban furniture may become an efficient way to make these elements stand out from their surroundings and, also, contribute to improve the city environment, to identification the different city zones, and to promote the orientation of their, permanent or temporary, inhabitants. It encloses a case study, alongside with a non interventionist qualities methodology.
The literature review focuses on urban furniture and signage, highlighting the chromatic applications and the orientation problems within the city.
The case study is centred on the City of Lisbon, trying to determine the existence of deficiencies about colour application on urban furniture and signage. A comparison will be established with other cities, where this problem might be successfully accomplished. In sequence, a chromatic plan will be suggested, taking account of the history and symbolism of the different zones of the city.
To complete the study, a group of specialists will be interviewed, to collect and confront their views upon the subject.
Simultaneously a survey will be carried out, in order to inquire the population preferences about the colour application on their surroundings.

The data collection analysis, and the literature review, will lead to the research conclusions, which pretend to be a contribution for knowledge and indicate suggestions for future research within this area.

PHOTOGRAPH AND RENDERINGS

CALENDAR AND CHRONOGRAM

<table>
<thead>
<tr>
<th>Investigação bibliográfica</th>
<th>Levantamento fotográfico</th>
<th>Projetos arquitetônicos</th>
<th>Elaboração de entrevistas</th>
<th>Consultas à População</th>
<th>Realização de entrevistas</th>
<th>Análise de dados</th>
<th>Redação da dissertação</th>
<th>Revisão bibliográfica</th>
<th>Complementação de dados</th>
<th>Revidões e alterações</th>
<th>Impressão do documento</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meses: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tr. Realizado</td>
<td>Tr. de preparação executado</td>
<td>Tr. em preparação</td>
<td>Tr. em execução</td>
<td>Tr. programado</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Sistemas de Identidade Visual Institucional

Design e Gestão dos Signos
Identificadores Gráficos

Doutoramento em Design - FAULTL
Área Científica: Arquitectura, Urbanismo e Design

Doutorando
António Carlos Camilo Correia da Lacerda

Contactos: aclacerda@ualg.pt // www.eae.ualg.pt/design
http://wl3.ualg.pt/~aclacerda

// Licenciado em Design de Comunicação pela Escola Superior de Artes e Design-Matosinhos;

// Pós-Graduação em Tecnologias Multimédia pela Faculdade de Engenharia da Universidade do Porto;

// Docente no Curso de Design de Comunicação da Universidade do Algarve-ESE;

// Investigador e Bolseiro de Doutoramento da Fundação para a Ciência e Tecnologia do Ministério da Ciência, Tecnologia e Ensino Superior.

Estrutura de I&D
// CIAUD-Centro de Investigação em Arquitectura, Urbanismo e Design

Instituição de acolhimento da estrutura de I&D
// Faculdade de Arquitectura da Universidade Técnica de Lisboa

Tema de investigação
// Design e Gestão dos Signos Identificadores Gráficos - Metodologias de programação, implementação e gestão de programas de identidade visual institucional

Título
// Sistemas de Identidade Visual Institucional: Design e Gestão dos Signos Identificadores Gráficos

Palavras Chave
// Design de Comunicação, Sistemas de identidade visual, Signos identificadores gráficos, Identidade corporativa, Gestão e programas de identidade visual

Orientador
// Professor Doutor Eduardo Herrera
Faculdade de Belas Artes - Universidade do País Basco- Bilbau

Co-Orientadores
// Professor Doutor Fernando José Carneiro Moreira da Silva
Faculdade de Arquitectura da Universidade Técnica de Lisboa - Lisboa

// Professora Doutora Leire Fernandez
Faculdade de Belas Artes - Universidade do País Basco - Bilbau

Objectivos da Investigação

// Detectar as ineficiências nos processos de design, implementação e gestão de sistemas de identidade visual institucional;

// Contribuir para a análise e reflexão do estado da arte ao nível do estudo dos signos identificadores gráficos e dos sistemas de identidade visual institucionais, contribuindo para um conhecimento mais profundo na área do design de comunicação;

// Efectuar a análise qualitativa de identidades visuais Institucionais, detectando os seus pontos fortes e fracos, comparando as suas estratégias de comunicação e linguagens gráficas adoptadas (cores, formas, símbolos, logótipos, etc.);

// Constituir um diagnóstico real das suas representações identitárias e subsequente apresentação de resultados;

// Clarificar o paradigma da construção e gestão de sistemas de identidade visual institucional;

// Descodificar que tipo de signos identificadores gráficos são utilizados pelas instituições de ensino superior e porquê;

// Conhecer os tipos de Sistemas de Identidade Visual Institucional que existem actualmente;

// Descobrir de que forma esses sistemas foram concebidos;

// Saber quais os aspectos que se podem suprimir ou reforçar para aumentar a sua eficácia;

// Conhecer os procedimentos para conceber, implementar e gerir a identidade visual;

// Descobrir o que representa a identidade visual para os seus públicos;

// Descobrir quais os modelos conceptuais a utilizar;

Através da análise e reordenação das ferramentas teóricas necessárias para a construção, implementação e gestão de sistemas de identidade visual, objectiva-se a construção de modelo teórico e um exemplo prático que permita possíveis aplicações, coordenando todos os signos identificadores gráficos e os seus modos de aplicação na totalidade dos produtos e suportes de comunicação.

