





## **Active Objects, Passive Dramas**

How may design re-appropriate tools from the art of dramaturgy in the service of developing more meaningful products?

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A thesis submitted in partial fulfillment of the requirements for the degree of Master of Design, Unitec 2008.



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# CONTENTS

<b>INTRODUCTION</b>	2
<b>CONTEXT</b>	4
<b>THEORETICAL FRAMEWORK</b>	8
Introduction	8
Theatre	10
Dramaturgy	12
Conflicts and Action	14
<b>METHODOLOGY</b>	20
Project Timeline	21
<b>PRACTICE</b>	24
First Design Phase	24
<i>Sugar Bowl Analysis</i>	24
<i>Mapping interactions</i>	24
<i>Contextual Research</i>	26
<i>Vessel Exploration</i>	28
<i>Concept Generation</i>	28
<i>Artifact Composition</i>	30
<i>Design Outcome</i>	38
<i>Design Reflection</i>	38
Second Design Phase	42
<i>Mapping interactions</i>	42
<i>Contextual Research</i>	44
<i>Concept Generation</i>	46
<i>Artifact Composure</i>	48
<i>Design Outcome</i>	50
<i>Design Reflection</i>	54
<b>PROJECT SUMMARY</b>	58
Further research	62
<b>BIBLIOGRAPHY</b>	66

## LIST OF FIGURES

Figure 1: Project frameworks	7
Figure 2: Choreography of Interaction	9
Figure 3: Seven Stages of Action	15
Figure 4: Traditional Sugarbowl	23
Figure 5: Narrative Breakdown	25
Figure 6: Vessel Explorations	27
Figure 7: Concept generation	29
Figure 8: Initial concepts	31
Figure 9: Composing Structure	33
Figure 10: Design development	34
Figure 11: Designed components	35
Figure 12: 'Mt.. Sucre'	36
Figure 13: Analysis of designed sugarbowl	37
Figure 14: Narrative mapping	41
Figure 15: Narrative sketching	41
Figure 16: Coffee & Cigarettes	43
Figure 17: Macro and Micro Level Concepts	45
Figure 18: Tray Layout Prototypes	47
Figure 19: Development of Coffee Set	49
Figure 20: Developed Components	51
Figure 21: 'Split Together'	53
Figure 22: Design Dramaturgy Model	57
Figure 23: Project Development Map	59



## INTRODUCTION

Looking to develop my professional design practice in the field of product design, I pursued this research project in order to further my product development skills and gain further understanding of design theories and research techniques. As a designer my interests are orientated toward the social and cultural affects of products. It was important for me to pursue a project that would allow me to explore new theoretical frameworks useful in generating design strategies for future design practice.

Inspired by the 'fizz moments' that some products create, such as the cracking of a coke can or the pop of the wine cork, I searched for ways that the most banal objects when re-designed can potentially develop meaningful dimensions in the everyday.

With these concepts in mind, I was inspired to direct my research toward exploring the role of product experiences, and how product design could potentially contribute to the development of meaningful everyday experiences. Embracing designs often overlooked ability to compose and orchestrate human behavior; the research question will investigate strategies to bring about new textures to everyday experiences.

Searching beyond traditional product design frameworks the project turns to the potential of theatre in the service of designing meaningful products. These techniques will assist in the construction of a linear design process that could potentially shift a design direction from functional and aesthetically driven products, to objects which play more potent roles in contributing to human experiences.

The project aims to deliver conceptual and prototyped products that evaluate and illuminate strategies for orchestrating more textured user experiences.



## CONTEXT

Product design is informed by a number of criteria – manufacture, ergonomics, and marketing to name a few. These various needs reflect the multifaceted nature of products as items of function and fashion, utility and extravagance. From extracting commodities and producing goods design now ventures toward delivering service. Current efforts of design research are now looking beyond the object as a functional tool, and toward objects as vehicles for staging more meaningful user experiences.

