Poetic Design
A Theory of Everyday Practice

by

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Abstract

This study aims to define design poetics as a category of design practice set apart from commercial, industrial or market-led design that generates a collection of experimental artefacts which investigate the everyday life of contemporary culture.

It is argued that in creating an active interplay between *users* (human agents) and *objects*, poetic design involves a different kind of production (which is not about improving the functionality of a product) and alternative forms of 'consumption' (which is not about a 'using up' of objects), by developing new practices of living with things. As such it is suggested that design poetics depends on the production developed by consumers as a creative users (post-producers), within unconventional experiential and social scenarios of living.

In changing the bilateral relationship object-user poetic design develops objects from the point of view of the user – its activities and models of operation and this aspect is related to an emotional and experiential evaluation. Thus the study proposes a re-evaluation of *objects* and *users* through experiential, narrative and performative criteria in order to understand their various roles and functions. In proposing these particular points of evaluation, poetic objects are distinguished as a particular category of objects together with the practices they engender or support; and within a network of relationships and contexts, as specific sites of interaction.[1]
In this light, it is shown that poetic design proposes a class of objects that respond to needs beyond the objects' instrumental (functional, practical) power; but to their contribution to life experience, embodying a variety of processes and manifestations. They translate immaterial interactions and make these interrelations visible.

key-words: poetic - experiential - interaction - narrative - performative design

[1] Objects and users are *tested* at a practical, analytical and interpretative level

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DESIGN POETICS

Introduction

'Nothing is lost, nothing is created, everything is transformed.'
Antoine Lavoisier[i]

In addressing a design poetics, both as historical phenomenon and as critical analysis this text intends to observe the theoretical underpinnings and the underlying practice for this design category from the point of view of a designer. What I want to find out is how this particular type of design practice sits within contemporary design culture and what systems of analysis or theories and characteristics distinguish it from forms of commercial, industrial product design.[ii] Thus where is this form of design situated in relation to production and consumption practices, and what is the site of its practice? This study is developed at a time of increased interest in design as a practice situated at the interstice between art, craft, and industry, a practice which tends to be defined by contemporary market as a new class of 'design art'. As a differentiated category of 'design art', I am interested in 'poetic design' as a form of design practice that embodies a variety of processes and manifestations, because it responds to other than purely functional, practical needs. Apart from function, form or aesthetics, poetic design speaks about objects from the point of view of the user – and this aspect is related to an emotional and experiential evaluation. In this sense, I am interested in the type of objects generated by a poetic design, and the ways in which they are representative of culture: what kind of practices they engender or support, and how they are experienced in everyday life.

The general absence of clearly defined theories underpinning new design forms and of new systems for classifying the range of their objects prompts contemporary design theorists to rearticulate and refine models of critical discourse. In general, theorists use systems of classifications to re-evaluate objects and objects have been classified according to varied criteria, from function to time of use, from size and form to aesthetics; however, these classifications refer mostly to the objects themselves, to their materiality rather than to users – their activities, experiences and models of operation. It can be suggested that, in being directed toward the making of an experience and thus proposing a different category of objects, design poetics enables other roles for objects and as such infers other systems of understanding their functions.

On the other hand, the theoretical systems and critical commentaries that define aesthetics or functionality for example are changing with new criteria, new objects and with diverse forms of practice in the field of design. In practicing a form of pluralism, contemporary design reshapes collective ideas about design, questioning the rules and evaluations adopted by theorists, designers or users to judge 'good design'.[iii] How are functionality and aesthetics understood and re-defined in contemporary culture and how new values are projected on objects? Apart from form, function and aesthetics, can experiential, emotional, or performative criteria be

adapted as a means for product revaluation? In this respect, the thesis intends to follow an alternative approach, considering other analytical criteria, based on experience, performance and narrative, to define new designs. Following concepts derived from interaction, performance or experience, the thesis aims to set apart and discuss a specific group of poetic objects that operate under the production-consumption pair and which are able to comment on the culture that produced them, whilst being part of it.

Design is present in every part of culture and society, enabling the interconnection of all of constitutive elements at all levels, reshaping forms of living through material objects. As media and cultural studies writer Ben Highmore noted, design culture affects users economically, emotionally, historically, personally, ecologically, therefore socially[iv]. As such, design entails a continuous rearranging of objects, creating potential developments of cultural configurations supported by social and cultural evolution. In this view, different design approaches generate products that respond to varied needs: the field of product design develops products for the market generated by a manufacturer and directed to a consumer. Generally, in manufacturing products for sale, the market economy favours the precedence of quantity over quality and cultural value[v]. The products of this category follow industrial designer Henry Dreyfuss's points of utility (maintenance, cost, sales, appeal and appearance) and their life-cycle fits the typical stages of conception, planning, design, manufacture and those of distribution, sale-use-discarding[vi]. The proliferation and competition of industrial products following technological progress and based on 'new, improved', 'faster', or 'more economical', 'safer', 'the latest', suggests the seemingly superiority of one product over its predecessor. But a newer version of a product does not necessarily improve the user-product relationship. Professor Henry Petroski (1993) observed consumers' reluctance in accepting radically different designs, because when familiar things are redesigned the functions they perform are less obvious. As such, commodities and goods representing 'new' types of objects change their form for convenience, but their use function remains the same, explaining why some products never 'mature' into significant, long-lasting objects.[vii] As such, technological progress, invention and mass-production have profoundly modified the sensibilities of both user and designer. Apart from technology, recent cultural and social changes have pointed out other types of needs than those supplied by a market-oriented design alone, and new forms of design seem to respond to these needs. It can be argued that design poetics is one such form that involves a different kind of production (which is not about bettering the purely functionality of a product), and a different

kind of consumption (which is not about a 'using up' of objects), developing new practices of living with objects.

In aiming to distinguish and understand the functions, the circulation and role of a class of poetic objects, I want to define the sense in which poetics is understood throughout this text. The term poetics follows the Greek translation of *poiesis* - a 'making', a form of literary art in which language is used especially for its *aesthetic* and *evocative* qualities, (in addition or replacing its apparent meaning)[viii]. Although aiming to reflect characteristics of material things through the use of poetics, this text approximates the term with its literary form, where poetry uses particular forms or conventions to suggest alternative meanings in the words, or to evoke emotional or sensual responses. Moreover, in literature, the use of ambiguity, symbolism, irony, and other stylistic elements of poetic expression leave poems opened to multiple interpretations. Forms of poetry are specific to particular cultures and genres, and poetic forms depend, of course, on language. Similarly, all objects are inserted into language and carry their own semantics; as such, objects speak a 'universal language'. In defining specific object relations poetics comments on both the culture and its users; in this, poetics observes the multiplicity of interactions and engagements supported by artefacts.

Thus, this study aims to locate and define *design poetics* as a category of design practice that generates a collection of experimental artefacts which investigate, question and comment on the culture that has produced them. Operating under the production-consumption pair, these objects extend their everyday function beyond the field of the practical to that of the poetical. In this sense, design poetics proposes a category of objects which are not produced as goods for material consumption, they do not eliminate labour, nor do they increase capital, but they are useful because they represent goods of an experiential kind. Thus, the thesis proposes an investigation of their design, but not their history or manufacturing, the rituals and patterns of their use, their material, aesthetic characteristics and associated values but not technical or cost issues; it does not address the institutions concerned with design issues, but explores design approaches and practices developed by contemporary European Western designers. Poetic objects are seen as specific designs constitutive of culture, operating within the traditions, customs and sociality of a culture, set apart from product, market or industrial design; a practice developed by designer-makers, generating a class of objects situated in the interstice between design and art.

In a time where the nature of contemporary art and design (both as practice and objects) are overlapping, Western design forms have been enriched by the internationalisation of education, business and cultural discourse within an interdisciplinary practice. Although larger audiences and markets develop and diffuse homogenous sets of global forms of design, the emergence of different cultural hybrids in design evidences the value of a global cultural exchange and creativity. This requires a relocation of design within material culture as an evolving, generative process of multidisciplinary approach.

The ***structural frame*** of the text is based on a bricolage composed of juxtaposed interpretations of texts as a strategy for analysis. The conceptual overlapping sourced from sociological or anthropological accounts, from material and design culture (studies) allows for closely interrelated views on design practice. The bricolage technique also functions as, and is based on a model of association and bisociation: for example, one theory from sociological background responds to issues raised by material culture and these answer to certain interpretations in contemporary design practice. The use of bricolage as a method for analysis functions in relation to the object-user pair which resonates in sociology, design theory and material culture as levels of related modes of interpretation. The juxtaposed fragments (rather than amalgamation of ideas) from these fields are strategically used throughout the text in order to define conceptual frames of reference specific to a design poetics - a field where a variety of enquiries combine, intersect and confront.

The structural form of bricolage in the text is understood and used in two senses: it follows philosopher and cultural theorist Andrew Edgar's practical use of the term 'bricoleur' in reference to the worker capable of mending or maintaining any machinery installation by reusing items from elsewhere, typically improvising new uses for these items (as concepts and terms).[ix] Bricolage is precisely the nature of the *uses* to which it puts things; for instance, I put to use Michel de Certeau's theory of 'making do' – as it applies to design in relation to user practice. Although the ability to bring two things together to create something new seems to have a predominantly practical sense, it applies on an abstract level (of ideas) as well. On the other hand, the bricolage as a structural device is used in critic Arthur Koestler's sense of a collage, an association of ideas, concepts, conventions and terms derived from seemingly unconnected contexts or frames of reference (habitually incomparable). Koestler (1964) defined this process of concomitant thinking on many planes at once (combining separate fields) *bisociation*, and considered it a functional basis for metaphoric thinking: "the term 'bisociation' … makes a distinction between the routine skills of thinking on a single 'plane', as

it were, and the [thinking behind the] creative act, which … always operates on more than one plane"[x]. Thus, the term distinguishes the type of analogical thinking (the essential mechanism of the *creative process)* that leads to creativity from the more 'pedestrian', purely logical thinking, which is specific to the practical, everyday life. It can be argued that the type of creative thinking on many planes at once generates novel and productive ways of both conceptualizing, and doing things ('making quick shifts from one way of seeing situations … to a new way of seeing' (ibid.)).

In cultural theory and especially the analysis of subcultures (Michel de Certeau's theory of 'making-do') for instance, the terms bisociation / bricolage refer to the processes by which elements are appropriated (adapted) from the dominant culture and their meaning (use) transformed through juxtapositions to challenge or subvert that culture. In both senses (practical and conceptual), the materials of the bricoleur are elements which can be defined by two criteria: they have *had a use*, as, for instance words in a piece of discourse - which one's thought 'detaches' in the same way a bricoleur would any material. Once detached, these components become free vehicles (dissociated, although they may retain former association with their initial context) and *can be used again* either for the same purpose or in a different role (re-associated or bisociated), if they are at all diverted from their previous function. The notion of bricolage is thus an operation of selection, combination and collage - the operations characteristic of all speaking and writing. As professor in comparative studies Gregory Ullmer put it, "the effectiveness of collage is that, like metaphor, the piece, displaced [and replaced] into a new context, retains associations with its former context"[xi]. It is relevant to note here that, in practical terms, for a design practice, bricolage has the sense of building by trial and error; like in art, bricolage is used as a technique to construct works from various materials available or at hand. Critic Nicolas Bourriaud also explains contemporary art practices as the result forms of bricolage or montage, whereby many artworks have been created on the basis of pre-existing works, on processes of interpretation, reproduction – and in turn, these become cultural products for postproduction. I suggest that design poetics practice operates on this mechanism of re-assembling, reverting and re-locating cultural components in order to reintroduce and re-appropriate them into practices of everyday living. Thus poetic design can be considered a conceptual form of bricolage as it recycles and superimposes concepts in order to establish new uses and practices for known things. Therefore, in this text bricolage is used as a layering of viewpoints composed from existing theories in a creative and resourceful way.

The form of bricolage as theoretical pursuit sits aside from a more scholarly form of design studies that usually follows design or art history: the latest part of the 20th century centred on the study of designers, movements and schools. Instead, this study intends to align to the past decade of design studies in which design culture has been explored through a series of other approaches that investigated, for example, affects and emotions, perception and the senses, science, technology, sustainability and globalisation. Like these late studies, the present approach adopted and adapted a range of concepts from sociology, product design, material culture, from art and design studies, overlapping disciplinary boundaries. However, while many debates in design studies focus strictly on production or consumption, this study looks at the designed environment as a territory of production - an active field of interactions and experiences through which design reshapes the world. In this view, design practice can be seen as a series of transactions and assemblages of scenarios, a bricolage of social and cultural components, objects and services.

Throughout the project, the bricolage construction functioned as a process of assembly composed from existing theories and these become materials for postproduction, allowing the coexistence of transmissible and embodied knowledge, and between objective and subjective reflection. The theoretical bricolage of the thesis considered existing relevant discourses and theories in contemporary design, sociology and material culture studies, permitting an interpretive approach to its subject matter. The interpretive approach adapted concepts of analysis from other contextual fields following a corroboratory mode: no single source has advantage over the others as they compliment and complete each other. This process allowed me to expand ideas, integrating theory and practice in order to re-situate the emerging practice of poetic design and its products socially and culturally.
The bricolage allowed the combination of inductive and qualitative methods (questionnaires, comparative case studies, observation, analysis of texts and physical artefacts) and emphasised the importance of personal perspective and interpretation on the results. The integration between theory and practice supported a process of theory-construction, attempting to find the principles that explain how poetic objects perform the way they do. The ideas and proposals that emerged from theory provided the basis for an exploratory and evaluative method of study, adding breadth to the investigation.

In support of the theoretical bricolage, the testing followed a qualitative approach and was used as an analytical tool in the interpretive process: in art and design research active experiences

generated within processes associated to creative practice are crucial for a reflective creative practice. I considered that the experience derived from using or engaging with products (artefacts) is an important aspect of processes that inform testing techniques. The trial tested, analysed and appraised design options, proposing a 'new generation' of design solutions. The experiences created from engagements with this new generation of objects formed the basis for the next reflective, theoretical stage.

This methodology however, being interpretive rather than scientific in nature may not allow for prescriptive applications: for example, the testing was proposed as an analytic, generative and evaluative tool that can be replicated according to a number of scenarios. However, although being a valid technique and an innovative adaptation which can be used by any designer, it cannot ensure prescribed results as its employability is dependent on the interpretation of the researcher. Following this method the thesis highlighted the subjective type of research process belonging to creative (artistic) practice in contrast with the scientific research, which is generally a predominantly systematic process based on objective knowledge, independent of any subjective considerations. Because design practice invents new products and uses, design artefacts must be re-situated and reconsidered within new systems of analysis and investigation; in this process the products themselves become critical objects (objects to think with). In contrast, a logical positivist approach would suggests a precision akin to a scientific (quantitative) research method emphasizing objectivity, neutrality, measurement and a set of defined responses. However, in employing more precise procedures of inquiry, logical positivism does not allow probable hypothesis, distinguishing cognitive from emotive, expressive forms of meaningfulness – which the bricolage method of interpretation allows specifically because it cannot be used as a precise template with which to compare empirical results. Again, if logical positivism would have considered the case study of the test in this thesis as a sample that leads to analytic generalisation, the bricolage is opened to multiple interpretation and cross-disciplinary investigation, leading to a different modality of constructing knowledge. In this comparison, the generation of new knowledge in art and design practice process to be located in the contentious spaces of new ideas and values.

The ***theoretical frame*** of this analysis of design poetics integrates material culture, sociological, anthropological and design studies aspects, considering their relationships with design. In taking objects to be mediators of culture and cultural information, material culture contributes to an analysis of the ways in which design operates. Material culture shifts the

routine of the discourse on objects: it moves the focus from how objects are made to how they are consumed, indicating their social and cultural significance. As such, material culture can provide understanding of the social world of things, as it centres on the ways in which people appropriate it - by living with objects, experiencing and using them, allowing them to mediate experiences and ideas. On the other hand, sociology offers a perspective of the user, reflecting on human social structure, social interaction and social activities; whilst both design studies and design culture provide a view of different areas of design and its practice.
The theoretical underlay of the study considers the works of sociologists and anthropologists Michel de Certeau, Pierre Bourdieu, Jean Baudrillard, Marcel Mauss and critic Nicolas Bourriaud in order to build an understanding of user practices and consumers; on the other hand, theorists of material culture (such as Tim Dant, Arjun Appadurai, Judy Attfield) contribute to the understanding of objects and their circulation within a culture. Product and hi-tech design-related discourses (Donald Norman, Henry Petroski, and Klaus Krippendorff) give a perspective on different forms of object production. A bricolage of these views allows the intercalation of relevant texts that respond to cultural, social and user-related aspects for a design poetics practice. The theories selected from these fields are key to the frame because they refer to and take into account *the user* (in relation to objects) rather than the maker - looking intently at modalities of consumption rather than focusing on the production methods of the maker. All in all, they consider the study of design by assuming that the active agent of design is the user and not only the designer.

At the centre of the analysis, the concepts developed by Michel de Certeau, Jean Baudrillard and Nicolas Bourriaud are adopted to discuss design poetics as a practice of production developed by its users. Their theories emerged as predominant in this discussion because they mark a common ground in the understanding and employ of the term 'user', that of 'object' and that of 'consumption'. Furthermore, they are central to this frame of discussion because they take into account the user and consumption according to other criteria than those of commercial nature: their writings consider the social scenarios and experiential processes by which people relate to objects. The views evolved from their theories represent an alternative standpoint on a consumer culture that usually sees the consumer as fulfilling the needs of a productive system.[xii] The dynamics between the writings of Michel de Certeau, Jean Baudrillard, Nicolas Bourriaud and Pierre Bourdieu bring forth the idea of *consumer* as creative a *user,* as a *post-producer.* To complete the dual, bilateral relationship object-user, the writings of Tim Dant, Arjun Appadurai and Judy Attfield pay attention to what happens to *the object* in

the psychological, sociological and material sphere of needs and practices, theorising the complex relationships developed between objects and users. In giving accounts on how objects become material agents and acquire social and cultural meanings, material culture evaluates the meanings that arise from the close interaction between users and things (where *interaction* is interchangeable with *sociality)*.

In addition to this theoretical frame, Henry Petroski, Donald Norman and Klaus Krippendorff are essential in reformulating the changing roles of a user-led design, where objects are analysed from the point of view of their functional and technological evolution in relation to society. As such, in formulating the ideology for a design poetics practice, the user-led analysis becomes central to the study, and as a result, the related concepts of 'consumer' and 'product' must be rethought. (These have been analysed in three chapters by reassessing their roles according to other criteria that involved experiential, performative and narrative aspects of design).

In redefining the term *user* and *object* for a design poetics, I will make alternate use of the views of Michel de Certeau, Jean Baudrillard, Nicolas Bourriaud and Pierre Bourdieu (since they all read the user as a creative producer) in order to map the role of the user and that of objects as they emerge in a design poetic practice. The user-led concept is understood and functions here in a different manner than in ergonomics, hi-tech or product design; the term *user* follows the methodological frame of Michel de Certeau's, Pierre Bourdieu, and Nicolas Bourriaud's theories: instead of passive consumers, users are seen as active collaborators in the re-appropriation of culture of everyday. As Michel de Certeau observed, while the social science studies the traditions, the language, the symbols, the art and articles of exchange that make up a culture, it lacks a formal means by which to examine the ways in which people re-appropriate them in everyday situations. This lack, says de Certeau, misrepresents people as non-creators and non-producers, heavily subjected to a received culture. Instead of seeing people as passive consumers, Michel de Certeau views them as active collaborators: throughout his text of *The Practice of Everyday Life* (1984) the term 'user' replaces the term "consumer", as the concept of "consumption" is expanded through 'procedures' or 'tactics' of consumption which translate into models of user production (which I approximated to Nicolas Bourriaud's postproduction). What I intend to use from De Certeau's theory is that an investigation of everyday life presupposes an analysis of its forms of manipulation by users (people) who, in the activity of re-use (by practicing a form of bricolage) tend to subvert the main-stream practices and representations imposed upon them. In this view, my emphasis will

be on the ways in which people create and develop certain forms of inhabiting the material world, evolving their own practices (a set of inventive forms of living). This view on the user echoes with similar nuance in the writings of material culture in the texts of Tim Dant, Judy Attfield and Arjun Appadurai, as they reflect the circulation of *objects* in terms of their multilayered relationships to *users* and as developed in a series of practices that are social in nature. Further on, the design theorists predominantly used in this study (Petroski, Norman, Krippendorff) have all analysed design processes as human-centred, thereby users play an important role at some stage in the design process. As such, throughout this text I will refer to the terms user and user-led as a differentiated category from product design, in accord to and as is understood in M. de Certeau, N. Bourriaud and P. Bourdieu texts.

Thus, if in his theory of 'consumptive' activity Michel de Certeau (as Nicolas Bourriaud) shifts the analysis from the object to the operations of the user, a similar tactic has been employed by human-centred designers, who turned their attention from the product to the 'user'. Although within a design process users bear different roles than those they fulfil in material culture studies, functionalist industrial designers of the past years have reconsidered theories of the dependence between object and 'user'. From product and hi-tech design, the analyses developed by Klaus Krippendorff, Henry Petroski and Donald Norman are useful as comparative views that comment on various aspects of design process, considering that the ultimate context of design is the user[xiii]. The understanding of the *user* is expanded from the concept of *usability* as conceived in mainstream user-centred design studies. If product design studies generally put the emphasis on a problem-solving methodology, and frame a series of design issues that favour production, new design practices operate beyond tailoring objects to people, distancing themselves from commercial or industrial design. In starting with the user, design semantics changes the emphasis from a client-oriented to a user-oriented design process – considering user's own terms of practice and contexts, and it is this aspect of the user-product interrelation that I favour in the analysis of a design poetics process. However, product semantics does not account for the *derivative* functions of objects developed during their domestication by users - and thus for the inventive, lyrical, or out of the ordinary uses and meanings of objects. Nor does ergonomics account for the 'wild' meanings (see Attfield below) developed by objects in terms of usability and practicality; ergonomics is concerned with optimizing product performance and applying measurable criteria to the people involved (thus human participants approximate machine-like operators). Because users always develop their own understanding and ways of making-do, ergonomists find the human operators (users) themselves (not the products) 'flawed', in error and unreliable. Ergonomics does not accept that

users are willing to live with, for example, dysfunctional furniture as long as they like it, or adapted to it - as these user motivations are not rational and determinable by objective criteria but derived from individual understanding and practice. Ergonomic design seems to loose their role in the critical debate on objects, as the products they create and the user's input relays mostly on sets of measurable data. In comparison, semantic theory favours the human-product interaction and I intend to relay on the user-centred approach and user experience in order to understand the mechanics of a design poetics.

In the light of Pierre Bourdieu's and de Certeau's theories as well as in those of material culture texts (Appadurai, Dant, Attfield), the user becomes actively involved in the circulation of everyday objects. Although objects evolved in accord to changes in social structure and technical development - and thus have been classified and recorded historically - there is less record of the ways in which objects are experienced, of how they enter specific practices, responding to needs other than functional. As social theorist Jean Baudrillard (1986), noted, objects are primarily defined according to their function: "Each object corresponds to an operation, often a tiny or heteroclite operation, but nowhere is any *system* of meanings even touched upon."[xiv] In highlighting that objects should be understood via the processes by which people relate to them and with the systems of human behaviour and relationships that result from their interaction, Baudrillard argues that the acquisition of material objects is oriented to a system of meanings; that meaning, not use, is primarily transferred through consumer objects.[xv] Following Jean Baudrillard's classification of objects, I suggest that in direct relationship to the user, there can be differentiated a set of 'passive' and 'active' objects. In distinguishing 'active' from 'passive' objects, I rely on Jean Baudrillard's definition of '*object*' taken from Littré's dictionary, where one of the meanings of the term object is 'any thing which is the cause or subject of a passion; figuratively – and par excellence – the loved object.'[xvi] Baudrillard considers that everyday things are in fact objects of a passion – the passion for private property, status or emotional investment. It is in this latter stance that I refer to objects in this text, and as such, objects will be considered within the network of relationships and contexts that define them as sites of interaction or experience (see chapter 2, page 55-56). Cultural analyst Mieke Bal (1989) pointed out, the meaning of a work does not lie in the work by itself but rather happens in the specific acts that take place in the work's field.[xvii] People's engagement with products evidence how everyday interactions reveal details about the ways in which they relate to an already designed world. Different types of interactions between users and products show how objects influence human action, behaviour and everyday activities. In

mediating meaning and acting as productive agents in everyday living 'active' objects engage the user on different levels. In her studies of science and technology professor Sherry Turkle considered that objects are active presences, supportive of dynamic relationships between things and people.[xviii] Indeed, the properties and functions of things are transformed with the everyday practices and operations of their users; furthermore, once objects are situated within user practices, their stability or transit is inseparable to that of practices, as they mutually afford or enable each other (see chapter 1, pages 28-31). As such, things are actively involved in both maintaining and continuously changing the order and structure of social practice. Conversely, 'passive' objects, as represented in some product design theories, simply stand as design solutions for functional problems, where products are re-designed and improved in order to function better (independently of their users).

If 'active' objects are read as tools of practice for their users through Michel de Certeau's theory for example, they reflect the evolution of specific practices. For example, KesselsKramer-Droog's 'Do' (1999) collaborative project consists of a series of exercises in 'making do and mending', involving the participation of users as creators in the completion of their objects. Marije Vogelzang's food designs involves the user in acts of ritual performance, whilst Julie Cook's textile designs or Noam Toran's interactive objects involve the user in specific emotional experiences. These activities, anchored on multiple layers of use allow designers to go beyond a strictly functional situation in order to attain a kind of 'savoir de vivre'[xix]. These types of designed objects render an active role for the user, dealing with various processes of creating meaning, and as such the focus is not on the object's instrumental power, but on the object as a contributor to life experience. Thus, the objects designed by practitioners such as Rachel Wingfield, KessellsKramer, Noam Toran, Ingrid Hora, Electricwig, Equator, Julie Cook, Marije Vogelzang or Droog (Jurgen Bey, Gijs Bakker, Hella Jongerius) are situated on a different field than that of product, hi-tech or ergonomic design – a field of social, emotional and experiential investigation of users. Because they address a lyrical, poetic and aesthetic relationship between user and product I consider these objects to belong to a poetic design. The non-conformist practices that this class of objects introduce propose a different kind of exploit which inclines towards artistic production. But where are this type of objects placed in design studies, and what theories can describe their functions and the contexts in which they function?

Objects are more than mere material possessions and tools because of the meaning users bestow on them: every object is designed, but some objects challenge ordinary perceptions about the way users experience the environment, and involve a different kind of 'consumption'.

They are not disposable commodities, things that can be 'used up', but valuable components of daily life; they communicate the values they bear and involve the user in their interpretation. Following this regard on the term 'user', I will consider 'active' objects as essential for defining a design poetics – both in its making and its uses, as various examples will show. By considering the sum of these characteristics I can thus define the 'limitations' of poetic objects as a specific category.

Objects as Material Culture - The material culture of design

Having established the meaning of the user and object for a design poetics, how is *consumption* understood as dependant of their dynamic relationship? Contemporary consumer practices change the focus of design studies from producer and product to the user and his models for living. Being integral to consumption practices, objects are located between the needs and wants of the consumers. The distinction between needs and wants is a traditional way of describing the difference between what is truly necessary for a person's activities (needs) versus what a person asks or desires (wants). Psychologist Abraham Maslow's hierarchy of needs (1943) is useful in this discussion as it supports the fluid dynamic between object, user and consumption: although the most basic and instinctive needs represent a priority in everyday life, in Maslow's hierarchy these needs become increasingly psychological and social. It is worth noting that poetic design engages on simultaneous levels the user's needs - from those of survival and comfort to those of self-esteem and self-actualisation - as it re-composes their experiencing. Needs are determined by tasks and types of activities, whilst wants are determined by culture. As Jean Baudrillard (1968) observed, contemporary civilisation is characterised by an accelerating process of generating products which determine a whole system of needs, socialised, cultural or practical.

The disposable culture of objects constitutes an invisible culture of consuming that uses-up products to their complete exhaustion. Mass-production tends to create and multiply false needs and manufactures products designed to accommodate superficial narratives, devalued by an artificial contextualisation.[xx] If sociologist Thorstein Veblen (1899) considers that the value of objects is based on concepts of 'need' and 'use', so the issue of *consumption* becomes linked to the idea of 'need'; for sociologist and anthropologist Pierre Bourdieu, the concept of *consumption* refers to a cultural engagement which covers a wide range of activities and ways of doing things[xxi]. For Bourdieu all cultural practices of consumption are actively

engaged with the field of cultural production: in 'Distinction, a Social Critique of the Judgement of Taste' Bourdieu (1979) elaborates a theory of the cultural field which situates artistic works within the social conditions of their production, circulation, and consumption. As such, cultural orientation (which for Bourdieu is the expression of taste) is embedded in the routine practices (habitus) of social being: "automatic gestures or the apparently insignificant techniques of the body – ways of walking or blowing one's nose, ways of eating or talking – engage the most fundamental principles of construction and evaluation of the social world".[xxii] In Pierre Bourdieu's view (1984), *habitus* is a network of social determinants that specify the particular orientation of an individual to the culture. If Bourdieu's view gives an account of the 'consumer' and of consumption as a series of practices (of learning, of gaining knowledge as well as goods), philosopher and cultural anthropologist Marcel Mauss considers culture as the totality of people's habits and ways of doing things, highlighting how these vary and signify differently from one set of users to another[xxiii]. Similarly, Michel de Certeau (1984) sees "styles" or ways of writing, of walking, reading, producing, speaking, etc. as users' "ways of operating" (producing) everyday activities. People's ways of using or 'functioning' amount to "their own formality and inventiveness that discreetly organise the multiform labour of consumption"[xxiv]. Thus, in *The Practice of Everyday Life,* Michel de Certeau (1984) describes a social history of 'making do' achieved through subtle and practical means that aim to render objects 'unconsumed by consumer society'. In following de Certeau theory on everyday practice the analysis shifts from the objects themselves to what he calls 'operations' that people perform with these objects (by ways of adapting and transforming them) – an anonymous creative process developed by ordinary people.

Thus, through cultural practices of 'consumption' (translated as ways of doing things) people differentiate themselves in a multiplicity of ways. Individuals, Pierre Bourdieu says, may be ready to adopt in the most visible part of their way of life the ways of doing things in the social stratum in which they operate, but this conformity is only on the surface: clothes, furniture and food are aspects of social life subject to 'precious apprenticeship' – they are not remoulded through education, and remain closely dependent on the person's class of origin. Like Pierre Bourdieu and Jean Baudrillard, Michel De Certeau (1984) examined the ways in which people individualize mass culture, altering things (from utilitarian objects to street plans, to rituals, laws and language) in order to make them their own. Thus, his theory on the practice of everyday focuses on users' ways of operating or 'making do' and their experience is seen as a productive way of consuming, a cultural practice of everyday life. As such, consumption, de Certeau says, "does not manifest itself through its own products, but rather through its ways of

using the products"[xxv]. This assertion corresponds with philosopher and sociologist Karl Marx's view on production and consumption seen as equivalent (consumption is simultaneously a production): he points out, for example, that a dress becomes really a dress only when is worn, and a house is not really a house if is uninhabited.[xxvi] Thus de Certeau identifies *use* with *consumption* highlighting the differences between the ways of making-do that refer to 'modalities of action', individual 'ways of operating' and 'formalities of practices' that could lead to the definition of 'styles of action' (specified by the form, time, place and frame of these actions). De Certeau's reflection on the ordinary 'practices' of everyday life (such as cooking, walking, reading or inhabiting living spaces) shows that everyday practices are flexible, creative and intelligible: users creatively adapt mass-production and social constraints to individual lifestyles.

De Certeau's theory becomes relevant to a design poetics as it views consumers as users partaking in a network of complex interrelations and networks that make-up an art of living.[xxvii] In this sense, it can be argued that users establish models for living by being engaged in what Nicolas Bourriaud (1998) calls postproduction - which accounts for the multiplicity of practices or ways of doing things[xxviii]. Bourriaud's postproduction (a form of consumption) is based on the term 'relational' - which is key to this discussion because its starting point is in human relations and their social context[xxix]. Bourriaud's view on contemporary art as relational is based on an aesthetic theory that analyses artefacts from the point of view of "the inter-human relations which they show, produce, or give rise to"[xxx]. Instead of an opposition between art and the commonplace articulated in everyday activities, Bourriaud describes art as a 'social interstice.'[xxxi] In my view, this relational, social 'interstice' seems to be the very space of everyday life in which de Certeau places the 'tactics' and 'operations' of users; the place where 'consumers' practice various forms of living. And by association, the site where I suggest that design poetics circulates its objects. Whilst Nicolas Bourriaud applies relational aesthetics to works of art, I transfer the concept of relational (practice) to define the interactions between users and everyday objects; as such, poetic design can be said to be a form of (relational) art, rendering design a social use. Thus, de Certeau's concept of 'making do' and Bourriaud's postproduction as processes of use-consumption-production become practices of living with material objects constitutive of culture.

In this light, the space of the 'social interstice' is populated by relations that are social in nature: social and cultural theorist Tim Dant (1999) observed the importance of practices of living with

material objects in sustaining the flow of social life and their contribution to the character of culture. Objects provide means of connection between individuals in society, generating the production of new relationships, acquiring a cultural life mediated by users. In reference to objects, socio-cultural anthropologist Arjun Appadurai observed that history of art and design tends to examine the context in which significant objects were produced and received but less why they might possess an inherent formal value and the role they play in determining social relationships: "…the things themselves, for their meanings are inscribed in their forms, their uses…"[xxxii] In this view, Appadurai (1986) suggests that commodities have social lives: "things may actually be inert and lifeless but, to understand the way that they gain and lose value, we need to think of them as if they have a life"[xxxiii]. The accumulation and exchange of artefacts influences the formation and transformation of their value; thus, from a material culture perspective, objects do not posses an inherent commodity status but they may become commodities because the history and the politics of an object's association with humans determine its commodity value in time. In this case, objects can be said to be active vehicles through which social values are expressed as a trace of the people (see Chapter 3), occasions and cultural contexts that inscribed value in the object. As Appadurai put it: "Types of objects have a cultural history and individual objects have their own biography so that their value lies in their provenance, in the history of those who have possessed it, and in the ritual practices of exchange..."[xxxiv]

Thus, people's relationships to objects cannot be explained only through categories such as 'commodification' or *consumption* because they are only adjacently related to the commodity form. As Appadurai observed above, *consumption* is more than an economic process, and involves more than the purchase of goods in the market place: it cannot reduce objects to the economic relations of exchange. Social anthropologist Marshall Sahlins (1976) claims that 'consumption' assigns symbolic value to things in the flow of social life by adding meaning to utilitarian goods, reinforcing the idea that products and their circulation are dependant on social relations. Thus, Sahlins sees material culture as an exchange within a system of symbolic meaning related to the social order of age, gender, time, work and leisure. So what I want to explore in the study of *users* and *objects* for a design poetics is that *consumption* is not evolving independently of human manipulations and it can be decoded from the ways in which material objects are lived with. It becomes relevant for design in general and design poetics in particular that the social value of material objects can be evaluated in terms of the ways in which they fit into social lives and operate within a culture - within its traditions, customs, and

rituals. Thus, the practices of everyday life represent consumption in a multiplicity of forms, and these are not visible in a traditional academic approach to design.
In this view, I intend to use the texts on material culture literature to read how objects perform in an already fashioned environment: the views expressed by Dant, Attfield and Appadurai show that the social relationships developed with and through material things contribute to the character of communal or personal life.

On the other hand, in her material culture and design history studies, Judy Attfield's (2000) account of industrial design and product narratives highlights the role of material objects within processes of consumption by returning the emphasis on consumers: her study is "… not really about things in themselves, but about how people make sense of the world through physical objects"[xxxv]. This view echoes that of social anthropologist Daniel Miller (1987), who sees *social relations* as created through *consumption as an activity*, while Attfield's theory of consumption centres on objects defining users' social self. Attfield's point of view also responds to Klaus Krippendorff's (1990) assertions on product design which suggests that generally, the form of an artefact for a human user should be able to support a practice of living (i.e. a form of consumption) and is already interpreted by having a recognisable history of use, and by functioning in combination with other things. Krippendorff (ibid.) further suggests that product semantics seeks to understand users' own understanding of their practices of interacting with 'designed things' and to provide "strategies for designing products that can either afford or supportively intervene in that understanding."[xxxvi]
Like Tim Dant and Judy Attfield's studies on material culture of design, semantics starts from the user, from understanding how people understand their own practice, how and why they engage in what their daily tasks. Klaus Krippendorff, Henry Petroski and Donald Norman show in different ways that product semantics operates on the premise that people surround themselves with things which allow to be handled with ease, things they are familiar with, or things with which they are comfortable of creating a familiarity with. Within existing debates in product design semantics, many usual assumptions about the form and meaning of objects need to be re-examined in light of new concepts of product life-cycle and post-use. By situating the human-product interaction at its core, a product semantic approach refers to user-centred design methods that trigger user experience and product use. A central concept derived from design semantics that is useful for the understanding of design poetics is that everyday life involves a set of relationships with objects that enables users to perform their activities in a variety of contexts. Thus even mass-produced goods acquire new meanings for consumers

located in different strata of society: they fit into the life of particular people at particular times, within the social, spiritual and artistic needs of their culture.

As an equivalent view, Attfield sees design as the integration of artefacts into the social world (beyond the empirical study of their physical features), through the acquisition of social meaning within specific cultural and historical contexts. She explains the incorporation of products into individual process of use as appropriation - an autonomous activity that creates 'wild meanings'. Like de Certeau's terms of inventive 'tactics' and 'operations', this concept describes how objects are used to construct personal identities, emotions and memories (activities associated with consumption). In being reliable, useful and necessary tools, or representations embodying status or possession, objects become companions to the emotional life of their users, serving as markers of relationships and emotional connection.

Thus, objects are appropriated through a series of 'consumption' activities (practices) into culture, and as such consumption can be read as a process of appropriation of objects into everyday practices of living. Appropriation is dependant on the multitude operations (such as adapting and transforming) performed by practitioners (users). In a similar manner, domestication (a supportive concept adapted from product design) can be used in response to Attfield's views on the integration of objects into daily life. According to media sociologist Roger Silverstone (1999) the process of domestication of products involves four stages: appropriation, objectification, incorporation and conversion[xxxvii]. These stages take place in different phases of 'adoption' through which objects start to fit into pre-existing object-human relationships – and once possessed, they share the lives of their owners. The theory of domestication contributes to an understanding of the ways in which objects find their place in the home; and explains the evolving functions and meanings of products when consumers adopt or reject them, sometimes modifying everyday practices. Crucial here is the reciprocal exchange: 'domestication' does not suggest a one-sided control - but entails a state of becoming affected, as the term refers to a learning process whereby things and people reciprocally influence each other.[xxxviii] Thus, in addition to the *primary functions* of objects (what they are designed to do), a series of *derived functions* are developed during domestication, as a result of them being included within the everyday life operations of the user.

It can be said that the concepts of appropriation, objectification, and interaction, leading to the idea that things are active contributors of meaning, become useful for a poetic design process.

The correspondence between the theories developed by sociologists and social anthropologists Pierre Bourdieu, Jean Baudrillard, Michel de Certeau, design theorists Henry Petroski, Klaus Krippendorff, Donald Norman and material culture texts (Tim Dant, Judy Attfield, Arjun Appadurai) contributes to a series of concepts that make-up a knowledge resource for building a scholarly base for design research. These overlapping views on the circulation of objects from material culture, sociology and design studies are brought into discussion to highlight the complex role of objects in creating a repertoire of interrelations; and that conversely, objects are transformed through the social relations in which they participate. Thus, these analytical tools (material culture, sociology, design theory) define design practice from the point of view of the interrelations developed between users and objects within social and cultural contexts. The theoretical frame suggested above shows that an analysis of objects reflects an analysis of users and entails different ways of understanding consumption. Consumption can be analysed as a series of processes dependent of the variety of activities developed by its users. Following Bourdieu, Baudrillard, de Certeau, Attfield, Dant and Appadurai - consumption takes the forms of a practice of, or a production of it users. In relation to objects, consumption can be read or represented as theories of appropriation and domestication, composed of the totality of 'operations' that people perform with objects. What is, in this case, the end-product of the user-object interaction? Can it be assumed that design evolves into un-conventional forms of living or consumption?

Chapter Structure

Design studies analyses objects through the forms of their production and their consumption, illustrating the dynamics between users and objects. The emergence of user-centred approaches, based on an increased use of ethnographical studies of people and their activities, places design in the centre of cultural production. However, the significance of material objects emerges through the ways in which objects circulate and fit into modalities of living - the user-object interrelation implies a re-evaluation of objects, users and their roles in everyday life. Thus, the circulation of objects within the practice of everyday life entails systems of evaluation, methods and analytical tools that need to be constantly renewed.

The theoretical frame above has offered some points of reference on people and resolved that an understanding of users implies a multilayered understanding of their practices within a society. From a design perspective, the practices evolved by *people (users)* can be explored in terms of experiences and interactions with things that are part of their repertory of practice. In

relation to the users, the analysis of *objects* in design entails elements of their performance as it relates to different *practices of use*. Therefore this study proposes an investigation of objects and users through experiential, narrative and performative systems of evaluation in order to understand their various roles and functions. A design approach based on these elements (narrative, experiential and performative) suggests experimental and participatory models that pay attention to the interpretive role of the user. In order to put to use these observational tools (experiential, narrative, performative) this study followed a prototype-based testing method that illustrated the various elements that contribute to the design of things. As such, testing was directed towards an analysis of objects of use, and hoped to understand their values, functions and meanings (how they relate or influence human action, behaviour, activities and user-product interaction). The testing addressed valuable aspects of the user-product relationship; their interaction was interpreted in relation to design poetics.

Thus, the text is structured in four chapters, aiming to define a poetic design in relation to narrative, performative and experiential aspects of user practice, establishing interrelations and correspondences between them. These fields of enquiry are connected by common notions of user-object interaction and participation. The elements that took prominence in the development of the thesis seemed to establish points of correspondence between key research areas: user-experience, user-object interaction, user participation, product-and-user performance. Performance-related, experiential and narrative discourses have been chosen and discussed here because they both consider at different levels the role and experience of people - a key element to a user-led design. Product, hi-tech and interface design approaches have also been mentioned for their methodological approach towards users. Experiential, performative or narrative aspects in hi-tech design for example, centre on modalities of action (how users act) and touch on common elements of interaction, interpretation and participation. In this view, users' activities and modes of operation become central to all stages in design thinking.

The chapters that compose this study investigate in essence the nature of the relationships between objects and performance, objects and narrative and objects and experience from a user perspective and within the domain of material culture of design. These investigations aim to outline defining characteristic for a poetic design as a relational practice, an interdisciplinary process which has as its final outcome a specific relationship established between object and user.