A realização de um projeto prático, que canalize todos os aspectos estudados e tratados nesta investigação, será uma forma de aplicação e formalização desta estrutura de investigação, contribuindo para o conhecimento na área do design de comunicação.
Objecto de estudo

Os significados das mensagens visuais, os seus conteúdos, os seus emissores e receptores, devem ser entendidos como uma reflexão profunda e fundamental na nossa cultura, que é predominantemente visual. A aceleração e evolução dos mercados, a globalização de produtos e serviços, as constantes transformações socio-económicas e suas constantes alterações numa sociedade cada vez mais industrial, levam ao aparecimento de um maior número de mensagens e sinais com diferentes significados denotativos e conotativos.

Nenhuma instituição prescinde hoje de um sinal gráfico como identificador institucional, e o próprio conceito de identidade corporativa está quase exclusivamente associado ao sistema de identificação gráfica, que se constituem por sistemas de mensagens e recursos significantes bastante complexos.

Neste contexto a sua importância social e cultural, leva-nos ao estudo e análise dos sistemas de identificação institucional, dos seus sinais identificadores gráficos (simbólos, logotipos, tipografia, nomes, cores, etc.), dos seus impactos e interrelações ao nível da identidade institucional, as suas classificações formais e os seus parâmetros de qualidade.

Optamos assim por definir como objecto de estudo os sistemas de identidade visual institucional (SIVI), do ensino superior público ou privado nacional e os seus sinais identificadores gráficos, pois geram e assumem diferentes problemáticas da imagem, valores diferenciadores, obrigações perante a sociedade, contribuindo para o desenvolvimento científico e tecnológico nacionais, projectando um conjunto de características específicas e objectivas da personalidade de uma organização, reflectidas nas suas diferentes mensagens, produtos e suportes de comunicação.

![Fig. 1 - Símbolos e Logotipos de algumas Instituições de Ensino Superior Nacionais](image)

Metodologias e Desenho da Investigação

Esta investigação é de natureza mista e envolve metodologias intervencionista e não-intervencionista. A metodologia intervencionista é efectuada através da investigação activa (caso de estudo com controlo), a observação directa, a seleção dos estudos de caso e a pesquisa documental, farão parte da metodologia não-intervencionista, assim como o recurso à opinião de peritos com trabalho desenvolvido na área, será uma das formas de suporte para testar a(s) hipótese(s) e modelo.

Através dos inquéritos e entrevistas, utilizamos bases quantitativas e qualitativas, com um conjunto de perguntas escritas específicas (variáveis dependentes / independentes, perguntas abertas e fechadas), definindo inicialmente a amostra (público interno e externo das instituições de ensino superior e alunos do ensino secundário);

A realização de entrevistas com peritos no desenvolvimento passado ou presente de sistemas de identidade visual institucional e recolhidos exemplos de todos os sinais identificadores gráficos de instituições de ensino superior nacionais fazem parte do processo de investigação;

Prevê-se que esta investigação forneça dados qualitativos e quantitativos relativos ao tema, permitindo a análise do estado da arte, a construção de um modelo teórico e um exemplo prático no desenvolvimento de identidades visuais institucionais.

![Fig. 2 - Esquema explicativo do objecto de estudo desta investigação](image)

Em 1973 existiam apenas quatro Universidades em Portugal (Coimbra, Lisboa, Porto e Técnica de Lisboa). Depois da revolução de 1974, efetivou-se a sua expansão devido às transformações políticas, económicas e sociais, concretizando-se na criação de novas Universidades públicas, a criação do ensino Politécnico público, e o desenvolvimento de instituições privadas. É através do aumento da escolarização no ensino secundário, das aspirações de ascensão social através da liberdade e da democracia e do processo de reestruturação económica, que se justifica esta importante expansão do sistema.

O sistema de ensino superior passou de quatro Universidades, em 1973, para uma rede de 7955, de empresas e organizações de ensino superior público e privado (Universidades e Politécnicos) que financiam a educação de pessoas formadas em Ciências e Ensino Superior, no ensino superior público e privado (Universidades e Politécnicos) que financiam a educação de pessoas formadas em Ciências e Ensino Superior.

Fonte: Direcção Geral do Ensino Superior, 2008

É com base na importância do contexto identificado que se propõe esta investigação, com o objectivo de aperfeiçoar mecanismos de padrões, para o reconhecimento visual identitário destas instituições, ao nível das públicos internos e externos, otimizando os seus processos de comunicação.

![Esquema retratando todo o processo de investigação](image)
Emotional expressivity in Multimedia Design: Model for technological mediated interpersonal communication.

Doctoral investigation

Scientific Domain: Design
Field of Investigation: Communication Design - Multimedia Design

Relevant Knowledge Fields
Communication Design/ Multimedia Design
Key-words: Emotional expressivity; emotions; Interpersonal communication; technological mediation.

Team
Researcher: Joana de Carvalho Folgado Lessa
Master in Multimedia Technology (Faculty of Engineering of University of Porto)
Graduation in Communication Design (Faculty of Fine Arts of University of Porto)

Adviser: Professor Doutor Fernando José Carneiro Moreira da Silva
(Faculty of Architecture of Technical University of Lisbon)

Applicant Institution
Faculty of Architecture of Technical University of Lisbon

Participant Entities
The researcher has a scholarship from the Fundação para a Ciência a Tecnologia (Ministério da Ciência, Tecnologia e Ensino Superior), for the development of this Project.

Contact
Algarve University - ESE
Campus da Penha, Estrada da Penha
8000 Faro
+351 939 321 558
jlessa@uaig.pt

Objectives
In broad terms, what is intended with this line of investigation is to enrich contemporary interpersonal communication; the idea is to give back to the technological mediated communication, the emotional expressivity, which is consider to be an human aspect rich in meanings and important for the good cognitive and communicational functioning.