“Everyday life is constructed of ongoing experiences” (Shedroff, 2001, p.4). As we go about our everyday, the majority of our personal experiences take place with objects, around objects, and in environments constructed of objects. A common theme that presents itself through the domains of experience design is the notion of narrative. Narratives are stories; the way in which humans perceive experiences. “Humans live in story”...“Stories which they can reproduce what becomes a human explanation of the past is largely a linguistic construction” (Krippendorff, 2006).

By definition, experience design privileges the experiential elements over the object itself. Experience Design looks toward human centred disciplines in finding new ways to evaluate and approach artifacts. Recent design research has seen the utilisation of theatre framework as a means to generate methods of constructing design experiences. Theatre encompasses teachings of representing humans, and more importantly the study of tools for developing narrative known as dramaturgy.

In contributing to the field of experience design, this project searches for ways that design may add value to objects beyond optimal functionality. “In a world where practicality and functionality can be taken for granted, the aesthetics of the post-optimal object could provide new experiences of the everyday life, new poetic dimensions.” (Dunne, 2005 p. 20)

“A user may choose to work with a product despite it being difficult



to use, because it is challenging, seductive, playful, surprising, memorable, or even moody, resulting in enjoyment of the experiences.” (Kees Overbeeke, 2004 [et al.] p.8). Drawing tools from dramaturgy, this project will set about finding strategies for design to look beyond designing for functionality and toward developing more textured user experiences. Through this, design can potentially provide us with more enjoyable experiences and benefit us through learning as for “all experiences are important and... we can learn from them whether they are traditional, physical or offline experiences...” (Shedroff, 2001 p.2).

A sugar bowl was identified early on as a vessel for the exploration of dramaturgical tools. Being a simple utensil or object with a relatively low cultural significance, the sugar bowl would be redesigned in attempt to generate new layers of meaning and significance through use. This object, would prove later in the project to be full of dramatic potential. The scope of the initial product analysis will deal with capturing the interplay between the object and user whilst the object is performing its core functions; as a vessel for housing sugar. Upon observing human interaction with this object we can begin to see how the human experiences which unfold around it, are triggered by the artifact and it’s surroundings.

Drawing from the knowledge of performance theory this project will outline tools that may be useful for further research into the relationship between theatre and product design and will contribute to the growing domain of what is known as experience design.