Many contemporary design practices have borrowed methodological approaches from technology (hi-tech) and product design, however these are limited and linear in understanding the relevance of user experience. There are perceived distinctions between creative, commercial and academic practice in design: design theorists Maxine Naylor and Ralph Ball note that design practice is often assumed to be based on pragmatism and commerce: "…an orderly and rational protocol, limited to conventional uses, methods and systems, and as such intellectually less pure than theory."[xxxix] However, design practice can be both experimental and experiential, a creative process responding to user needs. Market design involves many design methods, technologies and management studies, but less has been developed in terms of the methods, processes and objectives for new forms of design or alternative design approaches.
In the case of poetic design, I have set-up a theoretical frame within which narrative, experiential and performative elements of analysis distinguish a category of objects, setting apart their characteristics. By selecting this class of objects, the practice of poetic design is analysed - and this exploration becomes embedded in all the questions and considerations in which the objects are involved. The correspondence between design practice and theory is understood as a mutual, reciprocal testing of objects and users, their agency and the relationships that result from their interaction. The ***methodological*** approach also involved a testing element that run in response to concepts derived from sociology, anthropology, material culture and design studies. The testing was based on observation (data collecting) and interpretation, and was integrated as a form of ethnological approach in order to map a poetic design process. This exercise in speculative thinking was grounded in scholarship, empirical research and experimental practice, and has been variously qualitative, descriptive, analytical, and interpretative.[xl]

The theoretical frame above highlighted that objects circulate within culture in a multitude of roles, developing a series of practices that are social in nature (Dant, Appadurai); objects are invested with 'wild meanings' (Attfield); that objects become part of the users' various practices (Bourdieu, de Certeau), of living with things (making-do), becoming dynamic agents in a continuous flow of activity (Costall-Drier), creating patterns of interaction and sociability. Such roles and meanings are not controllable during the production process, therefore they must be addressed beyond traditional design studies.[xli] As such, poetic design investigates these multilayered relationships, proposing a category of objects that define human relations, interactions and their social context, objects that cannot 'be consumed' by the consumer society. In this light, I argue that a poetic design proposes a class of objects (defined by

experiential, narrative and performative aspects), that address other properties than those strictly functional[xlii]. This study reconsiders this class of designed objects and the ways is which they circulate within everyday practices of use. As the user and the designed object are readdressed and redefined in the context of design poetics, related aspects of experience, interaction and performance were integrated in the testing procedure.

Testing was a practical, analytical and interpretative method used to explore users and objects in use. Objects are difficult to define and classify without their functionality (Baudrillard pointed out a multitude of categories) as their meanings, and the practices in which they are engaged fall outside many systems of ordering. In examining experiential, narrative and performative aspects of the relationship between objects and users the test explores how objects introduce practices through their use. The testing exercise (chapter 1, pages 37 - 43) - a generative and an evaluative method - took as case study the prototyping of a series of functional cast objects, monitoring their development in relation to users. It considered prototypes, users and modalities of use and constituted a valuable reflective material informing practice, supporting speculative ideas that revalidate aspects of theory. In being a method of evaluation, the testing furthered postproduction ideas and re-tailored the making process. It took into account the design of the user - not in terms of measurable data, or in physical and ergonomic terms - but in terms of user experience, performance and interaction. In this sense design solutions responded to the motivations and needs of the users.

In relation to testing, the examples accompanying this study illustrate an ensemble of cultural acts, offering interpretations of material practices. Different examples of designers and design approaches have been discussed throughout the chapters in order to explore and develop the analysis via different frames of reference (objects and experience / performance / narratives). The main case studies (the Equator and Interaction Projects, Rachel Wingfield, Julie Cook, Noam Toran, Droog Design) have been put forward as comparative examples for a poetic design. At the same time, the Interaction Project and Ideo are examples of design initiatives that refer to testing methodologies for designers. The chosen examples incline towards artistic speculation and experimentation rather than commercial production and as such design is practiced as an art-form. In this perspective, the objects discussed throughout the study respond to needs apart from those functional - related to aesthetic, emotional responses and personal experiences; to playful or contemplative aspects belonging to a poetics of everyday. The objects' degree of functionality, their size and form are obvious relevant factors for design;

however, the social property that its use serves (private, family, public or general use) is closely linked to a series of cultural, social or technical developments.

Although *to design* generally implies the making of something new - that does not exist already, the area of contemporary design that is the focus of this text is most cases reinterpreting already existing objects on the premise that users are recreating modalities of use or adapt objects to today's culture (re-creating cultures of use). Such designs re-contextualise the already known functionality of objects, engendering different kinds of user-product relationships. Finding new purposes for already existing objects means finding new forms or models of interaction – and these evolve as a result of the continual interplay between the human agents and the things they are using. In accessorising a social relationship, design poetics challenges the roles people and objects play.

In creating a series of transformations of the everyday into an art of living, by reinterpreting and a re-contextualising the everyday and its objects, a poetic design practice could give rise to aesthetic experiences through particular forms of use in which domestic objects are engaged.

Chapter 1

THE DESIGN of EVERYDAY PRACTICES

'Creativity is allowing yourself to make mistakes. Art is knowing which ones to keep.'
Scott Adams

Whether objects of art or of everyday use, artefacts have functioned as central referents in contemporary cultural theory, representing sites for re-encountering material culture. Modern culture is characterized by a complex range of objects dispersed on various levels and layers in society in order to meet different needs, wants and uses. What happens to these objects when they are being produced and consumed, possessed and used, is central to the understanding of their circulation within a culture. Theoretical approaches to material things use classification as a natural and sure way of understanding objects: they are ordered and reordered, arranged and rearranged for and within particular social practices. They are studied according to their uses, functions, forms and technical evolution, and in relation to changes in social structure. However, such classifications do not account for how objects are lived with - as Jean Baudrillard noted, "… what cultural, infracultural or transcultural system underpins their directly experienced everydayness"[xliii].

Being an active part of ongoing social and cultural practices, objects both support and change the patterns of these practices. As design theorists Costall and Dreier (2007) noted, "… rather than regarding things somehow *pre-given* objects with definite known qualities, they [can be] studied as dynamic elements in a continuous flow of activity"[xliv]. Thus, the psychological, sociological and material sphere of needs and practices becomes as essential as the technological development of objects. As social agents, objects extend human action and mediate meanings between humans; as such, social relationships become modelled and located within the networks and transactions developed by their mobility[xlv].

In aiming to view material objects apart from 'products', commodities', 'technology', or as defined by their functions, I endeavour to read them as agents that make up a part of the context of the social lives of the users within the processes and activities whereby people relate to them (as Jean Baudrillard said, "… with the systems of human behaviour and relationships that result therefrom.")[xlvi] In this capacity, objects answer needs aside than those of a functional kind, and it is the nature of these needs, the relationships they embody and evolve that this study aims to explore.

A series of critical views from material culture and product design provide models of thinking about objects and users, and these were used to evolve other analytical frames in order to observe object-user interactions and user experience. Following an analytical pursuit this chapter considers the study of different aspects of design, the interrelations between making and testing as processes that contribute to the understanding of a poetic design practice.

In observing the circulation of objects and their embeddedness in a culture, I aimed to explore the practices and activities they engender or are part of in order to understand how design practice can support or change the practice of everyday life and the user. The culture of design places users in an already designed world in direct ways (material) and indirect (immaterial) ways: from clothes to food, from television to ways of transportation, and from the interior of a kitchen to the utensils used for dining, objects partake in the context of everyday living. A series of studies in sociology, anthropology material and design culture (Tim Dant, Judy Attfield, Arjun Appadurai, Pierre Bourdieu, Klaus Krippendorff) emphasize the roles and the content of (object-user) material relationships; showing the effects objects have on culture and society as a result of different interactions with things.[xlvii] Conversely, objects themselves develop and change as a response to material and social structural changes. In other words, the nature, the form, the aesthetic and use of artefacts has been influenced by technology and innovation as well as by politics, manners, taste and personal preferences[xlviii]. In its turn, the evolution of artefacts has profound influences on social intercourse and its evolution and in this capacity, objects act as dynamic agents: human social relations and everyday practices are mediated, developed, sustained and changed by objects.

The totality of artefacts circulating in a society are constitutive and representative of a culture: by analysing the artefacts a society uses, cultural anthropologists consider that objects represent a medium through which cultural identities are preserved. Thus, culture reflects the ways in which people live as a society, and illustrates how practices of cultural appropriation and forms of life are shaped by the things that people live with: objects contribute to the design of everyday practices. As Tim Dant pointed out, a culture illustrates how people share their values and experiences, how they invent, make or produce things, how they use and exchange and indeed 'consume' objects[xlix]. Dant (1999) observed that culture determines how people make sense, make use of, and live with things; "…things to be used, to be loved, to be with, to give as a gift, to fit into a normal day, to match a festive mood, to be proud of…"[l] In these varied capacities, the products and practices already embedded in a culture are the material support for social relationships created and maintained through various social forms and relations; and become conventional symbols of social differentiation, integration or status. For art historian Siegfried Giedion, the form of the object-world articulated the social structure of the past[li]. For instance, sociologist and anthropologist Marcel Mauss (1990 [1934]) points out that the circulation of goods in society follows that of human relations as they are embodied, developed and preserved in feasts, rituals and ceremonies that

bear symbolic significance.[lii] Thus objects participate in interpersonal relationships and become built into social realities, translating human communication often before they enter a particular practice[liii]. For different types of users, objects are implicated in different ways in the translation of emotional or social meanings, together with the practices they afford. As such, human relationships are translated into commodities which account for their quantitative and qualitative value: besides their inherent value, objects acquire an adherent social value in that they fit into social lives as relationships between material and emotional (immaterial) 'uses'. As material and literary culture writer Bill Brown observed, material objects have an essential role in the continuous re-production of culture, by coordinating the processes of production, dissemination, consumption, use and retirement[liv].

Thus, embodied as a set of common practices around material objects, culture makes use of objects in a different sense than that of the economic use, where objects are 'used up'[lv]. The cultural and social values manifest in the form and function of everyday objects (such as chairs, lights or tableware) suggests that artefacts function beyond their physicality, as cultural agents. However, cultural practices are dynamic and variable in that individual responses will adapt and at the same time alter those common practices (amounting to de Certeau's arts du faire, the practices of everyday, a hidden production, a bricolage, the 'making do'). For example, a social structure based on established ways of doing things (encompassing traditions, institutions and moral codes) is changed when people start to replace them, or to reproduce them differently, in other words when people become 'productive': human practices appropriate different objects and depend on the material context of the activities (practices) engendered by those objects. The idea that needs to be emphasized here – and is this idea that I want to use from material culture - is that objects take a double role: they are simultaneously products designed to fulfill basic needs, and, at the same time, an expression of the culture (material, immaterial, symbolic and social) that forms society.[lvi] The capacity of objects of fulfilling different uses means, as Dant (1991) observed, that they cannot be reduced to a singular function or a single aesthetic; Jean Baudrillard speaks of the use value, exchange value, the symbolic and sign value for objects – and these are shaped by the culture which defines what things stand for.

As Henry Petroski (1993) comments, the history of artefacts represents a cultural base for design, making, technology, engineering and invention. These endeavours determine the shapes and forms of every made object, of all the things that build up the material culture of design. Petroski (1993) noted that artefacts evolve from previous objects, products and tools: every new product is based on an already existing one through successive changes or as an improved alternative. It can

be argued that not only that made objects and new designs are based on and develop from previous models and ideas, they also result from the previous experiences of the previous users. Such experiences are repetitive in time, and are transmitted, as evolutionist Jean-Baptiste Lamarck has argued, as an 'inheritance of acquired traits' or characteristics; these characteristics refer to objects but moreover to users' evolution of gestures, manners and ways of 'making do'. The point here is to give attention to the fact that objects are created, developed and improved not only as a result of technological developments but also change as a result of the users' practices of manipulating them; so that design evolves with the tacit collaboration of users (their ruses of 'making do').

This theory of evolution and development of objects relates to the evolution of culture. The manners of use for all objects involved in eating, for example, and their diversity from one culture to another, shows a significant influence from the part of the user. The formal and technological evolution of artefacts has in turn diverse influences on how they are used: the development of simple utensils like knives and forks illustrate how interrelated technology and culture are in general. Baudrillard (1968) wrote that in ordinary life we are quite unaware of the technological aspect of objects; yet technology transforms in significant ways the environment and determining the development of the evolution of objects. But are there general cultural, social, design and/or technological principles whereby everyday use-products evolve into their shapes, sizes and classes? One theory favoured by product designers and theorists like Henry Petroski (1993) is that innovators altered the shortcomings and imperfections of inferior products in order to generate new, improved models:

> Different innovators in different places, starting with rudimentary solutions to the same basic problem, focused on different faults at different times, and so we have inherited culture-specific artefacts that are daily reminders that even so primitive a function as eating imposes no single form on the implements used to effect it. (Petroski,1993:20).

For example, Petroski (1993) comments that the tools of the crafts and trades represent classes of artefacts with a wide range of diversity and specialisation of form due to their performing specialised tasks.[lvii] As artefacts with which other artefacts are made, tools had a longer time to evolve and they are acknowledged to be the first artefacts of civilisation[lviii]. Being linked to domestic activities and needs, domestic objects like tableware and cutlery evolved in relation to their uses: silverware and crockery are a designed set of utensils that performs food-handling and eating tasks at the table - efficiently, correctly, and in accord with the current customs. The forms of old pieces of silverware, for example, indicate how they fit a familiar place-setting pattern and their form and

configuration (table-spoon, tea-spoon, etc.) vary with their intended use.[lix] The introduction of new patterns didn't interfere with the intended function of the objects themselves, this being mostly a matter of aesthetics in use – a matter of etiquette.[lx]

The various aspects on the historical evolution of design reveal an interrelated adaptation between user and functional object that developed with time. Evidently, users 'make do' with utensils, interchanging their functions. When the diversification is driven by aesthetics, similar tools perform similar tasks: the elaborate ritual of a meal drives the process of developing instruments for the table (therefore the form and manner of their use becomes more important).[lxi] Thus, the design of things is both based on biological, cultural and social contexts; as Petroski notes,

> Since the days when diners brought their own knives and forks to the table are long gone, we are expected to adapt instantly to whatever odd and unusual piece of silverware might be set before us, whether or not its end fits the food and whether or not its handle fits our hand. This state of affairs is as much a result of the evolution of manners, style and fashion. (Petroski,1993:156)

The polite, elegant handling of things according to set notions of behaviour in social intercourse is an old function for most utensils associated with food. Designers that follow the 'form follows function' tradition omit that one of the most relevant functions of an object can be its ceremonial use – and this responds to other needs than those of purely practical nature. The eating utensils that are in use daily are, as Petroski (1993) put it, 'as familiar to us as our own hands' and as convenient utensils they have become second-nature[lxii]. The spoons and bowls are claimed to be the first eating utensils (the knife is thought to have been first a tool or weapon rather than as an eating utensil). The cupped hand could have been either a spoon or a bowl. If at first humans cupped their hands to drink or eat, using the action as an extension of the body, they must have found then natural shapes that fitted the shape of the hands and which serviced the same task; when more suitable objects have been found to mimic the cupped form, they intervened in the object form as to make it even more appropriate for the task. Probably at another point in the evolution, there appeared the idea of attaching a handle to the bowl-like shape and the perfect object for drinking has been created. Further improvements in form and size correspond to particular tasks or materials: in this instance, design started by furthering ideas on what else the initial cupped form can do, in other words, what other activities can be achieved with the same archetypal form.

A few observations result from this evolutionary making: first, the action (an instinctual gesture) is the direct implication of a primary need; then, as an extension of the body, the action becomes or

ends up as a physical improvised object (the cupping of the hands). The approximation of the action with a natural form is perfected to better fulfil the scope of the action; another stage is creating an object according to a clear purpose (or to add a new function) and maybe the final stage can be approximated with endowing a particular significance to the object (such as participating in a particular event or ritual) and its narrative underlay.

In a similar way, Petroski (1993) describes a process of evolution (based on improvement) of the fork from what was initially a kitchen fork substituting the hand (resembled the hand). The evolution in form of simple utensils like cutlery shows that design is a process of shaping and reshaping that takes time; it also attests that the evolution of objects involves the experiences of their users within the social, cultural, and technological contexts in which the objects are embedded: as cultural customs change, objects are reshaped[lxiii]. The evolution of objects points out that their development is directly associated to that of evolution of culture and that of sociality.

A similar evolutionary theory to that of Henry Petroski, supported by Donald Norman (2002) and design theorist Jane Fulton-Suri (of 'Ideo') for example, considers design as a process of continual improvement through two kinds of product development: 'enhancement and innovation'. Enhancement refers to the improvement (bettering) of an already existing product or service; innovation is a new way of doing something (that was not possible before), which is subsequently creating a completely new product. Other approaches to design have generated different classes of products; for example industrial designer James Dyson considered that design is how 'something works' not how it looks, thus emphasizing the functionality of a product. Also as an industrial designer, Ron Arad saw design as 'imposing one's force on the material and thus pushing the material to its limits'. Designer Nick Crosby's (of 'Inflate') approach is to see design as creativity exploiting constraint. These examples are setting positions and rules which dictate a set of objects that embody those values and approaches.

A major contrasting issue here is between the product area of design, with commentators such as Donald Norman and Henry Petroski, who see the evolution of design as a means of finding new solutions to an existing product or enhancing the product's functionality and capabilities. And, on the other hand, the designer-makers field with design theorists like Maxine Naylor, Ralph Ball and Gareth Williams who, together with contemporary design practitioners (like the Droog Design makers) see design as a process that expands the functions of products – and their possibility of being experienced, read, or used. The first category of design (see above) works with measurable data and precise methods, whilst the second operates with factors that are difficult to measure,

whose only measurement is indeed the user. From this perspective, it has been pointed out that Droog designers for example, create user-object 'transactions', (rather than end-products), and such transactions evolve into object-user experimentations that allow alternative (creative) uses of established practices of living.

It is perhaps at this point that design overlaps with art and becomes an art-form in itself – a poetics of uses, of 'propositions' left to users to 'make do'. Not only products become supportive vehicles for the practices of the user (de Certeau's 'making do') but the user and object become a creative, activated entity. In this perspective, for poetic designers, design 'tactics' or 'methodology' do not mean the creation of an optimum, efficient object (the end-outcome of the design process), emerged as a 'solution' to a 'problem', or indeed a better functional product.

Design as Scenario for Living

The cultural meaning of everyday objects is complete when considering all aspects relating to an object: its production, consumption, mediation, public or individual everyday handling. In this sense, design practice is bound to the cultural associations in relation to function, need, desire, meaning, value and context. In looking at design historically, Naylor and Ball (2005) observed that most of the innovations in the domain of design are in fact reinterpretations of the same issues for new contexts and new generations. These reinterpretations show that the fundamentals of everyday activities that include eating, sleeping, protection from the elements, and so on, do not change but transform with time in other forms (both in material form and in practice)[lxiv]. In this view, design theorist Klaus Krippendorff (1990) observes that the form of an artefact is interpreted by having a recognisable history of use and as such, by being able to support a practice of living. As reiterated later, the meaning of objects and their use evolves with practice, "the practice of living with our environment and in particular contexts, whenever we cognitively connect our actions and perceptions in an experiential circle of use"[lxv]. In this perspective, design is a practice concerned not only with the form and making of material objects but also with their integration in human affairs and support of everyday practices of living. In their turn, these sum-up the historical aspects of the development of artefacts, their technology, genealogy and repertoire.

According to critic Adrian Forty (1986), "…the evolution of forms based on principles such as borrowing, adapting and disguising is common in objects that represent technological leaps".[lxvi] Designers often look at related artefacts when they re-design products: art historian Alois Riegl states that a given form "(...) [is] a combination of what [it] has expressed in the past (attribution,

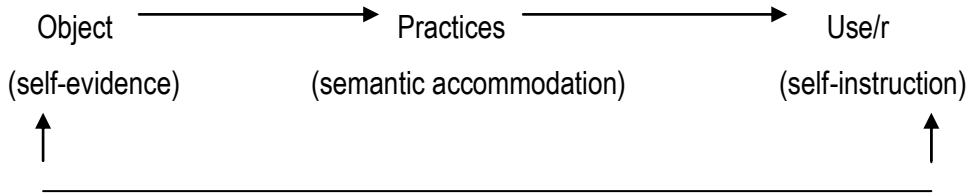
repertoire, tradition) and how it is transformed by the way people make different uses of it (appropriation, creative adaptation, desire)."[lxvii]

Notions of function and use contribute to the product's life-cycle: material objects do not 'die' - as artist/critic Louise Schouwenberg (2004) says, they are reused and refashioned by being invested with new significance; "the notion of reusing ideas, memories and archetypes give(s) objects a sense of longevity."[lxviii] As such, they become 'conceptual optimisations' - innovative in their form of *use* or *reading*, not necessarily in terms of technological advancement. This approach opposes the (traditional) response in the field of product design (see Norman and Petroski, above) that has generally been to produce objects that resolve a technical problem and which generally demand and relay on the support of technology. In many cases technologically improved solutions of the same product represent conceptually inferior versions of the same thing, showing that a newer version is not necessarily better or superior than the old version.[lxix] Although technology is an important part in the development of objects, it has the tendency of minimising the users' ability to sense and experience objects, erasing the physical contact and user interaction – a transformation of what Jean Baudrillard called a traditional gestural system based on physicality into a gestural system that relays on control.[lxx]

In opposition, the methodological approach of a poetic design is based on a cycle of concepts and values which enable the re-appropriation and re-evaluation of objects, a valuation based on emotional or symbolic longevity, not one limited to use or aesthetics. In this view, a poetic design practice elaborates on prior knowledge, uses imagination and interpretation in order to renew the appreciation and meaning of already known objects.

The two different design orientations and practices discussed here - one inclined towards finding solutions for a new product or toward enhancing a product's functionality; another towards a process that expands the experience of products and users, based on meaningful practices of living - represent interventions in various *practices of living*. In most cases the design process starts with the appreciation and analysis of existing objects, and builds on their history of use. In the best of cases design operates in both an anticipatory and an interventive manner, absorbing characteristics and concepts from already known and already tested practices and understanding of things. Anticipatory and interventive design processes start with an existing practice and end (through material intervention) with a consequent practice[lxxi]. As Klaus Krippendorff noted, the anticipatory approach ensures that products respond to users' current cognitive models (and practices) in order to initiate those that will develop within new practice. Thus artefacts, says Krippendorff, "… take part in, and when well designed, support circular enabling patterns involving

the way we treat them, our perceptions of them and what we intend to accomplish through them". The existing uses of things and practices are central to people's understanding of new forms of objects.[lxxii] If product design semantics solved primarily problems of use, it later considered problems of configuring products that can be handled within well understood practices. Krippendorff (1990) calls this process as semantic accommodation (see graphic below).[lxxiii] In this perspective, as an interventive category of practice, design has the potential of changing the ways in which objects function and how users operate.



Klaus Krippendorff's visualisation of semantic accommodation (1990)

In being a body-centred activity, contemporary design approaches have started to support a series of strategies and explorations that intervene to create meaningful practices of living; aiming to centre users in a symbolically meaningful world where they can make sense of things.

Making and Testing Objects

The standard view in traditional product design theories assumes that the design, the making and use of artefacts are quite distinct and separate activities and thus the intentions of the designer are a sufficient condition for the emergence and function of a product; in other words, the ways in which artefacts function privilege the intentions of the designer. Considering that consumers make creative use of artefacts, for purposes other than their designers had in mind (and in so doing also modify them), it is relevant to explore the interrelations between designing, making and using of artefacts, since this study involves the testing of prototypes.

Design and making have been interrelated processes involved in the development of objects and products, even if their techniques and methods have varied in time. In this view, design theorists Naylor and Ball (2005) observe that cultural history has often considered the process of making as an operation of repetitive, manual, skilful labour (a work of fabrication) instead of considering it a generative form of conceptual intent, a 'thinking through the hands'. Repetitive labour usually implies doing without thinking: manual work, say Naylor and Ball (ibid.) "… suggests something less cerebral, that when the hands are in operation the head is disengaged"[lxxiv]. Similarly, craft

theorist Bruce Metcalf sees the 'handmade' as the strict involvement of handwork, thus limiting the process of making[lxxv]. Although craft and design processes define the relationship between a person, a tool and a material, making is no different in 'manual' nature from writing: a physical act of conception, thinking directly through doing[lxxvi]. Apart from applying an analysis within specific sets of predefined rules, Metcalf (1997) observes that the making of an object that conforms to a traditional format is bound to the use of traditional materials and techniques, thus addressing a traditional context. These aspects seem to limit both the making process and its outcome. Naylor and Ball (2005) further noted the attempt of 'civilising' the process of design; in aiming to make it applicable to a set of rules - and thus accessible, design practice tends to adopt an 'objective methodology' made up of prescriptive, procedural methods. For example, the division of labour that occurred at the beginning of the nineteenth century defined industrialisation and the improvement of (mass) production. This determined a dramatic separation between designers and workmen: the designer did not take anymore an active part in the process of construction of the product; as Zeisel (2004) observed:

> The division of labour disrupted the unity of the designer's creative process. It divided his profession into that of the designer of the technical form, the form produced by the machine for use, and the designer of the art form, the artist, whose work was to be applied to the technical form to cover its nakedness. (Zeisel, 2004:6-7)

Designer Eva Zeisel commented that the division of these two areas of the creative process resulted in applied art - an art to be applied to a useful technical form, a process in which the object becomes a secondary carrier.[lxxvii] In reality, the separation between the 'technical' form and its aesthetic character is not possible in the anatomy and forming, designing or making of an object. As Dormer (1997) stated, the majority of objects exist only because of the coming-together of a variety of disciplines and industries; the making or design of any part of a product implies many systems of production and involves a variety of factors. When design used to be led by the 'form follows function' principle, the emphasis was on efficiency and simplicity of operation, so that generally end-products were designed to embody specific functions and were made to look and to be used in a specific way. In more traditional product design practices products have to conform to objectively measurable performance criteria, as prescribed by ergonomics. Notions of use and function are related to those of user performance - objects come into being as an evidence of human practices developed in time.

In responding and supporting alternative practices of living, both the technical aspect of making and the user-related aspect of using influence how objects are formed. These aspects show that

the designer, maker and user are closely interrelated during the design process. Thus, everyday use-objects illustrate several components of making in design: usability, aesthetics, and practicality:

> Frequently, a design is praised merely for its aesthetics, with other constraints shadowed by the glow of the beautiful object. No matter that a strikingly handsome chair is uncomfortable to sit in or impossibly expensive to own. Though architects may prefer form over function, engineers may sacrifice aesthetics in meeting function (...). Neither form nor function should overwhelm the other in design, but in the real world, one is often achieved at the expense of the other. (Petroski, 1993:22)

The interplay between elements of form, aesthetics and function shown by Petroski demonstrates that objects cannot be designed without consideration of the constraints imposed by their intended use. The technical components of making in the design of all objects can affect the efficiency and character of their function: it will impact on the way utensils can be formed and carry out their functions, and on will affect the way we use them. However the relationships between people and things are not completely predictable: how, then is the designer operating through the objects of his practice?

A methodological approach that supported the study of the design process was to develop a series of domestic, archetypal forms and test their use, involving user's participation. Thus, my project involved the design and making of small batches of cast objects for everyday use (*see Fig. 1-3 and 4-6*) and considered their design as a set of interventions in a specific everyday practice of living (food consumption). The prototypes were tested at consecutive stages on different groups of users who had no prior knowledge of the planned testing event, its setting details, their own role and what was demanded of them. Also, the test participants were not told that they will be interviewed, therefore their responses were spontaneous and filtered the fresher impressions. In order to obtain maximum results, there were two types of questionnaires: one provided the immediate answers of the participants at the time of the event (an ad-hoc, recorded interview); the other was proposed after a couple of weeks so that the essence of the participants' impressions was collected in written form. Because the first group of participants were an educated audience, I have repeated the test with a lesser-informed group in order to compare consistency of responses. In the repeated session of the first test I have also collected the observations of three assistants (who, besides serving food, were asked to observe and interpret the event); and their observations were corroborated with the impressions of the participants. In this sense, reflective analysis evolved through an exploratory process (of doing) rather than responding to prescribed procedures. The design of the prototypes involved the exploration of a set of (experiential, performative) elements in

both the making and the evaluation of the end-product, thus informing subsequent practice. The objects made for testing as part of this method of study represented a design exercise and were built with certain affordances and restrictions on purpose. The testing of the prototypes was not intended as a generative process of new object typologies; the archetypical forms were used as vehicles for observation of user performance.

Thus, the design and making of the cast test-pieces (*see Fig. 1-6*) followed a process of elimination and alteration which determined a possible final form: it focused on minimal changes of vessel elements (inversions and reversals) – changes that aimed to modify a single function at a time. First I 'detached' or rather eliminated the base of a simple bowl form and made the main body of the drinking vessel independent from it (while still maintaining its function as container); (*see Fig. 1-3*). On one hand, the idea was to revert to an archetypical form (a bowl) to emphasise its basic function. On the other hand, I planned or hypothesised that the bowls without base will determine changes in handling for the user, demanding the user to re-adapt to a form and use that offered constraints. Physical constraints, or 'forcing functions' (in Krippendorff's terms), restrict the user to only those options the device affords (as such, the objects indicate the nature or range of operations to the user). Constraints formed the basis for creative use - such short-comings determine other ways of handling and work-abouts, and the user becomes creative in 'making do'. Any functional object allows affordances and restrictions of use: while people and things constrain and/or enable each other, their reciprocal adaptation transforms limitations into obstacles to be worked around. The test of 'affordances' showed how the manner of eating was influenced by the form of the object: it can be said that the forms 'acted' on the movements of the users – a sort of exercise of re-appropriation that highlighted differences in the acts of handling. The reciprocal user-object adaptation proves Bruno Latour's theory: as a sociologist of culture and anthropologist, Latour considers that the relationship object-user emergent in use demonstrates that humans and products alike 'mutually exchange and enhance their properties.'[lxxviii] This adaptive process relates to Jean-Baptiste Lamarck's theory of evolution (referred to as the theory of transformation) whereby individuals change their habits in order to adapt to their environment. Thus it can be argued that new forms evolve from ways of use, and that the design of alternative objects results from finding other functions or ways of use.

In calculating that a bowl without a foot does not sit, I counted that it can exercise other aesthetic, social and cultural functions. For example, vessels of different shapes and sizes were used in the past for storage or to carry water and foodstuffs, but at the same time they played a significant role in ceremonial rituals in all ancient cultures. As such, the forms and the functionality of vessels developed with time in accord to changes in culture, practices and usage; however, as generic

forms, they maintained a fundamental functionality. Although primarily selected through its use value, an object must hold value beyond its functionality, in its cultural and historical context, in order to survive the test of time. The transformation of artefacts in the culture where they evolved is related to ongoing activities: any change in form of any artefact requires some break from its functional milieu. In this sense, I focused on the fact that designs are often determined by habit, custom, tradition, and practical considerations. The making of domestic, everyday objects is rooted in a series of cultural, everyday practices of use that evolved with time. With archetypal forms like bowls and cups, the underlying form is the same since its beginning, in spite of technological advance, as the basic relationship to the human body (and its basic function) has been essentially constant. Naylor and Ball (2005) call established forms like chairs, tables and plates etc. as 'mature typologies', as their forms are recognizable and culturally embedded. These generic categories of objects show that the underlying relationship between form and function has been used and verified over generations, during many years of service.[lxxix]

This aspect leaves space for alternative forms of use for such objects: plates, cups and bowls are metaphorically 'invisible' partly because of their base: in sitting on the plane surface of the shelf or table, they are liberated from their dependence to the human body – that is, from being held and handled. In testing the bowls with food, in low light, on a group of 12-15 people, I intended users to handle them with an added awareness of their materiality (their physicality attracts immediate sensitivity to material, temperature and form). It was an attempt to make the forms remembered and thus more 'visible' (felt). Vessels, cups and bowls for drinking and holding liquids represent another example of a mature type; this represented one reason for which I have chosen to operate minimal alteration on a simple bowl form. A second reason was to expose this form's relative cultural invisibility by reconsidering common, everyday elements, features and attributes that can be emphasized and valued beyond their unappreciated commonality.

Another development that ensued from the archetypal bowl shape was, in a sense, contrary to the first modification: if the first form constrained the user to cup the hands and hold the bowl directly, the addition of different handles invited different ways of holding (*see Fig. 4–5/6*). The handles were a kind of additional 'appendices' ('prosthetics') that relate directly to, and interrelate to the body of the user (the form of the handle influenced holding). I considered that any variations and additions are valid as long as they don't interfere with the object's utility as a container. In this view the addition was to do with inversion: it still focused on the function of holding but focused on the handle not on the bowl-form. The various handle shapes were developed by borrowing handles from other functional objects of common use, adapting their different forms to the bowl-shapes. The idea was to vary the function of (picking and) holding: handles dictated the ways in which

users manipulated the objects. All users employ force, pressure or finesse when using forks, knifes, hammers, screwdrivers, etc. and I wanted to replicate this diversity in the handles I have adapted for the bowls. Robust movements can become delicate and gracious: I started to concentrate on manners of use; manners make gestures symbolically valuable and precious. As a result, the objects themselves are elevated, as the response they demand requires consideration precisely because their manipulation involves delicacy and grace. Henry Petroski gives a pertinent example of handling in discussing the potter's tools developed in order to make his precise, strong or fine motions efficient, reliable and expressive. The manner of the potter's skill can be paralleled to the ways in which dinnerware is used: in this sense, all objects are tools.

The testing scenario used in the study shows the interrelations between elements of design, making and use; and as such, the connections between the roles of the designer, user and maker. If product, industrial and hi-tech design processes involve criteria and procedures for testing materials, technologies, product functionality and user response, this study was particularly concerned with the testing of uses and users, considering performance, narrative and experiential elements. Experience, narrative and performance concepts were used as analytical and evaluative tools to observe both objects and the act of involvement of the user. Interestingly, Norman (2004) noted that even with existing products designers seldom observe users and users' ways of performing because they generally focus on form and function and don't see the object in the time of its use. Thus, designers are likely to try to imagine how a new design will be employed by a typical user. The tests run at the beginning of this study aimed to rectify this approach and were based on direct observation of users and prototypes. All tests focused on the kind of experiences and relationships people develop with products and questioned how these relationships are formed – in other words, what factors determine the object-user experience? It adapted current views on user experience from product design, considering concepts or methods that can evolve user experiences. It was thus considered that testing outcomes may be translated into alternative design solutions and scenarios of use.

The testing method was devised for two reasons: on one hand, most studies on user practices and design processes focus on production and consumption, rather than the designer's perception of their interrelation and outcome. On the other hand, testing was developed to create alternative criteria for a design approach and analysis, based on experience, performance and narrative elements; an evaluative proposal has been generated as a result of testing user and object (a scenario of use). In addition, the testing process also probed theories about objects: it followed the concept of use-object reciprocal adaptation, and applied or rather tested Michel de Certeau's

theory of 'making do'. Thus, the testing procedure was used to explore and illustrate a design position not driven by problem solving, by commercial design concerns or by consummerism.
My main interest here was to show that objects generate or order a set of procedures and operations of use according to a design scenario, and this was the area that I wanted to explore in terms of design. Meaning, in this case, can be attributed by context and use: the meaning of objects is effectively manipulated as a part of a planned design process. The alterations on the bowl form and the reconstruction of archetypes from formal components and cultural referents has shown possibilities for rethinking the use and meaning of objects.
The observations and evaluations developed during testing addressed a set of criteria and concepts that contribute to an understanding and characterisation of poetic objects. The testing process illustrated a useful correspondence between making and testing as a generative, alternative model for studio practice and a potential development for a poetic design practice.

Testing principally aimed to record user activity and experience and to provide a visual evidence of a design in use; it had an observational and evaluative function and documented user-object interactions.
The first test consisted in serving hot and cold food from different sized bowls without bases and involved the users on many levels: they had to adapt to all elements of a planned communal eating event in low-lighting. This involved picking the prototypes up, un-wrapping them, feeling their weight, size, the tactile qualities of their surface, contours and edges: a tangible, visceral, tactile experience. The 'experience prototypes' were especially made for haptic interaction (the feel of weight, surface, etc.); the comfortable accommodation of the palm around the different sizes and volumes of the bowls and the movements this activity implied proved their functionality. The low lighting of the space in the testing procedure emphasized the haptic qualities of the objects and these related to holding them in balance. Besides providing a focus on the tactile properties of the prototypes, the low-lit set provoked communication between the participants. As the staged event also involved food consuming, it became a communal experience and provided comparative referents in terms of tactile impressions. Using the bowls for serving food to participants involved a multi-sensory experience (*Fig. 1 - 3*). There was hot (soup) and cold (finger) food, large and small forms to be held, glazed and unglazed surfaces to be touched. Soup is a 'slow' kind of food: it takes time to prepare, to cool, and to savour; it is hot to the touch and the tongue, whilst the cooling process allows time for conversation. Soup involves ritual both in its preparation and consumption, and is a metaphor for feeding and sharing; it provides a primary comfort (a warm-up solution for the poor, or a treat in a in a five star meal). The bowls have been designed to fit the food: large and

heavy of matte ceramic for soup, light and cold and glossy for desert, fitting roundly between the hands. In providing physical constraints - without a foot the bowls restricted their setting down before the end of the meal, indicating that they have to be held - it prolonged the contact with the surface of the object. The harmonious use of form inherently moved users who responded with a bodily sense to their proportion and form. The test provided an opportunity for direct observation of objects and people, their reciprocal adaptation and interrelated performance. It registered participants in direct contact with the test-pieces, showing how their qualities affected them[lxxx]. The test pointed out that the direct (physical) contact between user and object represents a base for challenging physical limits (product 'affordances') as well as the contexts, the habits, rituals, priorities and objects' different values. As design theorist Fulton-Suri (2000) observed,

> People develop an exquisite awareness of the possibilities and sensory qualities of different materials, forms and textures. This awareness is evident in [their] actions, even when [they] are not conscious of them. Understanding these intuitive interpretations might be a significant source of insight for designers. (Jane Fulton-Suri, Ideo, 2000:164).

The second test simply followed how objects were used in the set context of the participants' own environment. It used the same set of 'experience prototypes' valuing and revaluing simple object uses and the context of their use. The participants were not directed as to how to use the prototypes, and as a result the range of uses different from one user to another. As such, the second test attempted to explore the ways in which objects are adopted and adapted to in the domestic environment of different users' home. It involved participants different from the ones in the first test who received the same set of prototypes (three bowls different in size, weight, and glazed surface; a camera and a questionnaire) with the invitation to be used as they saw fit. This time, the participants were not involved in the communal, experiential testing session of the prototypes, so they did not have any previous experience of the context and use of the test-pieces. The seven-day test session unfolded during the ordinary activities of the participant, and participants were left to make-do with the test-objects, thus to be creative in the intent of their use. The test recorded how objects were lived with: when they have been used, on what occasions, and with what other class of objects or activities they were associated. Users responses shown that the prototypes were used in inventive ways and 'made do' for practices different that those envisaged by the maker. The test proved two or three hypotheses: that objects become incorporated in users' practices; that users are inventive in using objects following their own individual ways of operation, and that a designer not only designs an object, but a scenario of use. As Fulton–Suri noted, people

react automatically with objects and spaces they encounter (reacting), they make use of opportunities present in their immediate environment; they alter the purpose or context of things to meet their objective (adapting); some qualities and features prompt users to behave in particular ways (responding), also learning patterns of behaviour from others in the same socially group (conforming). Users take advantages of physical and mechanical qualities they understand (exploiting); as such, the interaction with objects is automatic and spontaneous.

The third test was staged in a similar manner to the first, and intended to repeat the first test with a different set of participants in order to compare feedback responses. The activities of the participants and their responses have been observed and recorded like in the first test. The test observed objects and users in a kind of physical exercise and reconsidered design ideas and initial concepts. Both tests aimed to introduce and create concrete examples of interaction that dealt with user experience. In relation to testing objects in product design, Krippendorff (1990) speaks of 'cognitive prototypes' in order to anticipate the unfolding of user experience. Krippendorff (1990) points out that users' cognitive models become central concepts in product semantics:

> Out of different experiences with using things, people tend to develop a kind of operational logic for why things work the way they appear and how they can be controlled or manipulated toward desired practices. These models can usually be reconstructed from the verbal explanations users give of their own behaviour, protocols, transcripts of exchanges, and so on. Construction of such models provides designers with a reference in terms of which the affordances of a product and the meanings it has for different user groups may be assessed. (Krippendorff, 1990:23)

Like the relation between a musical score and the ways of performing it, testing the prototypes has released a performative dimension that signifies in two ways: one refers to how the tested object 'performs' in ergonomics terms – if the object 'fits the task'. The other refers to how the user 'performs' and how his/ her activities around the object create the object's meaning and functionality (*Fig.1, 2, 4, 5)*. I was particularly interested in how the object 'performs' in the hand of the user: the 'activities' developed by users become individual and diversified (taking into account that the forms imposed affordances and restrictions for use).[lxxxi] Thus, the form of the prototype proposed models of use. Following Michel de Certeau's theory, the test focused on the relations and interactions between the users and prototypes and shifted the emphasis from the finished object towards the performance and the behaviours which emerge during object-user interaction (Chapter 3, page 74-5). Although planning and partly anticipating the use of the prototypes, the test exercise allowed closed observation on what people actually did in the planned situation of the test. Direct observation focused on users' workarounds (Michel de Certeau's concept of 'making do'):

there was evidence of people's reinterpretation and adaptation to things, improvising solutions for something that was missing (e.g. the absence of the bowl's base).
These aspects can be re-evaluated in order to assess the prototypes, peoples' activities and experiences. In this case, testing helped to observe and improve on existent and potential product characteristics: by watching people using the prototypes, alternative designs were reconsidered.

Test Conclusions

As part of the research, prototype testing has used the same prototype forms in all tests for consistency. The testing procedure involved the planning and making of the prototypes, testing their functionality and the activities developed by users (testing uses and users). The involvement of potential users in the test gave the opportunity to observe at first hand how users and prototypes performed.
A questionnaire was run after a lapse of time following the test and revealed a series of aspects that informed further the design process (*see Appendix, page 160*). The feed-back has revealed the stories and interpretations of the participants and these contributed to further design thinking alternatives. The questionnaire emphasized the 'attachments' that emerged between users and the prototypes; it showed the ways in which connections between people and things were formed, and exposed the quality of this association and performance (*participant comments in Appendix*). User responses also highlighted differences in the flow of individual experience and the experiences of different people: through bodily reactions and interactions the participants revealed idiosyncratic ways of using the objects related to behaviour and experience. Users' ways of doing things and adaptations embody their cognitive models (know-how), which is deeply embedded and therefore not immediately apparent.[lxxxii] As Krippendorff (1990) noted earlier, people use their previous experiences to develop an operational logic for how things work and thus they manipulate them toward desired uses (being well acquainted with the objects they use, they become specialists in the practices involving these objects). This aspect pointed out to the fact that in practice design has to accommodate a varied range of models for a variety of user needs and experiences, and to translate them into design opportunities. As Krippendorff (1990) pointed out, design must make sense of things and establish the material support through which 'practices of living become meaningful' and 'keep human users of artefacts centred'[lxxxiii].