The main purpose of the investigation is the design of a theoretical model for the development of multimedia systems. The study grounds itself in the visualization of emotion through multimedia expressivity, in the context of interpersonal technological mediated communication. From this central objective, there are others that can be established:

- The analysis of emotional expressivity in each of the identified media - text, sound, images, animation, video and interactivity;
- The study of media interconnection effect in emotional expressivity - synesthesia and others;
- To understand which are the aspects responsible for the regulation of affective expressivity, in a complex multimedia structure communication;
- To identify in what way the multimedia structure can be articulated/organized, in order to maximize the communication of affective information;
- To consider the communication process individuals as active fundamental participants in that process, thus important to integrate personal expressivity.

Project Presentation
Communication increasingly depends in a technological interface: to achieve distant places or to overcome shyness and socializing difficulties.

In interpersonal communication, the technological mediation filters the emotional content closely connected to the personal psychological and physical features (Lessa, 2005).

The emotional aspects are fundamental for the development of cognitive and communicational tasks: according to recent research in Computer Sciences - Affective Computing (Picard, 2000) as well in Design - Emotional Design (Donald Norman, 2005), emotions are recognize as important part of human activity and should not be put aside.

Nowadays communication gadgets make use of Multimedia for its ability to easily create an emmersive environment that gets people willingly involved to express themselves.

In this Project it is consider important to understand how can multimedia information carry affective content. Based on Gestalt Theory, this Project grounds itself in the theory that in complex systems "the total is richer than the sum of the parts", and lays the hypothesis that the multimedia affective expressiveness potential is superior than in each isolated media (text, sound, images, animation, video and interactivity).
Research structure and Methodologies

- Theme:
- Title:
- Literature research:
- State of the Art:
- Investigator questions:
- Preliminary study:

- Hypothesis:
- Case Studies (3):
- Generative Theoretical Bases:
- Testing the Model:
- Context:
- Conclusions:

Calendar and Cronogram

The Project's investigation follows as planned on the calendar.

<table>
<thead>
<tr>
<th>Tasks</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attending classes in curricula Design Doctoral degree - FAUtl.</td>
<td>**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenting investigation developments in FAUtl seminars.</td>
<td>**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>Establishing the field and themes of the investigation.</td>
<td>**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>**</td>
<td>**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Book research and investigation through orientated</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>Drawing online survey.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparing, collecting and analyzing the data from all the sources of information.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjustments to theoretical model and draw conclusions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finishing, graphic setup and document printing.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PROJECTO DE TESE DE DOUTORAMENTO EM DESIGN
Candidato: Mestre Arq. Paulo Maldonado
Orientador científico: Prof. Doutor Arquitecto Fernando Moreira da Silva
Bolsa de Investigação da Fundação para a Ciência e Tecnologia SFRH / BD / 30427 / 2006

RESUMO
Este projecto de investigação pretende colocar a inovação no contexto disciplinar do Design para gizar modelos teóricos de actuação que realizem um grande designio, nacional e global, o desenvolvimento sustentado.

TEMA
Processos de inovação induzidos pelo Design.

TÍTULO
Innovation, Design and so on...

PALAVRAS-CHAVE
Design, inovação, empreendedorismo, liderança, visão estratégica, competitividade, conhecimento, responsabilidade social, demografia, desenvolvimento sustentável.

ÁMBITO DA PROPOSTA DE INVESTIGAÇÃO
Explorar um par conceptual no contexto disciplinar do Design, abrindo-o a outras áreas, nomeadamente à Gestão, ao Marketing e às Tecnologias, num quadro global de incerteza e de complexidade.

OBJECTIVOS DA INVESTIGAÇÃO
Contribuir para a actualização de objectivos e de métodos da denominada teoria crítica do design, suporte teórico essencial a uma prática que se deseja esclarecida e socialmente responsável.
Contribuir, directa e indirectamente, para uma cultura da inovação e do design no tecido empresarial produtivo, na busca de modelos de desenvolvimento sustentáveis e competitivos no quadro económico da UE e à escala global.

PROJECT PRESENTATION
An empirical analysis of examples of design and design management integrated in three contexts - institutional, corporate and academic - makes it possible, first of all, to identify creative and operative methodologies and processes aimed at innovation in design and through design; and, secondly, to build a theoretical model aimed at good design and design management practices and excellence in the global environment - SPES (HOPE).

The fact that these contexts are real and not ideal scenarios signifies that there will be no omission of eventual differences between expectations created and achievements obtained.
This observation is not merely rhetorical, since Latin people, as a rule, do not easily accept a lack of success - REAL CONTEXTS.

Managing design and innovation processes in multicultural contexts, in a permanently changing global environment, is a proactive and collaborative task involving wide experience, skill and knowledge - PEOPLE.

The individual and the collective attitudes, inspired by strong leadership, should be militantly curious, avid when collecting, filtering and processing data, critically observant, aware of tendencies, discerning when detecting opportunities and attentive to detail without losing sight of the big picture.
They should reinvent using new means and methods, use imagination and intuition to envision the future and thereby actively contribute towards accomplishing the spirit of the mission, with social responsibility and sustainability - VISION.

In the first instance, create virtual scenarios for discussion and pre-validation of the concepts involved in order to identify problems, re-define goals and estimate operation risks.
The next step is to act and define strict implementation strategies for a new business design process - DESIGN STRATEGIES.

Design methodologies can be reviewed and redesigned using megatrends and benchmarking, by studying behaviour patterns of individuals and groups in their natural habitats, by analysing media content and messages aimed at these target groups and other processes induced by productive thinking - creativity - DISTINCTIVE DESIGN COMPETENCIES.
The proposed systematization requires rapid definition of potentially effective ideas and concepts: distinctive or innovative concepts that, in principle, reunite conditions necessary to stimulate, create empathy, produce strong emotions, create desire, in a word, offer unforgettable and wonderful experience - UNIQUENESS.