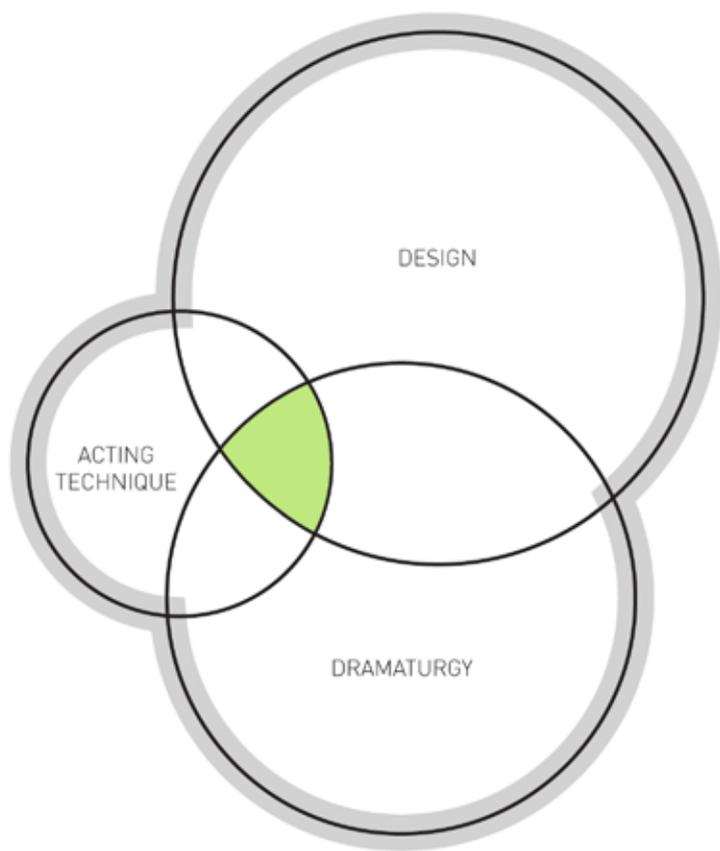


Figure 1: Project frameworks

# THEORETICAL FRAMEWORK

## Introduction

In a world where designers are faced with the challenge of finding new ways to develop innovative products, design finds itself looking toward other fields of knowledge in the hope of finding new methods to generate innovative ideas. In recent times, common themes of design research have included the appropriation of tools and techniques from other bodies of knowledge. Recent works by Brenda Laurel, Phillips and IDEO, have used theatre as a source for informing design, supporting the creation of new layers of novelty and complexity beyond optimal functionality. This suggests theatre is fertile ground from which design research can explore new ways of contributing to user experiences.

Theatre provides a space for humans to indulge in a release of emotions which are not usually experienced in the 'audiences' of everyday life. It is apparent that a crucial part of performance studies is not just about performing on the stage, but understanding life as performance (Schechner, 2002). The objects, of which we surround ourselves with, play roles in the construction of these everyday human performances. Like a prop in theatrical production, products assist in furthering the development of plot and narrative of many everyday experiences.

Principally this project is tasked with delivering poetic artifacts, stimulating experience through movement and gesture. As such the existing framework of product design does not support this intent. Therefore by exploring and incorporating frameworks of theatre, this project proposes ways that objects may be designed to trigger dynamic actions and labour through use, in the development of meaningful human experiences.

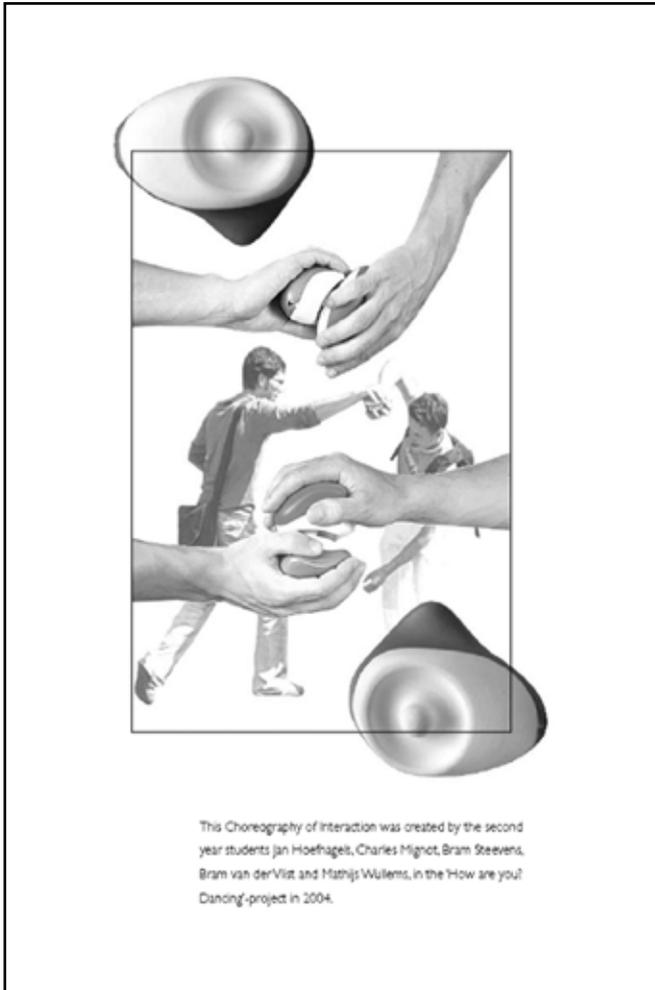


Figure 2: A student project exploring choreography in the development of interaction. (Sietske Klooster and Kees Overbeeke, 2005)

## Theatre

Theatre deals with the manifestation of people and their actions within time and space. Theatre theory is very diverse and is composed of a range of core disciplines; each dealing with ways to orientate humans in performing roles on the stage. It is the human centeredness of this framework that presents it as a potential source for inspiration and knowledge when designing product experiences.