The tests also showed that restrictions intentionally built into a product are prompting ways of 'working around' or adapting to shortcomings, prompting the active, inventive involvement of the

user. In this respect, test observations revealed patterns of behaviour transparent in the activities users performed, and suggested activities that needed to be supported. It exposed both the functional and behavioural aspects that products entail - as Donald Norman (2004) observes, "the first step in good behavioural design is to understand how people will use a product"[lxxxiv]. Jane Fulton-Suri (2000) also noted that close observation of users' activities is useful in distinguishing the actions that need to be aided by design.[lxxxv]

Additionally, testing objects and people demonstrated the visceral, behavioural and reflective levels on which products operate (Donald Norman, 2004) and also took into account components such as function, usability, and physical feel. At the visceral level, it considered physical features (particularly feel and touch), exposing immediate, initial reactions.[lxxxvi] The behavioural side of design was emphasized in the performance of objects and users.[lxxxvii] The reflective level was apparent in users' appreciations of the prototypes as *social accessories*. Both tests (1 and 2) were useful in understanding how people made use of prototypes: their verbal accounts (perceptions descriptions, impressions) apropos their handling of the pieces represent their interpretation, their constructions and cognitive models they employ to handle objects in concrete situations.

Documented photography has acted as additional informative material that illustrates the prototypes' scenarios of use. User responses were recorded as audio material (form of narrative) to register direct reactions and impressions; other user feed-back recordings involved the participants' answers to defined questions and impressions after a planned period of time. I considered that time will preserve the most relevant impressions of the participants and I took these impressions to be the predominant criteria for cataloguing and categorising feed-back responses[lxxxviii]. I have concluded that the main areas to be considered and reviewed in design testing refer to functional, emotional, performative and contextual elements (see Appendix tables, questionnaire and feed-back answers, pages 160-172).

In relation to the tests, the *functional element* refers to the form and functionality of the objects tested: the ease in handling to do mainly with size, form, weight and temperature; further on, if the 'object fits the task' or if the 'task fits the objects' in ergonomic terms. The functional side also considered object semantics to include both object characteristics (physical, given, inherent) and object relations and references that encompass the activities involved in their use. The functional element has a predominant influence on the activities of the user: for example in both tests, the simple absence of the bowls' foot has prompted the participants to handle the objects for longer

and to find a variation of body movements and gestures to accommodate them, and to handle them over when the contents have been consumed. This single element has also made the users more aware to the temperature, weight and size of the objects. The association of the objects with food consuming created more scope for the handling of the objects. The absence of a foot for the bowls improved the commitment and engagement with the objects, accentuating the physicality of handling.

In addition to the physical interaction, the *emotional element* was linked with the personal user perception of the objects and implied considerations on the ways the objects were handled and used. Experiential elements played a decisive role in the emotional part of perception: the communal eating-event, the low-lit set contributed to the setting and defined an active form of involvement on the part of the user. The feedback responses evidenced that the participation in the 'event' has established changes in user behaviour and a certain attachment to the pieces: some of the participants wanted to own the objects and use them afterward; some took with them a series of objects they have used. The term 'attachment' is close to what Bruno Latour calls 'associations' or 'mediations', denoting 'the creation of a link that did not exist before and that to some degree modifies the original two'.[lxxxix] The test scenario has created motivation through this attachment and has operated in subtle ways on the behaviour of the users. In this respect, one of the most effective results of the event was the creation of an experience that became communally and personally meaningful. Thus, the experiential element of the set scenario influenced the way in which the functions and uses of the prototypes are shaped, presented and received. These observations can be argued from contrasting the significance of use attached to the same objects by the participants in the first test with the set of possible uses bestowed on the same objects by non-participants.

The test also illustrated the *performative element* **-** focused specifically on how the object 'performs' in the hand of the user; therefore it took into account both the 'performance' of the object (see Chapter 3, page 85, 86); and the 'performance' of the user - how his/ her activities around the object create the object's meaning and functionality. During the test the 'activities' developed by users become individual and diversified taking into account that the objects were designed with 'affordances' and restrictions for use. The performative element is linked further to behaviour and emotional elements (reflected in the user-prototype interaction). As such, apart from operating on the form, functionality and handling of the pieces, the test observed users and their behaviour. In this view, an invisible aspect of design (emotional) only becomes relevant in user-product interaction.

The *contextual (staged) element* plays an important role in the perception, reception and use of the pieces; as well as in operating connections between the emotional and performative elements, influencing user behaviour. Furthermore, the staged element rendered participative roles to the users (who became 'actants' in a set scenario). The space was low-lit, providing a focus on the tactile qualities of the objects and at the same time provoking communication between the participants. As the staged event also involved food consuming, it became a communal experience and provided comparative referents in terms of impressions. In this sense, with every object, the designer is creating a scenario of use investing the user with a particular role. Although design directs a series of tasks toward a concrete product, the associated contexts in which the product operates are significant in articulating many stages in the design process. The context of use has been of primary concern for the test, together with other contexts in which artefacts need to survive in practice (social, experiential).

All four categories (functional, performative, emotional, contextual) evidenced by prototype testing refer to different kinds of interaction – they represent a set of relations evolved by getting in contact with and by using the objects; as well as a set of inter-relations between the participants. As such, the design did not operate major changes on the form of the objects, the emphasis being on prototype-user interaction. The testing followed sociologist philosopher Theodor Adorno's criticism on objects that limit interaction to mere operation, and proposed a 'surplus' of experience with objects, an experience that cannot be 'consumed' during the moment of action and use; a surplus that may survive as the meaning of the experience. These different aspects expand design beyond the functional performance of a product and include the quality of experience, integrating the symbolic functions of products, the psychological, social and cultural contexts of their use with various physical, ergonomic and aesthetic functions.

In revealing a series of relations between the design scenario, the prototypes and users the test represented a relevant tool for a creative and reflective design process. I want to reiterate here that in assessing the formal components of objects in relation to their users, testing aimed to explore and illustrate a design approach; it was a preparatory, generative and retrospective process (an activity governed by thinking through doing). The use of the testing scenario (as 'real-life' situation, opposed to theoretical hypothesis) demonstrated the relevance of performative and experiential elements and communicated back useful information to various stages of the design process. These represent points of reference that suggest the range of affordances (activities, actions) the prototypes allowed; and encompassed the underlying emotional and physical (practical) needs of the users.

Chapter 2

OBJECTS as EXPERIENCE

"Tell me and I will forget, Show me and I may remember. Involve me, and I will understand"
Confucius (450 BC)

The role of material objects in human experience is evidenced by the fact that historically people have always been using things they have made. The evolutionary process in nature is paralleled in the man-made environment through a co-evolution between man and product, a mutual, reciprocal dependence and adaptation. The first chapter has discussed (see pages 27-30) that whether changing in physical form or function (thus influencing cultural forms and practices of living) everyday objects have evolved from already existing artefacts and in close interdependence with their users. The various practices developed in time between objects and users have shaped continuously the forms of objects in the domestic field; what is pertinent for this study is that these incremental changes depend in great proportion on user experience[xc].

In recent years design activity has approached more closely the 'user experience' because designing for a user experience changes the stages of the design process. In the past twenty years in particular the notion of product experience has become the focus of the consumer society. However, the user-led design view in product, industrial or hi-tech design does not account for how products inform and change the practices rooted in material culture. Most of the existing research on product and user-led design look at experience in terms of measurements, measurable data, formulas and methods that do not explain the level of everyday engagements with 'low-tech' objects. In such cases, although product testing for instance compares a product functions from a user's perspective, it oversees the processes, practices and behaviours by which people relate to a product; it does not define the un-accounted (invisible) relationships that result from their interaction. Although research on user experience from product and hi-tech design has involved more recently the study of affects and emotion, seeking to formulate how 'pleasurable' products can be achieved, I argue that they fail on two accounts. In the first place, these theories adopt a *closed-process* approach to design, aiming to prescribe a formula, an established method applicable to all products. This closed-process approach can achieve a prescribed result, a predictable end-product. For example, in an attempt to 'measure' emotional responses to products, product design theorists like Pieter Desmet tested user responses to products by categorising them in equivalent visual icons called Emocards (*Fig.29*) to indicate pleasurable products from less-favoured designs ('smiley face' or 'sad face' icons)[xci]. In aiming to establish a correspondence between design and emotion, Desmet's approach suggests that pre-defined experiences could lead to new interaction patterns that guide the designer and inspire product development (this approach, called 'semantics of fun' or 'funology' aims to pair-out enjoyable experiences). But this categorisation seems to be limited in terms of illustrating the range of user responses. In the second place, in most if not in all cases, the product or hi-tech design approaches focused on user experience operate outside the context of the user's own history of experience (made of associated

types, qualities and levels) and which functions in relation to other ordinary, well-established objects that function so to speak, in a complex orchestration (Fulton-Suri, page 42). Further still, it can be argued that *closed-process* design methods – although taking the user in consideration - still view the user predominantly as a consumer, whilst their products are tied to the intentionality of its makers, a market and a brand identity.

Within the new 'experience economy', I would suggest that in contrast, design poetics (as it has been defined in the Introduction and illustrated in following examples) looks differently at people and their experiences, considering the processes and contexts, the traditions and habitus in which they operate[xcii]. Its approach takes into account the ways in which objects are settled into already trodden patterns or models and forms of living, within the networks of sociality that gave them life. A poetic design also reconsiders the narrative history of objects, reinterpreting the identity of objects that have been tried and tested by time; an identity that became interwoven into people's life course, varying in significance over time[xciii]. Thus, contrary to a close-process, design poetics considers that the meaning of objects is not statistically determined by the form and function of objects (at least not only) but by the processes of their integration in people's lives, into a web of experiences and intricate connections. This *open-ended process* of design thinking changes the views on the various rapports established in time between objects and users, thus between an object and its 'consumer'; they also leave a margin for various user practices to re-appropriate (reshape) objects (see Michel de Certeau) and, at the same time, give objects space to re-shape those practices. In support of this argument, design theorist Jaakko van't Spijker also considered the development of two design attitudes that address the experience of the consumer in an opposing manner: one follows a 'closed specificity' whilst the other operates an 'open specificity'[xciv]. The first position (closed) advertises a delivery of a unique experience, the second (open) aims to provoke unpredictable (and 'one-of-a-kind') reactions. The 'open specificity' approach is interested in interpreting, dealing with and supporting users' own interpretations of practices; thus a poetic design operates with an openly specific process, as an object or product makes sense only when it reaches the receiving end: the user.

In this case, if technology provides a commercial market with useful products based on the 'new' and the 'last' or 'better' versions and fashion-led needs (immediate, visceral), design poetics proposes objects based on different needs and wants (reflective, behavioural), objects that require a quite different kind of 'consumption' and thus involves a different kind of user. A specific territory is left to be explored in the space created by this difference and distance: and here my intention is to translate processes of production and consumption looking not at how design changes a product

or object for better use, but at how it transforms the user; at the ways in which a poetic design creates a practice of use and thus a different mode or model of 'consumption'.

In this view, this chapter looks at design as the practice of developing objects around the experiences of the user. The focus is on objects and users, on experience, interaction and participation: in this sense, designed objects stand for user's activities. Views on experience, interaction and user-product performance were adopted from different disciplines to explore viewpoints in designing user experience. The theoretical approaches assimilated from these areas are collaged and overlapped to view experience from different points of reference. The texts from material culture and socio-cultural anthropology (Tim Dant, Arjun Appadurai, Judy Attfield), sociology (Jean Baudrillard, Michel de Certeau) and product design literature (Klaus Krippendorff, Donald Norman) attest the centrality of objects in human experience. These approaches help to examine comparatively elements of experience from a number of perspectives and were chosen to analyze the concept of experience as it applies to certain stages in the design process. If the literature on product design frames predominantly issues of production and puts the emphasis on a problem-solving methodology, my own testing (pages 37 - 43) was used as a model that can be applied within the design process to generate possible models of interaction and experience with products. Partaking in the analytical part of the research, the prototypes aimed to test scenarios of user experience. The testing evaluated interdependencies between persons and things by creating situated activities based on interaction. In this context, narrative and performance elements were considered as possible frameworks (scenarios) for developing and defining user experience.

Practices around Objects – Objects evolved around Users

Users' experiences are mediated by the physical world of design and its artefacts, so objects and the contexts in which they are used give many insights on how people live. At the same time, the study of any system of objects implies a study of the meanings, the processes and multiple practices and interactions they engender. Thus user experience can be analysed considering the practical, social, emotional or aesthetic elements of the object-human interaction, through which objects acquire roles and meanings that become incorporated in everyday practices. The values and meanings arising from the close interaction between users and things are relevant elements for design thinking. Although the product and hi-tech design disciplines are interested in user experience, they mostly view experience at a functional level, and the standard understanding

assumes that meaning can be localised within objects themselves. Yet, any object acquires meaning as a result of human activity and interaction whereby objects are absorbed and embedded within the practices and operations performed by users. The meaning of things is related to their role in the material transformations of daily practices and thus dependent on people's activities; it arises from user experience, and the history of the continuous use of a given object. People's diverse relationships to objects mediate their integration into the world: sociologist Georg Simmel noted that in ancient cultures, objects – whether utilitarian or aesthetic - were absorbed into the practice of everyday life with little distinction between them, functioning as tools for everyday practice[xcv]. In this capacity, their meaning was dependent on fulfilling utilitarian, yet symbolic roles dependent on the practices they served. As Jean Baudrillard noted, "Traditional tools … belonged to a field of practical mediations (symbolic, time-set ritualistic) between the material to be transformed and the person doing the transforming"[xcvi]. This view echoes Martin Heidegger's (1935) point on the pure instrumentality and reliability of use-objects, where the use-value of an object is its intrinsic property. As the industrial society progresses, use-objects and their meanings multiply as a result of a separation and distinction between labour time and leisure time; between needs and wants. As a result, new classes of objects are set apart to fit the tasks required by these activities (leisure and work) and subsequently their roles change. These subtle divisions between objects increase the distance between tools related to labour (embedded in human relations) and aesthetic objects (referring to a different vocabulary of forms and meanings) relating to a different set of experiences. This development, Tim Dant observed, emphasizes the aesthetic value of objects over their usefulness, placing objects in relation to other comparable objects rather than to their functional demands[xcvii]. It can be concluded that these divisions between classes of objects, which entailed classifications between time-set activities and classes of people have multiplied and diversified the register of user experience.[xcviii]

Michel de Certeau's (1984) theory on everyday life redirected attention from objects to the repertory of 'operations' performed by people, suggesting that user experience is a valuable criteria for understanding how people operate. As such, de Certeau's interpretation of everyday human actions portrays the conversion of the routine and repetitive acts of domestic life into experiences of creativity and pleasure. In performing individual routines, inventive acts by which they negotiate and appropriate the everyday objects that serve their activities, users are not passive consumers but active producers of everyday practice. For example, Marije Vogelzang's food designs can be described as models of a 'participatory dinner theatre' in that they consider the aspect of the eating as an event, whilst highlighting the setting and serving food as experience. Vogelzang's designs

are based on the senses, and function within known and tested ritual structures and traditions. As primarily need, food is deeply rooted in every culture, history and rituals; its forms of serving connect people at a comforting level. Marije Vogelzang' 'White Funeral Dinner' (*Fig.9)* played with ideas of funeral ceremony: most mourning rituals are marked by colour and this becomes apparent when food is served. Vogelzang designed the ceramic ware, the clothes and the food for an alternative Dutch white funeral meal. The presentation and aesthetics influenced how food was eaten, and with what kind of instruments. The food-environments designed by Vogelzang are particular orchestrations of smells, tastes, textures, sounds and sights. These designed environments that deal with food consumption transform the user: they changes the taste and alimentary needs of the user; the user's expectations and temporal experiences (how fast should food be).[xcix] Thus, common objects and activities organise daily experiences that evoke a sense of experiential time (rather than clock time); they place users' practices outside time whilst, at the same time, they mark time. In this case, objects operate within a combination of activities, techniques, procedures, and habits, in relation to other artefacts and environments[c]. In another project Vogelzang devised an event based on the experience and memory of food and its symbolic cultural identity. She asked the local Lebanese to provide her with food memories and translated these in a 'green line' of bread-bowls coloured with parsley juice. The bread-bowls were offered to market-goers, who ate them with ricotta and cedar honey (*Fig. 12*).

Such mundane activities, procedures and tasks connected to everyday living imply an undergoing and continual transformation and elaboration of practices within the activities in which an object is engaged. For example, users' activities of object 'maintenance' request an almost ritualistic time set aside: how the objects is cleaned, where it is put, with which kind of other objects, and how long it is kept in a household are all practices that involve adapting and maintaining rituals that constitute the material appropriation of the product. In a different manner, socialising events involve the circulation of domestic objects on a level of meaning and use dependant on the time of day at which the objects appear, the degree of exclusiveness or sociability attendant upon its use (private, family, public or general use). The simple example of a special dinner with guests, when only the best table is used, or that of the gifts offered at special occasions illustrate that everyday objects support practices and uses, serve needs, act as go-between users and their interactions with others.

Sociological, anthropological and material culture sources (Tim Dant, Pierre Bourdieu, Theodor Adorno, Michel de Certeau, Judy Attfield) attest that interactive relationships with objects evolve from and are an embodiment of social relationships. Because material objects are incorporated into

social interactions, they reflect in turn the nature and form of the social world. Tim Dant (1999) observed that, by being appropriated into culture, man-made products represent the social relations of culture, "standing in for human beings … carrying values, ideas and emotions"; and that the ways in which people use and live with a wide variety of objects compose the "… material environment [and] the context in which social interaction takes place."[ci] Thus the process of cultural appropriation and domestication of things operate between production and consumption, involving active interactions between people and objects (that make-up ways of living). In the form of goods, commodities or mediated experiences, objects determine the nature and forms of social interchange, representing a relevant part of it – as Dant put it:

> We express ourselves as part of this society through the way we live with and use objects. Material culture ties us to others in society as a means of sharing values, activities and styles of life in a more concrete and enduring way than language use or direct interaction. (Dant,1999:12)

People's experiences are translations of what Dant calls 'quasi-social' relationships with objects; focusing on social studies of science and technology Sherry Turkle emphasized the role of objects as life-companions; in this latter capacity, an artefact becomes a user's object rather than an alienated producer's object. For example, Noam Toran's designs are physical representations that stand for less usual human activities or experiences - what Toran considers to be neglected needs. Toran exploits the secret, domestic rituals and habits of individuals, investigating human behaviour through objects that reveal human condition. These uncommon rituals make space for 'rebellious' acts, in an attempt to break free from a socially imposed conformity; or else they respond to a need of contemplation and day-dreaming. At the same time, his custom-made objects question the role of mainstream design in encouraging stagnant and generic social values. 'Accessories for Lonely Men' (2001*)* for instance *(Fig. 13)* is a collection of objects that substitute or re-constitute the activities or acts of the loved ones when they left: the collection involves a 'Sheet-stealer', a 'Plate-thrower', a 'Chest-hair curler', a 'Heavy Breather', and a 'Cold feet', device that recreate intimate experiences, mediate memories or fantasies, aiming to cure loneliness. The rituals recreated through these objects refer to habits and adaptations of a different nature as they link to an emotional, poetic layer in the human experience.

Following a similar pursuit, the 'Desire Management' (2004) collection acts as a platform for personal emotional performance: the 'Vacuum Scanner' for instance is a body-size pole with an attached vacuum cleaner for a client who enjoyed being vacuumed by his late wife, and has

commissioned the object in order to be able to retrieve the experience on his own (*Fig. 14*). These products and practices embed themselves into the operating system of the user, and become an undivided part of their 'host'; they define the domestic space as a private place where people use bespoke appliances to engage in personal experiences. Toran's custom-made products illustrate what Jean Baudrillard wrote about objects as 'the finest of domestic animals' because objects serve in a "...regulatory capacity with regard to everyday life, dissipating many neuroses and providing an outlet for all kind of tensions and for energies that are in mourning". And as such, "this is what gives them their 'soul', what makes them ours"[cii]. In capturing the dependence developed between objects and users, these poetic forms of design highlight the relationships theorised by material culture.

A similar approach to psychologically-related cases is followed by Ingrid Hora, whose products-cum-furniture cater for universal anxieties, responding to needs beyond the functional. For example, the 'Parabolic Ear' (a listening device) translates the isolation people might experience at home and the urge to be connected with their surroundings, whilst remaining unseen (*Fig. 16*). Although other pieces, (like 'Functional Escapism' or 'Leather Collar') operate in an opposite manner, enabling isolation by providing forms of camouflage, they create subtle engagements between individuals and society. In dealing with needs created by a fragmented society, Hora's playful solutions accommodate users rather than dividing them from the rest of the world. The objects created by Toran and Hora attempt to reveal the inherent need for expression and identity in the face of conformity. They illustrate that objects become part of an out-of-the-ordinary user experience, involving a poetics of uses situated in an emotional field. In the examples above, objects acquire a 'social life' (as Arjun Appadurai put it), which enables people to establish values and individual (or collective) experiences through buying, collecting or using objects. Being embedded within the social relations that created them, material objects and various products represent a social, relational, communal experience. Their design, their production or prior use, and their place within an existing cultural system of objects are reshaped in social interaction and are a result of user experience.

A series of relevant examples that centre on the experience of the user are the various scenarios developed by 'Do Create' (a collection developed by Droog Design in collaboration with the Amsterdam advertising agency Kessels-Kramer in 1999) demands that the consumer interacts with the product as a way of customising it. The user's own experience of 'making' the product 'fit' for use is what counts as design outcome (*Fig. 17, 18, 19*). Each piece requires the intervention of an

active user to 'do' something (finalise the product), making the audience achieve their experience. Thus, the users add their own interpretation to create a one-of-a-kind object, beyond the control of the designer. For instance, 'Do Hit' is a steel cube provided with an accompanying hammer requiring the user to deform and form a given shape into an individual, personalised seat by hitting the cube – thus transforming one type of object into another. Another piece, 'do swing' (by Thomas Bernstrand) - is a light fixture that supports the user, allowing him to swing as a form of play activity; in both cases user and object are involved in activities that translate into experiential forms of performance (*Fig. 17-18*). These examples rely on the activity of 'the consumer' who is consecutively a producer and a user (see Michel de Certeau). The activities proposed by these latter objects re-create, or indeed regenerate Jean Baudrillard's traditional gestural system based on physical effort (see chapter 3, page 84), emphasizing the physical contact between user and object - a reciprocal process (Baudrillard called it a two-way 'servitude').[ciii] In the same sense, Tim Dant emphasized interactions with things in the forms of '…touching, making, looking at, talking and reading about, using, storing, maintaining, remaking…' - these seeming to tie with Michel de Certeau's practices of walking, reading, cooking, making, to show that they are at core everyday activities, learnt and shared within a culture[civ].

These common experiences and practices depend on the adaptation of goods or commodities to cultural practices that can be summed up as habitus.[cv] Habitus is the sum of aspects of culture that are anchored in the body and which compose the daily practices of individuals, groups or societies. It is based on a common experience made-up by the totality of learned habits, bodily skills, styles, tastes, and other knowledge for a specific culture, and molded by social attitudes. The manners in which people interact with things are an index of the culture in which they live; industrial designer theorist Aren Kurtgözü (2004) considers that manners are a reflection of the embeddedness of values in the interaction patterns that things demand of their users. As it has been shown in the previous chapter the evolution in form and use of simple utensils like cutlery for example, is a result of the repetitive experiences of their users within the social, cultural, and technological contexts in which they act[cvi]. In relation to objects, practices and techniques such as eating, washing, sitting, swimming, running, writing, etc. (as in Mauss and Michel de Certeau's translation of everyday life practices) are dependant on the needs of the user, adapted to contextual situations and representing a life-long learnt and cultivated 'craft'. As such, the system of habits corresponds to a system of objects: objects are the foundation for a network of activities, and of a set of behavioural routines. The manners and kinds of interaction that things demand of users impose moral and cultural values on them[cvii]. As Jean Baudrillard pointed out, every habit depends on an object, and activities involving domestic artefacts serve as representations of selected aspects of culture. Thus

modalities of doing things come to be integrated within the greater mass of culture and their representations reflect and interpret culture.

Like Sheryl Turkle, Bill Brown sees habits as long-term practices by which people achieve a meaningful relationship with their possessions. In this sense, material objects (made and used in a culture) become socially remodeled in the ways that they fit into routine, everyday practices and ways of life. Thus, culture is 'embedded' within an object when the object is produced and 'dis-embedded' when the object is used – its 'consumption' being in fact what de Certeau (1984) calls 'quiet production' and Tim Dant a reproduction of culture. Dant's (1999) theory is useful in seeing the 'using-up' of material objects as the process of "embedding and dis-embedding culture (a releasing of what has been embedded) through using and living with things" - as it explains the construction of their meaning.[cviii] Meaning emerges in use, with practice: the practice of living within a designed environment in particular contexts, where actions and perceptions are connected in an experiential circle of use.

For users, products must communicate their affordances in order to be fitted into their practice of living; ritual performances, routine cultural practices assign all participating things meaningful roles and direct them to interact in ways that have developed over centuries of human social existence (see Jean Baudrillard's 'system of meanings', page 12). In this spirit, Jurgen Bey constructed one of his series of furniture compositions (*Fig. 20*) in order to create interplay between various parts of furniture: the chairs, tables and cupboards composed together and mutually compensating for absent sections to support the overall structure, to make a homogenous and liveable constructed space. The ways in which a user operates in Bey's designed microenvironment is by formalising a set of activities for living around and with the furniture set (reflecting Marcel Mauss's idea of habitus as a totality of adaptations, see introduction, page 15); the interrelated uses of the furniture unit address flexibility and mobility in contemporary domestic life. As such, material objects organise people's surroundings, appropriating their actions, becoming part of various cultural practices and uses (appropriation is a continuous process). Thus meanings do not derive simply from the physical nature and construction of the objects but from forms of use, from daily interactions with objects (see Judy Attfield's concept of 'wild meanings', pages 18-19).

The underlying levels of meaning for objects (what an object is and what it is supposed to do) make-up the elements of *function*; although notions of function and use represent the basis of the product's life-cycle, the functions of an object are multiple and not limited to its workings[cix]. The majority of interactions between material objects and humans are conceived to address the sustenance of human life, but the values and meanings that arise from close interaction between

users and things interchange the concept *interaction* with that of *sociality.* In these cases, the sum of meanings achieved by objects becomes a collective process: "… not the product of individual effort, but a socially circumscribed phenomenon."[cx] These views from material culture consider the social value of objects as emergent in the way people use and live with them. As such, material objects can be considered more than things to be used or looked at, they become meaningful experiences connected to specific interactions.

In the examples discussed above, Vogelzang, Toran, Hora and Kessels-Kramer-Droog designers have evidenced the metaphoric use of poetic objects by allowing their users to be humorous, introspective or contemplative. They are able to do that by reassembling and recombining the familiar meanings of everyday objects into elements of daily life proposing alternative models of living (an art of living). Because their designs are reinterpreted and re-invested with significance, these objects are not 'used up' but inserted as conceptual frames to operate subtle interventions in users' practices of living.

When objects are designed to fulfil their *proper* functions and at the same time to provide critical comment on their role, their status changes from a *passive* to an *active* one - drawing a symbolic line between 'active' and 'passive' types of objects (introduction, pages 12-14). In this case - as Naylor and Ball (2005) suggest - design becomes poetic and rhetorical, and this in turn generates a richer language for design practice[cxi]. As critic Aaron Betsky comments:

> Design was not a question of making more objects, using more materials, or even inventing new ideas or solutions to the problems we encounter in our daily lives; but one of finding more ways to experience, explore and expand the possibilities … of … existing objects, images, spaces and ideas.[cxii]

In extending user experience poetic objects make the everyday available as aesthetic experience; psychologist and philosopher John Dewey contended that the 'roots' of *aesthetic experience* lie in the commonplace activities - in the experiences inherent to everyday life. In this sense, art critic Arthur Danto (1981) comments that art claimed and preserved the aesthetic distance over everyday life and its domestic objects by eliminating use and habit as the raw aspects of the everyday. The examples presented in this chapter demonstrate that by reinserting use and habit in practices that recreate user experience, design seems to resolve Danto's (1981) question: whether the everyday takes over art ('a return *of* the everyday *in* art') or is it rather a moment in which art seizes the everyday for its purposes ('a return *to* the everyday *by* art'). In taking both roles into consideration, design allows the everyday to be presented and viewed as art.[cxiii]

User Experience as Interaction / Participation

In order to understand how experience and interaction are understood in a design context, and if they can be adopted into a poetic design approach, a series of aspects on user experience from product design research will be brought into discussion. Current theories in product design and technology also reconsider the role of their products and start to address the emotional and experiential needs of the users. In the proceedings of the Design and Emotion Conference (2004), design theorist Paul Hekkert argued for an experience-driven design process as opposed to conventional design paradigms that have so far addressed product experiences in an eclectic manner.

The contributions to user experience and interaction from hi-tech and computer interface design for example translate user experience into 'user-friendly' products; these products, services and interfaces follow methodologies developed and adapted from other disciplines than those of art and design. Thus hi-tech research literature is based on experience theories that integrate principles from social psychology and computer science in order to devise new user-led methodologies for user-product interactions. In order to understand types of user experience from design discipline readings, I have compared relevant aspects from hi-tech participatory design (Pelle Ehn, Morten Kyng, Susanne Bodker, Bloomberg, J. L., Henderson, A.) with product development (Kees Overbeeke, Jakub Wejchert, Stephan Wensveen) to include design historian Victor Margolin) and interaction design (Lauralee Alben, Jodi Forlizzi, Shannon Ford, Bilge Mutlu, Katja Battarbee). These comparisons aim to distinguish the types of user experience specific to a poetic design category: user-product interactions, involving both physical embodiments and models of use, providing an understanding on how experience informs new aspects and objects in design. The generative, evaluative tools and methods of 'experience-driven' hi-tech and product designs are useful in this study as comparative views on how user experience is understood in a poetic design practice. In addition, notions like interaction, process, participation and context from hi-tech design can be adapted to design poetics as criteria for making, testing and evaluation. In this view, the testing method used in this study (see chapter 1, page 37-43) was used as a model that can be applied within the design process to generate and evaluate user-object interactions and experience. As such, the prototypes used in the testing intended to support a series of scenarios of experience by creating activities based on interaction.

The routine interactions of everyday between people and objects take place on many levels. One level is that of direct response to an object's properties - on a physical plane the interaction is down to shape, colour, texture strength, flexibility. On a social level (as described above) objects are used within cultural practices that direct and specify their uses. In this capacity, objects are located within cultural parameters of traditions, rituals, and in specific times and spaces. Whilst circulating within the grid of a culture, objects become part of discourses and classifications; it is through these different modes of interaction that people explore the properties of material objects. Furthermore, a product incorporates many design aspects and functions (interaction, performance, adaptability and usability that contribute to the form and nature of user experience.[cxiv] As Donald Norman (2004) has pointed out, "a product's function specifies what activities it supports, what it is meant to do – if the *functions* are inadequate or of no interest, the product is of little value"[cxv]. The performance and usability of products result from overlapped layers of functionality that correspond to different elements of perception which relate, in their turn, to levels of feeling, user emotion and cognition.

Donald Norman's categorization of products illustrates three different aspects of design that refer to visceral, behavioural and reflective layers of user experience. The initial impact of a product (its form, 'touch and feel') resonates to the visceral layer of experience and consists of first impressions and perceptions, affects and appearances. The materiality of objects, their physical form, construction or configuration - are all qualities present on a pre-verbal and pre-semiotic level. Being in proportion with the human scale and referring to sensory experience, material forms posses (in their visual and tactile vocabulary) eloquence similar to that of language. Design theorist Richard Buchanan noted that all users perceive and admire elegance in form in the same way they recognised it in speech or writing as a recognisable experience. Designer Eva Zeisel notes that "…indeed, beauty is only skin-deep, but is only the skin that one sees. The surface is what informs us about the objects shape, texture, etc."[cxvi]

The behavioural layer of a product relates to the effectiveness and the manner of use, and takes into account different degrees of experiencing the product; it also takes into account user ergonomic requirements. The visceral and behavioural levels are, according to Norman, pre-thought (without interpretation); the interpretation and understanding of products depend on the reflective layer of a product. Of the three levels, the reflective one varies with the culture, experience, education, and individual differences; it includes self-image, personal satisfaction, memories, etc. and these contribute to product meanings.[cxvii] It depends on users taste,

environment (surroundings, situation, sociality and use); and time (represented by ongoing historical changes). These layers incorporated in different degrees into all kinds of products and objects determine experiences that involve all three characteristics in different proportions, as products are rarely designed on a single level. As such, the concomitant presence of visceral, behavioural and reflective elements in products accounts for both their emotional and cognitive content.[cxviii] For the visceral, behavioural and reflective characteristics to be encompassed into a product the designer must know its users for whom the product is intended. As Norman observes, a product's appearance "should match its usage and audience" and should be appropriate to 'the location, and the purpose'[cxix]. Users' diverse responses to products derive from their private experiences and this shows that each of the three levels (visceral, behavioural, and reflective) involved in their design plays a part in shaping user experience; each level also requires a different approach in the design of products. These observations reflect different aspects of human experience as connected to Norman's classifications of product design: visceral, behavioural and reflective. The classifications of experience in hi-tech and product design based on models of user experience consider experience as the user's subjective reaction or response.

The understanding of different types of experience has been supported by human-related disciplines who have built their discourses on John Dewey's (1934) theory of experience. John Dewey's theoretical model of experience was crucial in this study on design poetics because his view on how people engage with products and environments is central to the analysis of user-object relationship and still valid today. Dewey's views on experience, its nature, qualities, and its connection to emotion has influenced considerably design research and is considered to be the base for developing a designer's understanding of qualitative aspects of experience.

In Dewey's view, experience is a totality of factors "engaging the self in a relationship with an object in a situation, and has two major components, the object that is being experienced (event, artefact, environment) and the 'experiencer'[cxx]. In Dewey's theory, the experiencer (user or participant) and what is experienced (object or artefact, event, environment or a combination of these) both constitute the experience and its quality. Dewey also noted that a singular experience is made up of an infinite amount of smaller experiences that relate to contexts, people, and other products, and his view corresponds to that of Tim Dant and Arjun Appadurai from material culture (see above). Furthermore, relevant to design practice is that experiences act as undivided, continuous interactions and transactions between human beings and their environment (see Mihalyi Csikszentmihalyi's concept of 'flow', Chapter 4, page 100). In so doing, they change the user and sometimes the context of the experience as a result.

What is pertinent for a poetic design is that users contribute to a new experience with their prior experiences, as well as their emotions and feelings, values, and cognitive models for understanding, seeing and interpreting[cxxi]. In this view, the testing sessions developed during the first part of the research (see chapter 1, page 37-43) looked at users and prototypes with the aim of discerning relevant information on user experience as it relates to design. The testing outcomes are samples of work that serve as expressions of prototype ideas for further development. For example, in the first testing session, the bowls were carefully wrapped in layers of very fine paper, so that the users had the pleasure and curiosity of un-wrapping the objects and discover their shapes; this elicited a simple but effective emotional response from the user. In addition, the feeling of touch and balance, of thickness, weight, combined with finesse and fragility added to the elegance and pleasure in the handling of the bowls. Such qualities are at play with the sensory perceptions of the users, implying a changing of sensibility. On the basis of Dewey's theory, experience has been classified according to many criteria depending on how the object shapes the nature of experience; for instance, an experience with a product can become predominantly practical, emotional, aesthetic or intellectually-based. In an effort to pre-design user experience, product design theorists Paul Hekkert and Pieter Desmet (2007) proposed three levels of product experience: aesthetic pleasure (experience), indicating the degree to which user senses are gratified; attribution (experience) of meaning, translating the meanings attached to the product; and emotional response (experience) which sums up the feelings elicited by the user-product interaction. Although the Hekkert-Desmet classification of experience is pragmatic and to some degree misrepresented, it shows the layers of user perception.

In general any experience integrates a set of aspects, perceptions and affects in a singular form, and as a consequence, people impart different meanings on particular products. For example, designer Rachel Wingfield's participatory designs create a series of experience-based objects that modify user perception: Wingfield and Equator's collaborative project 'History Table Cloth' uses electroluminescent (inks) technology; the table cloth reacts to the temperature of a teapot placed on its surface and thus measures the ritualistic tea time users spend together (*Fig.24*). The piece is based predominantly on the reflective and behavioural level of user-product interaction; by measuring the time the teapot sits on its surface and thus user interaction, it favours emotional and aesthetic notions over practical elements of design. In the same manner, 'Walls with Ears', also by Wingfield, is a wallpaper structure that changes in appearance as a result of user interaction (*Fig.24*). The electro-sensitive texture of the wall-paper reacts to sound and modifies in direct proportion with the emotional levels evoked in user conversations; this responsive object highlights

the reflective and emotional aspects of interaction. Donald Norman (2004) noted that the emotional connection with a product is determined by the nature of interaction, experience and behaviour. In this case, reflective design aims to create long-term relations, and is based on the feeling of satisfaction produced by owing, displaying, and using a product:

> Emotional feelings take time to develop: they come from sustained interaction. What do people love and cherish, despise and detest? Surface appearance and behavioural utility play relatively minor roles. Instead, what matters is the history of interaction, the associations that people have with the objects, and the memories they evoke. (Norman, 2004:3-13)

For example, Marije Vogelzang's food design events (Christmas Dinner for Droog Design in 2003 and 2006, *Fig. 7-8*) are based on a history of communal dining - emotionally laden, physically embodied - and become a relationally specific form of social interaction. The performance script involves a combination of elements (including etiquette, specifically-created objects, user participation) in a framed structure which has an 'acted out' quality linked to formality, symbol and associations between sacred and secular order. Within this scenario Vogelzang creates interrelations between the experience of consuming food, objects and users, and thus the value of aesthetic experience is reinforced. The act of play creates an emotional frame which animates the sociality of their designed events; whilst their performance engages participants in an experiential stream of behaviour. Like in the case of the 'Do create' and Wingfield's event-products, objects are invested with personal and emotional significance; and the focus is on user behaviour and the product-user interaction. The example above highlights that experience depends on user emotion, as emotions reflect the user's personal experiences, associations, and memories. And that user experience is determined in a large proportion by the nature and quality of user-product interaction and by a history of use. Although types of experience are classified in different categories, their different qualities are overlapped when an object is used.

Another relevant example here is designer-artist Julie Cook's body-related designs who address different layers of experience simultaneously: Cook creates pieces as alternative therapeutic solutions for patients afflicted physically or psychically. For example, the 'Unilateral Body Bumper' (2005) is made of cotton pillowcases, blanket pads and knotted quilting and this object guards against 'crushes, knocks and blows to the body', thereby minimizing risk of bruising (*Fig. 26*); in this role the piece is designed to prevent 'danger and loss' of a poetic (metaphoric) kind. Most of Cook's body-products are made from materials associated to comfort: cotton duvets with duck

feathers, pillows, and bandage-like silk supportive tapes. One of the 'Asentamiento' series for example aims to take the form of an 'introspective dress' tied at the neck with a weighted base to maintain stillness: containment is provided as the feathers settle to a place of peace (*Fig. 27*). Cook has instructions of use for every 'product': 'position to side of the body and tie on the opposite shoulder'; 'for additional forearm protection use secret reverse pockets'. For the 'Zapateado Injured Soles' (2006) – she made cradle-like pieces out of calico and hospital blanket with darned toes and button tap – to provide for stressed-related damage (*Fig. 26*). When folded, they become cast shoes for injured or affected soles; when standing the heel inserts are activated and increase neuro-sensory perception. So Cook's designs deal with sensory needs of the body and involve the emotional and expressive elements of experience. The examples above show how design solutions refer to applications beyond the pure physical kind. As described above (see pages 51-52), designers Noam Toran and Ingrid Hora follow a similar experiential approach by transforming a series of contexts, needs, habits, rituals and human motivations into emotional interactions; these act as vehicles or carriers for individual stories. These therapeutic objects enable the expression and release of emotions, embodying spiritual and physical comfort, allowing time for healing.

If purely practical experiences propose a series of concrete actions with an anticipated final outcome, requiring a different kind of user participation, emotional experiences are subjective, expressing personal attachments to specific object qualities.[cxxii] The emotional content of a product is also associated to aesthetics (emotion is often linked with beauty), because affect is connected to value judgements[cxxiii]. The aesthetic component of an object fulfils a need that cannot be measured; in Dewey's opinion, the origin of the aesthetic experience is in the appreciation of common experiences inherent to everyday life. Pierre Bourdieu made a relevant parallel between the taste of food and that of aesthetic experience, commenting that 'good taste' is constantly changing in response to changes in the field of cultural production. Like most aesthetic experiences, intellectual experiences involve the interpretation of signs and symbols: the perception of aesthetic qualities in a product for example, is not based entirely on reason or knowledge – as it requires an immediate emotional response.[cxxiv]

Whether practical, emotional, aesthetic or intellectual, what is relevant for a poetic type of design is that these basic types of experience described by Dewey depend on a number of interactions and emotions that often operate behavioural changes in the experiencer.[cxxv] They emphasise events, performances and behaviours, proposing an investigative, non-conventional approach and alternative modes of exchange for commodified objects.

Testing Experiences

Although the classifications described here are theoretical, the examples and categories mentioned above contribute to an understanding of user experience, and reflect how experience changes the user. As design theorist Jodi Forlizzi put it, the classification of experience offers an understanding of the "mechanisms for creating it, together with the interactive and expressive behaviours that modulate experience"[cxxvi]. The variety of factors and components that make-up experiences show the complexity of human experience; and that the different characteristics that compose an experience can be adapted to design processes, materials, and forms. Depending on the type of user-product interaction they support, experience theories can generate product-centred, user-centred or interaction-centred design processes – and these are valuable to the development of a whole register of interactions and experiences for a poetic design.