This concept, which depends on creative ability as its operating tool for management and design management, will be placed in context by talking about our perceived or true experience as initiators of design processes, leading to innovation.

The geographical location is Portugal and operates in three contexts listed above, ideally collaborating with each other - INTEGRATION COMPETENCES.

The model that I wish to establish is the fruit of my experience as a designer in very different work environments, but all within the same cultural context.

It presupposes the belief that only a local point of view can be of global interest. In other words, I believe that, starting with a unique local context, we can arrive at a set of practices suitable for an international global context.

1. INSTITUTIONAL ENVIRONMENT
1.1
Li & Fung Portugal "Homesick" is a travel kit consisting of a case/container, 27 one set of breakfast dishes, a scented rug, slippers and a teddy-bear.

The "Homesick" concept is a marketing teaser to promote hotel linens by Li & Fung, a supplier aware of the need to appeal to well-informed and demanding buyers, who expect first class personalized service.

Li & Fung Riffs
An appeal to childhood memories;
A blend of facilities that fulfill the desire for emotional and physical comfort (of a nostalgic traveller);
Elegance in every detail, exploring the senses (sight, touch and smell);
A clever combination of practical and symbolic features that stimulate the desire to own (satisfied by ordering Li & Fung products off the shelf or custom made);
The seduction of the buyer in an amusing way, without offering him presents;

1.2
At Larus design management is at the business strategic level.
Design is a key part of its organizational philosophy, at any level of decision making.

"Street"..., "Lighting Pole"..., "Vesuvio Pillars"... and "Grate Aliados" are some of Larus products.

Recently Larus was distinguished, because of its excellent design management, with an honourable mention in the Small Companies category in the Design Management Europe - DME Award,

Larus Riffs
Understanding design and design management as a business strategy;
Assembling a team of quality national and international designers with a modest attitude and a team spirit;
Building an identity based on the culture of design and the ability to communicate that identity coherently and in a distinctive manner;
Being open to respond to special projects, proposed by non-resident designers;
Having a genuinely positive attitude with regard to social responsibility and sustainability;
Resisting adversity;
Innovation, Design and so on...

#2

2. CORPORATE ENVIRONMENT

2.1

In the context CORPORATE ENVIRONMENT, we will focus our attention on Tékhne, a micro company offering consultation services as well as projects in the fields of architecture and global design.

Belgrani is an industrial company in the natural stone sector specializing in the production of small series of artefacts for the construction industry.

The new strategy required the adoption of a new design culture as well as the development of a good product or system. In other words, it really involved a restructuring of the company.

To put this restructuring into practice, we developed a new corporate identity and we created a claim (stone marks) in keeping with the new business concept.

Belgrani had all the conditions necessary to become an example of success on an international level. It was able, in a very short time, to build a brand with a high potential, supported by innovative products and a solid marketing plan and distribution system, which started a wave of enthusiasm amongst demanding prescribers.

Its products were on display in two international trade shows ("Tektonica", Lisbon, 2003; and "The Big Four", Dubai, 2004).

Belgrani Riffs

Aligning management with design management, marketing and design;

Bringing together a team of designers, who are aware of the realities of the market, to develop a design strategy based on a mix of products, communication, marketing and distribution, all with the clients and prescribers in mind;

Knowledge of the latest architectural trends and the trends and options in the market (for high-end home bathrooms) destined for knowledgeable and demanding prescribers;

Defining price goals suitable for the distinctive character of the product, but offering value for money;

Defining concepts based on simplicity, refined shapes and more distinctive materials and colours;

Reinventing archetypes that signal serenity and emotional intimacy;

Bestowing upon the brand and the claim (stone marks) a simplicity that is in accordance with the concept and philosophy of the system, and which is applied to the logo and other communication supports (web site, exhibition design, catalogues, uniforms, etc.);

Using the technological equipment to the full and reducing to a minimum the amount of raw materials used, reusing some unused materials in new products;

Using highly specialized craftsmen for the detail and finish;

Being able to honour commitments at all stages of the process;

3. ACADEMIC ENVIRONMENT

3.1

FAA/ULL

The academic environment at university level FAA/ULL the Faculty of Architecture and Arts, Lusíada University of Lisbon - stimulates and complements professional activity, which professes to be aware of, and open to, the relationship. It is the place for simulation and research "par excellence", and for exploring the wheel of learning.

We selected three projects that contain the type of concerns that organizations with a future have about the future.

The "2B_Entrepreneur" project is part of the Master of Design project. Its goal is to promote and develop entrepreneurial skills.

The project comes under the umbrella "New Urban Mobility".

It makes use of currently available technology and respects today's principles of mechanics.

There is an increase in safety, which could be of interest to new users.

At a certain stage in the project, the concept evolved into the Seat Design Competition.
2B_Entrepreneur Riffs
Inventing visionary scenarios in a short time;
Developing entrepreneurial profiles;
Developing the aptitude for identifying and engaging strategic partners to implement excellent ideas;
Exploring innovative but tangible concepts based on existing technologies, and making selective use of them;
Configuring new life-styles and new concepts for urban mobility, within a sustainable life framework, bearing in mind the different factors that determine them;
Using research to construct imaginary urban users anxious for specific new, useful and simple experiences, regardless of their physical and/or technical aptitudes;

3.2
FA/UTL
Innovation, Design and so on... Is the subject of my doctoral thesis in Design at the Faculty of Architecture at Technical University of Lisbon (in preparation).