On the basis of intellectual, practical and emotional experience, interactions with objects support all practices of living whereby the object is absorbed in the practices performed by the user. What is relevant for a poetic design is that experiences contribute to the various object meanings and these evolve over time as an expression of the relationship between user, object and context.[cxxvii] The interaction-centred products discussed above – Wingfield's 'History Tablecloth' and 'Walls with Ears', Vogelzang's food events, as well as KesselsKrammer-Droog 'do create' – differ from the human-centred functionalist industrial design based on functional improvement. Because they are designed to evolve a varied register of user experience and because they experiment with the biography and history of material things I shall assign them to a design poetics where user-product interactions take place in a context of use, and are shaped by social, cultural and behavioural patterns. As such, a poetic design sees objects embodied in people's domestic practices as opposed to the hi-tech or industrial product design functionality.

The overview on types of experience suggests that satisfying encounters and engaging experiences are the ones that are most valuable to users. In order to relate user-product interactions to experience, design theorists have applied cognition science to classify interactions in fluent, cognitive or expressive.[*cxxviii*] For example, *fluent interactions* are automatic and learned, and focus on the practical nature of activity (the coffee making ritual) and generate strictly functional products. In comparison, *cognitive interactions* are based on product semantics and on the user's previous experience; whilst *expressive interactions* help the user to reform a relationship with a product by challenging user behaviour. On a cognitive level, experience results from understanding the meaning and sense of products, how they relate to their contexts of use and to

people's understanding of their own practice. Design theorist Klaus Krippendorff maintains that the layer of cognition on which user experience and interaction are based "… renders things understandable, meaningful, transparent … and usable"; and it centres users in their known experiential world.[cxxix]

Meaning and sense are two distinct parts of experiencing things: a product makes sense when it fits in a particular context; whilst its meaning enables a user to see and anticipate its possible contexts of use. When the object becomes used, the surplus of meaning is created by the user. One could say that meanings are affordances as perceived by a user before they have been checked out in practice. The relationship between meaning and sense enables all everyday patterns of practice.[cxxx] As such, most of the meanings relating to most of the artefacts are attributed more by context and use than by the physical nature and construction of an object. For example, anyone eating from a plate or drinking from a cup will be aware of two simultaneous levels of meaning: of the objects' intended purpose (functionality – the proper function, see endnote 42, page 26); and that these objects belong to a certain class of utilitarian objects (derivative functions, see endnote 42 page 26) circulating in a certain cultural milieu. The fluent, cognitive and expressive types of interaction resonate with the three levels of design suggested by Norman: visceral (appearance driven), behavioral (expectation driven), and reflective (intellectually driven); and show that experience and interaction are based on biology, psychology, society and culture.

In order to test these aspects of experience and interaction with objects, the second test (see chapter 1, page 42) conducted for this research has been developed with a tentative number of twelve users. The test-pieces (the same three versions of bowl prototypes used in the first test) were packed in boxes and given to users with no instructions for use. The test participants are asked to 'make use' or 'make do' (as in de Certeau) - to adapt creatively a set of objects they have not experienced / used before. In other words, the second test proposed participants to create their own uses for the same type of objects explored in the first test. As discussed in chapter one, in the first test the prototypes have been used in a pre-set, staged (given) context of activity which influenced the handling of the objects. Because the subjects of the second test did not participate in the first test (therefore they have not been introduced to the objects in a given scenario of use), they have found different contexts for the use of the prototypes. The reason for the second test has risen with the observations that followed the first testing: most of the participants in the first test said at the end of the event that: "Now I know how to use them" referring to the prototypes. On the contrary, upon receiving the same prototypes the participants in the second test (not present in the

first) enquired what the objects would be best to be used for. Thus the second test is a contrast for the first: by asking un-informed ('un-experienced') participants to use the objects in their own way (i.e. not having introduced them within a scenario of use), they are assumed to be creating their own context of uses and to derive their own activities and meanings. Thus the first test demonstrates a communal, social interaction in which objects have become part of a participatory experience. Both tests illustrate in different ways the theory of domestication: that it takes place in different phases of adoption and that objects need to be fitted into pre-existing object-human relationships. It can be argued that the idea of reciprocal exchange is essential (see chapter 1, pages 37-38): the process of 'domestication' does not suggest one-sided control, but rather entails a state of becoming affected, as the term refers to a learning process whereby things and people reciprocally influence each other[cxxxi]. As Jean Baudrillard noted earlier, people and objects operate on a two-sided 'servitude'.

In this case, *the testing* procedure was operational in illustrating how objects were used, to observe what practices they entered or supported and how they influenced these practices; it reflected the psychological, social and material sphere of user needs.

The uses to which a product is subjected during its life-span are impossible to predict until it is used in a concrete context or situation rather than the laboratory; by observing user-prototype interactions, testing aimed to analyse the interaction between products and users in a given context. The comments on experience and interaction show that user experience is a key element in design: users' involvement in testing is critical both because users are the experts in the practices supported by objects and because users creating new practices in response to new forms and activities (de Certeau's practices of everyday). In a testing scenario, experience can be evaluated in the way a prototype 'feels' in the users' hands (the visceral level), how well they understand the ways in which it can 'work' (the behavioural level); how they feel about it while they're using it, and how it serves its purpose, fitting into the entire context in which they are using it. Thus, the prototype-testing aimed to monitor models of interaction, user behaviour in a designed scenario; it served as a comparative method for evolving ideas for the form and performance of the prototypes. It can be observed that these issues are relevant in understanding how user experience can be modelled in a poetic design approach.

Another aspect of testing suggested by HCI designers (Blomberg and Henderson, 1990 and Ehn and Kyng,1988) asserts that by presenting design ideas to users in prototype form as testing

material, users begin to get a sense of what it would be like to use the objects in their own context[cxxxii]. Most product design theories based on experience involve the user in the design process at some stage in order to create a valid product. Although sourced from product and HCI design practices, these user-centred models are useful in bridging the gap between designer and user, thus assisting designers in creating products based on experience (chapter 1 pointed out the gap between designer, maker and user, pages 36-37). This experiential design approach can be illustrated in a series of examples that belong to the poetic kind: for instance, the Interaction Project at the Royal College of Art (RCA) and Equator Project operate with design ideas based on a series of probes for prospective users. The probes record different forms of user experience, showing how objects can be generated and integrated in the context of peoples' activities. These testing probes record especially the behavioural and reflective levels of users' experiences and prove that user-object interactions are related to their context of use: for example, the probes include a dream recorder, a glass for listening to sounds around the home, a photogram device for taking images (*Fig. 28*).

Commenting on these methods of research, product designer and theorist William Gaver of the Interaction Project (RCA, 2004) says that in addressing the users, the designer in fact addresses the user's life – and as such, modalities of being, using and doing things. Their project approach shows that human-centred notions of design involve inventing ways of supporting everyday people doing everyday things. Although they make use of technology, both design agencies (Interaction Project, RCA and Equator Project) create series of objects based on user-object interactions in users' own environment, requiring physical input form the user when distributed in the home.[cxxxiii] One of these devices is the 'Key Table' (Interaction Project, RCA, *Fig. 30*) with a sensitive surface responsive to people's input: when users throw their keys or empty the contents of their pockets onto it (an emotional release), the table uses their transient weight to trigger the swing of framed pictures off-centre. This mechanism transforms a negative emotion into a positive experience by measuring user gestures and interaction. In a similar manner, the 'Drift Table' (*Fig. 30*) presents under its top-surface a sequence of family images collected by the user himself; whilst the 'Video Window' provides a continuous film of images recorded from the user's surroundings on a TV screen (*Fig. 31*). Like Wingfield's 'History Tablecloth', the 'Key Table' the 'Drift Table' were designed to encourage interaction with objects and are based on user perceptions and response. They connect with the user in a tangible way and trigger reflection, curiosity and play – which are present but undervalued aspects of life at home.

In these cases, design thinking evolves both in response to initial design ideas and in relation to user response and experience. To this end, poetic designers become concerned with designing product dialogues, with engaging people in user-product interactions[cxxxiv]. Understanding the experiential and emotional aspects of products enables designers to change the behavioural and even social aspects of interaction. The ways in which users are involved is critical to the appropriation of any designed object; thus designers need to understand the users, products and contexts and the nature of their interaction. It can be concluded that designers could conceive and create types of experiences by considering experience components and qualities and possible user-product interactions, as experience includes feeling, doing, handling and perceiving.

The review on these different aspects of experience illustrates a series of significant factors that can be reconsidered and reinterpreted in contemporary design practice. What is relevant for design poetics is that user-centred models are directed to the understanding of the users and are based on the analysis of people's actions and aspects of experience. The varied qualities and elements of human experience, the issues that affect it and constitute it provide directions for a design testing methodology. Designers need to understand the users, the contexts, and the nature of their interaction so that they can take an active role in making decisions on the relationships between the components of a user-product interaction.[cxxxv] The key point of this experiential theory is that a poetic design process needs to base its approach on some level of user experience, and therefore categories of experience are a starting point in a process of design thinking. The nature of interaction between people and products and the experiences that result are therefore central to both designers and researchers in understanding all aspects of experiencing a product: physical, sensual, cognitive, emotional, and aesthetic, expressive, and social and their combined contexts of use. By collecting user experiences and embodying them as a series of physical experiences and interactions, designers can create beneficial products and experiences. Experiences can thus be transformed into products that carry personal and social value, relating to aesthetic enjoyment (what Pierre Bourdieu called 'simple delight').

Whilst conventional product design has been directed towards ease of use, comfort and efficiency, a user-product interaction leads to a 'product experience' to include the associations and memories it activates, the feelings and emotions it elicits, and the evaluative judgments it brings about[cxxxvi]. As such, design poetics can be considered in terms of user interactions that involve new models of use and these inform the design of new products. Thus, the contemporary world of design might be characterised as the production of designed experiences.

Chapter 3

OBJECTS and PERFORMANCE

'Manners maketh man'

William of Wykeham, Winchester and New College, Oxford

Drawing on a series of sources and ideas from material culture and design studies, the previous chapters conveyed that by engaging with culture at large, mundane objects function as mediators of social relationships and as bearers of meaning within a culture. The mediatory capacity of objects is representative for the relationships between people and culture, and translates into various individual and social experiences. The various forms of interaction between people and artefacts take place on many levels beyond the physical, to include the symbolic and metaphoric use of objects.

Material culture studies (Tim Dant, Judy Attfield, Arjun Appadurai) texts have shown that the consumption of goods takes a variety of forms that reflect the social role of objects: they stand for lifestyles, status and identity (as Thorstein Veblen and Pierre Bourdieu indicate); as bearers of aesthetic value and active vehicles of meaning or as symbols of cultural knowledge (Tim Dant, Judy Attfield) and components of ritual (as suggested by Arjun Appadurai and Jean Baudrillard). An increasing attention to the use of objects within processes of consumption is reflected in material culture texts, as new design practices situate their objects in a large social network; but do objects embody symbolic notions or notions of functionality and aesthetics by themselves, or are they best understood through the interactive uses and embedded practices developed and evolved by their consumers/users? How do objects derive and accumulate meaning when bound to the symbolic activities, occupations and systems of value created by their 'consumers'? Are user practices in fact the ultimate end-product of a design process?

As Arjun Appadurai (1982) noted, the identity of objects is produced by "the context in which the object, product or artefact is actually moving" – thus the cultural meaning of everyday objects is complete by considering all aspects relating to the object, its production, consumption, mediation, discourse and everyday handling.[cxxxvii] Appadurai (ibid.) discusses the circulation of objects within a network of sending and receiving messages; and Tim Dant (1999) suggests that objects "call out" for responses, inviting people to use them and through their interactions 'quasi-social relationships' are developed[cxxxviii]. Whether in the form of goods, or designed activities, everyday objects are active agents performing in different capacities: as end-products of processes of production, as commodities within consumption processes; as cultural signifiers, representing the culture that created them (at one end) and the everyday practices and activities of their users (at the other end). In their turn, user activities (reflecting the adaptation and adoption of culture) illustrate how objects circulate within everyday practices of living and become permeable points of access for cultural practice.

This part of the study aims to introduce the concepts of performance and performative because they refer to the quality of the transactions between people and things as human action is reconstructed from the dynamic interactions with the material world. As such, I considered these concepts as possible evaluative criteria to comment on aspects of user-object interaction as it relates to design poetics. Considering that users and objects are defined by the ways in which they perform in everyday activities, I was interested in performance as a form of observation and evaluation for the object-user binary. As the object of study of different disciplines (anthropology, social science or psychology) performance theory provides relevant insights in reference to people and their doings. Anthropologists interested in cultural performance (Bambi Schieffelin, Lucy Suchman, 1987) consider performance as a simple practice whilst sociologists recently considered performance as a (social) form of interaction[cxxxix]. It is this latter view that I wanted to adopt for design thinking. In translating forms of interaction, user performance and product performance concepts are relevant for understanding both the human subjects and designed objects that belong to design poetics. As de Certeau has shown, user practices are composed of ways of performing ('doing things', 'making do'): people use objects in creative ways, by adapting and transforming them and practicing an art of doing.

Throughout the text, the use of the term 'performative' is based on J.L. Austin's (1962) meaning of performative language – where utterances 'exist as acts in themselves'[cxl], in Austin's words, as performative[cxli]. As language anthropologist Richard van Oort (1997) observed, performative utterances 'bring a state of affairs into existence'. As such, he says, 'The performative is therefore, in the most rigorous sense, *an act* and not a representation of something else'[cxlii]. Relevant to the understanding of the term 'performative' and its appropriation to a design context is Michel de Certeau's comparison of use with the speech act which is, "… a use of language and an operation performed on it" (see Austin above). Further on, de Certeau explains the transformations users operate on language as a parallel to the practices of everyday: "Starting with the language imposed upon us (the system of production), we construct our own sentences (acts of everyday life), thereby re-appropriating for ourselves through these clandestine microbricolages, the last word in the productive chain"[cxliii]. Following de Certeau's parallel, performance is "… affecting the appropriation, or re-appropriation, (of language) by its speaker".

The concept of performance and its use in this text was prompted by the fact that in product and hi-tech design literature the quality of any product depends and is judged on how the object or product 'performs'; if *it does* what is designed to do, it fulfils its function.[cxliv] Greek philosopher Aristotle

believed that the 'goodness' of an object can be judged on how well it performs its function, in respect of the sort of thing it is, if it is a highly functioning one of its kind. Interestingly, function is defined in the Penguin Concise English Dictionary as 'the *activity* proper to a thing'. Thus *performance* measures how well the product embody its functions (if the performance is inadequate, the product fails); and *usability* refers to the ease with which the user can manipulate the product in order to perform well. As objects are designed in relation to the anthropometrics, anatomical, physiological and psychological characteristics of the users, the performance of the product depends on the ability of user performance. In other words, the 'performance' of a product is interrelated to the 'performance' (activities, practices, operations) of the user[cxlv]. In relation to the product 'performance' ('the activity proper to a thing') I intend to consider the ways in which the end-user 'performs' as relevant in creating practices of use, part of the practices of everyday life. In this sense, I suggest to view consumption as a practice of use relaying on the performance of user's everyday activities.

If performance is characterised by *acts* or *styles*, *user performance* is understood here as the way in which an activity is rendered: its execution, interpretation, realisation or rendition (the act of doing something using knowledge and skill). In relation to a *product, performance* refers to the way in which it functions (the process or manner of operating): the behaviour, functioning and operation (see glossary). It is the intention of this part of the study to explore if *user performance* (ways of doing things, activities and experiences) and *product performance* contribute to the definition of a poetic design and its objects. In aiming to observe user performance, the examples presented in this section intend to assess user experience and user-product interactions. As cultural analyst Mieke Bal's (1997) asserted, the meaning of a work does not lie in an object by itself but rather happens in the specific acts (performances) that take place in the work's field.[cxlvi] The objects designed by Noam Toran, Marije Vogelzang, Ingrid Hora, KesselsKramer, or Rachel Wingfield, to mention but a few, engage the user in the subtle play of performative scenarios. Subverting the idea of pure functionality - in fact extending it further - their products invite consumers to stage a world of their own. Their poetic designs become vehicles that explore and exploit key characteristics of everyday practice, provoking user participation; they evidence and comment in particular on the various domestic acts that users perform daily, highlighting that the form these acts take is directly related to the performance of objects. What is, in this case, the end-product of the user-object interaction? Can it be assumed that such designs evolve into unconventional forms of living and consumption?

A poetics of Uses: User Performance

As discussed in the previous chapters, in the analysis of a poetic design, the focus transfers from objects towards users and the experiences formed by their interaction. Linguistic anthropologist Bambi Schieffelin (1997) and sociologist Ervin Goffman (1959) observed that there is something fundamentally performative about the human being in the world, and that performance is composed of a set of actions, dealing with the 'habits of the body more than structures of symbols, with the social construction of reality rather than its representation.'[cxlvii] Goffman's dramaturgically oriented approach explains human interaction and behaviour, showing that far from being passive, consumers engage in a set of processes (what de Certeau's called the 'quiet', 'quasi-invisible' background activities comparable to an everyday 'clandestine production'). Also Roger Silverstone's four stages of domestication claim the active participation of the user in adapting objects to their own ways of 'making do'. Although many design theories assume that objects are passive end-results of the design process, material culture texts suggests that objects are active in establishing 'quasi-social relationships' with their users.

Thus, central to the analysis of user performance and how this may contribute to an understanding of poetics in design is Michel de Certeau's (1984) theory on the practice of everyday life, understood as a 'productive' form of consumption. In 'L'invention du quotidien, Arts de faire', De Certeau and Luce Giard show that users' creativity is revealed in adopting mass-production, cultural practices and social constraints to individual lifestyles, thus practicing 'an art of living'. These acts of adaptation are inventive activities of appropriation realized by individual practitioners: "…users make innumerable and infinitesimal transformations of and within the dominant cultural economy in order to adopt it to their own interests and their own rules."[cxlviii] Design theorist Jane Fulton-Suri pointed out that understanding users' intuitive interpretations are a significant source of insight for designers.

My appropriation of de Certeau's term of consumption here is that this secondary user production is based on the *performance* of everyday activities (moments of creative engagement), corresponding to the processes of manipulation developed by users who re-appropriate objects into their own practices of living. Thus everyday practice is a sum of activities *performed* by users (disguised as 'consumers'), that make-up 'the obscure background of social activity'. Consumption, de Certeau says, "does not manifest itself through its own products, but rather through its ways of using the products". Following de Certeau's significant identification of *use* with *consumption*, user activities and performance are interpreted in this study as a form of 'consumption', a "… production hidden in

the process of its utilization" (see Introduction, pages 15-6.)[cxlix] As de Certeau comments, the various *forms of use* developed by users must be analysed in the multitude of their differences and formalities of practice; and their performance ('making do') must be considered beyond its products (what is used).

De Certeau maintained that everyday practices bring to light the models of action that attest the fact that consuming is not a 'using-up' of products, but a form of engagement with them, manifested in *the ways* of using the products. De Certeau's social history of 'making do', composed of 'subtle tactics of resistance and private practices that make living a subversive art' renders objects and everyday things as unconsumed by consumer society. Noam Toran, Marije Vogelzang, Ingrid Hora, KesselsKramer, or Rachel Wingfield or Droog designs propose precisely the inventive form of engagement with their designs; they perform an action, are part of an act, and as such, engage users into a meaningful activity.

An example that illustrates in practice this theory is Marije Vogelzang's 'Christmas Dinner Party' for Droog, 2003 and 2006 *(Fig. 7-8)* – a scenario based on a sharing and connecting experience where users are participants in a performance in which they are both actors and audience. A tablecloth unites the diners from ceiling down to the table, so they cannot see each other's clothes and thus become equal in status. The dishes served become complete when diners begin to exchange and share the food – so that food-consumption becomes a celebration; and objects are elevated to an aesthetic status by changing roles: their performative function as social mediator is revealed in user interaction. Far from filling a minimal, instrumental role (as in philosopher Martin Heidegger's view), in this example the use-objects are more than mere tools: they allow participants to re-create forms of social interaction. The stages involved in Vogelzang food settings slows down of the supper event, and focuses the attention of the users towards the meal, the ritual, and the company around the table. The performative character of the event creates networks between the experience of consuming food, the objects and the users, and thus the value of quality and aesthetic experience over the efficiency of objects is reinforced. Thus, through acts of performance, domestic rituals are transformed into self-conscious activities, celebrating significant stages in the sequence of everyday life routine; whilst objects are more than things to look at or to possess - they become the measure of a poetic experience that reinforces their meaning. Vogelzang's example shows that the transition from 'eating' to 'dining' (starting in Renaissance Europe) not only meant performing the act of eating with a designated instrument rather than the hands but it changed the modality of use of tools and the customs; it introduced a series of rules and standards of behaviour and etiquette

for diners[cl]. Indeed, as Petroski put it, "A knife and a fork are not merely utensils for eating. They are utensils for eating in a society in which eating is done with a knife and a fork."[cli] This fact demonstrates that an action comprises not only what is done, but how: the two are indissociable in the course of the action's performance. In comparing the taste for the most refined objects to the elementary taste for the flavours of food, Pierre Bourdieu (1984) spoke of "…the antithesis between quantity and quality, substance and form, corresponding to the opposition between the taste of necessity (which favours the most 'filling' and the most economical foods) and the taste of liberty or luxury (which shifts the emphasis to the manner – of presenting, serving, eating – [that] tends to use stylised forms to deny function)".

In composing scenarios of 'consuming' or of use, such as those created by Vogelzang (*Fig. 7,8,9,10*) or those of Rachel Wingfield ('History Tablecloth', *Fig.24*) the designers give equal attention to users, objects and food in terms of physicality, but this specific physicality acquires an inherent emotional quality, reinforcing the importance these objects have in everyday life. Thus, the role playing, the set of rules proposed to the user are given room for manipulation: the diners around the table are expected to perform new manners and adopt a different etiquette, but these are reversed, played with, in order to create new rules. As critic Aaron Betsky (2007) points out, in using an object created by Droog design - for example Gijs Bakker's 'Knitted Maria' Coffeepot (1997) or Hella Jongerius' 1998 China 'B Set' or the 'Embroider Tablecloth' plates *(Fig. 33-34)* - a user shows, besides what plate to use or how to hold a fork that he or she knows that '*is acting* at holding the fork'. In recreating scenarios of use design poetics addresses de Certeau's large-scale anonymous creativity of ordinary people; proposing a series of ways of 'operating' (doing things) leading to 'styles' of action (performances) diversified by the time, place and frame (social context) of the activities.[cliii] Thus consumption becomes a lexicon of practice,[cliii] the postproduction of users.

Following rules and ways of operating, objects enable and contribute to particular ways of handling, becoming equal actors in the performance by materially supporting contemporary practices over traditional ones. Marije Vogelzang food design events illustrate Nicolas Bourriaud's (2002) relational aesthetics, as they deal with the convivial, relational and thus interactive aspects of objects that co-produce models of sociality. Her set supper-performances involve a combination of elements in a framed structure, with an 'acted out' quality based on the relatively formal nature of dining. The sense of performance provides participants with strong emotional experiences; these type of experience allude to Csikszentmihalyi's (1975) concept of 'flow' that facilitates the ritual performance by coordinating and combining multiple stimuli, sensations and messages;

consecutively defying, sacralizing and idealizing simple domestic rituals. The sociality of Vogelzang's staged events illustrates that in the simple act of eating all kind of registers are activated simultaneously (bodies, tools, physical resources) and come together in a designed scenario; it reforms ideas of conviviality, reformulating practices of privacy and publicity. In reusing and restaging objects, the performance of domestic rituals shows an investigative, non-conventional approach to the repertoire of everyday activities. In a similar manner, the first test of the research was set on purpose in semi-darkness and, by way of testing the size, surface and weight of the prototypes - and thus their function, properties, their adaptation and haptic associations - involved a communal, social event that prompted a certain amount of performance from the users (see chapter 1, page 37-43).

The performance of everyday tasks (eating, walking, dressing, sleeping), differs from a culture to another and, as Marcel Mauss (see introduction, page 15) observed it is a craft of the body learnt in time. This craft is dependent of a series of objects and is structured in relation to time, place and type of activity. This correlation between body habits and objects is used by Droog designers Arnout Visser's and Erik Jan Kwakkel's bathroom staged-set *(Fig. 32);* their specific arrangement of things converts the activities and actions involving the body (bathing, eating, elimination) into a pristine, clinical white tile space against which one's actions become highlighted and correlated with each other. In this system a person's use of a roll toilet paper is related to another's use of a soap dish in the same grid - like the use of the right number, order and correct shape of cutlery at a dinner table. Thus the bathroom becomes the supportive space for a well-designed performance.

In a similar way, table manners are the result of the evolution in the use of table utensils in correlation to the habits of the body; for example, forks developed from knifes by the addition of two tines, consequently changing shape and function[cliv]. In the Far East, chopsticks developed about five thousand years ago as extensions of the fingers, involving a different form of performance. As it has been showed in the first chapter, these simple tools evolved in symbiosis with their users, allowing or restricting their performance and their manipulation reflects de Certeau's 'ways of operating' which have their own 'formality and inventiveness that discreetly organise the multiform labour of consumption'. These forms of use represent in fact forms of doing things (ways of walking, reading, producing, speaking) which establishes active relationships between users and objects. In Bourriaud's view, use is 'an act of micropirating', whereby the user of culture deploys its own practices; and, as any artwork, each object becomes "… inhabitable in the manner of a rented apartment"[clv].

It can be argued that the creative adaptation and appropriation of products to newly created models and formalities of (performative) use generate poetic forms of living with things as it activates the poetic quality in the use of simple, mundane things. In performing everyday tasks, objects bear the trace of user activities, they become, as de Certeau poetically put it, "… mark(s) in place of acts, a relic in place of performances: it is only their reminder, the sign of their erasure"[clvi]. Thus, de Certeau and Bourriaud highlight that the practice of everyday life registers the poetics that articulates activities, a poetics of uses, rather than objects. In this exploratory role, useful objects for daily use act as cultural encounters.

A creative set of uses that illustrate innovative, poetic and playful ways of living is represented in the series of participatory objects of 'Do create' project - the collaborative brand between KesselsKramer and Droog Design (1999) created in response to globalisation and uniformity (see chapter 2, pages 56-7). Their designers play with a variation of themes that stage encounters between users and objects. The project is a generator of user activities, but these operate on well-established ways of living with objects embedded within the intricacies of mundane life, in order to evolve inventive engagements and interactions with things. By restaging objects or reusing their qualities and in demanding the participation of the user, anonymous, yet highly stylised products take the identity of the people who buy and use them. In providing thematic activities for their users, the 'do create' collection of products - including 'do frame' by Marti Guixe, 'do hit' by Marijn van der Poll, 'do add' by Jurgen Bey, 'do break' by Frank Tjepkema and Peter der Jagt - invests use-objects with personal and emotional significance (*Fig. 17-19*). Reversing the status of the traditional precious object, all 'do create' products invite particular user interactions, and become prototypes through which designers explore essential characteristics of everyday practice.

Sociologist and anthropologist Bruno Latour noted that interactions are 'experiments of various sorts in which new performances are elicited'[clvii]. Although referring to science and technology in general, Latour's network theory is relevant here in that it defines a human actor (user) or non-human actor (product) activated by their performances: by what they do (see Chapter 4, page 114). By engaging the users in purposeful activities, all 'do create' products cum furniture involve an element of play, a performance, a theatrical involvement in a pre-designed scenario of use.
Thus, user and object become involved in activities that amount to experiential forms of performance: 'do swing' (by Thomas Bernstrand) is a light fixture - a handle-bar shaped lamp - that supports the weight of the user, allowing him to swing *(Fig. 18)*. The piece comes to life when its owner swings from the ceiling. When engaged in this performance, the users of 'do swing'

experience themselves as actors; such an activity, interwoven in the living of everyday turns into a ritual situated outside the ordinary. What is relevant in terms of product and user performance is that in such staged-sets, user actions become significant beyond their physicality: using becomes the acting, a participative role-playing sustained by implements that stage the otherwise communal world of ordinary life.

Another performative-based piece is 'do brake' (by Frank Tjepkema and Peter der Jagt) - a ceramic vase with a layer of latex coating that allows it to crack but not splinter; the vase can be thrown and broken after a bad day, as emotional release. Although the user can break it after purchase, the latex keeps the shards in place in a unique pattern of cracks, holding the memory of the experience *(Fig. 19).* In a similar manner, 'do hit' (by Marijn van der Poll), allows its user to shape a metal cube in the desired seat-shape, permitting a release of nervous energy *(Fig. 17).* The users' and objects' involvement into daily routines amounts to 'quasi-ludic' performances based on user interaction and involvement. In these design scenarios, where the approach has been to produce ideas over usable products, people are always the key component. The playful and experimental interactions illustrate a theory of domestication - an adoption of practices in the domestic milieu - playing fundamental role in the ontology of everyday living. In part-taking in the circle of production*, the consumer* gains a sense of ownership and empowerment; whilst *the objects* surpass the status of commodity, expressing the aesthetic and social knowledge of the culture that went into their production; in turn, a different kind of knowledge is required to consume it appropriately (in other words, a different kind of 'consumption'). Another, similar example is Peter van der Jagt's 'Bottoms up' doorbell which marks, by a theatrical play-scenario, the activity of dinning or announcing one's arrival in a home, a performance in which the user becomes conscious of playing its role (*Fig. 23*). By representing what de Certeau called "… parts of the repertory with which users carry out operations of their own", these type of objects define consumption as a production.[clviii]

These latter examples reflect that the performance of any object is related to that of the users. In this view, Pierre Bourdieu's (1984) observations on everyday rituals of domesticity points out how the forms of objects are translated in forms of manners and thus determines the primacy of form (beauty) over the use function. In shifting the emphasis from object to performance, use and habit the latter products translate common activities (eating, drinking or sleeping) by establishing a different (extra-ordinary) relation to the commonplace. In partaking in the so called 'theatre of objects', these examples mark significant acts in the sequence of routines-performances of everyday life. Acting consecutively on behavioural, visceral, and reflective levels, household objects fulfill functional, metaphoric and emotional needs. Thus the designs evolved by 'do create' operate

on more than one plane, following the kind of 'bisociation' Arthur Koestler spoke of, whereby they make "… quick shifts from one way of seeing situations or performing, to a new way of seeing or performing"[clix] (see introduction, pages 6-7).

Sociologist Theodor Adorno observed in 1954 that the interactions between people and objects reflect the cultural and moral values that define human nature; Bourdieu also saw everyday objects as marks of social and cultural evolution. Thus the analysis of the world of things to which people are exposed gives insights on how people behave: the interaction patterns engendered by design in everyday objects draw attention to (and are reflected in) the consequent movements they demand of their users. Adorno perceived the influence of technology on people's manners and behaviour as a subordination of things to the law of pure functionality, which reduced considerably user experience. In making gestures precise and removing the sense of care and good manners from people's movements, technology was responsible, in Adorno's view, for a loss of finesse in their everyday performance; for example, people's ability to close a door with care, firmly yet quietly and discreetly without slamming.[clx] Adorno's disagreement of products that limit user-product interaction to operation seems to have weight in this discussion especially that in suggesting a surplus of experience with things which cannot be 'consumed' during the moment of use, Adorno implies other forms of interaction[clxi]. It can be said that this surplus is visible, for example in 'do hit', 'do swing', 'do break' or in Marije Vogelzang's pieces ('Go Slow' for Milan Fair, 2003, or 'Christmas Dinner' for Droog, 2006), the relational interaction between people and objects amounts to immaterial uses: an immaterial 'consumption'.

A poetics of Uses: Object Performance

In the first part of this discussion, at the beginning of the chapter, I have highlighted the interrelated performance of user and object. In order to analyse this adaptive - reciprocal relationship, and to understand its osmotic evolution and it's relation to design, I have considered a few examples that highlight the performative character of the product-user relationship. The fact that generally, product design views the bettering of a product as an improvement of its function (chapter 1, page 30) highlights that the development of objects is based on their performance (how well they fit the task). As I have pointed out, their performance is dependent to that of their users, their practices and operations, and thus, their evolution in form and in time is based on this dual and reciprocal adaptability. Although new objects and forms (for furniture or tableware, for example) are based on

existing objects and practices of use, products are made following different traditions, techniques and materials; thus the tools of different cultures evolve into distinct forms and yet serve the same essential functions. But how functional objects serve the practices and rituals they have created and what other forms of practice they evolve by changing their form? Which physical, functional or cultural factors cause the evolution of new artefacts from other artefacts? In other words does the performance of products change the manner of their use and function?

In 'Objects of Desire' professor of architectural history Adrian Forty explains that the variety of products is the result of a direct relationship between design and the ideas of the society in which they are made. Thus, different designers started to perfect artefacts focusing on different aspects of product performance, creating culture-specific objects[clxii]. The diversity of their forms proves that primary needs like eating or sitting evolve in a variety of forms and practices.

As such, object typologies evidence people's multiple ways of using things in performing different activities: there are, for example, chairs designed for every kind of sitting function and food utensils for that enable the performance of eating in good society. A case in point is sociologist Siegfried Giedion's comment on the adjustable chair whose form "… was prompted by the posture of the times… based on relaxation, found in a free, un-posed attitude that can be called neither sitting nor lying"[clxiii]. Similarly, the specialised pieces of silver at the dinner-table enabled the fin-de-ciècle diner to eat an elaborate meal in style and good form; contemporary silverware designs are based on a variation of performance depending on the time, course and social frame of the event.

In order to refer to the performative aspect of the user-product relationship I want to point out here that the majority of daily objects owe their evolution of form both to technological advance but also to a whole history of manners, customs and traditions. Thus classes of objects appear to fulfil classes of activities: every 'heteroclite operation', observed Jean Baudrillard, is supported by a specific utilitarian object; and many objects result from an altering of use. For example, the history of tableware attests that the shape of the fork derives from that of the knife due to the transfer of some of the knife's *functions* onto the fork; this transfer is a result of change in the *performance* of eating certain food in a certain culture and in a certain company. No matter how aesthetically pleasing tableware may look on the table, it had to adapt and perform well in the hand of the user. The concomitant manipulation of the two instruments by both hands ('zigzagging') demanded a skilful performance and was considered as good mannered in most Western countries.[clxiv] As Zeisel (2004) pointedly observed, such tools are often instruments of proper manners rather than strict utility, and their faulty employment exposes social incompetence. These permutations of functions and inter-related performances of tasks determined the fundamental forms (typologies) of the basic

eating tools known today. The numbers, sizes and shapes of table instruments for eating are a direct result of different eating customs and manners and express the user's performance of his actions: any table is set to perform efficiently a great variety of operations that would be required to eat a variety of foods"[clxv]. In this sense, Jean Baudrillard's 'gestural system' allows a relational mediation between objects and users, highlighting the reciprocity of user-object interaction. Referring to the user-object adaptation, Jean Baudrillard (1968) distinguishes a 'traditional gestural system' characterised by physical effort and a 'functional gestural system' characterised by control. The traditional gestural system "…epitomises his [user's] integration into the world, into social structures"; and this integration "is discernible in the beauty – the 'style' of the relationship and its reciprocity"[clxvi]. This assertion leads me to conclude that the design of simple tools such as eating utensils appears to be as much influenced by cultural and social as of technical factors; and that it depends on a double-performance: one of a strictly functional kind, and one of a social-cultural one. In its turn, the evolution of the artefacts influences manners and the performance of social intercourse.[clxvii]

In terms of performance, and in particular in relation to the performance of the user, Marcel Mauss (see habitus, in introduction page 15) considered that peoples' bodies are the first tools that negotiate human needs and activities in the world, and pointed out that the use of functional objects in any culture is learned in childhood. Thus, the manners implied by the use of functional objects have value-laden uses: apart from referring to the way in which something is done, it also alludes to forms of conduct, denoting one's general demeanour and behaviour. In his "History of Manners", the second part of "The Civilizing Process" sociologist Norbert Elias describes the work of manners as 'the theatre of a peculiar ritual', dictating the relational performance of user and tool.[clxviii] These performative acts become embedded in ritual forms organised around formality, symbolism and associations between sacred and secular order. In relation to manners of performance Pierre Bourdieu shows that cultural needs are the product of upbringing and education: "… the importance attached to manners can be understood once it is seen that it is these imponderables of practice which distinguish the different and ranked-modes of cultural acquisition, early or late, scholastic or domestic, and the classes of individuals which they characterise."[clxix] For example, forks spread slowly in England for the utensil was much ridiculed as 'an effeminate piece of finery' and as such the user had to learn the handling of the fork correctly and efficiently (Baudrillard's gestural system based on physical effort, characterised by control).[clxx] Table implements began to be used as a mark of good manners and conduct (according to accepted customs): at the beginning of its use the fork was considered an affectation and as such probably an invention that aristocracy used as a

language to distance itself from the lower classes (Bourdieu pointed out in 'Distinction' that aristocracy eats with due form).

For example, at a time when eating in style was an appreciated performance, the appearance of specialised instruments such as salad forks, asparagus forks, lemon, pickle, or sardine forks each with its tines widened, thickened, sharpened, splayed, barbed, spread, joined, or somehow modified to reduce the faults that other forks exhibited in handling specific foods. Petroski gives a relevant description of the mutual adaptation of user and tool (a saw) by describing their concomitant performance: in making the task possible, both tool and user engage in a "manoeuvre [that] requires contortions, balance … to produce a clean and accurate cut".[clxxi] Thus functional objects become shaped and reshaped through the experiences of their users within the social, cultural, and technological contexts in which they are embedded.[clxxii] In this view, Bourdieu asserts that every area of (cultural) practice tends to transform and stylise primary needs by establishing codes: "…the primacy of form over function, of manner over matter." (see also reference to Maslow's hierarchy of needs, p.14)[clxxiii] As such, the form and size of eating implements is dictated by the performance required in the process of eating, showing demonstrating the reciprocal and adaptive performance between user and utensil.[clxxiv] In this sense, manners represent a stylisation that emphasizes nuances in modalities of use: "Form is first of all a matter of rhythm, which implies expectations, pauses, restraints … It is the expression of a habitus of order; restraint and propriety may not be abdicated."[clxxv]

The aesthetic and social 'disposition' of which Pierre Bourdieu speaks of have a profound impact on the way the utensils can be formed and carry out their functions; in turn, they evolve into their shapes and sizes to 'control' the handling of their users (an adaptation of products to uses and users to products). In this sense, Henry Petroski observed that the eating utensils used daily become an extension of one's hands and thus second-nature by acceptance and custom: changes in flatware and dinnerware have appeared in time with varied dining contexts.[clxxvi] Petroski notices the difference in evolution between the table knife, whose shape has changed with the customs and functions in comparison with the kitchen knife, whose shape stayed much the same throughout time - perhaps because its function remained the same in that it did not involve a social use. This example, which explains the evolution of form for such humble utensils as cutlery, shows that the formal evolution of artefacts has profound influences on how they are used. In relation to manners of use, Petroski observed that the handles of forks and spoons or knives were treated with much more care in the variation of their design than their real functional dimension; in contrast, the diversity of design for hammers focused on their varied functions neglecting the form of their

handles, since the work to be achieved was more important than their appearance. Whilst changing their shape with time, such instruments enhanced or restricted the movements of their use(r). The man-tool relationship is a repetitive task, which becomes routine: with time, users learn to perform the same tasks with skill and this aspect accounts for the fact that most users tend to adapt to and accept the faults of their tools when these are imperfect. When use-objects perform well their functions, users don't notice them: they are well-integrated and adapted in the user's patterns of use. The fact that adaptation is achieved by the mutual performance of product and user is pointed out by Klaus Krippendorff who observed that if traditional design approaches attributed user errors to the psychology of *human performance*, recent design theories explain errors in *product performance* as a mismatch of meanings and affordances.

These simple illustrations of man-tool relationship suggest that the performance of everyday tasks is interrelated to a whole range of practices, rituals and habits formed by adaptation to the objects' affordances and qualities. The changing customs, fashion or habits of eating dictated the manners involved (and invented) in the manipulation of such humble objects as cutlery had to obey the required 'form' of the time, influencing user behaviour and conduct.[clxxvii] As such, these activities involve the user at a behavioural and reflective level by (see chapter 2, pages 61-2) and are highly dependent upon cultural norms. Each of the visceral, behavioural and reflective levels play a critical role in human behaviour, and each have equal importance in the design and use of products, performance being only one part of user experience:

> A product's function specifies what activities it supports, what it is meant to do. Performance is about how well the product does those desired functions – if the performance is inadequate, the product fails. Usability describes the ease with which the user of the product can understand how it works and how to get it to perform. (Norman, 2004:54)

A series of contemporary objects are designed on the basis of this double performance: a good example of virtuosity in performance is the case of glasses produced as small-batch a testing range by Rosenthal Company in Germany: their stems were so thin and elongated, that drinking from them made the user aware of their particular performance. The grace and elegance of the glasses transferred into the gestures and the body-posture of the users. If the form of a simple glass becomes elongated as that of a sophisticated wine glass, the users' ways of handling, their set of actions and behaviour is expressed in the form of handling[clxxviii]. Zeisel (2004) observed how the character of line in every object describes human action, not only that it traces the making process

of the designer, but is also implied in the process of use.[clxxix] Although the stemmed wineglasses display similar functional characteristics as the standard glass, through size, form and material, they express the heightening of social or ceremonial ritual. Such objects fulfil an inner sense of aesthetic by pleasing the eye, or provide ease of use or give a sense of comforting the body; but through elegance, refinement and form they contribute and vary their handling and use: plates or eating utensils could offer the pleasure of touch or sense of balance - elements of play with the audience's senses.

Using the same commentary on the function of everyday objects, Hella Jongerius' deformation of bone china tableware and Gijs Bakker's re-cladding of teapots ('Maria Knotted' Coffee-pot, *Fig. 33*) re-create objects that highlight and add value to common rituals and activities like eating and drinking. Jongerius's 'B Set' (1998) refers to the role these objects have taken in time: they have a history of use restricted to special events or else reduced to the passive display of the china cabinet (*Fig. 33-34*). Also referring to the history of common objects and to the age-old function of most utensils associated with eating and serving food, designer Marije Vogelzang enhances the performance of consuming food, and the ceremonial time of eating in set events like the design of 'Slow' (for Droog at Milan Fair, 2003, *Fig. 10*). Like for 'Christmas Dinner' and 'White Funeral', Vogelzang prepared a scenario of both making and consuming food in traditional ways and the sense of ritual is closely linked with a sense of play and objects are used in an unconventional, whimsical way (see chapter 2, pages 53-4 and 64).[clxxx] Both events paid attention to every detail that composes food handling, emphasizing the careful, elegant handling of things in social intercourse - a harmonious performance. Zeisel observed that designers of the 'functional' tradition "…frequently fail to understand that one function of an object can be its ceremonial use"; this function makes connections between the object, and the life and culture which supported and historically informed its making[clxxxi].

The social use of tableware objects, in particular drinking vessels, has been the source of play on models of handling for craft/designer Kristina Niedderer who has developed a set of six silver glasses with a little suction pad connector attached to them on each side by means of which the glasses can be connected (Silver for Social Occasions – 'Six Cups for Prosecco', 2002). At least three cups have to be connected to build a composite unit with stability and so users need to operate them together (*Fig. 36*). In designing this protocol, Niedderer prompted an inventive use for the objects, a form of use that facilitates interaction and communication between users (a socially-laden performance). Niedderer's drinking vessels comment on the performative characteristics of objects as part of their social, ritualistic or symbolic roles. A similar example that calls for a model of

use is the traditional Italian ellipsoid wooden vessel presenting a lid and a number of spouts around the body inviting a different use on the part of the users: the diners are supposed to pass this vessel round and drink directly from the spouts. Although still a form of drinking, this latter piece creates a protocol which symbolically links the diners; the design of the vessel promoted a common but specific activity, revealing the intrinsic social aspect of the act of drinking. In this example the performative and ritualistic values of the vessel are supporting a performative quality in relation to the actions of the users.

The social context in which an artefact is used has a considerable influence on the variations of its form and performance: Noam Toran's work addresses a series of rituals and habits that establish a different kind of adaptation between user and product. Toran's technology-based products (see chapter 2, page 55) represent solutions for emotionally complex needs: the 'Turbulent Air Hostess Trolley' (part of Desire Management project, 2004), is a trolley with built-in turbulence for a former airline hostess who suffered a panic attack on a flight (*Fig. 15*). Because she is unable to fly, she uses the trolley as a therapeutic device (as a prop) to regain confidence. In this example, the interdependence between object and user highlights the active role of the product in enabling the performance of its user. In such a case, Mihalyi Csikszentmihalyi's concept of 'flow' provides a good description of how the user, being fully engaged in an activity, identifies himself with his performance, as if he and the activity were one.

A similar approach to user-object performance is that created by Rachel Wingfield and Interaction Project (see chapter 2, page 63); they use as starting point people's habits and forms of interaction in order to generate products. Operating at a different level, but requiring the human input, Rachel Wingfield's products are not directly manipulable by users but they are affected by user actions, transforming the user's environment and thus affecting the user in quite subtle ways. Thus the objects are in correspondence with the user, act in interdependence and continuously create or model each-other. This process of adaptation and readjustment explores the human presence, measures user performance and action having a tangible effect on habitat, providing sites for reflection. Like the piece entitled 'Digital Dawn' which reacts to light levels to accord to the waking habits if the user (*Fig. 25*); 'Walls with Ears' (2001) is a sound-reactive wallpaper that comes to life as it reacts to ambient noise levels (*Fig.24*). When the space surrounding the user or when the user himself become louder, the wallpaper becomes brighter. The piece exploits the history of wallpaper as a passive material, representing a decorative surface that contains space, and reverses this role. These latest example illustrate Ervin Goffman's 'dramaturgical approach' on interaction - viewed as a performance shaped by both environment and audience. The user-product interactions

proposed by Toran's and Wingfield's designs affect people's behaviour, their thoughts and emotions.

I thus argue that the products discussed in the examples above are poetic because they enable different readings: they transform the mundane into a ritualised, out of the ordinary experience, a practice to be explored; rather than obeying commonplace routines they propose a change of performance within the domestic set of everyday life. By shifting the emphasis from object to performance, poetic objects assign users active, meaningful roles (as actors). Contrary to the idea of pure functionality, yet extending it further, poetic objects highlight certain rituals in the activities of daily life, amounting to novel but productive ways of conceptualizing and doing things. The interactive mechanisms at the base of the objects, uses and events presented in the late examples surpass the specificity of one culture - their form of use is valid in any culture. As acting props in staged activities, they illustrate closely a creative theory of domestication (see Roger Silverstone in introduction, page 19) - an adoption of practices in the domestic milieu, playing fundamental roles in everyday living.[clxxxii]

In this view, objects are more than things to use or to possess; they become the measure of experiences where the performative aspect of the work is more important than any of the objects on their own. Unlike commodified products, poetic objects emphasise events, performances, and behaviours, proposing alternative modes of exchange, privileging flexible notions of form and retrieving the specificity of the everyday. Poetic designs fit into what Michel de Certeau's book 'L'Invention du quotidian' summarizes: literally the 'invention' of the everyday.[clxxxiii] Poetic objects are proof of the absence of differences between artworks and mere things, of the fact that art can resemble reality (de Certeau's 'arts du faire'). Poetic works enter Nicolas Bourriaud's 'social interstice' that facilitates a variety of relations between art and life: a relational aesthetics which reverts to a de-commodified everyday life based on collaboration, participation and other modes of exchange that re-define the relation between art and life. In this sense, Pierre Bourdieu speaks of the integration of an aesthetic consumption into the world of ordinary consumption: "There is no area of practice in which the aim of ... refining and sublimating primary needs and impulses cannot assert itself, no area in which the stylisation of life, that is, the primacy of forms over function, of manner over matter does not produce the same effects".[clxxxiv] Thus Bourdieu asserts that in order to understand cultural practices, 'culture', in the "… restricted, normative sense of ordinary usage' is brought back into 'culture'' in the anthropological sense …". In this view, it can be said that a design

poetics embodies what Bourdieu called a stylisation of life in the primacy of forms over function, of manner over matter. In this perspective, the work of a design poetics defines a series of tools, objects or implements that consumers can use to stage their own world. The design process becomes a mise-en-scene devised by the designer in collaboration with an audience.[clxxxv]

The role of performance in a design process

From the introduction throughout the previous chapters, I have considered that objects function as referents in production and consumption practices embodying designed activities. By observing certain categories of user practice and products, the discussion on user and product performance focused on categories of objects for domestic use that encourage particular types of interaction between users and products. The 'active' or performative characteristics of everyday objects are activated by the activities performed by users and translate into different forms of interaction [clxxxvi]. Significantly, design considers the relationships between its objects and their users: as such, value can be attached to the ultimate end – to the activities that derive from the objects themselves. By engendering or restricting user actions, objects influence the ways in which people function (perform) in the milieu they organise. I have noted earlier that Tim Dant considered objects to 'stand in' for human relationships, and that their social function is revealed in mediating interactions between users, influencing user behaviour and social communication. In actively partaking in interaction, objects become both material constructions and things to be experienced and interpreted. As such, designers of a poetic design conceive artefacts more than 'subordinated objects'; by producing alternative object and user performance, they change or improve certain kinds of interaction with objects.

In this case the design process becomes an intervention in the everyday practices of living, changing the experience of users' interactions with the environment, rendering things understandable, meaningful and usable. In this scenario, the role of the designer is to intermediate and model inter-relationships and activities between users and objects.

As previously mentioned, in recent years product design discipline aimed to better understand and tailor the relationship between users and products, following a user-centred approach. As a result, contemporary design theories and design approaches in general have focused more intently on the user, becoming predominantly user-led orientated practices. However, in many product design theories objects are analysed as (and assumed to be) passive end-products of the design process,

rather than active vehicles in the production of meaning and as promoters of activity. As Suzanne Vihma and Eva Zeisel observed, artefacts are measured, planned and adjusted to the requirements of the human body and the processing of this information is conceived as a one-way activity where the artefact is passive and its position is conceived as subordinated to human action. Feedback in product design usually means correcting measurable data and as such, ergonomics, although a good start for design, does not support the interpretive act. On a physical level, objects are active by imposing the constraints and affordances through which they guide user activities: in directing or limiting activities or actions, objects affect bodily movements, provoke responses from all senses, producing immediate mental and emotional impressions. The examples discussed in this part of the study suggest that physical interaction between users and artefacts, especially within the social context, contributes to the production of meaning. In this role, objects are not passive but active in establishing *'reference*' relations. Meaning-production is important in understanding the type of user-product interactions, as inter-actions and inter-relations are sustained by the interpretative act.

As the examples above demonstrate, particular types of activities and objects can be analysed from the perspective of performance. As such, the examples in this chapter highlighted in particular the performance of the user and object in specific user-product interactions. Performance has been used to study a variety of interactions in many domains: for instance, in the form of 'theatrical metaphors', performance has been applied to study social interaction. As an expressive representation of practice, the performance of everyday activities ('performative acts') involving objects is relevant in (social) interaction[clxxxvii]. Interface (HCI) design methodologies (science and technology anthropologist Lucy Suchman (1987) and Liam Bannon (1985) show that the understanding, representing and modelling work practices use performance as a representation process; and that performance approaches the collectively constituted creation of meaning[clxxxviii]. Hi-tech design has used the concept of performance as a testing technique, considering the user-product binary as key element in testing products. In hi-tech and product design practice, scenarios have several roles in supporting design ideas: different 'plots' are used for testing different phases of the interactions between users and design interfaces, collecting user feedback. Traditionally, hi-tech as well as interface design have evaluated products in accordance with performance criteria in terms of utility and efficiency, and which do not reflect on the range of user-product interactions. Recent technically oriented design theories focus on the programmatic building of artefacts, but do not examine the perspective of the user from the point of view of user interpretation and appropriation and how these may contribute to product performance and the redesign of products.

Interface design theorists Giulio Iacucci and Kari Kuutti's (2002) approach to feed-back as role-playing suggests that performance can be used in exploring and testing user experience. Although users have already defined numerous other relationships within the same class of objects (as users are specialist in the practices they device) and while people and things constrain and enable each other, their reciprocal influence is not completely predictable. In these cases, unpredictable or already anticipated object and user performances can be tested, as a trial always surfaces unexpected elements that can be further developed into design ideas. The testing procedure also facilitates the assessment of design solutions in direct relation to user practices; thus, in anticipating the future uses and contexts of use for a product, testing represents a valuable feedback for the prototypes. In this sense, Bruno Latour supports the value of testing since it is in trials that actors (objects or people) show what they are capable of. In this perspective, the role of planned scenarios in testing user-product performance and alternative interactions are relevant for a poetic design process.

The testing enabled first-hand exploration and observation of user performance and the new roles that products may acquire in the contexts in which they are used[clxxxix]. In the present study, the testing element was a direct method of investigation and observation; a reliable and valid tool that assessed the accommodation user-product in the course of use. On one hand, the testing was concerned with the exploration of the roles and involvement of users and products, observing key elements in their performance. In this capacity, the analysis of performative roles for users and objects informed the ways in which prototypes were put forward; and it enabled their interpretation through an enacted scenario of use. Thus, the testing scenario showed that performance - as it is relates to what Michel de Certeau calls 'operations' and 'styles of action' - is efficient for studying the user. In this case, the performance of everyday activities is an expressive representation of a practice, an interpretive act, a production: de Certeau's 'secondary production hidden in the process of its utilisation'.

On the other hand, the role of the staged scenario-testing was useful for collecting user feedback; user responses contributed to the evaluation of the reciprocity of user-product interaction[cxc]. It tested the 'second-order understanding' which uses the meanings and interpretations developed by users in order to start design solutions. As Klaus Krippendorff said, designers must proceed from their understanding of users' understanding. This second outcome (user response) relates to another relevant aspect of the testing: the performative character of the social encounter delivered a valuable experience for participants. Thus, the test observed an additional performance - that of social interaction, in which instance the prototypes undertook the role of 'social accessory'. The

planned test showed that elements of performance (in the form of scenarios) can be adapted as tools for exploration and evaluation. Thus, the various types of performative activities observed during testing did inform subsequent design stages, changing modalities of interpretation and concepts for prototypes; or evaluating a proposed design and situating its use in a certain context. It can be argued that these aspects increase the understanding of the impact any artefact will have within situations of use, representing a valuable input for designers who understand better the present and future use of their products. For example, the tests considered the function, use, and context of the prototypes and the active participation of the user; user activities and behaviour also affected the course of the design process. As such, the performative aspects of user-product interaction were useful in translating performative elements into a poetic design in the form of embodied experiences. In mediating between objects and the contexts of their use, testing contributes to the elaboration of forms of participatory design related to human activity.

The testing of user-object performance within a scenario of use can be considered an analysis tool and assessment for the designer during the intermediate stages of the design process. In this view, the first test in particular aimed to demonstrate the twofold performance of user and object; it showed that in the course of the set event, the prototypes performed well due to the performance of their users, becoming 'social accessories' during the interaction processes. It can be concluded that as a particular performative device, *testing scenarios* represent observational design stories about people and their activities. Suzanne Bødker (1997) pointed out that "Good scenarios are not a detached description of user tasks and actions, but selective scripts or stories that stage user actions with a future artefact."[cxci] As forms of evaluation and interpretation, testing scenarios readdress everyday situations: the complexity of objects requires several perspective points and the knowledge of the context and sub-contexts of their use. These are discussed in the text in relation to understanding and developing design practices where performative activities have a relevant role in evolving interpretations of objects and ideas. The performative element reflects behavioural and emotional relations: the form of objects and their context influence the behaviour and the emotional response of the users: for instance, in the design of a waiting room designer semantics theorist Suzanne Vihma focused on the nature of waiting as activity, and concluded that depending on the type and time of waiting, the objects present in the waiting room change meaning and function; as Vihma points out, "the discipline, control and stiffness created by furniture can influence human action also in a broader sense by dominating the whole process of waiting…"[cxcii] In this case, the relationship user-product becomes active by giving the artefact the predominant

role; in this sense, objects can be conceived as more than passive responses to various activities and the relation between people and things can be reciprocal or mutual.

The views and considerations on everyday objects emerging from product design (Kristine Niedderer, Suzanne Vihma and Richard Buchanan), material culture (Tim Dant); sociology (Michel de Certeau, Arjun Appadurai, Ervin Goffman) and anthropology (Bambi Schieffelin, Lucy Suchman and others) have been employed to investigate the performance of users and that of objects, aiming to provide another framework for analysis. The analysis has shown that the performative characteristics proper to a specific category of objects are the result of user-object interaction in a specific context (social, symbolic, ritualistic). These specific performative properties that distinguish a certain class of objects from others are at play during user-object interaction, prompting an 'inventive use' (so objects become more than 'subordinated' products of interaction)[cxciii].
The products explored in the case studies and tests highlighted these performative aspects re-opening the evaluation of poetic forms of design, showing that play and performance are interwoven into social relationships, and many kinds of artefacts and designs are reinterpreted to articulate these physical, embodied experiences. It can be argued that performance scenarios can be viewed as creative processes embodying uncommon forms of use that regenerate the poetics of everyday life. As such, design culture is construed from these interconnected ways of living in an already known environment.

This chapter aimed to define the interrelation between performative roles for utilitarian objects and users, considering subsequent user activities (processes of use). The performance of products and users alike suggest that certain elements (such as scenario, structure, function, play) may have a mediating role in the interaction between products and users; and that these elements can be transferred into design practice and translate into design objects. The performative elements highlighted by the examples presented in this chapter show that objects can be integrated meaningfully in the practice of everyday life: in moderating interaction, objects proactively define and model user interrelations, relating to behaviour and sociality. It can be argued that a specific class of 'performative objects' could become the work of a design area that anticipates and collaborates with the activities of the user. In operating with elements of performance, the starting point for a poetic design process is the activity of the user. As such, by creating alternative interactions, a design poetics is re-defining concomitantly the role of the user and that of the object.

Chapter 4

OBJECTS and NARRATIVES

'*All unnoticed, the articles of everyday use act upon man'*

Siegfried Giedion[cxciv]

The material world is read from the ways in which people live with things: cultural sociologist Tim Dant (1999) indicated the absence of a sociology of objects that might represent them in the forms in which they are implicated in user-product interactions. The various parts of this thesis touched, however, on different aspects of the 'social life' of objects (chapters 2 and 3), reflecting how objects partake in practices of living or in design thinking. The introduction of this study highlighted the role of material objects in sustaining the flow of everyday life: Dant (ibid.) asserted that the practices of living with things contribute to the character of personal, social and cultural life. At the same time, Michel de Certeau's (1984) saw products as "… parts of the repertory with which users carry out operations of their own", reinforcing the idea that products and their circulation are dependant on social relations and become part of a network of contexts. These aspects pointed out that consumption is a process of appropriation, a domestication of objects into everyday practices of living, assigning symbolic value to things in social life. In this sense, material things operate within a culture of traditions, customs and rituals, supporting practices of living and histories of use. The social structure encompassing institutions, moral codes, and established ways of doing things is changed when people start to replace them, or reproduce them differently.[cxcv]

Because users live so closely with objects, the histories of objects (their making, provenience, cultural associations) and the history of their uses remain in the background of the everyday. Yet, many objects that circulate on the contemporary market are often reinterpreted typologies, and their use and associations resurfaces in new contexts. Poetic designers such as Marije Vogelzang, Rachel Wingfield or Droog Design (chapters 2 and 3) often embed narrative elements into objects, reflecting their histories and cultural meanings: in telling a story about the product, the product becomes a subject or a script to be interpreted by users. In such cases, objects acquire a script-like value that requires readings in accord to new codes and meanings; their production and reintegration into everyday practices of living reflects how material culture re-emerges within new historical contexts. As the examples of the previous chapters show, for poetic design, the reinvention of objects consists in a reconnection of narrative layers of meaning for objects that have lost significance and value. At the user end, any attempt to analyse or describe an artefact requires an account of its context and characteristics (a text, description, a recounting) in order to be understood meaningfully.

Thus objects are translated back into stories, and material objects become reinterpreted and articulated in language (a semantics) – both by designers and users. As technology and science sociologist Sherry Turkle put it "… [the] narrative of how we make objects part of ourselves offers

a language for interpreting the intensity of our connections to the world of things, and for discovering the similarities on how we relate to the animate and inanimate."[cxcvi] In this sense, by involving products in everyday uses, people embed them into the repertory of their everyday experience; these experiences, in their different forms, follow a narrative structure. As such, all habits, ways of 'making do' and practices that compose ways of life are dependent on a narrative interpretation of experience.

In order to understand how narratives operate, the views of narratologists (David Carr, Martin Mcquillan, Gerald Prince, Mieke Bal, Hayden White and Daniel Punday) have been linked with writings on narrative media related to hi-tech design (Shachindra Nath, Marie-Laure Ryan, L.A. Murray, R.M. Young, and symbolic anthropologist Mary Douglas). In aiming to associate narratives to the design process and to specific objects, I used the term 'narrative' in this text in its sense of a story, an 'account of connected events'; as the art, technique, or process of narrating. In relation to designers, narratives are understood as a series of choices by an author to achieve a certain effect and meaning[cxcvii]. Also useful in this discussion, narratology is an analytic tool that describes narrative elements and their functions within a narrative, the study of the development of a narrative.

Narratives are constructed by elements and 'aspects' that refer to the ways in which a text manipulates the presentation of its elements[cxcviii]. A basic narrative structure encompasses three traditional components: setting, protagonist and action - which enable the telling of a story. According to Mark J. Weal (2001), the narrative structure is held within the links between these components by ways of associations and references. What I aim to argue here is that many narrative elements, such as plot, action, mediation, communication and the subject-object interaction can be identified or at least approximated with various stages in the design process[cxcix]. The various forms of interaction discussed in the previous examples have highlighted the role of objects and users when engaged in experiential or performative activities. In this sense, Shachindra Nath observes that a narrative is more than creating a logical mechanical structure of events and its purpose is to enable a personally meaningful or subjective experience[cc]. This last aspect reflects the central role of the audience (users) which is relevant to a design process: in a narrative framework audiences (the users) bring (to the plot) or insert their own knowledge and experience of use - an 'experiential valuation'.[cci] In the second chapter John Dewey's and interaction design theorists Jodi Forlizzi/Shannon Ford's theory on experience showed that user experience is composed of a history of previous experiences. As such, although referring to digital media, Marie-Laure Ryan outlines the audience's participative role in

a narrative, that the 'experiencer' is "…an agent, and in this sense the co-producer of the [narrative] plot"[ccii].

In this case, what becomes pertinent to this study is that narratives act as mechanisms for appropriation: narratologists Terri L. Kelly and Hayden White (1987) see narratives as structures or 'metacodes' that 'make sense of things', subject to cultural, interpersonal, linguistic and cognitive variables[cciii]. Narrative means, in Hayden White's view, a translation of knowing into telling in order to convey meaning. According to R.M. Young, human experience and action are inherently based on a narrative structure and narrative structures enable personally meaningful experiences. Users always impart meaning to their experiences and relate experience to meaning and interpretation (meaning and experience are, as such, inseparable). In this sense, narrative structures modify the way in which a 'reading' is shaped, presented and received. Narrative elements can therefore be used in analysing interaction as a process placed in a field of experience, and as a theory of meaning. The implication is that forms of narratives can be translated into design scenarios (chapter 3, pages 78-79); and could mediate the understanding of how users 'make sense' of things (a useful aspect in the design of everyday objects, and in design poetics in particular).

As such, basic structural elements in narrative – setting, action, and protagonist – can be adapted to a design scenario. For instance, a good low-tech design example was the series of objects designed by 'Do create' (chapter 3, pages 80-81) where the user, as protagonist, has a defined role in the final making of the product. The objects designed by Noam Toran, Ingrid Hora and Rachel Wingfield also illustrated in the previous chapters that narratives are embodied in different forms of user experience and interaction that reveal the 'hidden', poetic aspects of the relationship between objects and users. In this view, the stories objects entail and the possibilities of their interpretation is relevant to their meaning; so objects are more than mere material possessions and tools because of the meaning users bestow on them.

In order to analyse the 'mechanics' or workings of a poetic design, this section looks at the relationship between narrative elements and user experience, aiming to identify narrative elements that could be involved in design scenarios; and record testing outcomes in a narrative format. The comparative analysis of reading texts and objects is based on narrative components characteristic to literature; in operating with narrative forms, design poetics may be a modality of converting stories and histories into user experiences. This part of the study aims to associate the notion of narrative to design thinking, in order to explain how a particular category of designed objects could be considered poetic.

Objects as Stories

The previous chapters illustrated a few aspects of experiencing a product - physical, sensual, emotional and aesthetic, expressive, and social. These aspects are based on diversified interactions and activities developed in time between products and users. Most products influence user experience in the way in which they 'tell a story' of use through their form, features, aesthetic qualities, history and affordances. But what is the language of things, how they communicate, how are they read; and what can designers themselves communicate using objects as a medium for comment?

For anthropologist Claude Levi-Strauss material things are 'goods to think with'; when narratives are embedded within objects, they express the ways in which objects are used and suggest the practices they are part of. Beyond being useful and necessary, objects also act as companions to people's emotional lives and represent forms of material history. The levels of experiencing an object is proved when users begin to be affected by objects: if they fit well in user practices objects disappear from observation, but people begin to realize the meaning of their possessions especially when objects are lost, broken or worn out. Thus everyday household objects facilitate and support the flow of living on many levels: in their study, 'The Meaning of Things', psychologist Mihalyi Csickszentmihalyi and Eugene Rochberg-Halton distinguish between objects valued for action and those valued for contemplation by examining users' relationships to their material possessions and the elements that contribute to their meaning[cciv]. They recorded that objects associated with memories (for instance those associations to activities related to a place); those that provoked emotional responses or evoked stories were the most treasured possessions (see John Dewey's comment on experiences linked to contexts, people, and other products, page 58). These factors suggested that objects contribute to user experience by providing a familiar symbolic context, reaffirming the identity of the owner. In this sense, cognitive scientist Roger C. Schank said that stories are the vehicles that people use to condense and remember experiences, and to communicate them in a variety of situations to certain audiences.

Donald Norman (2004) also observed that user attachments to products are determined by the nature of interaction: "Surface appearance and behavioural utility play relatively minor roles. Instead, what matters is the history of interaction, the associations that people [make] with the objects, and the memories they evoke"[ccv]. In user-product interaction, user emotion contributes to the nature of experience; in an identical way, user emotions influence the course of experience in narratives.[ccvi] Nath (2004) defines emotion as a 'dimension of experience', saying that meaning

and understanding arise from and are conditioned by the nature and pattern of bodily experience including the emotional relationships to the world.

A set of objects which reveal that user experience functions as a narrative and that its quality depends on emotion is Noam Toran's work (chapter 2, pages 55-56 and chapter 3, pg. 88), especially the collection of implements from 'Accessories for Lonely Men' and the individual pieces from 'Anger Management' project. In substituting a host of human activities and their emotional, private history, pieces like the 'Sheet stealer', the 'Plate thrower', or the 'Vacuum Scanner' (*Fig. 13-14*) represent solutions for personal experiences; they re-enact activities and preserve memories. Toran's objects stand-in for human relationships and are reinterpretations of private stories – acting, at the same time, as commentaries for the human condition and the variety of human needs. In a similar manner, Ingrid Hora's customised products (chapter 2, page 56) and July Cook's therapeutic implements for bodies in distress (chapter 2, page 64-5) support user experience, providing an emotional base for human interaction. In exercising critical comment on the nature of contemporary society, Toran's, Hora's and Cook's pieces ensure a narrative frame for emotional expression.

Taking into account that user experience has a narrative structure, Forlizzi and Ford (2000) categorised forms of experience based on narrative (storytelling). If, for instance, *sub-consciousness experiences* are 'automatic' and fluent (well-practiced routine activities involving everyday objects that users only need to learn to use once (fluent interactions, see also page 65); *narrative experiences* have been formalized in the user's cognitive system (cognitive and expressive interactions, see also page 65) and translated into language. Storytelling experiences consist of a product's set of features and affordances transferred into use and highlight the subjective aspects of experience: this process enables a user to translate the relevant parts of an experience into a personal story.[ccvii]

The fact that user experience functions as a narrative sequence is exploited by many poetic designers. For example, the designed feasts set by Maria Vogelzang (chapters 2, page 53-4; chapter 3, page 77) involve participants, objects and specific sets, proposing ritual experiences based on narrative structures. These set scenarios involve plots in which diners are brought together to share the food experience and to manipulate and interchange objects according to set rules. As previously shown, Vogelzang's 'White Funeral Lunch' (1999) and 'Slow' events for 'Droog Design' at Milan Fair (2003) put the emphasis on user experience, the ritual of consuming food and the use of the objects in a specific context (*Fig. 9-10*). In these occasions the narrative

structure of the event is relevant in defining a set of actions for users and a set of relations between the users, users and objects, users and environment. In these particular interactions, users bestow meaning on situations, creating stories of product use; thus, domestic objects fulfill the needs of a physical but also of an emotional level. These needs reveal how objects permeate and support the continuity of user activities, that they have a powerful emotional role and a comforting presence besides their functional service. In fact, Vogelzang considers herself a 'story artist' because she uses the experience of food to communicate and explore ideas and processes which relate to food-making and food- consumption. For example, she explored the process of photosynthesis by 'baking' small dough pancakes at the light of lamps, on the light-bulbs (*Fig. 11*). The aim was to convert electric light into crispy, edible leaves, a poetic approach to physics. By creating an environment that encouraged interaction Vogelzang bypassed the materialism of food to work directly on people's emotions. A similar narrative scenario was Vogelzang's project in Beirut ('Taste of Beirut'); this was based on farmers' market and revolved around Lebanon's culture and heritage. Vogelzang asked one hundred locals to tell her stories about food, especially food they associated with war. Using their various narratives Vogelzang created bread bowls (coloured with parsley juice), and the participants inscribed their bowls with a personal story (*Fig. 12*). These stories bonded the market-goers who were invited to eat the bread-bowls with ricotta and cedar honey.

These examples show that as useful and necessary artefacts functional objects take part in daily scenarios of living, but also act as companions to people's emotional lives, representing forms of material history. Rather than acquiring the 'new', the 'latest', the 'improved' products, not yet absorbed and settled in the history and culture of a society, users feel comfortable with and respond to objects that have recognisable stories of use (forms and materials). Because functional objects used everyday support the physical boundaries of the home, they are less easily disposable than new gadgets: people relay on their practicality, they re-instate well-trodden ways of doing things. Old pieces of furniture, crockery or lighting for example – what Naylor and Ball call 'old typologies' - are tested by a history of use in all cultures and reflect the culture that informed their design. 'Old typologies' or archetypal objects like tableware or furniture are adapted by users into practices and activities that grow familiar. This familiarity may develop into an emotional connection over time, and only their surface may reflect the history of their use. Artist and critic Louise Schouwenberg observes that use-objects infer interest because they are on the border of disappearing into over familiar and reliable functionality whilst at the same time they make themselves subtly known by telling the stories of their uses. Because objects adapt to

their owners' habits, and, in turn, users adapt to them they come to carry personal meanings. Like contemporary artworks, which have been interpreted by critic Nicolas Bourriaud as narratives that "… extend and reinterprets preceding narratives", poetic objects are based on these many re-interpretations of histories of use that stand against common objects which lost significance under the proliferation of consumerism. Based on the prior experience and knowledge of the user, poetic design practice proposes alternative interpretations and renews criteria of appreciation for familiar objects.

A relevant example is Jurgen Bey's series of 'Kokon chairs' (*Fig. 21*): by re-evaluating the function of seating, Bey revives discarded, damaged and obsolete chairs, heightening their qualities and endowing them with expressive values. As critic/curator Gareth Williams says, "…metaphorically and literally he [Bey] re-skins and bandages up objects to heal their wounds and make them last another day."[ccviii] Thus the stories of their frequent use become hidden in layers under the cover of these objects - under what Louise Schouwenberg calls 'the flimsy skin of everyday things'. Practicing a similar commentary on traditions of use, Jurgen Bey's furniture associates a specific context and history of use (a narrative) to the elements of the piece; the fact that the component items of furniture only work when they are attached to each other alludes to certain traditions of dwelling (*Fig. 20*). Like the 'Kokon chairs', introduced in communal living spaces, Bey's 'Light Shade Shade' lamp (*Fig. 22*) is formed by enclosing a chandelier inside of a cylindrical transparent mirroring layer; underneath material layers, the function remains the same but the new-formed lamp's role becomes the storytelling of it's own history of use. Without losing functionality, all Jurgen Bey's everyday objects acquire artistic value: they become lyrical and nostalgic visual essays that play with the potential of objects to evoke memories: they become narrative material.

These examples demonstrate how the visual telling translates a story into a form (an object), how visual narration is embodied in forms of making; as Nicolas Bourriaud put it, a 'screenplay becomes form'[ccix]. Bey himself admits that the process of re-invention of objects is based on the interpretation of their stories and the memories attached to them: "Why should I invent new forms if reality already offers so many fantastic images, so many special solutions. As a designer I only have to discover them and to rescue them into new stories."[ccx] Increasing their possibilities for poetry by reinterpreting values of the past, Bey's chairs already have meaning, even before the new user can link his own experience to them. Thus, user attachment develops beyond the pure functionality of the object toward the relationship, the meanings and feelings the object

represents. As such, narratives can be used in the elaboration of objects' 'stories' and the design process evolves around the history of artefacts.

Designers like Rachel Wingfield and Julie Cook, Jurgen Bey, Hella Jongerius or Gijs Bakker play with the cultural and personal associations and histories that surround mundane utilitarian objects like lamps, chairs and crockery; by bringing these associations to the fore, they reinterpret a universal knowledge, characteristics and the positive attributes that objects already have. So that, as Bourriaud says, "…to create is to insert an object into a new scenario, to consider it a character in a narrative."[ccxi] Although based on technology, Rachel Wingfield's 'Digital Dawn' and 'Walls with Ears' refer to the history of passive objects and their use: she re-activates the role of these decorative products, investing them with new functions. In reacting to light, the light-sensitive structure of 'Digital Dawn' (*Fig. 25*) evokes the narrative of the passing of time; whilst 'Walls with Ears'' (*Fig. 24*) reverts the history of wall-paper as a passive, decorative material: the wall-paper is sensitive to sound and modifies in direct proportion the sound level produced by user conversations. Apart from their apparent functionality, both pieces act as commentary on the culture and history of everyday things.

In these examples, poetic design solutions are reflected in objects that allow a balance between function and meaning; they represent ideas that celebrate the ordinariness of made things, the poetics of everyday life. Thus, the primary notions of functionality also include style, beauty and elegance, what designer Eva Zeisel referred to as 'charm' and 'grace' - the "…tender use of objects, the soft-spoken relationship between things and us"[ccxii]. Use-objects also possess values that transcend their materiality – it can be said that such objects surpass their underlying function. The derivative, secondary functions of objects are evident in ritual and habitualised activities which determine a series of (role) transformations for objects, persons and actions. For example, Gijs Bakker's coffee pot entitled 'Knitted Maria' Coffee Pot (1997) is 'contained' by the knitting around its body (*Fig. 33*); because coffee pots are archetypal forms used and seen everyday, they disappear in the background of daily activities. Generally, people tend to place greater importance on some daily routines than others; therefore products performing necessary but non-ritual functions become background objects of less distinction than those performing functions of personal ritual significance. These objects and their functions accumulate importance, significance and expression - the very elements that Gijs Bakker's pot articulate. His interpretation of the simple teapot reintegrates the object in a history of use, bringing about the image of domestic comfort, the intimate ritual of sitting around the table of past generations, the comfort of handling well-known things. The re-appropriation of the cosy that holds the pot alludes

that the pot is a relic held together by the knitting – a poetic writing of its materiality. Like Meret Oppeheim's fur-covered cup and saucer (*Fig. 37*), it suggests, in from and material, the comfort implied by drinking tea in good company. Rachel Wingfield's collaborative piece with Equator Project, 'History Table Cloth' (2002) is also a poetic commentary on the history of a well-known object (*Fig. 24*). The table-cloth is based on electroluminescent inks printed onto its flexible substrate material, a matrix covering a kitchen or dining room table. The electroluminescent inks react to the heat of the teapot, so that when objects are left on the table, the cloth starts to glow beneath them, creating an expanding halo. When items are removed, the glow fades, thus measuring the time of the tea ritual. Being sensitive to the objects place on the table, the table-cloth records the flow of objects over its surface. These visible material changes reflect the temporal existence of the objects on the table. The piece is built on a narrative structure: it consists of a plot related to the activity, the ritual and culture of tea-drinking, a sequence measuring a temporal event dependent on the user's input.

A narrative structure that revolves around domestic rituals and which includes a setting directed to an 'audience' was followed for the development of the 'Video Window', a domestic object based on technology by Equator Project (2000). This product-furniture interrelates inside and outside spaces by way of transferring images from surrounding environment of the user's house on a monitor (*Fig. 31*). The small video camera mounted outside the home feeds live images of the surrounding landscape – and these become the story-telling of the monitor installed inside (usually in the bedroom). The wide-angle lens of the camera set-up outside (on a tall pole) offers a wide panorama, a moving image that opens-up a nostalgic view: a poetic experience. The 'Video Window' thus operates concomitantly on two layers of the home (inside and outside) and its formality of 'use' follows a narrative, temporal structure. Most of the Equator Project's experimental products focus on the home as a place of 'utility'; in attempting to connect its outside and inside environment, the piece confronts the private with the social milieu, investigating unconventional forms of experience. Although supporting the home environment as technological design solutions, Equator products challenge the traditional design view that electronic domestic products are and should be purely functional. On the contrary, the Interaction and Equator Projects base their design solutions on domestic technology precisely to reflect on the physical boundaries of the home, whilst their scenarios centre on user experience. R. M. Young pointed out that users act as agents that carry out their individual and collective activities in interacting with a place. Thus, the use of narrative scenarios in the design of these pieces is highlighted in the pattern of meaningful actions that combine into meaningful activities[ccxiii].

As Mieke Bal's theory on spectatorship explained, the meaning of a work is the result of user interaction - represented by the acts that take place around the object. In the examples above, the participation of the user is of central significance because it is the user who activates the potential of the works in their specific circumstances (see Rachel Wingfield's 'History Tablecloth' and 'Walls with Ears' or the 'Video Window', above). In this sense, the design process is complete only when the user makes sense of the 'story' proposed by its designer through an object. As narratologist Nath observed, the story doesn't just 'happen to the user', he makes it happen to himself; and narratologist Thomas Leitch concludes that "… the narrativity of a work is, in a radical sense, the enabling narrativity of its audience"[ccxiv].

The narrative capacity of objects to carry nostalgic stories is revealed by designer Hella Jongerius who proposes expressive tableware that supported patterned routines of living: the pottering around the house, the cosiness involved in habitual activities. Her 'B Set' (1998), consists of a set of plates deformed by high-temperature firing allude to old, cracked and eroded china collections, making reference to tradition and material (*Fig. 35*); like Gijs Bakker's teapot, Jongerius's objects enable the reading of their history – suggesting notions of imperfect china growing old from use. In her 'Embroidered Tablecloth' design (2000) Jongerius integrated the plates into the embroidery of the tablecloth (*Fig. 34*): like Bakker, she allowed the decorative use of embroidery to tell the story of old, valued customs. In displacing the role of decoration, she reverts the lost meaningful narrative of the ornamental embellishment.

Thus, trivial functional objects voice their own histories, awakening memories and past values, and narratives become forms through which objects manage to tell their 'stories'. Another, similar example is Peter van der Jagt's doorbell (made of wine-glasses) is composed by associating the 'clink' of the toasting glasses with the tone of the doorbell; the piece, which plays on the symbolic meanings of set rituals and celebration marks the announcement of one's arrival in the home (*Fig. 23*). The use of such objects marks the time and social interaction of simple activities by imbuing them with the meaning of a performed ceremony; the objects' role resembles the custom and tradition of being dressed for dinner in order to participate to and mark a social, communal activity. Another example involving the input of the users in a narrative structure of correlated events is 'The Drift Table' (*Fig. 30*), developed by Interaction Project (RCA); the table has an in-built mechanism that reveals a series of images collected by their user – these being inserted on

the table's surface. The weight of the various objects placed by the user on the table controls the slide-show of the images (a visual narrative in itself).

These late examples make use of a narrative setting, providing useful design elements that address the activities of the user, so that the user becomes a participative subject. I consider that these various design reinterpretations are forms of poetry: they propose ways of re-writing and re-reading objects of use. In these cases, design becomes observational in nature by exploring, expressing or narrating the ordinary role and use of objects in relation to their users. In these cases, poetic designers deal with cultural ideas about domestic products, re-embodying them in narrative stories, reinterpreting and re-evaluating what objects are, what they do and how they become appropriated by users. Whilst deriving new ideas from old forms and new forms from old ideas, this kind of objects engage the user in new histories and memorable narratives.

Without making overpowering statements, and without losing their basic functions, poetic objects acquire the power of art objects: the designs above can be compared to artistic pursuits: for instance, Dutch artist Zeger Reyer's installation 'Good Intentions' (1997), consisting of tableware pieces piled-up over a 15 meter long covered table (*Fig. 37*); or Judy Chicago's installation of crockery, 'Dinner Party' (*Fig. 38*); or artist Meret Oppenheim's 'Fur Cup' (1936) showing the narrative possibilities of use-objects. In proposing not new objects, but new narratives for living, Toran's, Wingfield's, Jongerius's or Bakker's objects resemble artists Judy Chicago's, Meret Oppenheim's and Reyers's interventions because they allow use objects to tell stories about conventions, etiquette and the growth of consumption, the excess of goods, their growing production at the expense of their lost functionality.[ccxv]

Such poetic works explore ideas of visual story-telling by employing cultural, typological, symbolic or metaphoric elements to articulate meaning. The artistic commentary is present in all design objects of the poetic category, and users recognise their poetic value: in buying these objects they purchase an 'art of living'. And, as Louise Schouwenberg observed, "Works of art are not so quickly ready for the garbage. We don't buy a painted panel but an illusory story, not an object but ideas, not a thing but implicit beauty, and these we don't throw away so quickly."[ccxvi] These latter examples of designed artefacts often function as artistic, visual, critical, ironic or playful commentary on cultures of material consumption, causing different ways of seeing and valuating the everyday; they are interpreted as stories.

A significant parallel is worth to be observed here between the emergence of poetic design and the contemporary art scene, as they approximate a similar way of operating: in highlighting the essential role of the 'user', curator and critic Nicolas Bourriaud called contemporary culture 'a culture of use' or a 'culture of activity', and observed that the artwork functions as "the temporary terminal of a network of interconnected elements"[ccxvii]. Bourriaud's theory points out a parallel between objects of use and objects of art: they neither are the 'end point' of their production (an end-product), but a vehicle in a network of uses and contributions. Bourriaud's 'culture of use' implies a profound transformation of the status of the artwork, changing its traditional role as product of the artist's vision.

Like fine art, design has become a creative pursuit, a form of communication, an exploration of ideas connected with the social, aesthetic, or political aspects of everyday life. Design practice has come to "enhance the quality of life and deepens appreciation of the familiar world" (what Mike Featherstone called the 'aestheticisation of everyday life'), being grounded in common experience.[ccxviii] In this sense design can be seen as a democratised, popular form of art, where the traditional boundaries between utility and high art are blurred (see chapter 3, p.89). Many contemporary designers follow the conceptual freedom of artists, proposing experimental pieces in self-initiated projects that heighten the creative, aesthetic value of artefacts, elevating them to a higher status and demanding certain connoisseurship. In following the fine art standards of value the market of design artefacts has slowly started to construct its own systems of evaluation. Thus, the design market has come to generate objects not necessarily designed to 'work better' but to activate other levels of use. As critic Gareth Williams observed, aligning themselves to artists and craft-makers, conceptual designers "subordinate materiality and functionality to symbolism, [aesthetic] and emotional qualities and emotional resonance".

In such cases, both artworks and artefacts become embedded in relational practices manipulated by users. These communal forms of 'consumption' (or postproduction) show that users do not do things in isolation, but embed their activities in practices and in a social context which needs to be understood. Following Michel de Certeau's concept of consumption as production, Bourriaud claims that "… to give a new idea to an object is already [a] production."[ccxix] Thus, in contemporary culture, both utilitarian objects and artworks function as active agents, partaking in "an unfolding scenario, a framework that possesses autonomy and materiality to variable degrees."[ccxx]

Nicolas Bourriaud seems to define best what I referred in this text to be a design poetics, and helps to explain the relationship between poetics and narrative: if design poetics can be approximated with contemporary art, it can be said that their making is not based on new objects but on new forms of practice (or consumption).

Testing a Narrative Scenario

Design history and material culture studies base their descriptions of objects, of objects' histories and their making on the interpretation of written sources. Design and material culture are both articulated in language and writing about objects conditions the understanding of design. In most design practices, the design process starts with a brief describing the future product in the form of a text, which later becomes an interpretation of form, function and uses. Furthermore, semantic attributes are embodied in an artefact by converting the ethnographies of particular practices into a set of product affordances, and verbal descriptions into easily recognisable features. As mentioned earlier, Nicolas Bourriaud described this process as a translation of text into a material form: 'a script becomes form'. These set of transformations illustrate that the scope of design in its broadest sense is to develop objects according to a plan (or a scenario of use); thus, objects are translation of words and return to verbal or textual form when they are analysed as products of design and material culture. Aside from being interpreted in written formats, all kinds of objects and design products are interpreted by users in various contexts and everyday activities.