My hypotheses are as follows:
Designing innovation by taking into consideration various meanings will make it more effective;
Innovation can be customized to fit each specific case;
With this theoretical model (to be defined) it will be possible to tailor strategies and models for innovation and functional design diagnosis and to develop firm plans for action and implementation that will offer organizations competitive advantages and success on a global level.

At the present time, we do not yet have a theoretical model to present. However, we have some rifts:

Knowing how to visualize the future, finding a balance between the tangible and the too risky;
The culture of innovation and design needs to be a part of the culture of organization, in a genuine way;
Pro-active engagement of upper management with design management, and with the marketing and design departments, in an enthusiastic collaboration between all the professionals from each of these areas;
Promoting horizontal organizations;
Encouraging strong leadership, capable of inspiring armies of competent collaborators, and able to visualize the best options for the future;
Encouraging intersection of knowledge;
Eradicating fear, envy, unnecessary volunteerism, unbridled ambition or its lack, excessive modesty;
Learning to cope with setbacks;
Not giving up in the face of uncertainty or because of a whim;
Valuing know-how and experience, taking maximum advantage of the two compatible universes - industry and craftsmanship;
Maintaining a strong and constant awareness of one’s cultural identity in order to identify and develop the best business opportunities, while promoting a sustainable life-style;
And so on...

CALENDAR AND CHRONOGRAM

<table>
<thead>
<tr>
<th>Meses</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
</tr>
<tr>
<td>B</td>
</tr>
<tr>
<td>C</td>
</tr>
<tr>
<td>D</td>
</tr>
<tr>
<td>E</td>
</tr>
<tr>
<td>F</td>
</tr>
</tbody>
</table>


Product design: managing vocation and culture process in different contexts

RELEVANT KNOWLEDGE FIELDS
Design, Design Management, Psychology

TEAM
Doctoral candidate: José Rui de Carvalho Mendes Marcelino
Supervised by: Prof. Doutor Fernando José Carneiro Moreira da Silva (FA-UTL)
Co-supervised by: Prof. Doutor Heri Christiaans (to be confirmed)

OBJECTIVES
The proposed research will try to define a flexible methodology for planning and monitoring design processing, in its different stages, in order to ensure final result excellence, whenever possible.
The adopted method should be adjustable to different realities within its specification and consider management of the various competences, the vocation of whom makes the concept, the understanding of whom executes it, the satisfaction of whom enjoys it and mainly, the satisfaction of whom will use it, within a sustainable context and improvement of life quality of the involved agents.

PROJECT PRESENTATION
The present doctoral thesis proposed research goal is to study, and if possible, to develop, a project methodology applied to product design practice, bearing in mind the several process stages, the work culture of the involved agents and the very design professional's vocation.
Having a working experience background in a product design oriented studio - Almadesign - the goal is to develop a work model which allows to give guidelines, and to do the monitoring of the design project, considering its application to different contexts - within a studio, in teaching activity and in product oriented companies - and thus ensure the achievement of the proposed objectives, optimize each product final quality during the design processing and, at the same time, managing the various professional's vocations, training, educational disciplines as well as the different cooperative agents culture.
In this context, the objective and the subjective management criteria that determine the design team work quality will be particularly focused, as well as the consequences of this balance towards market sustainability.
For such purpose, the resource to studio working experience in Almadesign is in order, as well as the design area teaching experience, the assessment and analysis of theoretical studies developed in this area and the design practice studies of companies that work in or appeal to product design.
Visual Communication and Inclusive Design

Colour and legibility on posters and the aged vision

RELEVANT KNOWLEDGE FIELDS


TEAM

PHD Student: Maria Cristina de Sousa Araújo Pinheiro
Supervisor: Prof. Doutor Fernando José Carneiro Moreira da Silva - Professor Associado da FAULTL

FUNDING

This research project has a grant from FCT- Fundação para a Ciência e a Tecnologia.

APPLICANT INSTITUTION

FACULDADE DE ARQUITECTURA

CONTACT

Maria Cristina de Sousa Araújo Pinheiro
Largo da Pirâmide, 3, Bloco A, 1ºF
2795-156 Linda-a-Velha
maria_cristina@netcabo.pt

OBJECTIVES

This research project has the aim of determining if there is an Inclusive Design approach (or perspective), in the practice of Visual Communication Design project, that is to say, if designers are aware of the problems related with the good legibility and colour perception of people with aged vision.

This study intends to:
- Determine if there are are some specific design principles that should be applied to objects of Visual Communication Design, in order to be easily read and perceived for all individual of the target group.
- Develop the study of some aspects related with vision, and especially with colour vision, perception, colour interactions, chromatic contrasts and legibility, so as to identify the problems related with the decrease of vision and with the normal ageing process.

PRESENTATION OF THE PROJECT

This research project pretends that colour application to visual communication design, should be based on knowledge, in order to create more efficient design projects.

We will use posters of some cultural events as objects of study and observation.

The target group of this study will be composed for a selection of socially active individuals, aged between 55 and 75 years.

After analysing the collected posters, it will be created an identification form to each other, and they will be tested with the target group.

As a way to sustain the idea that color vision on the elderly people has specific characteristics, we will use a survey methodology: oriented interviews to a panel of experts on these subjects (vision, ophthalmology, gerontology); questionnaires to designers, in order to determine how professional designers deal with this issues.
The research will be developed with a non interventionist, qualitative and quantative mixed methodology, and active research.

With all these informations and knowledge, we hope to contribute to a less intuitive approach to colour application.

We defend a design practice more conscious, informed and inclusive.