As it has been previously noted, product design has made successful attempts to address human needs, to support user experiences, and evoke particular emotions when users interact with products. The nature of interaction between people and products and the experience that results is therefore central to both designers and researchers in understanding human experience. As in recent years design activity has given more importance to the 'user experience', designers started to modify the design process in order to create products that achieve specific user experience. As such, recent design approaches adopt research methods from anthropology, social science and behavioural science to understand the users for whom they are designing. In the second chapter on experience it has been noted that a design process can become experience-driven to the extent that an intended, pre-defined experience introduces new user-product interactions. It has been mentioned in the first chapter that designers often oversee the observation of users and users' ways of operating, because they generally focus on products' functionality and do not see the object in the time of its use, in a concrete context. Therefore the

testing of users and objects has become a method of evaluation of product functionality in product and HCI design; however, testing can be an exercise directed towards other aspects of design, apart from product performance. In aiming to associate user, product and context, testing scenarios can bring about a series of observations on user performance, interaction and experience in a set context.

In order to anticipate and plan the unfolding of user experience, to observe and reconsider objects' relevance, the main test of this project followed how objects were used in a set context (chapter 1, page 37-43). In an attempt of correlating a narrative structure not only to the design of products but also to their testing, the test sessions have been tailored as planned scenarios. For example, in following a narrative sequence, the first test scenario was run as an event and recorded experiential and performative outcomes as different but interrelated kinds of interaction. This testing model aimed to surpass the more formal modalities and approaches to product design analysis, which often relay on linear methods for assessing user experience and emergent practices of use; limiting design thinking to a formulaic process. In other words, a formal testing tends to apply strictly functional elements to better a product (Klaus Krippendorff parallels this to linear constructions, as subject–verb–object) – and the product becomes a 'sentence'; a narrative-based test, involving contextual related elements directed to participants (an action–actor–sequence) creates a more complex, layered construction (a poiesis). In targeting different types of interaction and experience, the narrative-based testing scenario was considered an approach that allowed interpretive space for the designer. Following a scenario of use, the testing represented a method intended to re-evaluate how artefacts function within existing practices and, at the same time, to generate an understanding beyond pure functionality for the same practice. The testing procedure integrated in this project aimed to evaluate how a narrative scenario can contribute to a poetic design process.

A common element between narrative formal conventions and design conventions is the role of users. According to narratologists N.L. Stein and C. G. Glenn (1979) a narrative structure provides a setting, initiating an event, it accommodates the protagonist's response and the outcome of the event. In following the structure and sequence of a narrative, the tests of this study involved users and prototypes (protagonists and actants), a set of interactions (a plot) and a setting. In this the test approximated narratologist Algirdas Greimas 'actantial' narrative model in terms of subject (user), the object (prototype), the 'sender' (designer)[ccxxi]. The narrative plot used in the test of the prototypes proposed models of participation for the user (structured

sequences of actions). Contemporary Hi-Tech and HCI design studies research and interface design literature (R. M. Young, S. Nath, M-L. Ryan, L.A. Murray) related to digital applications consider users as participants (as actors) in the design processes, highlight the role of narrative structures, their functions and components in planning and feed-back testing. These approximate the narrative structure of a text describing the instigation, course and outcome of action.
In this view, the narrative setting of the first and third test (chapter 1, page 37 - 39) enables inter-related observations or readings: individual and communal user-object performances, the context for social interaction (the expected context of use), modes of participation and related behaviour[ccxxii]. These interrelated aspects in which both human and non-human 'actors' assume specific roles during an activity is explained by sociologist/anthropologist Bruno Latour's 'network theory' as a set of negotiations. The interconnected components of the scenario mediate user participation, following a sequential structure; when users interact with objects, they connect their actions in an experiential circle or pattern of use. The various types of interaction offered by a testing scenario allow a range of design solutions for selective experiences and provide understanding of human interaction and behaviour in pre-set contexts. Participatory design theorist Susanne Bødker (1999) pointed out that good-quality scenarios are not a formulaic description of user tasks and actions, but selective scripts or stories that stage user actions with a future artefact. As such, the narrative structure of the tests established preconditions for obtaining a set of results: for instance, an anticipated range of uses, subsequent user activities and behavioural attitudes. The mediated experiences are dependant on the intentionality of the designer; in this sense, user activities remain within a certain range of potential - established by designer in terms of affordances (possibilities for action are pre-contained or encoded in objects). R. M. Young suggests that the user response might be developed in a form of re-planning the narrative structure, by modifying the un-experienced portions of the narrative plan.

The tests used in this project were based on a narrative structure (plots), involving elements of experience and performance; all tests focused on interaction and adaptability and observed the relationships between user, object and environment (chapter 1, pages 41-43). For example, the first test scenario was a simple framework for user-prototype interaction: it explored the use of simple archetypal forms in a set context and observed their performance in the hands of the participants (chapter 1, page 37-40). The future situation of use was a premise for reflection and consideration in the design process. In the case of the first test, the re-planning took the form of object intervention in the post-production design stage. In this view, the narrative (and performative) scenario allowed flexibility in altering the development of the prototype according to

user activities. The first test scenario provided a valuable context for the activities of the user, and revealed the anticipating twofold adaptation between user and product, illustrating the reciprocal change envisaged by the theory of 'domestication', which suggests a two-sided control, a state of becoming affected; a temporal process whereby things and people influence each other.[ccxxiii] The testing revealed forms of attachment between users and prototype-objects, an active form of involvement operating in subtle ways on user behaviour. Also co-experience - the experience that users themselves created and shared together in social interaction allowed communal interpretations (see Judy Attfield and Tim Dant, page 54). Social inter-relations can thus be modelled through objects, who act as social instruments for (social) interaction.

Similar examples of testing scenarios were developed by Equator (2000 – 2006) and Interaction Projects (Royal College of Art), showing that the shape of things can be engendered by activities developed by users. Interaction Project's designs are based on thematic 'probes' (see *Fig. 28*) that contain tools for recording users' experiences. From these probes (for instance, users record the images they see from their window or the objects sitting on their kitchen table) the design team proceeds to design products in response to users' perceptions, observations and recordings. The design models are reconstructed from user feedback ('probes') which include visual or audio transcripts or materials (in other words narratives), recorded or written explanations through which users account for their own behaviour or protocols of doing things. Such models of exploration provide designers with useful references in terms of the meanings and affordances a product has for different user groups. Users' ways of 'making do' are then translated into utilitarian objects: the 'domestic probes' designed in collaboration are utilised to elicit responses and function as collections of user tasks (first-hand information). The Interaction Project takes into account the fact that out of different experiences with using things, people tend to develop their own ways of operating (see Michel de Certeau); and a practical understanding of how things work, how they can be controlled or manipulated toward desired practices and outcomes. Interaction Project's probes represent tools of analysis for human needs, and propose solutions for these; for example, a user may articulate a need which is read in the probes, this is interpreted by a design team and a 'solution' is produced, appropriated and redesigned and then disseminated to a user community.

These examples of narrative plans (from user to product) represent alternative user research methods to more traditional ones that have been adapted from social sciences (such as questionnaires, focus groups and ethnographies). User-centred methodologies in product design for instance expand traditional task-based thinking from cognitive science to include 'action-

orientated modes of behaviour'. For example 'SonicRim', a U.S. based User Research firm developed user-based categories of 'say, do, make' as a designing tool; or 'think, do, use' as methodological approach. Like 'Ideo' (2001), and to some extent Equator, 'SonicRim' start by observing and learning of people's expectations and experiences with products; they target people's motivations and actions (in particular contexts) as central aspects of user experience.
In the same way, the testing scenarios integrated in this project took into account the interaction and adaptability between user and object, aiming to analyse the relationship between user, object and context, and to engage the users in a communal experience. By reacting, responding, exploiting, conforming, users started to adapt to the objects and the context of use; the test proved Fulton-Suri's observation that participants make use of opportunities present in their immediate environment, altering the purpose or context of things to meet their objective (adapting); it showed that the context prompted users to behave in particular ways (responding), also learning patterns of behaviour from others in the same socially group (conforming).[ccxxiv] The test participants made use of the physical qualities of the objects they understood, interacting with them in the set scenario. The narrative plan of the testing scenario integrated in this study provided a useful feed-back for analysis, becoming essential in refining both models of participation and prototyping. Thus, the narrative elements of the scenario (context, protagonists, and set of activities) informed the design process by guiding its evaluation at different stages. Plans or plots are useful in the construction of design scenarios that involve multilayered user-object interactions; as the stages of the narrative structure enable solutions or directions when things are in the making (for example Marije Vogelzang's food events).

Testing proved to be a significant feed-back element that looked at user-product interaction from a range of viewpoints (chapter 1, pages 41-43): an emotional element based on user behaviour and participation, a functional component (handling) linked to performance (how objects perform in the hands of the user), a contextual, social element; all these components contributed to a multilayered user experience. Test recordings (visual, verbal) brought about a series of conclusions and observations that can be taken into account to develop further the design process. For example, the performative elements revealed during the test were relevant in evaluating the participants' responses, their roles and modes of operation. They assisted in the evaluation of user interaction and influenced the subsequent development of the prototype pieces. The test also provided a framework for the interpretation of the objects' meaning and functionality; it showed that meaning emerges in use, in the practice of living within a designed environment in different contexts. The narrative frame of the testing scenario opposes the classic

idea of the 'adoption curve' in reference to new objects: Everett Rogers's (1962) 'diffusion of innovation' theory maintained that users simply adapt to what is offered to them, implying an extremely passive role in regard to the consumer. In contrast, the testing carried out in this project shows people as active in the ways they interact with, appropriate or experience objects.
The participative, active role of the user in the design process can be approximated or compared in function with that of protagonists in a narrative. Any narrative considers as central the reader, by association - the role of the user. As such, an interesting parallel can be drawn here between the protagonists or actants of a narrative (see Algirdas Greimas's actant concept in Glossary); users as they are defined in design (see Bruno Latour above who sees users and objects both as actors), and Nicolas Bourriaud's audience as defined in 'Relational Aesthetics': they play the same role in the interpretation of a product (whether this is a story, an object or an artwork).

It can be concluded that a poetic scenario can be created as a possible 'story of use'. That plans and plots could operate as design scenarios, and narrative elements can be adapted to a user-led design approach. Test methods based on narrative structures could provide further information on user experience and the analysis of prototypes, suggesting further developments. The testing sessions presented in this project became conclusive in identifying narrative elements relevant to design. Unlike user testing in hi-tech product design, the tests of this project were intended to explore design ideas in ways that are evaluative and generative, rather than analytic. They provided a practical tool in gathering information on a few key aspects in the design process: the usability and functionality of the prototypes (directly tested on the prospective user); information on the reception of the objects (handling, use) and the type of experience; information on the targeted design elements (focused on tactility, temperature and weight, form and size and manipulation); and it rendered information on what it 'worked' and what it did not 'work' – this having a significant impact on the subsequent course of the design process. In addition, the test responses concluded that the design process operates on different levels (performative, experiential, behavioural, functional, aesthetic, and contextual) that correspond between them and which present common points of interest for design. These common points refer to static characteristics (set, object characteristics, form and functionality, aesthetics, object relations); and to dynamic characteristics, involving user-product interactions.[ccxxv] As explained in the first chapter, these aspects expand design thinking beyond the functional performance of a product and include the quality of experience, integrating the symbolic functions of products, the psychological, social and cultural contexts of their use with various physical, ergonomic and aesthetic functions.

Thus, the evaluation of the first test responses showed that the design of the prototypes was in fact the design of an experience (the designer did not propose an object but a user experience); it involved the qualities of objects, user movements, actions, gestures and modalities of use. In these terms, testing provided details on how users felt, and what elements constructed their experience. The testing scenario also ensured openness for the design process: it allowed interventions at any stage, and changes of the staged, functional, emotional, or performative elements (see chapter 1). The modification of any of these components would change the making process and impact on the participative role of the user, or affect object developments. The constant element for the tests remained the form, the size and weight of the objects – the fixed, intrinsic properties of the objects. Most test responses also highlighted the double function of the objects (prototypes) handled by the participants in the staged presentation: their usability was extended as "social accessory."[ccxxvi] The test responses showed differences in the role of participants, the influence of the staged context and user behaviour (see Appendix). The participant-prototype interaction was central to the testing scenario, in that the designer observes design problems in the context of 'real time' and can refine further conceptual issues.

It can be argued that narrative scenarios could be adapted and employed to evaluate a series of aspects in design practice (user interaction, experience and participation) acting as analytical template. Thus, forms of narratives can be useful as devising mechanisms in design planning; and can become potential tools supporting experience-based design scenarios, an understanding of user experience, interaction and behavior. Apart from establishing a structure and scope for observation, the testing narrative used in this study aimed to act as an evaluative tool in the design of user experience, and in the design of the prototypes.

In aiming to define alternative forms of thinking and designing for users, this section approximated the construction of a narrative for a design poetics process. The basic structural elements in narrative (setting, protagonist, plot, actants, story-telling, object) can be approximated with a scenario structure in design. As a design form that involves forms of story-telling, scenarios of use, references to history and to object typologies or archetypes, design poetics involves different kind of experiences for its users. Thus narrative elements can be adapted to mediate a poetic design practice.

CONCLUSIONS

This study aimed to situate design poetics and its objects in a specific site of cultural production and explored the forms of its 'consumption'. It intended to question the position of poetic design within contemporary design culture and to select the systems of analysis, theories and characteristics that separate it from other forms of contemporary design.

Various approaches in contemporary design respond to a variety of demands, theories and practices and these can be defined by analysing the specific objects they produce. In order to distinguish poetic design as a separate category, as a form of design practice which embodies processes and manifestations that respond to other (immaterial) needs than those purely functional, material or practical, I have selected a class of poetic objects. In analysing these objects through a bricolage of views from material culture, sociology, anthropology and design studies, I have set out their characteristics. By re-evaluating their characteristics I questioned the particular field of design poetics. As such, I envisaged that poetic objects support a different category of practices of living and develop experiences that diversify the practice of everyday life.

Design practice is generally directed towards practical necessities, offering a variety of pragmatic solutions for most aspects involved in everyday living, from food, clothing, furniture and domestic products to transport, services and social spaces. However, new forms of design question the ways in which users interact with the built environment, how they operate in an already fashioned world: the modes in which people live at home, work or travel are oriented, filtered, influenced and shaped by the culture of design. The past decade has witnessed a return to the re-design of the domestic field, reflecting on living in the world within specific material relationships of production and consumption.

In being an evolving practice continuously responding to new forms of living, design is creating new products for new-developed needs and for new kinds of users. New, contemporary design forms represent a productive field for social and cultural research by involving the participation of aesthetics, play theory, sensual perception, technology, affecting in its turn traditional design theories and research perspectives. The profound structural changes of the contemporary society in relation to everyday life, work, family, behaviour as well as science and technology demands a continuous and creative adaptation. The role of design in contemporary culture is evidenced in the impact it has on the changing experiences of modern life, which highlights the role of design as a field permeating changes and movements. The increasing number of designed objects available to the consumer has diversified the needs and experiences of modern users. In this view a variety of 'goods' are designed to achieve lifestyles, whilst other types of objects are incorporated in a

multitude of forms of practice. Therefore, a new economy of needs determines the development of a pool for other types of products, defining 'new' types of 'consumers'.

If mass-production provides commodities for everyday consumption, new forms of design that infiltrate cultural practice start to cross disciplines and object classes, introducing different kinds of 'valorisations', broadening the exposure of objects and their significance in everyday life. But how do objects find their place and their role in society, and how the functions and meanings of products evolve when consumers adopt them, modifying everyday practices? Therefore, how do such objects derive meaning when bound to the symbolic activities, occupations and systems of value created by their 'consumers'? It can be said then that design situates its products in a large social network, expanding their interpretive capacity; but designed artefacts do not embody notions of functionality or aesthetics on their own, they are best understood through the interactive uses and embedded practices developed and evolved by their consumers/ users[ccxxvii]. Significantly, design considers the relationships between its objects and their users and as such, value is attached to the ultimate end - the activity that derives from the interactions between users and objects.[ccxxviii] From this point of view, Pierre Bourdieu (1984) considers peoples' activities and ways of doing things as representing a 'cultural engagement' and that this cultural orientation is embedded in the routine practices of consumption.[ccxxix] Thus peoples' activities illustrate how objects circulate within everyday practices of living and become permeable points of access for cultural practice.[ccxxx] In this sense, this study focused on the bilateral relationship object-user and analysed designed objects that transform the end-user's practices of use, aiming to observe how they are valued and 'consumed'.

The texts from material culture, sociology and design studies offer a multilayered understanding of the situational, practical and social organisation of the everyday life aspects in the domestic space. As such, the domestic field of the home, its objects and people's activities constitute an active site for design research and analysis. In exploring it, I have endeavoured to analyse the physical but also the experiential, emotional and social interactions and engagements sustained by a series of artefacts considered to be poetic. The different strands of this exploration showed that, apart from the most common processes of consumption there are potential transactions with objects leading to experiences that can be developed through a poetic design form.

As I have highlighted in the introduction (pages 6-9), the bricolage methodological approach used in this thesis was instrumental in that it allowed an interpretation of the object-user relationships as

an alternate viewing from sociology, design theory and material culture. This collage associated, juxtaposed and re-composed ideas, views and concepts derived from separate contexts and frames of reference. Their concomitant use enabled me to relate, adapt, accommodate and accord various theories whilst connecting them to the practical side of the testing. Therefore the concept of bricolage construction selected and reassembled elements drawn from available sources, providing a platform for the practice of research. It provided a theoretical framework for the literature review which enabled me to identify the interrelations between users, products and consumption in design becoming an interpretative model for poetic design and the class of objects it generated. The dynamics of this technique permitted me an understanding of the processual and multilayered relations between people and objects as opposed to seeing them in isolation: thus, I placed poetic design's immediate 'local' context in the cultural and social context within which the experiences and practices are situated.

In distinguishing between industrial, product and hi-tech design and contemporary forms of design such as design-art, design for critical debate, etc. (therefore in differentiating industrial, hi-tech products, design-art from poetic design objects) I have highlighted throughout the thesis that the methods of their production bears essential differences. Because the coming into being of an artefact in the contemporary design field follows a distinct process from those applied to industrial or hi-tech production for example, it has been explored differently from the analysis or interpretation of artefacts in disciplines such as hi-tech design, material culture studies, design history or anthropology; as a result the methods of analysis and research for this processes have been rethought. In this sense, positivism would be harder to adapt been for research projects in the humanities.

In addition the bricolage method established a good level of rapport between theory and testing and added an interpretive dimension to the qualitative research, enabling to be used as the basis for a theory. It made possible relational links between test findings and previous fields of analysis; it informed speculation – providing an opportunity to be creative with the ideas developed through the discussion. This suppositional structure to arguments was useful in that it connected theoretical paradigms (interpretive material) to testing methods, indicating how issues are addressed through triangulation. Applying this method is appropriate to the objectives of this study and consistent with accepted practices in the field of design, with the research topic and assumptions.
Also, following the bricolage technique, the research made use of qualitative analysis - a combination of case-studies of contemporary designers with common background and testing

case-studies which discerned common areas of interest in the design process. In generating and analysing data from multiple perspectives, the bricolage method established dialogue and interrelation between theory and practical testing: by responding to issues identified in the theoretical analysis, the testing has been instrumental in proposing useful interpretations. In responding to the issues and questions raised by the user-product binary, the test indicated a series of patterns related to user-product performance, context (narrative setting) and experiential elements that led to a set of principles for constructing a theory. The questionnaires helped to establish specific behaviours and interactions and these have been interpreted in relation to the theoretical frame established in the introduction. In addition, the case studies enabled comparisons that determined relevant similarities and differences between processes of production.

The use of the bricolage method allowed an analysis of poetic design objects as 'bearers of knowledge" and made it possible to relocate objects of design within a new model of meaning and understanding.

Using as Consuming

In order to distinguish the characteristics of a specific class of (poetic) objects, their analysis has followed the dynamics of the triangulation of users–objects-consumption. Although the roles of objects are varied and fluid, only in recent years have they begun to be analysed in the multiplicity of their capacities by different domains of study. These different domains, such as sociology, anthropology, material and design culture (Tim Dant, Judy Attfield, Arjun Appadurai, Pierre Bourdieu, Klaus Krippendorff) emphasize the roles and the content of object-user relationships, seeing artefacts interrelated to people and their activities; showing the effects objects have on culture and society as a result of different interactions.[ccxxxi] As such, culture reflects the ways in which people live as a society, and illustrates how cultural practices are shaped by the things people live with (see introduction, pages 14-20). Furthermore, social relationships become modelled and located within the networks and transactions developed through objects, making-up a substantial part of the context of the social lives of the users.

At the same time, the different views from design studies highlighted that objects evolve as a result of innovation and improvement through a continuous product development (chapter one, pages 29-32). Ergonomics, human factors, market research and efficient manufacturing have contributed to technological progress and thus have integrated technology into every aspect of daily life[ccxxxii]. However, I have pointed out that this evolutionary process, consisting in the shaping and reshaping of objects, involves the experiences of their users within the social, cultural, and technological

contexts in which the objects are embedded. And, that everyday objects are enduring because they are linked with the activities and practices developed in time together with their users. A twofold interaction is at play: users create new practices in response to new forms, new forms determine the development of other products (new tools create new needs and these determine new objects and practices of use)[ccxxxiii].

The participation of domestic objects in everyday tasks accounts for the objects' multiple functions, histories and meanings; the ways in which domestic objects are used illustrate their development in form, the evolution of their functions and meanings. The capacity of objects of fulfilling different uses means, as Dant (1991) observed, that they cannot be reduced to a singular function or a single aesthetic; Jean Baudrillard speaks of the use value, exchange value, the symbolic and sign value for objects – and these are shaped by the culture which defines what things stand for. The different perspectives from material culture and sociology, those from anthropology and design culture have highlighted that objects perform functional and 'non-functional' roles. It was the last category of characteristics that I aimed to observe with preponderance: as utensils for domestic use and aesthetic objects alike, use-objects belong to a territory where the distinction between form (functionality), beauty (aesthetics) and use (practice) is erased[ccxxxiv]. Objects of use have formed a distinctive category of artefacts, incorporating both utility and beauty and as such their production has always occupied a dual position: in their mundane role, functional objects provide an economic basis for living; in an elevated, aesthetic role they evolve a different kind of economy. As such, everyday objects relate to experiences beyond aesthetic enjoyment in favour of what Pierre Bourdieu calls 'simple delight': "… nothing is more distinctive, more distinguished than the capacity to confer aesthetic status on objects that are banal or even 'common' because 'common' people make them their own"[ccxxxv].

Thus, the text intended to emphasise the transformation of objects from functional, domestic use (necessary products serving subsistence needs) to objects of aesthetic enjoyment, contemplation and play, acting both as social instruments of domestication and as cultural signs and symbols. This transformation comes into play with the distinction between needs (what is truly necessary for a person) and wants, which are determined by culture (what Pierre Bourdieu called the 'taste of liberty or luxury' and Thorstein Veblen named 'conspicuous consumption'). As curator and art historian Philip Rawson (1971) expressed, products evolve from "strands of meaning related to life, use, and symbolic thought", to the exploration of "functions which have no basis in immediate life needs, with its own symbolic justification."[ccxxxvi] Thus functional objects create their own notions of

aesthetics and economy, beyond commodity, symbolic use or class status markers. This explains why the cultural values invested in objects designed for use have altered with the patterns of consumption and commodification, in response to changes in the field of cultural production. Sociologist and cultural theorist Mike Featherstone (1991) pointedly observed that "… aesthetic sensibility shifts in late modernity from the world of art, separated from the reality of everyday life towards the routine, mundane stuff of life whose form begins to be treated as valuable in itself, beyond its usefulness"[ccxxxvii].

As such, human relationships are translated into commodities which account for their quantitative and qualitative value: besides their inherent value, objects acquire an adherent social value in that they fit into social lives as relationships between material and emotional (immaterial) 'uses'. For different types of users, objects are implicated in different ways in the translation of emotional or social meanings, together with the practices they afford. As I have discussed above, in giving rise to processes and manifestations that respond to other than material or practical needs, design proposes categories of objects that act beyond their strictly functional role. But what is the nature of these other roles and how the relations 'invented' by these objects can be classified?
This study aimed to localise this class of objects and to identify the category of practices they engender. By observing design poetics as a specific category of contemporary design practice, the text explored a range of specific characteristic for a poetic class of objects, setting them apart from other mass-produced artefacts. Aside from aesthetic and functional necessities, the class of poetic objects of domestic use embody specific experiential, emotional, narrative and symbolic values relevant in the ways in which they perform in everyday life and practice. In these complex capacities, this type of objects, which I considered poetic, are situated in a different field of cultural production, therefore other instruments of evaluation and valorisation are necessary to analyse their circulation and use.

When objects are viewed from the point of view of material culture, sociology and design studies**,** commodities become the expression of the technological, aesthetic and social knowledge of the culture that went into their production. The anthropological approaches to culture focus not on material or artistic production but on people's everyday lives. But although cultural anthropology looks at cultural practices and accounts the ways in which social relations are created through consumption, it does not explain how material culture is formed through various practices of living with things. And although sociologists and social science study the traditions, the symbols or articles of exchange that make up a culture, looking at social relations, social interaction, culture

and social activity, users' everyday activities and the ways in which people re-appropriate things in everyday situations are not recorded or classified by the system of analysis of the social sciences.

In this sense, the review from material culture shows that 'goods' or commodities are not as important as experiences and services. Although material culture, social studies and cultural anthropology explain the circulation of objects within a web of social relationships, they do not reveal a series of other properties characteristic to poetic objects. These objects (discussed throughout this study) respond to needs related to aesthetic, emotional responses and personal experiences or to playful or contemplative activities belonging to the poetics of everyday. I aimed to bring these specific needs into discussion by considering performative, narrative and experiential tools of analysis (chapters 2, 3 and 4). These means of exploration view objects as tools in the rituals of everyday life, as part of the stories and experiences of the users, as vehicles for emotional evaluation. As such they can be examined as central referents for the experiential and emotional life of their users, and as propositional forms of living. In advancing performative, narrative, or experiential forms of analysis for a poetic design process, the study established interrelations and correspondences between them, considering both its objects and the type of practices they engender.

By involving different notions of cultural capital and appreciation, the class of *poetic objects* require a different knowledge to be *consumed* and a distinct understanding of the culture that went into their production. As such, they propose a form of *consumption* situated outside the commercial market; and a different kind of consumer. Following this view, it can be said that the objects designed by Droog and KesselsKramer, Marije Vogelzang, Jurgen Bey, Rachel Wingfield and Equator, Noam Toran or Julie Cook are not 'consumed' - what is 'consumed' is the idea of object-user relation. It follows that, like works of art, poetic objects do not represent the end-products of the designer's creative process but become generators of activities and experiences. When analysed from the point of view of experiential and performative perspectives (chapter 2 and 3), these examples have shown that poetic objects permeate a flow of cultural production and operate concomitantly on a series of levels: as bearers of symbolic and aesthetic value, as components of ritual; as signs or active contributors of meaning, consolidating their place within an existing cultural system and embodying a much broader concept than that implied by mere 'usability'. At the same time, they establish rich connections to daily life reflecting on the practice and culture that produced them.

Both material culture and sociology have taken into account the active roles of the users in the circulation of objects. In this view, poetic objects were considered in relation to the practices evolved by users around a specific type of 'consumption'. On one hand, consumption practices were read as a theory of domestication that enables a product to be adopted into a pre-existing context. On the other hand, consumption was seen as the sum of various 'operations' that people perform with objects, which introduce their "… own formality and inventiveness, discreetly organising the multiform labour of consumption".[ccxxxviii] In relation to poetic design, the analysis considered users as essential in the dynamics of consumer practices: in accord to Michel de Certeau's theory, the practice of everyday life has been seen as a productive form of consumption ('… subtle tactics of resistance and private practices that make living a subversive art'). By following de Certeau, I have considered that users' practices become a 'productive' form of 'consumption' - related to cultural needs and practices which fluctuate between the ritualised and mundane forms of life, generating the practices of everyday. Michel de Certeau's equivalence between use and consumption has exposed the hidden practices beneath the surface of the production-consumption pair, showing the participative role of the consumer.[ccxxxix]

Thus, consumption practices become a sum of 'lived experiences', 'quasi-invisible', 'quiet activities', a praxis where products are "… parts of the repertory with which users carry out operations of their own".[ccxl] Following this reading on consumption, I have considered that poetic objects become part of the repertory of users' activities and thus they are integrated in processes of user-production. In this case, the 'hidden' production of varied users becomes a 'lexicon of practice', a repertoire through which users 'employ' or/and 'inhabit' culture; which points out to the use of objects as processes of consumption.[ccxli]

The vast majority of interactions between users and objects are primarily related to the flow of everyday life: people appropriate culture and its objects to fit into their own systems of value and necessities. As objects are re-contextualized, they become integral to the social contexts in which they are experienced: Pierre Bourdieu (1984) writes of the 'labour of appropriation' referring to the ways objects are lived with; and that a re-contextualizing process provides understanding of the social world of things[ccxlii]. In keep with this view on the user, Roger Silverstone's concept of domestication of products (like that of appropriation) was a useful tool for understanding the integration of poetic objects into already established practices of use (indeed Nicolas Bourriaud observed that appropriation is the first stage of postproduction). In this sense, objects and their uses can be understood through such processes as objectivation and appropriation or incorporation as both social and individual activities.

The case studies and examples of poetic objects (Rachel Wingfield, Marije Vogelzang, Droog Design and Kessels-Krammer, Noam Toran, Julie Cook, etc.) have illustrated throughout the text that in actual practices of everyday living concepts such as 'material' and 'symbolic', or 'interaction' and 'sociality' are not much distinguished from each other. Indeed they become practices transformed in 'lived experiences' and people find common ground in everyday experiences. These observations show that the ways in which people live with, and use objects are linked to activities that were always of social nature, and that shared values, activities and styles of life define the communal and collaborative character of human existence. It follows that social processes play an essential role in domestication of products; and at the same time, products play a fundamental role in the ontology of everyday living. In this sense, social processes of domestication see objects as active agents in the ways in which they circulate and fit into everyday practices and human relationships[ccxliii]. As design historian Alison Clarke suggested, homes and possessions are "…active agents (…) in the construction of taste and social relations."[ccxliv] As a result of varied processes of appropriation, objectivation, incorporation and conversion, objects enter the life of the household and circulate between private and public contexts. As Pierre Bourdieu (1984) pointed out, every area of cultural practice tends to transform and stylise primary needs by establishing cultural codes in order to determine 'cultural continuity'; and objects become part of an economy of cultural goods dependant on the economy of cultural needs, governed by cultural practices and regulated by conventions.[ccxlv]

But if the first chapter analysed the making of objects and their circulation in a culture; the second, third and fourth chapters analysed the interrelations between objects and users from experiential, performative and narrative points of view. These proposed a different reading of objects and users because from an experiential, performative and narrative standpoint *consumption* can be read as a process of user *production*. In this view, design poetics is seen as the experimental practice of developing objects around the experiences, particular stories and everyday performances of the users. By adapting products to users and users to products, user experiences and product performances can be transformed into products that carry personal and social value.

The outcomes of this study refer to the particular models of consumption generated by a poetic design, to poetic objects and users, the specificity of their interrelations being central for the design poetics practice. One of the intended contributions was to define poetic design and to propose evaluative tools of analysis by highlighting its models of operation. Rather than prescribing precise parameters for poetic design as a specific design practice, I intended to take a position by setting a theoretical frame and testing this against a series of evaluative points of reference (play,

performance, experience and interaction) in order to distinguish a class of objects that cannot be 'consumed'. By distinguishing design poetics from other design approaches, I have selected a class of poetic objects and defined their characteristics. In articulating a set of properties for poetic objects I reconsidered the user-product relationship. But this relationship changes in the case of poetic objects, which in turn contributed to the redefinition of design poetic practice and the redefinition of poetic objects. As such, this study looked at the ways in which the models of operation of a poetic design condition object-user interactions and the characteristics of poetic objects. Therefore I have proposed the following conclusive observations and findings:

(1) *Design poetics: models and methods of operation*

Design in general can be considered as a collection of material and cultural life, as a sum of processes, values, practices and products. In discussing various design approaches (chapter 1, pages 29-30, 32-34) the study has differentiated a poetic form of design apart from hi-tech, industrial and product design practices which by and large consider objects as the passive end-products of the making process. Market design involves many design methods, management studies and new technologies, but much less has been developed in terms of the methods, processes and objectives for new forms of design or alternative design approaches. Many contemporary design practices have borrowed methodological approaches from technology (hi-tech) and product design, however these are limited and linear in understanding the relevance of user experience. Even if product design follows a user centred direction and people remain in some measure within the framework of the design process, the role of products as final outcomes still dominates design practice. As a result, a certain measure of determinism is still at the base of many design projects as a methodology: many developments start from an idea of a potential object which in a design process finds a form and a set of functions that may appeal to its future users. In these cases, user-orientated approaches become visible in relation to the human aspects of product use influenced by ergonomics. As such, product or industrial design practices, hi-tech or interface design offer only a partial perspective on the ways in which – on one hand how designers operate; on the other, the ways in which users appropriate and make use of their products. It follows that new forms of contemporary design become relevant in proposing alternative models of operation in accord to a time of interdisciplinary change.

Is relevant to distinguish that in comparison, poetic design takes into account that objects cannot evolve independently of human manipulations, and as a result, the design process considers the situation of use and the 'product' as a constituent of a whole experience.[ccxlvi] In these cases, user-

product interactions engage products and people together with their contexts, practices and the experiences they evolve.

Poetic design does not aim to create the newest or best design – instead, it makes recourse to already produced forms or existing products, changing (or recreating) the relationship between these and their users. In other words, by reconsidering the common uses of known objects, re-examining their expressive qualities and by making use of references that constitute daily life, a poetic design develops alternative 'functions' for use-objects (introduction, page 26, endnote 42) - for example the 'Do create' collection by Droog-Kessels-Kramer. In this sense, the processes employed in a poetic design are those of re-inventing *protocols of use* for already existing objects, users and practices; and it does this by encompassing both the emotional and physical needs to use artefacts. Thus, poetic design produces objects that extend their everyday function beyond the field of the practical, relating to the user's repertoire of experiences and practices.

At the beginning of this study I intended to pinpoint theoretical and practical means for a design poetics practice; however the analysis of various aspects of poetic design (material, social, experiential, narrative, performative) has shown the complexity and interrelation of the levels on which design poetic practice operates. Although this study defines specific characteristics for design poetics, it can be said that this design category does not have a methodology that prescribes a set of rules that could be applied by any designer in order to obtain an expected result. In this sense, a design poetics does not seek to better a product in a strictly functional sense; instead, design poetics operates on user behaviour, user experience and thought and in a sense, creates its (own) user. It starts by looking at the user and its modalities of operation in order to start the process of production of objects.

(2) *Poetic Objects defined*

Theoretical approaches to material things use different classifications to understand objects: they are ordered, arranged and studied according to their uses, functions or forms in relation to their technical evolution or within particular social practices. In aiming to view material objects apart from 'products', commodities', 'technology', or as defined by their functions I have considered design poetics as a practice concerned with both objects and users, especially focused on the user's repertoire of practices. Like Sherry Turkle, Ben Highmore observed that designed objects represent active agents in a dynamic environment, and as such, they are generally invested with powerful meanings whilst remaining material: as practical things, as symbolic possessions or as objects used by subjects whose playful interactions. This view illustrates both the physical life of

material objects (use-value) and their social life (sign-value) in relation to their users. The theoretical frame employed in chapters 2, 3 and 4 has brought to light specific experiential, performative and narrative characteristics for poetic objects, distinguishing them from the functionalist and strictly pragmatic properties common to the objects generated by, for example, product or hi-tech design. Not only that these characteristics are specific to poetic objects but also the experiential, narrative and performative properties that define poetic objects also influence forms of user-product interrelations.

In the light of Nicolas Bourriaud's (2002) notion of a relational art, poetic objects can be seen from the point of view of the inter-human relations which they produce, as they address human relations and their social context. Thus, as artefacts implicated in inter-human relationships, poetic designs can be located in the space of what Bourriaud calls the 'social interstice'. Whilst participating in a complex network of practices and interconnections between users, poetic objects can be defined as relational – by means of the production of relations within a culture. Thus design poetics is defined by the production of relations 'invented' by poetic objects, an operational field where users, as producers either preserve or transform everyday practice.

In spite of preserving recognisable everyday functions, the examples of poetic objects presented throughout the chapters (Droog Design, Droog and Kessels-Kramer's 'do create' products, Marije Vogelzang's food events, Ingrid Hora, Julie Cook's and Rachel Wingfield's solutions for living) undergo a process of conceptual de-construction and re-construction in order to re-enter a bricolage of practices, or new places of activity and use. In this, poetic objects challenge the known, habitual notions of meaning and function, generating new sets of relations that can be established with the users in time. Some of the objects are experienced as part of the self (Toran, Hora), others as collaborative forms of experience (Marije Vogelzang, Kessels-Krammer-Droog), others as reinterpretations of new forms of ritual (Wingfield, Vogelzang, Droog) allowing users to create and organize their own stories, practices of use and routines.
Thus poetic design practice re-cycles the already existing forms, histories, meanings and uses for known objects, generating interpretations that are subject to the user's repertoire of practices. Through a re-combination of historical associations and characteristics, the biography of everyday objects is reinterpreted and relocated within other forms of utility. In becoming reintegrated in the patterns of practice that gave them life, poetic objects become absorbed into the combination of already existing rituals and activities. As such, poetic objects illustrate the complex nature of people's interactions with the material world: the way in which stories, sensations, emotions and

aesthetics, for instance, are interwoven at an everyday level[ccxlvii]. In other words, poetic objects *tell* about human experience. In generating 'open-ended' objects, poetic forms of design transform users, provoking them to act in different capacities, offering them roles and scenarios for alternative practices of living. When objects perform well their functions and at the same time 'play' with the functions that define them, they act simultaneously as *passive* and subservient tools (see Martin Heidegger, page 53 and Jean Baudrillard, page 12) and as *active* vehicles for critical commentary – roles which distinguish 'active' from 'passive' types of objects.

As I have already demonstrated, in differentiating a specific class of poetic objects, aspects of experience, narrative and performance emerged as significant referents for defining object-user interactions for a poetic design. As sites for of creative engagement, and as transactions between people and things within the material and social worlds, a number of poetic objects were evaluated throughout the study using these experiential, performative, narrative referents as essential criteria. All the case–studies discussed here (i.e. Noam Toran, Marije Vogelzang, Droog Design, Ingrid Hora, KesselsKramer, Rachel Wingfield, etc.) explore user participation, engaging the user on multiple levels of interaction – but some of these poetic objects act at an experiential level more than at a narrative level, others have a predominantly performative character, others offer a combination of these roles, overlapping aesthetic, emotional and cognitive experiences.

For example, as participatory models of interaction, Marije Vogelzang's food events are based mostly on a predominantly *performative* structure which co-produces models of sociality, permitting users to 'act out' *(to perform)* using objects as props in a theatre-like ritual. By devising a setting, an event, and props as performative tools, both users and objects become actors in a design scenario. Vogelzang and 'Do Create' designs in particular enable role-playing, establishing a set of rules where objects are active in creating 'quasi-social relationships' with their users. Many 'do create' products demand a tangible interaction with products, engaging users in purposeful activities by integrating elements of play and *performance* in a pre-designed scenario of use (a mise-en-scene). More so than Gijs Bakker's 'Knitted Maria' Coffeepot (1997) or Hella Jongerius' China 'B Set' or the 'Embroider Tablecloth' plates (1998/2000) - which are predominantly narrative-based designs - Toran's and Vogelzang's design-events propose a combination of elements in a staged structure where objects and users become equal actors in the performance, activating the poetic quality in the use of simple, mundane things.

Noam Toran's designs reveal most of all the *emotional performances* of the human experience; in the same way Ingrid Hora's products are active mostly as *experiential* vehicles that respond to personal stories. In a different manner, Rachel Wingfield's designs re-assess user *experience* by activating the reflective, emotional and behavioural level of the user-product interaction. Although Rachel Wingfield works might not invite overt user performance they allow time for contemplation, where the emotional, aesthetic, contemplative and emotional aspects of interaction overwhelm the practical elements of design. Thus, Wingfield, Toran's and Cook's products 'qualify' as poetic being interaction-centred and user-experience focused, and as they recreate the relationship between user, object and context. Their designs trigger predominantly a multilayered experience: physical, sensual, cognitive, emotional, and aesthetic, expressive and social, becoming in fact a design of a particular a protocol. Julie Cook's body-related designs address simultaneous *layers of experience* dealing with the sensory needs of the body and its *performance*.

Using the narrative elements of plot designers create scripts that enable the staging of user actions with a future artefact (a narrative plan mediating an experience). Jongerius, Gijs Bakker and Jurgen Bey especially embed narrative elements into objects, reflecting their histories of use and cultural meanings: in telling a story about the product, this becomes a subject or a script to be interpreted by users. Thus poetic objects become visual narratives material: Bakker's 'Knitted Maria' Coffee Pot (1997) and Jongerius's 'Embroidered Tablecloth' (2000) add value to common rituals and activities like eating and drinking, acting on a reflective level. In reading a poetic object the user becomes a co-producer and part of the narrative. Following a similar visual story-telling manoeuvre, Jurgen Bey's furniture re-evaluates functionality by translating a story of domestic use into an object. These predominantly narrative designs evolve a reflective register of user experience. Yet on another experiential level, the Equator Project proposes domestic objects that support the performance of the home environment challenging the user. The user-product interaction has highlighted the role of objects and users when engaged in experiential or performative activities.

Although starting as experimental projects that triggered various layers of user experience and interaction the projects developed by Toran, Wingfield, Vogelzang and Cook are actual events and artefacts that have been and are still put into practice. On the other hand poetic objects are also consumed as visual material: the 'Do create' project produces actual objects (which can be bought) but also proposes their consumption as visual narratives through the seduction of their imagery. Being circulated as images 'Do create' products are proposed as possible scenarios for living to *an*

audience that includes not only an informed elite but also the masses. In this guise, poetic objects function as social investigators because users still 'consume' them (the image) as cultural objects; that consumers count on advertising to understand what they consume in fact *through* objects.[ccxlviii] This points out to the fact that theoretical lines between the material objects and their image are blurred and that in consuming the image (*a simulacra*) a product also acts "at a secondary level", becoming the "*expression* of a culture." The presentation of poetic objects as visual commentary allows users to read and recognise their poetic value: in buying these objects they purchase a model of living. As such, in operating a user-object interaction to a visual level design poetics creates a different kind of user (with the necessary knowledge to 'consume' the objects).
Weather in material form, as supporters of people's actual environment in everyday life or as staged images that propose scenarios for living, poetic objects operate as cultural referents, exposing the ways in which society, culture and human lives evolve – the ways in which they are understood and can be evaluated. In both roles these design solutions (the case of Toran, Vogelzang and Wingfield) inform popular culture, with the potential of being dispersed across social layers. At the same time, by exploiting the complexity of the relationships between objects and people these creators propose their designs as vehicles for critical thinking.

As I have previously noted, poetic objects do not have a precise final outcome, responding to needs that cannot be measured, evidencing a number of interactions requiring a different kind of participation, which often operate behavioural changes in the experiencer, refashioning their experiential world. They enable experiential events that support the user interpretive act, proposing investigative, alternative modes of exchange for commodified objects. As the performative, experiential and narrative layers of poetic objects are activated in specific user-product interactions, users acquire an experiential, a performative and a narrative valuation of these objects.

By reversing the value of useful mundane objects from tools for domestication to social instruments and cultural signs and symbols, poetic design generates objects that modify user practice and forms of user-object relations; their role is to model cultural sensibilities. In measuring the life-span of functional and art objects, critic Louise Schouwenberg observes that in contrast with works of art, use-objects are slowly but surely 'consumed' in being used (or 'used-up'), since use-objects inescapably coincide with their function. In contrast, works of art are not used up - they are not consumed, so to speak, as material objects, as they bear symbolic value: if they "wear themselves out as use-objects, as art-objects they emphasize an unmistakable autonomous quality."[ccxlix]

Some of the twentieth century art movements have incorporated commodity and consumer culture into art, considering lifestyles as forms of art, as the everyday was invested with aesthetic significance.[ccl] Moreover, elements and notions like those of interactivity, context and participation re-emerge as concepts in contemporary art and design practice to the point of constituting new artistic practices.[ccli] Conceptual artist George Brecht claimed that there is no difference between art and everyday life; it can be said that by becoming part of an art of living everyday objects of the poetic kind can be seen as tools that make life approach art.[cclii] In this view, design poetic restores de separation between art and life, transforming the mundane practices of everyday life into an aesthetic experience for the user.[ccliii] It can be said that the interstice between art and life is occupied by design, which operates as a form of art, by introducing new types of transaction with cultural objects.

(3) The *user – object interrelation*

The nature of the user-product interaction is central to designers and researchers as it allows a deeper understanding of all aspects of experiencing a product - physical, sensual, cognitive, emotional, and aesthetic, expressive and social. In this sense, the multilayered relationships developed between objects and users in the psychological, sociological and material sphere of needs and practices are relevant in defining poetic objects. The introduction (pages 9-12) highlighted the meaning of the *user* (as employed by Certeau, Bourdieu, and Bourriaud) as an active collaborator and post-producer in the re-appropriation of culture instead of a passive consumer. Being involved within the complex network of social, experiential, material or emotional needs, objects also become *active* in supporting users. As such, users and objects were readdressed in the context of a poetic design - their respective roles and the nature of their interaction being re-valued by alternative criteria than those usually used by design studies. In enabling other roles for both objects and users design poetics infers alternative ways of understanding their functions. Aspects of experience, narrative and performance emerged as significant referents for defining object-user interactions for poetic design. By examining narrative, performative and experiential aspects of the relationship between objects and users, the study investigated how objects introduce specific practices through their use (with applicability for design thinking). The nature of the relationships established between objects / users and performance; objects / users and narratives and objects / users and experience (chapters 2, 3 and 4), were discussed from a user perspective; and highlighted a series of design models and scenarios of use for everyday objects to which users insert their own activities and interpretations, actively inhabiting socio-cultural forms of living. These alternative analytical means explored poetic design as a

relational practice, and considered the circulation of its objects partaking in the material culture of design.

(4) *Testing the poetics of uses*

Testing considered that human activity is a valuable media mapping the domain of experience. Objects are difficult to define and classify without their functionality: their meanings and the practices in which they are engaged fall outside many systems of ordering. In this light, the testing aimed to highlight the performative, experiential qualities of poetic objects.

The testing element of the research was related to the theoretical framework set in the introduction and has been, alongside relevant case studies, a practical analytical and interpretative method that explored users and objects in use. Testing took into account the design of the user - not in terms of measurable data, or in physical and ergonomic terms - but in terms of user experience, performance and interaction. In this sense, the testing of the prototypes that have been integrated in the project represent a body of evidence for the manner in which people make use or make do. At the same time, the testing protocol generated evaluative tools and furthered postproduction ideas; it re-tailored the making process and redirected it towards alternative concepts. The concomitant testing of objects and users also enabled the observation, analysis and re-evaluation of the user-object interaction from the point of a narrative, performative, and experiential standing.

In adopting alternative performative, experiential and narrative analytical scenarios, sets of concepts and procedures poetic design is 'designing the user'. These protocols and frames of reference are different from hi-tech, interface, industrial or product design practices that focus mostly on the improvement of the product. Design poetics therefore does not produce objects as much as user-object interactions or 'transactions', creating a different kind of user (with the necessary knowledge to 'consume' the objects).

(5) *Design poetics characteristics*

Poetic design emerged as a dynamic field that situates users within interrelated aspects of everyday life, creating a continual interplay between human agents and material things. It creates complex connections between objects and users, involving immaterial elements related to emotional and experiential values, the senses, forms of ritual and sociality, proposing different kinds of consumption. In this capacity poetic design translates unseen, immaterial relationships and makes them visible. As a relatively new design form, poetic design transforms everyday practices of use: in re-orchestrating the seemingly ordinary elements of the designed environment, it transforms the sensual, material and social worlds of the users, affecting the intellectual,

emotional, and experiential aspects of living. At the same time, as part of the ordinary, everyday life poetic design becomes a critical medium for cultural reflection and as an agent of social change.

Following a multilayered analysis of the interrelationship between *objects* and *users* I have situated design poetics in a specific site of cultural practice apart from commercial, industrial or market-led design. In reading poetic design as a cultural phenomenon (from a material culture, sociologic and anthropologic perspective) I have shown the ways in which it proposes a category of objects that engender experiences related to complex aspects of production and consumption.
Thus I argued that design poetics involves a different kind of *production* (which is not about the bettering of a product), developing goods of an experiential kind, allowing new practices of living with objects. In this sense I deliberated that poetic design is defined by the production of a particular *set of relations* and *protocols of use* 'invented' by poetic objects. That, as a result, by re-inventing user experience, it creates a different kind of user. I have also evidenced that poetic design explores other forms of *consumption* (which is not about the 'using up' of objects but a form of engagement with them) creating a new economy of needs and defining a different category of *users/consumers*. In this sense I have seen consumption as a sum of practices engendered by poetic objects that involve users in a productive form of consumption. Thus I have highlighted in a series of examples that *the user* becomes an *active* collaborator and post-producer in the re-appropriation of culture instead of a *passive* consumer.

In establishing poetic design as a separate category of practice I have separated a class of (low-tech, domestic) poetic objects, distinguishing their *characteristics* and setting them apart from other mass-produced artefacts. I have distinguished these objects not only by analysing their materiality (physicality) but also as emotional and social interactions, showing that they support a different category of practices and experiences in everyday life. In showing the nature of the user *needs* (aesthetic, emotional, experiential, symbolic, playful or contemplative) to which poetic objects respond to, I concluded that such objects acquire different *roles* and *values*[ccliv]. I have proposed that the roles of poetic objects (relevant in the ways in which they perform in everyday life) need other instruments of evaluation and valorisation to analyse their circulation and use. My theory stipulates that this class of objects can be valuated via experiential, performative and narrative frames of reference, enabling a different understanding of the nature of object-user interaction - permitting an analysis of objects in relation to the (human) activities in which they are involved.

In conclusion, I have represented poetic design as an experimental pursuit which develops objects around the experiences, particular stories (narratives) and everyday performances of users, responding to needs beyond the material. That in this capacity it makes visible immaterial relationships between users and objects, enabling new experiences and performances for them. Ultimately, design poetics is a practice of converting stories, performances and experiences into everyday objects and practices of use. I argued that as lived transactions leading to emotional, symbolic, narrative, aesthetic, performative or playful experiences, poetic objects can be developed through a poetic design form. As such they become generators of activities that engage users in different capacities, offering them roles and scenarios for alternative practices of living. Thus, in adopting performative, experiential and narrative forms of interaction poetic design is, in a matter of speaking 'designing the user'.[cclv]

In support of this theory, I made use of the concomitant testing of objects and users to highlight the specific qualities of poetic objects and to enable the re-evaluation of the user-object interaction and the user models of operation from the point a narrative, performative, and experiential standing. My testing procedure has demonstrated that the user-product interaction activates emotional, participative, performative, contextual and social elements contributing to a multilayered user experience. If the literature on product design frames predominantly issues of production and puts the emphasis on a problem-solving methodology, my own testing (pages 37-43) was used as a model that can be applied within the design process to generate possible models of interaction and experience with products. Therefore products can be have evaluated, for example, in accordance with performance criteria – not only in terms of utility and efficiency, but also reflecting the range of user-product interactions. In staging the test-experiment I demonstrated that a poetic-oriented design process operates on different levels (performative, experiential, behavioural, functional, aesthetic, and contextual, evidenced in the first chapter (pages 41-43, 45-47) that correspond between them. I have suggested that these aspects expand the design process beyond the functional performance of a product to include the quality of experience, the symbolic functions of products, the psychological, social and cultural contexts of their use alongside various physical, ergonomic and aesthetic functions.

In can be summarised that, as a cultural phenomenon design poetics is based on a set of specific the relationships and practices developed by users, affecting everyday practices of living. These practices assume social significance and assign symbolic value to objects of use, contributing to the flow and character of social life. Values based on concepts of need, use and beauty determine how functional or non-functional objects operate within a culture, how they become the expression

of the culture involved in their production, and part of its history, traditions, ritual practices or customs.
In this light, design poetics is a generative form of contemporary design attuned to the range of material, social, cultural and lyrical life of objects - and to the people that interact with them. In this role, design poetics represents a model of accessorising social relationships, leading to a better understanding of the roles users play in the user-product interaction. As such design poetics brings into play material and immaterial experiences, affects and emotion, perception, symbolic values making their interrelations visible. Thus, the multilayered relationships that poetic objects introduce refer to human relations, interactions and their social context, and in these roles they cannot be 'consumed' by the 'consumer society'.

Taking all these aspects into consideration, I argued that a poetic design practice is an experiential modality of production that generates its own class of objects (that can be defined by experience, narrative and performative referents) distinguished by properties that surpass strict functionality. Apart from seeing objects as referents in production-consumption practices, I have considered them to embody designed activities that reflect how users are affected physically, emotionally and symbolically. Thus, the focus of analysis changed from objects towards the users and the experiences formed when engaging with objects 'at play'. In this view, my emphasis was on the ways in which people create and develop certain forms of inhabiting the material world, evolving their own practices of living. Clearly, functional objects are reshaped through the experiences of their users within the social, cultural and technological contexts in which they are embedded. People's daily behaviour, their habits, 'making-do', or unspoken rules reveal the ways in which people engage, adapt to, and make sense of their surroundings; they are made-up of interrelated and overlapped activities within a designed environment. As such, the practice of everyday life registers the poetics of uses evolved within established practices of living.

The specific class of poetic objects defined in this study reflect the inventiveness of their users and can become the work of a design approach that plays with the everyday activities of the user, translating them into an inventive form of production. It can be argued that the appropriation of this type of products is situated outside everyday formalities of use, generating alternative forms of living with things. Although these products become objects to think with, therefore objects for critical discussion and analysis, they remain objects for use, fulfilling needs outside of the conventional system of consumption.

Fig. 1. Test Pieces in use. 2004-2005

Fig. 2. Test Pieces in use. 2004-2005

Fig. 3. Test Pieces (forms and sizes). 2004-2005

Fig. 4. Test Pieces – Further Developments (after test 1). 2006

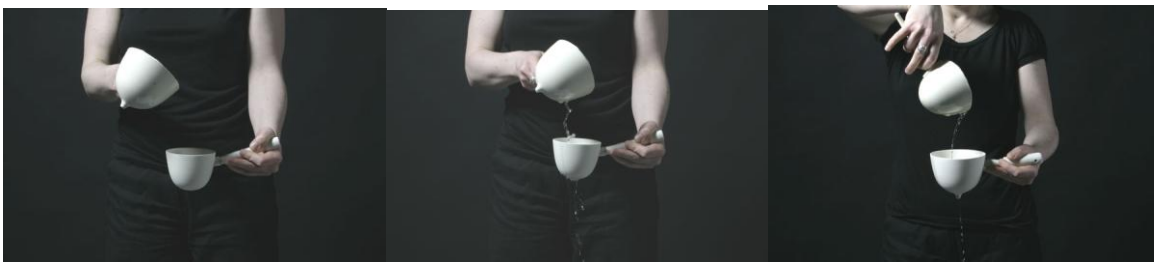


Fig. 5. Test Pieces – Further Developments (after test 1). 2006

Fig. 6. Test Pieces – Final Developments from the initial forms. 2007

Fig. 7 / 8. Marije Vogelzang, ‘Christmas Dinner’ for Droog, 2006. Vogelzang reversed the tablecloth so it went up around guests’ necks rather than falling on their laps.

Fig. 9 / 10. Marije Vogelzang, ‘White Funeral Lunch’, 1999. The funeral dinner using white fish, rice paper, potatoes, almonds and other white food. And ‘Go Slow’ for Droog – Milan Fair, 2003

Fig. 13. Noam Toran, ‘Accessories for Lonely Men’, 2001

Fig. 14 / 15. Noam Toran, ‘Desire Management Project’, 2004
‘The Vacuum Scanner’ / ‘The Air Hostess Trolley’

Fig. 16. Ingrid Hora. ‘Parabolic Ear’ and ‘Leather Collar’, 2007

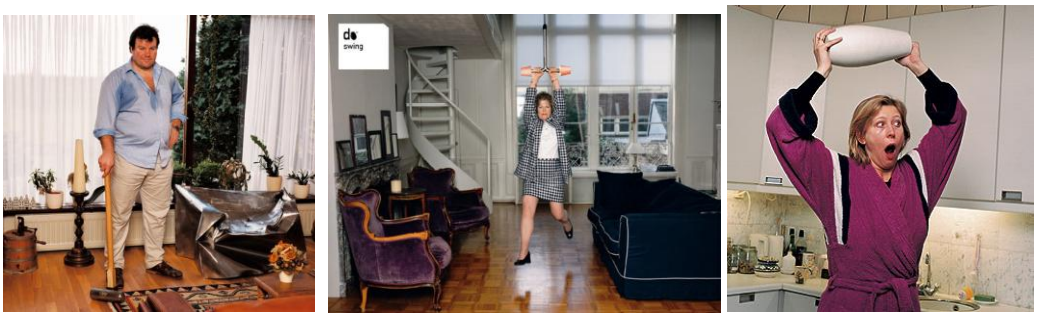


Fig. 17 / 18 / 19. KesselsKramer and Droog Design (1999) Do Create Project.
'Do Hit' by Marijn van der Poll / 'Do Swing' by Thomas Bernstrand / 'Do Break' by Frank Tjepkema and Peter der Jagt and below Fig. 19. 'Do Add' by Jurgen Bey; and 'Do frame' by Marti Guixe

Fig. 21/ 22 / 23. Jurgen Bey. 'Kokoon' Chairs. PVC covering existing furniture, 1997. And Light 'Shade Shade', 2007. Fig. 24. Peter van der Jagt. 'Bottoms Up' Doorbell, 1994

Fig. 25. Rachel Wingfield in collaboration with Equator: 'History Tablecloth' (2002) and 'Walls with Ears' (sound reactive wall paper), 2001 / Silent Alarm Clock, 2001

Fig. 26 / 27. Julie Cook. ‘Body Bumper’, 2005 and ‘Zapateado Injured Soles’, 2006

Fig. 28. RCA Interaction Project Probes, 2000. The probes are a set of tasks designed to collect information from people about their lives at home

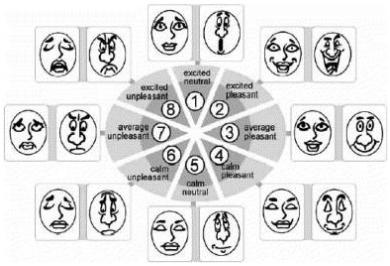


Fig. 29. Cartoon Face on Emocards. (Desmet, P. et Al.) 2001. The Emocards method is based on the assumption that emotions can be classified or categorised and associated with a specific facial expression – and this classification is related to product response.

Fig. 30 / 31. Equator Project. ‘Key Table’ and ‘Drift Table’ are conceptual designs that rely on sensing the weight of objects placed on surfaces, reflecting people’s activities at home (2000-2002).
Equator Project - Video Window (on the right), 2000-2002.

Fig. 32 / 33. Pieter van der Jagt and Arnout Visser's Bathroom, 2001.

Fig. 33. Gijs Bakker. 'Knitted Maria' Coffeepot (1997)
Fig. 34. Hella Jongerius Embroidered Tablecloth (2000)
Fig. 35. Hella Jongerius 'B Set' (1998)

Fig. 37. Zeger Reyers, 'Crokery Pile' (1966) and Meret Oppenheim, 'Fur Cup' (1936)
Fig 38. Judy Chicago, 'Dinner Party' (1974-79)

APPENDIX

TESTING (feedback as testing methodology)

Feed-back Records

The different recordings of the testing process brought about a series of conclusions and observations that illustrate the design process and explain the changes of the prototypes. Feed-back responses focused on the set of interactions evolved by users in contact with the objects at hand. The test answers are analysed considering experiential, narrative, performative and contextual criteria.

Participant responses during the test were recorded as audio material to register direct reactions and impressions. The feed-back questionnaire involved answers to defined questions and the impressions remaining after a planned period of time (a memory-test). I considered that time will filter only essential impressions for participants and I considered these to be de predominant criteria for cataloguing and categorising the feed-back responses (see tables below).
The test concluded that the main areas to be considered and reviewed in a poetic design (such as functional, performative, emotional and staged elements) are dependent and based on interaction and the specific form of experience. Theodor Adorno criticized objects that limit interaction to mere operation, and advocated a 'surplus' of experiencing things which cannot be 'consumed' during the moment of action and use. The test shows this 'surplus' in its various forms of user-object interaction.

Test Questionnaire

The questionnaire refers to the test-event organised on the 4th / 5th of November 2004 with the kind participation of 15 'users' and intends to answer a few memory-related issues that complete your immediate responses to the ceramic prototypes you have used in the Gallery. The testing procedure involved the audience response to the pieces and concentrated on the tactile / physical contact as central areas of perception.
The questions were based on two groups of elements: the designed objects in terms of the material characteristics of objects (form / weight / colour / size); and in terms of object relations and interaction elements (to include perceptive/emotional, narrative/performative and staged coordinates).

The five questions of the test were as follows:

1. What is your first memory of the event (that comes into mind)?
2. On what principles have you made judgements on the objects in hand?
3. Has the prolonged contact with the objects in the dark changed your tactile/ or other perceptions?
4. Did the absence of a base for the bowl-shaped objects presented any difficulty in handling? How did you know/negotiate to use them? Were they functional?
5. Anything that you enjoyed most during the event?

The test has been repeated in the second part of the study and it involved a second cohort of 'users'. The following answers represent a selection of answers from over 25 participants.

Subject 1. B.B.

1. What is your first memory of the event (that comes into mind)?
It was dark yet full of sound and moving shadows.
2. On what principles have you made judgements on the objects in hand?
Shape, surface and function.
3. Has the prolonged contact with the objects in the dark changed your
tactile/ or other perceptions?
To some extent; the ability to feel is but one of our (human) senses; in isolation only part of the complete picture can be recognised.
4. Did the absence of a base for the bowl-shaped objects presented any
difficulty in handling? How did you know/negotiate to use them? Were they
functional?
The objects presented and instinctive appeal in their handling, the form sat comfortably in the hand and created an intimate engagement with the contents and the act of consuming the contents.
5. What you enjoyed most during the event?
The soup was very good, being part of a desperate community thrust together into an alien environment not knowing quite what to expect and feeling slightly awkward about what should be said and done. Also the ambient stimuli which were being perceived by myself and others and how this should be, could be or would be interpreted.

Subject 2. P.S.

1. What is your first memory of the event (that comes into mind)?
Darkness and a reverential atmosphere.
2. On what principles have you made judgements on the objects in hand?
Comfort, efficiency, aesthetic.
3. Has the prolonged contact with the objects in the dark changed your
tactile/ or other perceptions?
Being in possession of 'a token of belonging' (see 4 below) gave me a sense of locus from which to experience & negotiate the spatial relationships, projections (historical, cultural spaces), & people during the event.
4. Did the absence of a base for the bowl-shaped objects presented any difficulty in handling? How did you know/negotiate to use them? Were they functional?
No difficulty in handling - actually a pleasure. Functional at both practical & psychological levels: to receive a gift of food & warmth contained in a vessel which so snugly fitted the hand(s) provided a sense of security/belonging/welcome which was very reassuring. That the bowl could be clasped in both hands was helpful to overcome the initial insecurity of encountering/orienteering the project space, then to be able to hold it (rather elegantly) in one hand while gesturing in conversation again gave confidence - it became a social accessory. In both contexts it was like a token of 'belonging'.
5. What you enjoyed most during the event?
Feeling nurtured & sustained; also the unfolding of inter-relationships between elements of the whole experience.

Subject 3. D.S.

1. What is your first memory of the event (that comes into mind)?
Hot bowl form and later a cold bowl shape because of the ice cream.
2. On what principles have you made judgements on the objects in hand?
Primarily aesthetic and experiential, rather than judging on the basis of everyday usability.
3. Has the prolonged contact with the objects in the dark changed your tactile/ or other perceptions?
Maybe, but other stimuli took over.
4. Did the absence of a base for the bowl-shaped objects presented any difficulty in handling?

Yes, I didn't want to hold it for as long as I did.

How did you know/negotiate to use them?

Not really any other way to use them.

Were they functional?

Yes, to a point.

5. What you enjoyed most during the event?

The artifice involved.

Subject 4. P.S.*

1. What is your first memory of the event (that comes into mind)?

I remember the smells, followed by the darkness then the other 'players'.

2. On what principles have you made judgements on the objects in hand?

I'm not sure. If a principle is a basic quality and a rule a standard then I suppose my standard of appreciation of the objects is based on my experiences to date and they have been primarily informed by ceramic tableware manufacturers. I am used to a bowl with a foot, however my travels and my increasingly cosmopolitan dining experiences have challenged this more and more.

3. Has the prolonged contact with the objects in the dark changed your tactile/ or other perceptions?

Yes when I am reminded by your asking, but not day to day.

4. Did the absence of a base for the bowl-shaped objects presented any difficulty in handling? How did you know/negotiate to use them? Were they functional?

Not really. I acknowledged immediately that there was no foot so I assumed that they would not be able to contain their liquid contents if placed on a surface. I suspect the 'solids' would also have rolled out! Once I had eaten the contents the bigger question was what do I do with my bowl. If I hadn't finished the contents then there would have been a problem. Yes and No see above.

5. What you enjoyed most during the event?

During the entire event I was excited by being engaged within what felt like a performance.

Subject 5 C.E.

1. What is your first memory of the event (that comes into mind)?

The ambience of the room and the sounds.

2. On what principles have you made judgements on the objects in hand?

Sense of feel/usability or function/what to do with it once I have finished with the food.

3. Has the prolonged contact with the objects in the dark changed your tactile/ or other perceptions?

Not really, or little.

4. Did the absence of a base for the bowl-shaped objects presented any difficulty in handling? How did you know/negotiate to use them? Were they functional?

Initial surprise but then negotiated my hand shape to suit. Surprisingly functional until having to put them down.

5. What you enjoyed most during the event?

The whole experience was engaging and entertaining as well as thought provoking.

Subject 6. M.M.

1. What is your first memory of the event (that comes into mind)?

The darkness of the space and the smell of the food - which was delicious, by the way!

2. On what principles have you made judgements on the objects in hand?

Weight, smoothness, heat/cold - I sort of evaluated these together, though, rather than separately, and I was basically interested in the fact that I found them comfortable in my hands and wondered what it was I liked about holding them.

3. Has the prolonged contact with the objects in the dark changed your tactile/ or other perceptions?

It gave me time to get used to them and I didn't really worry too much about what they looked like.

4. Did the absence of a base for the bowl-shaped objects presented any difficulty in handling? How did you know/negotiate to use them? Were they functional?

They were great to hold; the difficulty was only to do with setting them down. Since people came and took them from me, it made it easy.

5. What you enjoyed most during the event?

Lunch! Seriously, the sense that I was being cared for and that I could just relax and enjoy a block of 'free time'.

Subject 7. F.B.

1. What is your first memory of the event (that comes into mind)?
I think my first memory of the event was the dark/semi light environment. I think this gave occasion a completely different feel and atmosphere. The novelty of that along with the anticipation generated by being unaware of what was going to happen created an subtle feeling of nervous excitement amongst the group (?). I think this was continued in the 'unkown-ness' of the form. Although they were clearly and obvious containers for eating out of and it wasn't obvious how to use them
there was still an element of not being quite sure and a feeling of vulnerability that comes form the unknown and things being done unconventionally.
2. On what principles have you made judgements on the objects in hand?
Not sure what you mean. I suppose my judgements come from my past eating/dining experiences.
3. Has the prolonged contact with the objects in the dark changed your tactile/ or other perceptions?
Yes. I think the prolonged contact made me more aware of the surface changes and temperature. I think by the time I was on the third bowl I was more into the idea of holding them and perhaps was more aware of the tactile qualities.
4. Did the absence of a base for the bowl-shaped objects presented any difficulty in handling? How did you know/negotiate to use them? Were they functional?
I don't think it was difficult to handle them but the absence of a base created an awkwardness in terms of not having a spare hand to do other things with - like scratch your head or blow your nose! I can't remember how I dealt with this I just remember it being awkward! I think they were definatly functional and fun to use. Eating the soup was out of the bowl that had to be held heightened the 'comfort factor' of the food but eating the ice cream created a more uncomfortable sensation (not sure if this would be the case though in summer!).
5. What you enjoyed most during the event?
I enjoyed the actual food! But more that it seemed to be an eating experience rather than just having some food, if that makes sense. The prominence of the food created by the fact that we had to hold it made it more of a point of discussion I think, and focused conversation on the experience because it was taking up so many of our senses. This in turn I think made the lunch more corporate/communal rather than an individual experience....?

Subject 8. R.B.

1. What is your first memory of the event (that comes into mind)?
Dark silhouettes of human bodies holding bowls with two hands.
2. On what principles have you made judgements on the objects in hand?
In retrospect I consider the following criterion in order of importance: haptic and tactile; primordial shape – the fact that holding it resembles taking a drink with one's hands cupped in a bowl form: lightness of the bowl, which emphasises the content inside, the functionality of the object related to each different food.
3. Has the prolonged contact with the objects in the dark changed your tactile/ or other perceptions?
Yes, at the beginning my concentration in holding the bowl was spontaneous and fresh. Afterwards I began to worry that I might drop it because it doesn't have a handle or a traditional shape.
4. Did the absence of a base for the bowl-shaped objects presented any difficulty in handling?
Not on first contact, but yes in the longer term in a dark room.
How did you know/negotiate to use them?
By holding the bowls tightly.
Were they functional?
Yes in terms of being able to eat and drink their contents, but not in terms of holding them for a long time.
5. What you enjoyed most during the event?
Seeing the work in context and being able to discuss its performance or my view with the others.

Subject 9. A.B.

1. What is your first memory of the event (that comes into mind)?
My memory recalls the atmosphere and the slide show.
2. On what principles have you made judgements on the objects in hand?
I don't remember judging the artefacts but simply enjoying them.
3. Has the prolonged contact with the objects in the dark changed your tactile/ or other perceptions?
The dark was not so dark as to change my perception. It might have if I could not have seen anything.

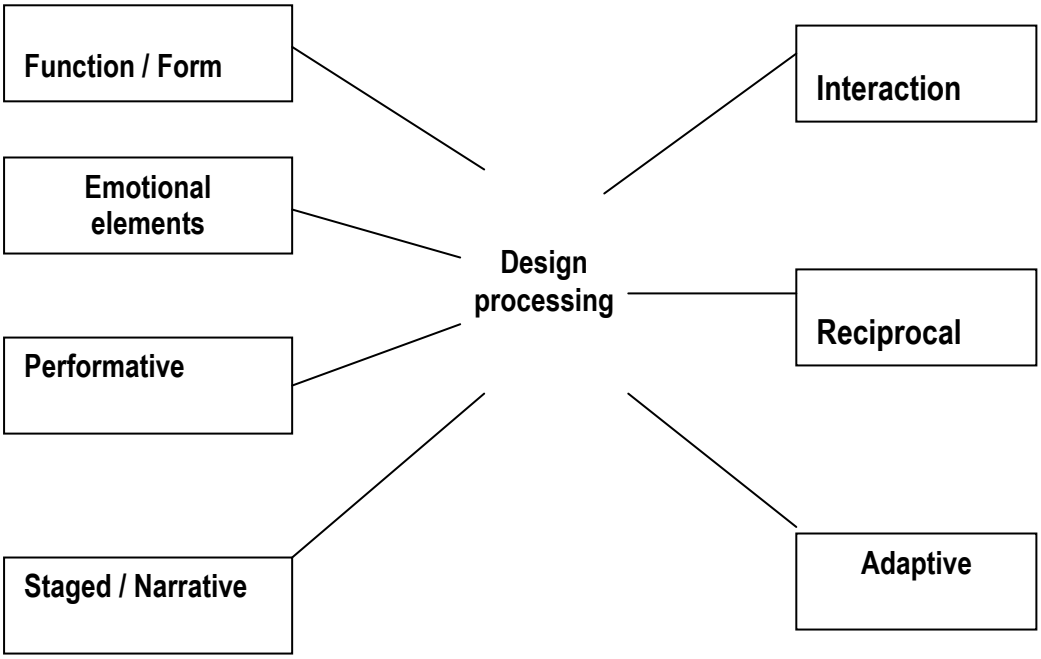
4. Did the absence of a base for the bowl-shaped objects presented any difficulty in handling? How did you know/negotiate to use them? Were they functional?

I enjoyed the object and had no difficulty to handle it. Had there been tables and I would have wanted to sit down it might have become difficult.

5. What you enjoyed most during the event?

I enjoyed the company of others, the talk, the atmosphere as I have said.

Design elements revealed during testing



Testing tables

Table 1. Subject 1 - Memory response (B.B.)

Object	**1. Function**	**2. Emotional**	**3. Performative**	**4. Staged** presentation
impressions sensations memory responses	Tactility: - surface and shape - functionality, instinctive appeal in handling - intimate engagement	- intimate engagement - comfort - how the ambient stimuli should / could or would be interpreted	- engagement in the act of consuming the contents	- ambient stimuli - darkness, interpretation of perceived, ambiental stimuli - social elements

Table 2. **Subject 2 - Memory response (P.S.)**

Object	**1. Function**	**2. Emotional**	**3. Performative**	**4. Staged** presentation
impressions sensations memory responses	- efficiency, practicability, aesthetic (q4) - food and warmth contained - fitted the hands - social accessory	- comfort - attachment: "token of belonging" - security and welcoming, reassurance	psychological level: receiving - social encountering (q4) - social accessory	- reverential atmosphere - sense of locus to experience and negotiate spatial relationships narrative: unfolding of relationships between elements of experience

Table 3. **Subject 3 - Memory response (D.S.)**

Object	**1. Function**	**2. Emotional**	**3. Performative**	**4. Staged** presentation
impressions sensations memory responses	(q2) - aesthetic, (q1) - tactile: temperature restrictions in handling in relation to time of holding		(q1) - experiential	(q4) artifice involved

Table 4. **Memory response**

Object	**1. Function**	**2. Emotional**	**3. Performative**	**4. Staged presentation**
Subject 4 P.S*. impressions sensations memory responses	(q2) - tactile experience - comfortable / negotiating handling	(q5) - being engaged	(q1) perceiving the other “players” (q5) - being engaged in what “felt like a performance”	(q1) darkness and olfactory sensations

Table 5. **Memory response**

Object	**1. Function**	**2. Emotional**	**3. Performative**	**4. Staged presentation**
Subject 5 C.E. impressions sensations memory responses	tactility: sense of feel - usability (q4) - reciprocal adaptability: negotiating the hand to suit the form -restrictions / affordances	- engaging and entertaining	reciprocal adaptability: negotiating the hand to suit the form (q5) whole experience thought provoking	ambience and sou (q5) whole experience was thought provoking

Table 6. **Memory response**

Object	**1. Function**	**2. Emotional**	**3. Performative**	**4. Staged presentation**
Subject 6 M.M. impressions sensations memory responses	(q2) weight, surface, temperature comfortable holding (q3) - physicality	(q2) wondering the liking (q3) Prolonged contact: time to get used to the shapes and handling being cared for	(q3) prolonged contact: time to get used to the handling (q4) setting objects down or handling them to others	(q1) darkness and olfactory sensations

Table 7. **Memory response**

Object	**1. Function**	**2. Emotional**	**3. Performative**	**4. Staged** presentation
Subject 7 F.B. impressions sensations memory response	- container form - surface and tactile qualities, - temperature changes - functional, affordances/ restrictions sensorial: taking up many senses	- anticipation, nervous excitement - 'fun to use' (q5) sensorial: taking up many senses	- adaptability to holding that heightened the 'comfort factor' (q5) - focus on conversation social, corporate, common experience	atmosphere and different mood / feel (q5) - more an eating experience not only having some food

Table 8. **Memory response**

Object	**1. Function**	**2. Emotional**	**3. Performative**	**4. Staged presentation**
Subject 8 R.B. impressions sensations memory responses	*object characteristics* tactility, form adapted to cupped hands, comparative weight restricted affordances - *object relations*: spontaneity in holding	concentration, negotiating holding the objects, changes in interaction	- sense of performance, participation to discussions	darkness and shadows, (q5) work in context

Table 9. **Memory response**

Object	**1. Function**	**2. Emotional**	**3. Performative**	**4. Staged** presentation
Subject 9 A.B. impressions sensations memory responses	(q3/4) comfort in handling - affordances, restrictions in movement	(q2) enjoyment in handling the objects companionship	(q4) affordances, restrictions in movement (q5) social inter-relations	(q1) atmosphere and additional visuals (q5) social inter-relations

Glossary of Terms

actant - a term introduced into narratology and semiotics in 1966 by French narartologist Algirdas Julien Greimas to name a "character in a situation". The 'actant' can embody any of the six roles maintained by characters in a classic narrative structure. According to Greimas, each actant is claimed to be the opposite of another such that three pairs are obtained: subject versus object; sender versus receiver, and helper versus opponent.
In analysing the social construction of technology as a field where new things emerge, French sociologist of culture and anthropologist Bruno Latour also refers to 'actors' for both users and things, since they are defined by their ability to perform; therefore it is in trials that 'actors' reveal what they are capable of.

adaptability – is the degree to which adjustments are possible in practices, processes, etc. and can be spontaneous or planned.

artefact – (*arte factus*) has its origin from *factitius* defined in Latin as that which is 'artificial' that has been 'made with art'. Something 'made with art' gains the sense of displaying skill and ability. It is summed up thus: fetish – feitico – factitius (facere) – arte factus – artefact.

culture - since the 19th century, the term was used to refer to a wide array of human activities, and (by others) to refer to 'civilisation'. In the 20th century, human culture encompassed symbolic representations and expressions of human experience. According to many theories accepted by anthropologists, culture exhibits the way the humans interpret their environment. According to this point of view, culture becomes an integral part of human existence that it is the human environment, and most cultural exchange can be attributed to human adaptation to historical events. Culture is seen as the primary adaptive mechanism for humans and takes place much faster than human biological evolution; is reflected in any given social group.

cultural analysis – a multidiciplinary, critical approach to cultural phenomena in a variety of media, with a view of exposing unarticulated social norms of popular culture. It investigates trends, influences and effects within cultures and maps the ways in which a culture adapts and changes in relation to its environment.

cultural anthropology - provides an account of a particular culture, society, or community; it deals with cultural practices in a multidisciplinary manner. It grew around the practice of ethnography,

refining the technique of translating cultural differences. It studies and interprets cultural diversity through ethnographically based field work.

design culture - is the study of interrelationships between design artefacts, their production (how they are formed) and consumption, the various meanings or functions that design performs and the work of designers.

domestication – is explained historically as a reciprocal breeding of humans and animals. The French philosopher Michel Serres suggested an ambivalent, and not a one-sided control; it entails a state of becoming affected, as the term refers to a learning process where things and people reciprocally influence each other. In relation to the 'domestication of technology', French sociologist of culture and anthropologist Bruno Latour analysed the social construction of technology as a field where new things emerge: he applied the process of domestication to technologies by following different phases of adoption.

eclectic – selecting or choosing from various sources; made up of what is selected from different sources. Not following any one system (like from philosophy or medicine), but selecting and using what are considered the best elements of all systems.

emotions – occupy the foreground and the present of consciousness; they are connected with some personal meaningful circumstance and are typically short-lived.

ethnography – from the Greek *ethnos* (nation) and *graphein* (writing) refers to the qualitative description of human social phenomena, based on fieldwork. It is a method of studying and learning about a person or group of people. Typically, ethnography involves the study of a small group of subjects in their own environment. Rather than looking at a small set of variables and a large number of subjects ('the big picture'), the ethnographer attempts to get a detailed understanding of the circumstances of the few subjects being studied. Ethnographic accounts are both descriptive and interpretive; descriptive, because detail is so crucial, and interpretive, because the ethnographer must determine the significance of every observation and statistical information. Ethnographers are participant observers. They take part in events they study because it helps with understanding local behavior and thought.

experience – indicates the apprehension of an object, thought, or emotion through the senses or mind; active participation in events or activities, leading to the accumulation of knowledge or skill. An event or a series of events participated in or lived through, the totality of such events in the past of an individual or a group. A practical contact and observation of facts or events; to encounter or udergo an event or occurrence; personal knowledge derived from participation or observation. Also, to participate or partake in; to be physically aware of through the senses or to undergo an emotional reaction: feel, have, know, savour, taste.

flow – in reference to user experience, psychologist Mihaly Csikszentmihalyi refers to it as being 'in the flow', an experience of optimal fulfilment and engagement, giving raise to emotional wellbeing and pleasure.

infracultural – the term generally refers to basic behavioural patterns, rooted into the biological past.

transcultural /culturation – is the phenomenon of merging and converging cultures.

interaction – acting or capable of acting on each other; vb. – to interact is to act on each other. In computer science: of or relating to a program that responds to user activity. Interaction is understood and used throughout the text in terms of reacting and responding with reference to a product.

interactivity – is the ability of the viewer to directly manipulate and influence his or her experience of media.

narrative – n. a narrated account, a story; the art, technique, or process of narrating; a recounting of past events: account, chronicle, description, history, narration, report, statement, story, version; an account of connected events; a story, the narrated part of a literary work, as distinct from dialogue; narrative is a series of choices by an author to achieve a certain effect and meaning. Adj. -consisting of or characterized by the telling of a story (narrative poetry); in the form of a narrative or concerned with narration.

narrativity - term used to indicate properties characteristic of narrative (Nath); the articulation of ideas about theory-based narrative;

narratology - the study of the development of a narrative; it is the theory of the narrative describing narrative-specific system of rules in narrative production and processing

object – a material thing. Something to which attention, feeling, thought, or action is directed, therefore usually conceived as subhuman, unreflective and passive, in contrast with the active subject.

paradigm - serves as a pattern or model; a set of assumptions, concepts, values, and practices that constitutes a way of viewing reality for the community that shares them, especially in an intellectual discipline.

participation - the act of taking part or sharing in something; to participate – to take part in something, to share in something; to partake of.

particpatory – marked by, requiring or involving participation, especially affording the opportunity for individual participation.

performance – noun – (Dictionary: Houghton Mifflin Company, answers.com) the act or style of performing a work or role before an audience, something performed; a presentation, especially a theatrical one, before an audience. The way in which someone or something functions. *Thesaurus:* The act of beginning and carrying through to completion (the act of performing; of doing something successfully; using knowledge as distinguished from merely possessing it, as carrying out, carrying into action): discharge, effectuation, execution, prosecution. One's artistic conception as shown by the way in which something such as a dramatic role or musical composition is rendered: execution, interpretation, reading, realisation, rendering, rendition. The way in which a machine or other thing performs or functions (process or manner of functioning or operating): behaviour, functioning, operation, reaction (see action / inaction machine). In engineering, performance refers to measuring some output or behaviour – in techniques of monitoring performance (such as sampling, testing, taking snapshots). Bruno Latour saw trials as various experiments that elicit new performances. Although there are anticipations concerning what type of performances will occur, the trial is capable of surprising participants. Latour refers to

‘actors’ for both users and things, since they are defined by their ability to act, to perform; therefore it is in trials that ‘actors’ reveal what they are capable of.

performative - adj. - relating to or being an utterance that performs an act or creates a state of affairs by the fact of its being uttered under appropriate or conventional circumstances. Leatherbarrow suggested that the building itself is a performance piece, with a life of its own beyond our intentions for it. He feels that the greatest promise of performative architecture is as a new way of understanding buildings apart from their functions. His comments seemed to lead to a consideration of architecture as an event, not as an object.

phenomenology - is the school of philosophy that claims to begin its analysis of existence with the study of human experience (Edmund Husserl and Martin Heidegger laid groundwork with studies of the epistemological foundations on the nature of Being).

sociology – is a branch of social sciences that uses methods of empirical investigation and critical analysis in order to understand human social structure and activities. It deals with social relations, social interaction, culture, social activity, etc.

product semantics is an area of inquiry or discipline concerned with what objects mean, what their symbolic qualities are, and what the psychological, social and cultural contexts of their use is

sensations – are considered to be the basic unit of experience in abstract analysis. David Carr argues that sensations are by themselves ‘meaningless’ and ‘far from being elements of experience’, but ‘theoretical entities or constructs’.

representation – to stand for, to symbolise, to depict, or portray.

semantic – of or relating to meaning, especially meaning in language

sensitivity – is the degree to which a system will respond to change

symbol – a form, image or subject representing a meaning other than the one with which is usually associated.

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http://www.elumin8.com/
http://www.equator.ac.uk/
http://www.interaction.rca.ac.uk/equator/
http://www.designersblock.org.uk
http://www.liveartmagazine.com
www.jorislaarman.nl
http//www.designmuseum.org
www.dosurf.nl

End-Notes - Introduction

[i] As a chemist Antoine Lavoisier (1743-1794) discovered that, although matter may change its form or shape, its mass always remains the same.

[ii] For the purpose of distinguishing the views of the writers from my own observations, I have used the first person throughout the text, especially when defining or commenting alongside the authors.

[iii] Are the designers' approaches, intentions or meanings considered in the evaluation of 'good design'?