**CALENDAR AND CHRONOGRAM**

| Previsão das Etapas do trabalho | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|-------------------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Pesquisa Documental e Bibliográfica | em curso | | | | | | | | | | | | | | | | | | | | | | | | | |
| Recolha e selecção dos cartazes | completa | | | | | | | | | | | | | | | | | | | | | | | | | |
| Construção de Fichas | iniciada | | | | | | | | | | | | | | | | | | | | | | | | | |
| Testar fichas com grupo piloto | não realizado | | | | | | | | | | | | | | | | | | | | | | | | | |
| Testar cartazes com grupo alvo | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Estudo final dos cartazes | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Entrevistas orientadas (Semi-estruturadas) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inquéritos a Designers | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Análise e interpretação de dados | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Critérios e ferramentas de análise dos dados | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Verificação dos resultados | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Resolução de Dados | em curso | | | | | | | | | | | | | | | | | | | | | | | | | |
| Conclusões | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Formatação final | | | | | | | | | | | | | | | | | | | | | | | | | | |
| impressões e encadernações | | | | | | | | | | | | | | | | | | | | | | | | | | |

2 meses

**IMAGES OF SOME POSTERS**

[Images of posters]
Accessibility and Inclusion at University

RELEVANT KNOWLEDGE FIELDS
Inclusive Design; Accessibility; Inclusion; Education; Usability

TEAM
FACULDADE DE ARQUITECTURA
- Fernando Moreira da Silva
- Jorge Teló Pacheco
- Eduardo Alfonso Dias
- Sandra Rodrigues

FACULDADE DE MOTRICIDADE HUMANA
- Leonor Moniz Pereira
- Cristina Espadinha

INSTITUTO SUPERIOR TÉCNICO
- João Brisson

FUNDING
FCT Fundação para a Ciência e a Tecnologia
MINISTÉRIO DA CIÊNCIA, TECNOLOGIA E INNOVAÇÃO

CONSULTANTS
- Prof. Marcus Ormerod (Director of SURFACE, Inclusive Design Research Centre) - University of Salford
- Prof. Klaus Miesenb. - University of Linz - Institut Integriert Studieren

PARTICIPANT ENTITIES
FA - Faculdade de Arquitectura
FMH - Faculdade de Motricidade Humana
IST - Instituto Superior Técnico
ACAPO | APD | ADFA | SNRIPD | UMIC
Centro de Recursos para a Deficiência Visual ME

CONTACT
Fernando Moreira da Silva
Rua Sá Nogueira | Pólo Universitário
Alto da Ajuda | 1349-055 Lisboa
Tel. 213 615 818 | Fax 213 625 138
lid.fa.uitl@gmail.com

PROJECT PRESENTATION
In nowadays society social participation is the main focus of studies on people with disabilities. Their abilities, performance levels, activities limitations and social participation restrictions are the most relevant aspects to be studied. Activity limitations may be defined as the gap between a person performance level and task requirements. The less restrictive environment possible is in general the most accessible one and has an important role on the performance activity level of those persons.

The needs of an individual or of a group can be characterized by their ability to do, to decide and to adapt themselves to a certain task taking into account its accessibility.

Accessibility studies need to consider the definition of user groups and their demographic estimates. Those definitions are usually profoundly influenced by impairment and functional abilities definitions, task
requirements considered, and social expectations on the quality of services.
On the other hand, new products are introduced into the market everyday. Such products promote new ways to fulfill a task without taken into account users with disabilities thus creating new accessibility problems causing social exclusion of those persons.

OBJECTIVES
- Collect standards, legislation and existing studies on accessibility university campuses.
- Identify a place to develop the study at the university campus.
- Identify students with special needs depending on the existence of accessibility conditions to participate in academic life without restrictions.
- Identify the most frequent services and equipments used in academic and social tasks.

This project addresses:
- the identification of the more frequent tasks performed in learning activities at university level, school services and campus mobility;
- the definition of groups of people with disabilities presenting limitations to perform those activities;
- the establishment of a set of priorities and tools, guidelines and checklists contributing to solve the problems identified.

- Define the network of routes more frequently used by students.
- Define scenarios and evaluation methodologies related with those routes and equipments interaction regarding its accessibility and usability.
- Create a set of guidelines and propose future work.
ÁREAS DO CONHECIMENTO MAIS RELEVANTES
Inclusive Design; Accessibility; Inclusion.

EQUIPA
FACULDADE DE ARQUITECTURA
Fernando Moreira da Silva
FACULDADE DE MOTRICIDADE HUMANA
Francisco Rebelo

FACULDADE DE ARQUITECTURA
UNIVERSIDADE TECNICA DE LISBOA

ÁREA DE FORMAÇÃO EM INCLUSIVIDADE

FINANCIAMENTO
Municípios e Entidades Privadas

APRESENTAÇÃO
Porquê é Importante a Acessibilidade?

De acordo com a OIT (2002), o emprego das pessoas com deficiência pode prestar uma grande contribuição à economia dos países.

A inclusão profissional de pessoas com deficiências, reduz os custos com benefícios sociais e pode reduzir, também, os índices de pobreza.
(Organização Mundial do Trabalho - OIT.2002)

A Comunidade Europeia diz que o emprego e a actividade profissional são elementos importantes para garantir a igualdade de oportunidades para todos.
(Directiva 2000/78/CE - parágrafo 9)

É prioritária a promoção de um mercado de trabalho que favoreça a inserção social, através de um conjunto de políticas de combate à discriminação
(Orientações para as Políticas de Emprego em 2000, aprovadas pelo Conselho Europeu de Helsínquia)

Para a Segurança Social, os encargos com o desemprego das pessoas com deficiência ocupam o 3º lugar, depois das pensões por reforma e por doença.
(Agência Europeia para o Desenvolvimento das Necessidades Educativas Especiais)

O que é o programa INCLUI

O programa INCLUI resulta de uma parceria entre o ErgoLab da FMH-UTL e o LID da FA-UTL para promover a acessibilidade nos espaços construídos, permitindo a inclusividade de todos nós.
Para quê analisar a acessibilidade?