[iv] Highmore, B. 2002. Everyday Life and Cultural Theory: An Introduction. London / N.Y: Routledge

[v] Naylor and Ball (2005) observe that the design narratives of Modernism and Postmodernism introduced manipulative, commercial realism although they started with high social and cultural intentions. p.47

[vi] In Petroski, H. 1993. The Evolution of Useful Things: How Everyday Artefacts - from Forks and Pins to Paperclips and Zippers - Came to be as they are. New York: Alfred A Knopf. p.157-8

[vii] See Naylor and Ball, 2005. p.64. Dreyfuss emphasised the importance of a 'survival form', which was manifested in 'a familiar pattern in an otherwise wholly new and possibly radical [product] form' thus making 'the unusual acceptable to many people would otherwise rejected it".

[viii] Aristotle attempted to define poetry (in 'Poetics') in its different forms (drama, music, rhetoric).

[ix] The French term bricolage is developed as a metaphor from Levi-Strauss's structural anthropology. Anthropologist Claude Levi-Strauss described bricolage as a way of combining and recombining a closed set of materials in order to achieve new ideas.

[x] Arthur Koestler (1964) coined the term in his book *The Act of Creation*, where he considers creativity as a simple joining of two things together to create a new synergy.

[xi] Derrida observed that the workings of collage belong to "the most characteristic mode of composition in the modernist arts." Max Ernst's definition (1934) of collage is "the bringing together of two or more elements apparently opposite in nature, on a level whose nature is the opposite of theirs."

[xii] See further Baudrillard, J. 2003 [1970]. The Consumer Society, Myths and Structures. London: Sage Publications; where Baudrillard asserts that, in fulfilling the system of production, 'the consumer is under the illusion that he is servicing his private wants'.

[xiii] See Petroski, 2003, p.15

[xiv] In Baudrillard, J. 1986. The System of Objects. London: Verso. p. 23-5

[xv] Baudrillard suggests that the individual in effect buys a group identity with each over-determined purchase. In Baudrillard, J. 1981. A Critique of the Political Economy of the Sign.

[xvi] Baudrillard, J. 1986. The System of Objects. London: Verso

[xvii] Bal, Mieke. 1989. Looking in: the art of viewing. (Tr. Norman Bryson). Amsterdam: G & B Arts International. '(..) rather than a property that a work has, meaning is an event; it is an action carried out by and in relation to what the work takes as you'; 'meaning is an event.'

[xviii] Sherry Turkle considers objects as evocative, bringing together thought and feeling.

[xix] Bouroullec, R. & E. et All. 2003. Ronan and Erwan Bouroullec. London: Phaidon Press.
Designers Roland and Erwan Bouroullec suggest the accentuation of a haptic quality, or the use of a material charged with history changes the perception of objects. p. 124

[xx] Naylor and Ball comment on Baudrillard's simulacra, that space and 'lifestyles' are consumed as images.

[xxi] Sociologist Thorstein Veblen applied the evolutionary theory of Darwin to economics. He noted the social and cultural changes on economy in The Theory of Leisure Class (1899).

[xxii] Using concepts such as habitus, practice, cultural capital, Pierre Bourdieu's views culture from an anthropological point, makes an analogy between 'taste' as an innate sensibility (taste of the taste buds) and 'taste' as a set of cultural preferences and aesthetic judgements: 'the elaborated taste for the most refined objects is reconnected with the elementary taste for the flavours of food.' (ibid. p. 113- 466) Bourdieu (1986) views taste as a consumption practice and habitus as social location. In Bourdieu, P. 1986 [1979]. Distinction**:** A Social Critique of the Judgement of Taste**.** Nice, London: Routledge and Keegan Paul

[xxiii] The mimetic theory of cultural evolution could be considered a form of Lammarckian inheritance of non-genetic traits (as in Jean-Baptiste Lamarck's theory of evolution).

[xxiv] Certeau, Michel de. 1984. The Practice of Everyday Life. London: University of California Press. p.30

[xxv] De Certeau, Michel. 1984. The Practice of Everyday Life., p.29-30

[xxvi] Bourriaud, N. 2002. Marcel Duchamp also used the principle that consumption is a mode of production.

[xxvii] It can be said that Michel de Certeau's theory on an 'art of living' – which he attributes to consumers-cum-users is a poetic activity.

[xxviii] Bourriaud, N. 2002 [1998]. Relational Aesthetics. Dijon Quetigny: Les Press du R□ÉEL. A relational art, says Bourriaud, requires a relational aesthetics.
[xxix] In Relational Aesthetics (1998), relational art is seen by Bourriaud as opposed to autonomous and exclusive art; by association, design can be seen as relational in opposition to designers' only vision.
[xxx] Ibid. Bourriaud, 2002 [1998], p.117.
[xxxi] Bourriaud borrows the term 'interstice' from Marx who used it to describe exchange spaces which can escape from the dominant capitalist economy.
[xxxii] Appadurai, A. (1986). The social life of things. Commodities in cultural perspective. Cambridge: Cambridge University Press. p.15
[xxxiii] Appadurai, A. (1986). Ibid. p.3
[xxxiv] Appadurai, Ibid.
[xxxv] Attfield, Judith. 2000. Wild Things: The Material Culture of Everyday Life. Oxford: Berg. p.1
[xxxvi] Krippendorff, K. 1990. 'Product Semantics. A Triangulation and Four Design Theories'. Helsinki: The University of Industrial Arts. UIAH Conference. p.23
[xxxvii] Silverstone, R. 1999. Silverstone refers to the stages of appropriation for technology products.
[xxxviii] In Michel Serres's (2001) book Hominescence, 'domestication' is explained historically as "a reciprocal breeding of humans and animals". p.105.
[xxxix] In Naylor, M. and Ball, R. 2005. Form Follows Idea. p.33
[xl] According to Stephen Wilcox of Design Science in Philadelphia, ethnography is an observational approach derived from anthropology and folklore; scholarship focuses on reviewing sources derived from history; experimentation puts the emphasis on making and presenting models and prototypes derived from exact sciences and product design.
[xli] Postmodernist cultural studies assert that objects are produced according to the designers' intentions. However, in cultural and individual practices these intended forms and meanings are transformed.
[xlii] Functionality is an inherent property of everything which is designed and varies with different domains or range of application. In this text, the notion of 'strict' functionality' or 'purely functional' is understood in the conventional sense of being designed solely with regard to practical use or purpose[xlii]. The expression is used as an abstract, theoretical concept that considers objects in isolation (de-contextualised), separated from their participation into human activities, helping the delineation of the practicality of objects from their other meanings and uses. Of course design cannot be reduced to logical principles and utilitarianism, this reduction being solely used for the purpose of distinguishing what is materially functional from human participation - a comparative exercise. Thus it is easier to see that the poetic objects brought into discussion have a potential that goes beyond functionality, that their functions are read as predominantly evocative and symbolic rather than utilitarian. Surely they maintain functionality as designed objects, but they propose other functions and as such other values beyond the objects themselves. A useful observation here is that, traditionally, design is thought to imply an utilitarian role, producing objects bound to functionality whilst art proposes ideas carried by artefacts that do not 'function'. This abstraction helps to understand the distinctions in object performance and therefore the ways in which objects can be evaluated. For example, if a hammer was not connected to any rituals, memories or meanings (but read in isolation) it would just fulfill its practical purpose. Clearly, all functional objects lend themselves to an endless number of uses – but they are still bound to their primary, *proper function*. The *proper function (use)* of a plate for example is *for eating* - fulfilling the role intended by its designer - even though it can be thrown, used as decoration, etc. Similarly, the *proper use* of a fork is to convey food, but the *performance* of eating certain food in a certain culture and in a certain company adds a social-cultural function to its primary use (see chapter 2, p.65 and chapter 3, p.81). This shows that objects and their properties are determined subsequently by users who use artefacts for purposes other than their designers had in mind. Such distinctions underline what can be called the *proper* and *derived* functions of an artefact. As I pointed out in the third chapter (p.79) Pierre Bourdieu (1984) observed how the forms of objects are translated in forms of manners and thus determines the primacy of form (beauty) over the *use function*. Indeed, by taking the concept of 'pure' or 'strict' functionality as a basic frame of reference I have the advantage of not assuming that the meaning of things can be *localised* within the objects themselves, being in fact related to their forms of use and to the activities of the user. In conclusion, the distinction between what can be called *proper* use of objects, allow the rationality of *derivative* (*non-standard)* use of artefacts - acting consecutively on the behavioural, visceral, and reflective levels, objects fulfill functional, metaphoric and emotional needs.

End-Notes - Chapter 1

[xliii] In the System of Objects, Jean Baudrillard, 1968. p.3
[xliv] Costall, A. and Drier, O. 2007. Doing things with Things. Aldershot: Ashgate Publishing Company
[xlv] The analysis of material objects and their relationships to users happens in light of their socially and historically attributed meanings.
[xlvi] Jean Baudrillard, Ibid. (1968) p.3
[xlvii] Arjun Appadurai's background is in anthropological studies, Judy Attfield is a specialist in British Design History and feminist studies, and Pierre Bourdieu and Tim Dant are of sociologist formation.
[xlviii] See further in Henri Petroski, 1993, p.21
[xlix] See Dant, Ibid. p.7-11
[l] Zeisel, Ibid. (2004) p.13
[li] Siegfried Giedion. 1984. Mechanisation Takes Command.
[lii] See further Mauss, M. 1990 [1922]. The Gift: forms and functions of exchange in archaic societies. London: Routledge.
[liii] In Product Semantics, Krippendorff (1990) notes that things that cannot be described can hardly be designed, are impossible to produce industrially, are unlikely to be used. As such, design activities are communication activities, concerned as to what a product should be for or mean to potential users.
[liv] Bill Brown observed that the past two centuries have marked an age dominated by things, "but under the tyranny of them", and that in our "relentless effort to sell, purchase, and accumulate things, we do not possess them as much as they possess us". Thus, the history of possessions is integral to the history of consumption, for cultural formations are mediated by objects. In Brown, B. 2001. *Critical Inquiry*. Things. Vol. 28, No. 1, (Autumn), p. 1-22.
[lv] As Dant (1991,12) put it: "the ways of using material, of sharing, it, of talking about it, of naming it and making it".
[lvi] This perspective sees the role of design and its intervention in everyday practice from a different angle, in that design needs to address material and immaterial needs.
[lvii] George Kubler (1962) also points out the "existence of some problem to which there have been other solutions and that other solutions to this same problem will most likely be invented"
[lviii] Petroski, H. 1993. The Evolution of Useful Things. New York: Alfred A Knopf. p.114
[lix] According to Emily Post, the 19th century renown writer of code of manners and conduct, a set table should be equipped with a minimum of: table spoon, desert spoon, tea spoon, after dinner coffee spoon (..) large fork – often called a dinner fork, small fork – sometimes called salad or dessert fork, (..) large knife – dinner knife with steel blade, small knife – silver blade. (Petroski (1993,131)
[lx] Petroski, 1993, p.34. For example the proliferation of silverware in terms of form-and-function: the models sold by Towle Company's 'Georgian' (1898) summed up 131 different pieces that covered all forms of eating: spoons that conveyed food to the mouth (nineteen types), for serving (seventeen), ladles (six); pieces for carving (ten), and pieces for serving that were not classified as ladles, forks or spoons.
[lxi] Petroski (1993,147) explains that the number of such dinner ware services is explained also by the fact that every course is dependent on a specific number and form of utensils. The 'Rogers Brothers' (1880 - 1900) who introduced twenty-seven new flatware patterns which included new kinds of serving pieces. This, of course, questions how such pieces were used, for what type of food, at what time of the day and occasion, and in what kind of company. In accord with the development of silver and tableware, and by comparison the varying shapes of the glasses had evolved and multiplied in a very similar manner – and in accord with the different needs and wants society developed. On the other hand, other table implements came to be disused with the change of custom and as a result of the related evolution of other objects: the little stand for the fork and knife that served to protect the tablecloth was slowly replaced by table mats.
[lxii] Since the knife, the fork, and the spoon became commonly accepted as the basic eating utensils of the privileged classes of Western Europe, their size and form underwent changes according to the nature of food, taste, style, and strata of society.
[lxiii] Petroski, Ibid. 1993, p.20
[lxiv] Naylor, R. & Ball, M. 2005. Form Follows Idea. p.54
[lxv] Krippendorff, 1990. p.5
[lxvi] Forty, A., Cf. 1986. Objects of Desire. Design and Society since 1750. London: Thames and Hudson
[lxvii] Riegl, A. 2004 [1966]. Historical grammar of the visual arts (K.M. Swoboda and O. Pächt (Ed.). Tr. J.E. Jung), New York.
[lxviii] Schouwenberg, L. in Renny Ramakers 2004. Simply Droog: 10 plus 1 years of creating innovation and discussion. London : RIBA. p.78

[lxix] Curator Gareth Williams says, "Content and purpose are as important as style and appearance." In Ramakers, R. 2004. Simply Droog: 10+1 years of creating innovation and discussion. London: RIBA. p.25-33.

[lxx] Donald Norman (2004) also observed the negative emotional side-effect of the contemporary technologically-advanced world: it is not common, he says, to hate the things we interact with. p. 3-13

[lxxi] As Klaus Krippendorff (1990) observed, metaphors are processes by which patterns from a familiar domain are used to organise something in another, unfamiliar domain; and metonymies are processes of generalising from familiar parts to the organisation of unfamiliar wholes.

[lxxii] These aspects can be grouped under *ethnographic methods* in design semantics. Typical sources of ethnographic data include participant observation, video recording and interviewing.

[lxxiii] Krippendorff concludes that errors of performance in designed objects are considered to be a result of incongruence between meanings and affordances (see observations on ergonomics, Chapter 2).

[lxxiv] Naylor, R. & Ball, M. 2005. Form Follows Idea. p.32

[lxxv] Metcalf Bruce, in Peter Dormer (Ed.) 1997. The Culture of Craft. Status and Future. Manchester: Manchester University Press. p.67-83

[lxxvi] See Peter Dormer, 1997. The Culture of Craft. Manchester: Manchester University Press

[lxxvii] Zeisel, E. 2004. On Design. The Magic Language of Things. New York and London: Overlook Duckworth, Peter Mayer Publishers, Inc. p.136

[lxxviii] Latour, B. 1992. 'The Sociology of a Few Mundane Artifacts', in Shaping Technology/Building Society: Studies in Sociotechnical Change. Wiebe E. Bijker & John Law (Ed.). USA: MIT Press. p. 225–258.

[lxxix] As Naylor and Ball comment, "there is a consistent base form underlying all the nuances of diverse cultural embellishment" (2005, p.61)

[lxxx] The test was repeated with a different group of participants for comparative feedback. The three observers among test-participants recorded their opinions. Colin Painter's project had a similar scope in aiming to understand the way objects become adopted in everyday life by exploring the environment of the home as a whole it followed biographies of things and people. In Painter, C. 1999. At Home with Art. London : Hayward Gallery

[lxxxi] Affordances are used here in James J. Gibson's terms: we perceive the environment in terms of its possibilities for action; in this text, it translates as what set of activities objects 'afford'

[lxxxii] Fulton-Suri, ibid. (2000), p.167

[lxxxiii] In Product Semantics, Krippendorff, 1990, p. 19. Rafael Cardoso considers 'product semantics' to be the capacity of the object to 'suggest' use or 'convey' meaning.

[lxxxiv] Donald Norman, 2004 p.71

[lxxxv] Fulton-Suri, ibid. (2000), p. 153 Being rooted in human activity, this approach to design requires attention about what people do.

[lxxxvi] Referring to existent user needs, Norman (2004) asks "How do you discover a need that nobody yet knows about?" - thus set a context for a design approach based on user observation. Ibid. p. 67

[lxxxvii] As pointed out by Norman, appearance or rationale do not matter in this case (2004) p. 70

[lxxxviii] The verbal explanations provided by the users as feed-back comments draw observations on different characteristics of the objects and their use and affected subsequent making.

[lxxxix] Latour, B. Ibid. The Sociology of a Few Mundane Artifacts. p. 56

End-Notes - Chapter 2

[xc] Experience is analysed in the text with the sense of engagement with an object that produces a distinctive reaction. Experience represents the apprehension of an object, thought, or emotion through the senses or the mind; or an active participation in events or activities, leading to the accumulation of knowledge or skill; a practical contact and observation of facts or events. The third edition of *Roget's New Thesaurus* and the Editors of the American Heritage® Dictionary define *experience* as the apprehension of an object, thought, or emotion through the senses or mind; as active participation in events or activities, leading to the accumulation of knowledge or skill. As an event or a series of events participated in or lived through, the totality of such events in the past of an individual or a group. A practical contact and observation of facts or events; to encounter or udergo an event or occurrence.
n. personal knowledge derived from participation or observation. It also means to participate in or partake of personally: feel, go through, have, know, meet (with), see, suffer, taste (of), undergo; to be physically aware of through the senses (feel, have); or to undergo an emotional reaction: feel, have, know, savour, taste.

[xci] The Emocards method is based on the assumption that emotions can be classified or categorised into a set of emotions which can be associated with a specific facial expression – and this classification is related to product response. In Desmet, P.M.A., Overbeeke, C.J. et. Al. 2001. Designing Products with added emotional value; Development and Application of an Approach for Research through Design. The Design Journal, No. 4, p. 32-47.

[xcii] It is considered that design is an activity in which everybody participates in – and the user has its role.

[xciii] Csickszentmihalyi, M. 1990. Flow: The Psychology of Optimal Experience. New York: Harper. See chapter 3, p. 78.

[xciv] In Jaakko van't Spijker's view, 'Open' means undefined and 'specific' means highly defined. Van't Spijker is architect for studio Sputnik, office for architecture, urbanism and research, Rotterdam

[xcv] Georg Simmel in Frisby, David. 1992. Simmel and Since: Essays on Georg Simmel's Social Theory. New York, NY: Routledge

[xcvi] Baudrillard. J. 1968. In The System of Objects. p.54. In comparing the activities surrounding different classes of objects and criteria of classification, Baudrillard considers that every object has two functions, "to be put to use and to be possessed", alluding to the range of possible meanings objects acquire in time.

[xcvii] See Dant 1999. (ibid.) p.137. Dant noted that people's contact with objects is often more continuous and intimate in comparison with their contact with people.

[xcviii] For example, the modern Western industrial culture resulted in general in a material culture oriented towards special purpose artefacts, whilst in poorer cultures this is not the case.

[xcix] Vogelzang's Design Studio (Proef) was set in Rotterdam in 2004. A similar eating event to Vogelzang's was described by Petroski as a re-enactment of a medieval festival, involving eating dinner with the minimal instruments available at the time. This learning experience showed that the operations performed at the time in the eating ritual are differed due to the different utensils used.

[c] Leon, D. 2006. The Cognitive Biographies of Things. Hampshire: Ashgate Publishing Ltd (p.113-120)

[ci] Dant, T.1999. (ibid.) p.12-16

[cii] Baudrillard, J.1986 Ibid. p.96)

[ciii] The everyday contact with everyday objects reverses Baudrillard's observation that people lost touch with things because products seem to be operated by buttons that replace physical contact.

[civ] Dant, T. 1999 (ibid.) p.13

[cv] Habitus was introduced by Marcel Mauss (1930) as 'techniques du corps' and developed by Norbert Elias in the 1930s in his work, *The Civilizing Process* (1939). The first volume traces the historical developments of the European *habitus* or "second nature," the particular individual psychic structures molded by social attitudes. The term becomes one of the central concepts to Pierre Bourdieu's writing.

[cvi] See Henry Petroski (1993). p.20

[cvii] Design theorist Paul Hekkert spoke of interaction patterns in terms of 'manners'. In Design and Emotion Conference Proceedings, 2004.

[cviii] Dant, T.1999. (ibid.) p.16

[cix] Rafael Cardoso observes that even if either the cup or the plate will be used as decorative objects and locked up in a glass-cabinet, instead of being used from the kitchen shelf everyday, it would not deny their inherent meanings. In Cardoso, R**.** 2003. Putting the magic back into design: from object fetishism to product semantics and beyond. 'From Cyberspace to the Visual Culture of Interface' at the Royal Academy of Fine Arts/School of Architecture in Copenhagen, Denmark.

[cx] Clarke, Alison J. 2000. The Aesthetics of Social Aspiration. Home Possessions: Material Culture Behind Closed Doors. Ed. Daniel Miller. Oxford: Berg. p.27

[cxi] Naylor and Ball. Ibid. 2005. p.65
[cxii] Aaron Betsky, director of the Netherlands Architecture Institute, Rotterdam, is a critic and teacher. In his opinion, in addressing issues of production and consumption, most Droog products comment on the reduction of our reality and culture to a system of signs and codes - Jean Baudrillard's 'simulacra'.
[cxiii] Danto, A. (1981) The Transfiguration of the Commonplace: a Philosophy of Art. Cambridge, MA, & London: Harvard University Press, p.7. and 'The World as Warehouse: Fluxus and Philosophy, p 31.
[cxiv] Interaction is understood throughout the text as 'acting or capable of acting on each other'. In computer science: of or relating to a program that responds to user activity
[cxv] Norman, D. 2004. Ibid. p.35
[cxvi] Zeisel, E. 2004, Ibid. p.211
[cxvii] As Norman (2004) said, "Can I tell a story about it? Does it appeal to my self-image ..?" Ibid. p.5
[cxviii] The three types of aspects concerning design described by Norman (2004:21) as visceral, behavioural and reflective are derived from the biological origins of the brain that operate on different levels: automatic responses correspond to a visceral level; the behavioural level controls everyday behaviour and the contemplative part operates at a reflective level.
[cxix] Norman, D. 2004. Ibid. p.49
[cxx] Dewey, John. 1958. Experience and Nature. New York: Dover
[cxxi] See also Forlizzi and Ford (2000) other classifications of experience as simple, narrative, subconscious, cognitive or story-telling based.
[cxxii] See Forlizzi, Ford and Mutlu (2000)
[cxxiii] As designer Eva Ziesel says, "The pleasure of making things useful or beautiful involves your feelings as well as your thinking" (Zeisel, 2004, p.210).
[cxxiv] Zeisel (2005) notes that that many designs of the last century have lost emotional appeal, and, as a result, the design process has become sensible instead of sensitive. p. 23
[cxxv] See Forlizzi and Ford's (2000). Other classifications (Wright, 2003) discuss experience from a design perspective as consisting of four threads: compositional, sensory, emotional and spatio-temporal.
[cxxvi] Forlizzi, Jodi. Mutlu, Bilge. 2000. The Chaotic nature of Human Experience: An Alternative Approach to Determinacy in Understanding Emotions and Experience. Conference Paper
[cxxvii] Bill Brown sees the use of objects as a means of making meaning: objects "organise our anxieties and affections, to sublimate our fears and shape our fantasies". Brown, Bill. 2001. Thing Theory. Critical Inquiry. Vol. 28, No. 1. p. 1-22.
[cxxviii] Forlizzi-Battarbee and Ford (2000) Interactions can be classified in fluent-automatic, cognitive-learnt, and expressive.
[cxxix] Krippendorff, ibid.1990 p.34
[cxxx] Klaus Krippendorff (ibid.) maintains that product semantics aims at the design of things whose affordances cover at least the range of meanings users have in mind.
[cxxxi] See further Bruno Latour network actor theory in Lehtonen**,** T-K**.** 2003**.** 'The Domestication of New Technologies as a Set of Trials'. Journal of Consumer Culture No.3 (3). p. 363–85.
[cxxxii] See further Bloomberg**,** J. L. and Henderson**,** A. 1990. "Reflections on participatory design: lessons from the Trillium experience"; and also Susanne Bodker**,** Pelle Ehn**,** Morten Kyng. Obstacles to participatory design in large product development.
[cxxxiii] The Equator Project is an Interdisciplinary Research Collaboration (IRC) funded by the Engineering and Physical Sciences Research Council. Equator's central goal is to investigate the integration of the physical and digital worlds by developing innovative systems that take a proactive role in the home.
[cxxxiv] Alben, Lauralee (1996) suggested that the conception, planning and execution of a product must be based on how effective interaction can provide users with satisfying, engaging experiences.
[cxxxv] Battarbee believes that these models show that designers cannot design subjective experiences, but only their context.
[cxxxvi] See further Hekkert, P. 2006. Design Aesthetics: Principles of Pleasure in Product Design. Journal of Psychology and Science. Volume 48, p.157-172.

End-Notes - Chapter 3

[cxxxvii] Appadurai, A. p. 6-16
[cxxxviii] Interaction (see Chapter 2) is, in Dant's view, a quasi-relationship between users and products.
[cxxxix] Suchman, L. 1987. Plans and Situated Actions: The Problem of Human-Machine Communication. Cambridge: Cambridge University Press.
[cxl] Austin, J. L. 2003 [1975]. How to Do Things with Words. Urmson, J. O. and Sbasà, M. (Ed.) Cambridge: Harvard University Press
[cxli] As adjective, performative relates to an utterance that performs an act or creates a state of affairs by the fact of its being uttered under appropriate or conventional circumstances. Architect David Leatherbarrow suggested that a building itself is a performance piece, with a life of its own beyond our intentions for it. He believes that performative architecture is a new way of understanding buildings apart from their functions; these observations lead to the consideration of architecture as an event, not as an object.
[cxlii] Van Oort, Richard. 1997. Performative-Constative Revisited: The genetics of Austin's Theory of Speech Acts. Department of English and Comparative Literature University of California, Irvine.
[cxliii] Bourriaud, N. in Postproduction, 2002. p.24-5
[cxliv] The Penguin Concise Dictionary defines performance as the act or style of performing a work or role before an audience, something performed; a presentation before an audience. In this text the term is used in the sense of the style in which someone or something functions. In relation to a user, it refers to the act of doing something successfully, using knowledge and skill; the way in which an activity is rendered: its execution, interpretation, and realisation. In relation to products performance refers to the way in which machines function (the process or manner of operating): the behaviour, functioning, operation, reaction. In engineering, performance is monitored or measured in terms of output or behaviour (sampling, testing).
[cxlv] User-centred design considers people as the starting point for design: in opposition, ergonomics postulated that if a product failed to take account of the users, the design of the product was at fault.
[cxlvi] Bal, Mike. 2001. Looking in, The Art of Viewing. In the introduction of the book, Norman Bryson comments on Bal's approach to works of art: "(...) Rather than a property that a work has, meaning is an event; it is an action carried out by and in relation to what the work takes as you'. P. 5
[cxlvii] Goffman, E. 1959. The Presentation of Self in Everyday Life. University of Edinburgh Social Sciences Research Centre: Anchor Books Edition. See also Marcel Mauss, on habitus as body techniques chapter 2.
[cxlviii] De Certeau, Michel. 1984. The Practice of Everyday Life. p. 69
[cxlix]As seen in Introduction, Michel de Certeau follows the Marxist idea that consumption is simultaneously also production. Karl Marx established equivalence between production and consumption in pointing out, for example, that 'a dress becomes really a dress only by being worn, a house which is uninhabited is indeed not really a house.' (see further Nicolas Bourriaud, Postproduction, 2002)
[cl] This change, Martin points out, has marked the shift towards consumer culture.
[cli] In Petroski, H. 1993. The Evolution of Useful Things. London: Pavilion Books. p.17
[clii] De Certeau, M. 1984, Pp.31 in Certeau's words, "… the 'actions' or 'engagements' that system of products effect within the consumer grid and the various kinds of room to maneuver left for consumers".
[cliii] Bourriaud, N. 2002. Postproduction, p. 24 says that what matters is what we make of the elements and things placed at our disposal: to use an object 'is necessarily to interpret it' and 'to betray its concept'.
[cliv] The use of the knife, fork and spoon in the seventeenth and eighteenth-century Europe has influenced the differences in their use by Europeans and Americans today (different performances); and determined alternatives in the positioning of the utensils on the table.
[clv] In Bourriaud, 2002. Postproduction, ibid. p.35.
[clvi] Michel de Certeau, 1984, p.63
[clvii] Latour, B. 2005. Reassembling the social: An Introduction to Actor-network Theory. Oxford, New York: Oxford University Press, p.311
[clviii] de Certeau, M. 1984 (ibid.) p.31
[clix] Arthur Koestler interpreted the creative act as a bisociation in The Act of Creation, in 1964.
[clx] Adorno, T. 2003 [1991]. The Culture Industry: Selected Essay on Mass Culture. London: Routledge. Adorno referred in particular to the technological advances promoted by industry after 1944.
[clxi] In 'Minima Moralia' and the 'Culture Industry', Adorno placed daily experiences with technological artifacts within a historical context suggesting that the everyday things with which people come in contact affect their manners and behaviour.
[clxii] See Petroski, H. 1993. The Evolution of Useful Things. London: Pavilion Books. p.47

[clxiii] In 'Mechanisation takes Command', Siegfried Giedion refers to mid-nineteenth century America.
[clxiv] The Western practice of 'zigzagging' (19th century) was termed by good-manner writer Emily Post. In Petroski, H. Ibid. (1993,140)
[clxv] Petroski, ibid. 1993, p.147. Petroski refers to this operations as 'cutting, slicing piercing, scooping'.
[clxvi] Baudrillard, ibid. 1968, p.52
[clxvii] Pierre Bourdieu's considered that everyday simple practices are constitutive of social difference.
[clxviii] Elias, N. 1969. The Civilizing Process, Vol.I. The History of Manners, Oxford: Blackwell
[clxix] In Bourdieu, P. 1986. Distinction: A Social Critique of the Judgement of Taste. Nice, London: Routledge and Keegan Paul. p. 247
[clxx] In Petroski, H. 1993. The Evolution of Useful Things. London: Pavilion Books. p.17. Renaissance humanist Erasmus of Rotterdam published a Treatise on Manners in 1530, according to which it was not impolite to use the fingers as long as one only used three at most and took the first piece of food touched.
[clxxi] Petroski's (1993) study of the hammer shows that there are subjective aspects to using tools and other artefacts, whether dictated by tradition, habit, feel. p.120-124
[clxxii] Petroski observes that objects 'do not spring fully formed from the mind of some maker'
[clxxiii] Pierre Bourdieu asserts that 'One cannot fully understand cultural practices unless 'culture', in the restricted, normative sense of ordinary usage, is brought back into 'culture" in the anthropological sense, and the elaborated taste for the most refined objects is reconnected with the elementary taste for the flavours of food". Ibid., p. 231-32
[clxxiv] Because the two forks were found heavy and not satisfactory, they were replaced by a silver fish-knife and fork which are now in general use. In order to distinguish the silver fish knife and other knifes as specialised tools from the more common steel-bladed ones, their ornamental handles also evolved.
[clxxv] Bourdieu, P. 1984, in Distinction. "The relation to food – the primary need and pleasure is only one dimension of the bourgeois relation to the social world." p. 231
[clxxvi] Petroski (ibid, 1993) describes the evolution of the fork from an initial kitchen fork substituting the hand: "… had a resemblance to the hand, and was used to prevent the fingers to be scalded"; similarly, in the Far East, chopsticks developed about five thousand years ago as extensions of the fingers". p.156.
[clxxvii] Etiquette writer Eliza Leslie (1864) had precise rules for the performance of good manners: "Cut up [the pie] first with your knife and fork both; then proceed to eat it with care." Eating pie with a fork was considered 'an affectation'. As the knife ceased its function, forks with cutting tines were introduced.
[clxxviii] Like the Rosenthal glasses, the refinement of glass goblets produced in the past by a manufacturer cannot be reproduced today although the form is the same. The difference is in the thinness of the original, which, invited grace and great care in use because it's excessive fragility.
[clxxix] See Zeisel. 2004, p. 57 and p.129 - 132
[clxxx] 'Slow' was a movement supported by worldwide small-scale companies formed at the end of 20th century as a response to large-scale 'Fast-food' chains.
[clxxxi] Zeisel, (ibid.), p.233
[clxxxii] Roger Silverstone 1999 [1994]) and 1996 writings on domestication refer to media and technology.
[clxxxiii] See Situationist thinkers such as Guy Debord and Henri Lefebvre.
[clxxxiv] Bourdieu, P. 1984, in Distinction, p.178
[clxxxv] In his First Principles of Evolution, philosopher Herbert Spencer considered art as being play.
[clxxxvi] Niedderer (2002) defines performative characteristics as 'objects that effect an action by being used, or by means of which the user performs a particular act.'
[clxxxvii] In relation to performance, interaction is understood throughout the text as 'acting or capable of acting on each other' and refers to reacting and responding.
[clxxxviii] For example in Suchman, L. 1987. Plans and Situated Actions: The Problem of Human-Machine Communication. New York: Cambridge University Press
[clxxxix] Giulio Iacucci and Kari Kuuti (2002) suggest that performance has different roles in testing: communication exploration, and supports the interactive role of participants.
[cxc] Reciprocity is understood as the degree to which one accommodates his/her behaviour to the needs and viewpoint of the other, and (b) assimilates input (i.e. behaviour and ideas) into his/her behaviour.
[cxci] Bødker, S. and Christiansen, E., 1997. Scenarios as springboards in design. In: Bødker, G., Gasser, L., Star, S.L. and Turner, W., Editors, 1997. Social Science Research, Technical Systems and Cooperative Work, Erlbaum, Mahwah, NJ, p. 217–234.
[cxcii]Vihma, Susann. 1995. Products as Representations. A Semiotic and Aesthetic Study of Design Products. Helsinki: UIAH (University of Art and Design) Publication Series. p.34
[cxciii] Niedderer proposes the integration of a performative function for objects which mediate interaction. Niedderer, Kristina. 2002. The Performative Object: Enacting the Humane Dimension within Design. PhD Thesis. University of Surrey. Falmouth College of Arts.

End-Notes - Chapter 4

[cxciv] Giedion, S. 1984. [1948]. Mechanisation takes Command. New York: Oxford University Press. p.360
[cxcv] Sociologist Anthony Giddens says that human agency and social structure are in a relationship with each other, and it is the repetition of the acts of individual agents which make the social structure.
[cxcvi] Turkle, S. 2007. Evocative Objects Things We Think With. Cambridge: MIT Press
[cxcvii]As a noun, narrative is understood as a narrated account, a story; the art, technique, or process of narrating; a recounting of past events: account, chronicle, description, history, narration, report, statement, story, version; an account of connected events; a story, the narrated part of a literary work, as distinct from dialogue; narrative is a series of choices by an author to achieve a certain effect and meaning. As adjective, narrative is characterized by the telling of a story. Narratology is the theory of the narrative describing narrative-specific system of rules in narrative production and processing. Narrativity indicates properties characteristic of narrative; the articulation of ideas about theory-based narrative.
[cxcviii] See further in Bal, Mieke. 1997 [1985]. Narratology: Introduction to the Theory of Narrative. Toronto: University of Toronto Press. Narratology is the study of actual events, participants and stories.
[cxcix] Narrative is a versatile medium in analysing literary texts, philosophy and visual arts, proposing an alternative to the traditional ways of categorising, analysing.
[cc] Nath, S. 2003 "Story, Plot and Character Action: Narrative Experience as an Emotional Braid" in S. Göbel, N. Braun, U. Spierling, J. Dechau and Holger Diener eds. Proceedings of the Technologies for Interactive Digital Storytelling and Entertainment (TIDSE) Conference, p. 1-18.
[cci] Leitch, 1986. The prior knowledge of the audience supplies connections among narrative elements and perceive events as significantly related
[ccii] Ryan, Marie-Laure. 2001. Beyond Myth and Metaphor. The Case of Narrative in Digital Media. Research Paper presented at the Digital Textualities Conference in Copenhagen. p.6
[cciii] White, H. 1996. In Appleby, E., Hoyt, D., Covington, E. et Al (ed.) Knowledge and Postmodernism in Historical Perspective. London & N.Y. Routledge. p. 395-407
[cciv] Philosopher Pierre Daniel Huet (1669) suggests that meaning does not derive from reason, imitation or custom, but is a natural inclination of the viewer. Csickszentmihalyi, M. and Rochberg-Halton, E. 1981. The Meaning of Things: Domestic Symbols and The Self. Cambridge: Cambridge University Press
[ccv] Norman, D. (ibid.) 2004. p.47
[ccvi] In cognitivist theory emotion is linked to user experience and action. In Antonio Damasio, 1999. The Feeling of What Happens: Body, Emotion and the Making of Consciousness. London: Heinemann
[ccvii] Cognitive experiences involve interactions with new, unfamiliar products and tasks that require attention, cognitive effort, or problem-solving skills.
[ccviii] Williams, G. 2004. In Renny Ramakers. 101 years Droog Design. London: RIBA, p.27
[ccix] Bourriaud, N. 2002, Postproduction, Pp.8
[ccx] Schouwenberg, L. In Renny Ramakers. 2004. In Simply Droog. London: RIBA, p.37
[ccxi] Bourriaud, N. 2002, Postproduction. p.56. In referring to Marcel Duchamp's piece 'Fountain' Bourriaud considers that Duchamp completes the definition of the term creation.
[ccxii] Zeisel, E. (ibid.) 2004. p.136
[ccxiii] French Film Theoretician Chris Metz (1991) suggested that narratives represent an 'anthropological forms of perception' for the 'consumers' of narratives; and an operation for the 'inventors' of narratives.
[ccxiv] Leitch, Thomas M. 2003. Twelve Fallacies in Contemporary Adaptation Theory Criticism - Volume 45, Number 2, Spring 2003, p. 149-171
[ccxv] Design, like art is also an intervention in every day life. Ana Barbara proposed first to create a modality of drinking and then the appropriate object to drink from.
[ccxvi] Schouwenberg, L. 2004. Ibid. p.36
[ccxvii] Bourriaud, N. 2002, Postproduction, p.36
[ccxviii] Featherstone, M. 1997 (1991). Consumer Culture and Postmodernism. London: Sage Publications
[ccxix] Bourriaud, N. 2002, Postproduction, p.49
[ccxx] Bourriaud, N. Ibid. p.63
[ccxxi] Actant is a term that was introduced into narratology and semiotics in 1966 by Algirdas J. Greimas
[ccxxii] Social factors mediate and appropriate products to social-group needs
[ccxxiii] Philosopher Michel Serres (2001) saw domestication both as an experience and a learning process.
[ccxxiv] Fulton-Suri, J. 2000. Experience prototyping. Proceedings of the conference on Designing Interactive Systems: processes, practices, methods, and techniques. New York: ACM Press.
[ccxxv] In narratives, users (participants or audience) have an active role.
[ccxxvi] These are the words recorded from one of the participants (Mr. Phil Sayers), see Appendix.

Endnotes - Conclusion

[ccxxvii] In de Certeau's theory, an interpretive process. De Certeau, M. 1984. The Practice of Everyday Life. London and Los Angeles: University of California Press.
[ccxxviii] As Jean Baudrillard says: the "systems of human behaviour and [the] relationships that result therefrom." In Baudrillard J. 1996 [1986]. The System of Objects. London: Verso
[ccxxix] In *Distinction* (Bourdieu 1984 [1979] explores people's taste in the French culture of 1960s as a set of cultural preferences and aesthetic judgements – these being perceived as an orientation to culture.
[ccxxx] See further Bourdieu, P. 1984. Distinction. A Social Critique of the Judgement of Taste. London: Routledge and Keegan Paul.
[ccxxxi] Arjun Appadurai's background is in anthropological studies, Judy Attfield is a specialist in British Design History and feminist studies, and Pierre Bourdieu and Tim Dant are of sociologist formation.
[ccxxxii] Betsky, A. 2004. In Ramakers, R. 2004. Simply Droog: 10 plus 1 years of creating innovation and discussion. London: RIBA. p. 36
[ccxxxiii] Ionascu. A. 2006. Conference Paper. Design and Evolution, Delft. Conference Proceedings
[ccxxxiv] For example, Peter Fuller's says that "the hand-made vessel exemplifies the union of man's functional skills and his aesthetic and symbolic intends"
[ccxxxv] Bourdieu, P. 1984. Ibid., p. 156
[ccxxxvi] In de Waal, E. 2003. 20th Century Ceramics. London: Thames and Hudson. p.175
[ccxxxvii] This, Featherstone says, emphasizes the social resistance of transforming goods that are high in cultural capital into economic capital – a resistance that is finally broken down by a new class of cultural intermediaries". This view can be associated with T. Veblen's 'conspicuous consumption'. In Featherstone, M. 1992.Cultural Theory and Cultural Change (Theory, Culture and Society Series). Sage Publications, p. 87-92.
[ccxxxviii] De Certeau, ibid. 1984, p.43.
It's important to maintain that throughout the text domestication was defined according to Roger Silverstone, as a twofold process whereby things and people reciprocally influence and affect each other.
[ccxxxix] De Certeau, M. 1984. The Practice of Everyday Life. This can be related to Roger Silverstone's four stages in the domestication of objects, claiming the active participation of the user.
[ccxl] De Certeau. 1984. p.31 "…since it shows itself not in its own products but in an art of using those imposed on it". Using as consuming (see conclusion) – through practices of use (through the practices of using them), creating in turn a production of meaning.
[ccxli] As Nicolas Bourriaud says in Postproduction (2002), the work of art becomes a material from which new utterances can be articulated, instead of representing the end result of anything. p.56
[ccxlii] Bourdieu, P. 1984. Distinction. A Social Critique of the Judgement of Taste. London: Routledge and Keegan Paul. p.100
[ccxliii] See further Lehtonen, T.K. (2003) Domestication of New Technologies as a Set of Trials. London: Sage Publications. p364
[ccxliv] Clarke, A. J. 2001. The Aesthetics of Social Aspiration. Home Possessions: Material Culture behind Closed Doors. Ed. Daniel Miller. Oxford: Berg. p. 67
[ccxlv] Bourdieu, P. 1984. Distinction. A Social Critique of the Judgement of Taste. London: Routledge and Keegan Paul.
[ccxlvi] A maker does not only question the form and function of an object, but considers the relations this has to potential users.
[ccxlvii] Ben Highmore. Highmore, B. 2004. Homework: Routine, Social Aesthetics, and the Ambiguity of Everyday Life. Cultural Studies No.18 p. 306-327
[ccxlviii] Baudrillard, J. In the System of Objects, (ibid.) p.178-180.
[ccxlix] Schouwenberg, L. In Ramakers, R. 2004. Simply Droog, p.93
[ccl] Early in the 20th century, art began to recycle design when the Dadaists renamed objects of industrial production by signing and displaying them as 'readymade' art.
[ccli] Notions of interaction and participation were present in the 1990s and in the work of situationists
[cclii] Brecht, G. 1965. 'A Conversation about Something Else'. Interview with George Brecht by Ben Vautier and Marcel Alocco in *Identités*, nos. 11-12. Milan: Multiple Edizioni. p.71.
[ccliii] Featherstone, M. (ibid.) points out '… the way in which the urban landscape has become aestheticized and enchanted through the architecture (..) and through the embodied persons who move through these spaces: the individuals who wear, to varying degrees, fashionable clothing, (..) or who move or hold their bodies in particular stylized ways.' p. 66-76
[ccliv] Product or market design 'measures' products and users ergonomically
[cclv] Poetic design does not as much changes a product or object for better use, as it transforms the user.