Promover a acessibilidade dos utilizadores no espaço construído.

Em particular:
- Dos trabalhadores, através da identificação e sugestões de melhoria do espaço físico, informacional e das políticas de recrutamento e organização do trabalho.
- Dos visitantes, através da identificação e sugestões de melhoria, dos espaços públicos físicos e informacionais, permitindo a inclusividade de todos nós.

Como analisamos a Inclusividade Espacial?

Desenvolvemos um guia com 310 variáveis que permite a recolha de informações com aspectos relacionados com o espaço físico, da disponibilidade e qualidade das informações, assim como das políticas de integração de pessoas com deficiências.

A análise das informações recolhidas permitirá:
- a identificação de problemas de acessibilidade e recomendações gerais para correção;
- a classificação de níveis de acessibilidade;
- a atribuição de um placa de um edifício inclusivo.

Quais as vantagens da adesão ao programa INCLUI?

Ao aderir ao programa INCLUI tem direito a:
- receber um selo de adesão ao programa;
- uma acção de formação de 35 horas teórica e prática da aplicação do guia para 10 colaboradores;
- documentação técnica;
- a certificação de avaliador da acessibilidade para os participantes;
- apoio a consultoria.

- Reunindo as condições, o edifício receberá uma placa de “Edifício Inclusivo”.

O programa INCLUI fornece apoio de auditoria e consultoria.

Protocolo de Adesão ao Programa INCLUI - 30 de Março de 2007

Câmara Municipal de Palmela
A decorrer na 2ª fase - aplicação do guia no edifício

Protocolo de Adesão ao Programa INCLUI - 3 de Dezembro de 2007

Câmara Municipal de Évora
A decorrer na 1ª fase - formação dos técnicos
ÁREAS DO CONHECIMENTO MAIS RELEVANTES
Inclusive Design; Accessibility; Inclusion; Education; Usability

EQUIPA
FACULDADE DE ARQUITECTURA
- Fernando Moreira da Silva
- Jorge Telo Pacheco
- Eduardo Alonso Dias
- Cristina Cabral
- Manuel Tibério
- Ricardo Soares

ENTIDADES PARTICIPANTES
FMH - Faculdade de Motricidade Humana
IST - Instituto Superior Técnico
CE - EQUAL
Centro Português de Design
Câmara Municipal de Lisboa
Associação dos Cegos e Ambliopes de Portugal

CONTACTO
Faculdade de Arquitectura
Rua Sá Nogueira | Pólo Universitário
Alto da Ajuda | 1349-055 Lisboa
Tel. 213 615 818 | Fax 213 625 138
lid.fafutl@gmail.com

FINANCIAMENTO

APRESENTAÇÃO
O Observatório de Design Inclusivo é um Projecto de Investigação que visa sistematização e cruzamento de informação sobre a realidade do Design Inclusivo em Portugal, comparando com as realidades de outros Países, nomeadamente dentro da União Europeia.

Como enquadramento às várias actividades do projecto está a ser realizada uma recolha e organização de informação existente a nível nacional e internacional: referências bibliográficas, dados regulamentares e casos de estudo relevantes.

Para além desta função de compilação de informação existente, o Observatório está a realizar um estudo de avaliação sobre as competências existentes no País na área do Design Inclusivo nomeadamente através da realização de um inquérito a nível nacional aos currículos do Ensino Superior nas áreas do Urbanismo, Arquitectura, Engenharia, Ergonomia e Design, tal como seminários e conferências.

Para a prossecução dos objectivos do Observatório está a ser estabelecida uma rede de contactos nacionais e internacionais que pretende vir a ser o embrião de um futuro Centro de Recursos na área.
OBJECTIVOS

Monitorizar, estudar e estimular as metodologias; as políticas e acções a implementar, no âmbito do Ensino Superior; Profissional e Institucional.
Criação de metodologias de análise; Levantamento e análise de situações; Estabelecimento de objectivos, metas; políticas e propostas de intervenção.
Indução e acompanhamento de acções concertadas; Avaliação e divulgação de resultados.

A construção de uma base de dados dedicada ao Design Inclusivo em Portugal e no Mundo (produtos, intervenções, fabricantes, organizações e escolas);
Bibliografia e Normas sobre Acessibilidade; Avaliação da Evolução da Situação no Ensino e Praxis;
Produção de Conteúdos para o Website criado, com base de dados e relatório de progresso da Avaliação - www.designinclusivo.org

Seminário PARA O ENSINO DO DESIGN INCLUSIVO EM PORTUGAL

Esta acção teve por objectivo o levantamento e a disseminação das práticas do Design Inclusivo no âmbito do ensino superior português universitário e politécnico, público e privado, nas área da Arquitectura, Design, Engenharias, Urbanismo, Planeamento e Paisagismo.

Seminário DESIGN INCLUSIVO:
Estratégias de Âmbito Municipal

O Observatório de Design Inclusivo, no âmbito 3ª fase do projecto EQUAL, promoveu o seminário: Design Inclusivo: Estratégias de Âmbito Municipal, no dia 23 de Março de 2006, no Fórum Eugénio de Almeida, em Évora.
Esta acção teve por objectivo o levantamento e a disseminação das práticas do Design Inclusivo e das Acessibilidades ao nível das estratégias de âmbito municipal das áreas Sui e regiões autónomas e destina-se a técnicos que no exercício da sua actividade abordem a temática do Design Inclusivo.

Web Site - WWW.DESIGNINCLUSIVO.ORG

O Web Site, cuja produção é da responsabilidade do CPD, tem uma forte componente de divulgação das actividades, bem como na disseminação de informação na área do Design Inclusivo.

Base de Dados

A base de dados encontra-se disponível no site www.designinclusivo.org e em breve no site da FA.
- Base de dados bibliográfica.
- Recolha de legislação nacional e internacional relacionada com o tema.
- Rede de contactos dos profissionais da área.
CONTRIBUTIONS FOR A NEW BODY REPRESENTATION PARADIGM IN PATTERN DESIGN

GENERATION OF BASIC PATTERNS AFTER THE MOBILE BODY’S LINEAMENT

RELEVANT KNOWLEDGE FIELDS
Pattern Design, Anthropometrics, Ergonomics, Physiology, Neuromechanics, Biomechanics

TEAM
INVESTIGATOR
Inês da Silva Araújo Simões, Master (FA.UTL)

ADVISORS
Professor Luís António dos Santos Romão, PhD (FA.UTL)
Professor Fernando José Carneiro Moreira da Silva, PhD (FA.UTL)

APPLICANT INSTITUTION
FACULDADE DE ARQUITECTURA
UNIVERSIDADE TECNICA DE LISBOA

FUNDING
FCT Fundação para a Ciência e a Tecnologia
MINISTÉRIO DA CIÊNCIA, TECNOLOGIA E INÓVENCIA
SFRH/BD/40281/2007

CONTACT
Inês Simões isimoes@fa.utl.pt

OBJECTIVES
Acknowledging that conventional pattern design has, at all times, been laying on a paradox - since patterns describe the body standing still albeit the inconsistency of its shape due to motion -, the central aim of this PhD research consists in translating the inconsistency of the body through a diagrammatic representation, namely by generating basic patterns intended for the production of generic women's clothes assembled with woven textiles. Thus, the problem we are dealing with is the mobile body's lineament, which implicates amalgamating various body stances so all the movements performed in daily activities are synthesized in a single set of lines.

KEY WORDS
Body; Body Movement; Mobile Body's Lineament; Basic Patterns; Body/Product Physical Interaction; Comfort

PROJECT PRESENTATION
Because the focal point of this investigation congregates two understandings, body and pattern design - though they are implicitly related -, this research involves reviewing literature of various areas of knowledge such as biomechanics, anthropometry, physiology, neuromechanics, ergonomics, along with the literature review on pattern design's theory and practice. The compilation of information is focused on body movement, perception of comfort, clothing fit, representation techniques and wear trial techniques.

The intention to contribute to a new body representation paradigm implicates to implement an experimental method based on clothing deformation caused by wear, as well as to employ graphic somatometry and dermatom maps. These approaches facilitate (1) reorganizing the basic patterns' outlines, (2) recording the body's angle measurements, (3) analyzing the resulting clothing deformation patterns.

Framed by body/product physical interaction concerns, the combination of academic methods and of the process of pattern creation is used as a medium to investigate the improvement of sensory comfort and body movement through clothing. For that matter, wear trials and interviews will be implemented to derive qualitative assessments and to validate the problem's solution.
PhD Research:

Contributions to a sustainable design methodology applied to the furniture industry: The Portuguese case.

RELEVANT KNOWLEDGE FIELDS

Sustainable design; Eco-design; Design Methods; Product Life cycle; Furniture industry.

TEAM

PhD Student (SFRH/BD/38423/2007)
José Manuel Andrade Nunes Vicente

Supervisor
Professor Doutor Fernando José Carneiro
Moreira da Silva

APPLICANT INSTITUTION

FACULDADE DE ARQUITECTURA
UNIVERSIDADE TÉCNICA DE LISBOA

FUNDING

FCT Fundação para a Ciência e a Tecnologia
MINISTÉRIO DA CIÊNCIA, TECNOLOGIA E INICIO SUPERIOR

CONTACT

andradedesign@clix.pt

OBJECTIVES

The overall objective of this research is to contribute to the sustainable development, through the eco-design processes, applied to the furniture industry.

The main objective is to develop a sustainable design methodology specific to the furniture sector with the new inputs from the more recent environment studies, (e.g. IPCC studies on regard to the climate changes) which demand new requirements to the product life cycle analysis.

To improve the companies and the designers environmental performance.

To sustain that is possible to improve the environmental performance along with the economic growth.

To raise awareness on this matter among the designers and the industry.

PROJECT PRESENTATION

This project is part of the Design PhD Doctoral program from FA-UTL, which had last year the curricular part, and is now starting the research that will, expectedly, end in 2010 (see calendar below).

This project is based on several eco-design methods (Brezet e Hemel, 1997) (Tischner et all, 2000) (Wimmer e Züst, 2001) (McDonough e Braungart, 2002) (Frazão, Peneda e Fernandes, 2006) and the information that we'll collect from the analysis of the Portuguese industrial furniture sector. From the information crossover between this two fields, along with the new information relative to the current environmental demands, it is expected to develop a process that will improve the environmental performance of this sector without crippling the economic growth. (See research methodology bellow).

To develop this project we've received the support from FCT, and we expect to work in partnership with one of the industrial sector associations and with INETI CenDES (Sustainable Business Development Centre, part of the National Institute of Engineer, Technology and Innovation).