Theatre is an ancient discipline dating back to before 2000 BC and is an integral part of human culture. First formalised by the ancient Greeks, the art of theatre has since developed through many forms. Aristotle was the founder of Western literary criticism; his profound poetics were the first writings on theatre. In recent decades several movements have tried to break away from the Aristotelian perspective. Many directors and writers have since written about their own dramaturgical thinking, these include the credited writings of Bertolt Brecht, and Antonin Artaud among others. Constantin Stanislavski is a pivotal figure in the development of theatre technique. Stanislavski (1988) developed systems for artistic truth on stage by teaching actors to essentially “live the part”.

Due to its centrality in the development of drama, this project will focus on the Aristotelian form of dramatic composition, known as traditional dramaturgy. Dramaturgy has a commonality with the role of design within its own domain of theatre. The dramaturges role in theatre exists between script and audience. There exist parallels between the role of the designer when considering product experience and the function of dramaturgy in composing elements on the stage.

Theatre is about the production of social meaning and structure through time and space; dramaturgy essentially shapes these reproductions. Theatrical events as a professional event have been largely displaced by television and film in modern culture. These are more modern derivations of the wider domain, just as product design has supplemented hand craft as the dominant shaper of everyday artifacts.

*“Storytelling is one of the oldest experiences and still one of the most powerful” (Shedroff, 2001 p. 208)*

## Dramaturgy

“In its broadest sense, dramaturgy is the technique (or poetics) of dramatic art which seek to establish the principals of play construction, either inductively on the basis of actual examples or deductively on the basis of a system of abstract principals”(Pavis, 1998 p.124). Written around 335 BC, Aristotle’s poetics, also known as traditional dramaturgy, was the first western work on drama theory and remains the touchstone of western dramatic criticism. In the poetics Aristotle’s defines the notion of plot as the most important aspect of story telling and outlines principle guidelines for ideal representation of story through imitation. This model of theatrical form, though millennia old, holds great potential for design, as it ventures consciously into the domain of constructing narrative in and through the material world.

Poetics derives from the Greek words: ‘poises’ meaning how to do and ‘techne’ meaning technique. Poetics refers generally to the artistic theory of how to do something. Aristotle defines six basic elements of theatre which include: plot, characters, verbal expression, thought, visual adornment and song composition. (Worthen, 2004) “The greatest of these elements is structuring of the incidents”. (Worthen, 2004, p.100).

Of these six elements the Plot – or as Aristotle called “the arrangement of the incidents” is defined as the most important. Performance theory deals with narrative, and a performance having a Beginning, Middle and End is the backbone of Aristotle’s poetics. Shedroff (2002) discusses experiences that draw upon these principles. “...most [experiences] have edges that define their start middle and end. Much like a story..., these boundaries help us differentiate meaning, pacing and completion.” (Shedroff, 2002 pg. 4)

In identifying plot as the central component of dramatic composition it becomes inherent that Narrative is a central concern of Dramaturgy. It is these basic fundamentals of traditional dramaturgy which may be taken into account when designing experiences.



Narrative depends on conflict. "Narrative has at its centre the sore point of a conflict (of values or between persons) in which the subject is led to transgress the values of his world" (Pavis, 1998 p.232). Narrative will always pose a question which is being disputed, a problem to be solved to allow the narrative to have drama. This research project explores the notion of conflict, and how it may be used to assist in the composure of narrative and design of objects.

"Dramaturgy... consists of assembling textual and stage materials, bringing out complex meanings of the text by choosing a particular interpretation and orientating the performance in a certain direction." (Pavis, 1998, p.125). Through the interpretation of contextual research, design will orientate and suggest appropriate structures and textures to be rendered through user experiences. Dramaturgy will be a useful framework in the staging and sequencing of these experiences, but is not directly concerned with specific techniques for the development of dynamic actions.

"Classic dramaturgy examines the playwrights work and the narrative structure of the play (text and performance) exclusively. It does not concern itself directly with the realisation of the performance on the stage..." (Pavis, 1998, p.125) Therefore I will look toward acting technique for further tools to equip my design process with more tools for composing the external structures of the experience.

## Conflicts and Action

Dramatic conflict is the result of antagonistic forces of the drama. Conflict has become the hallmark of theatre for an action oriented dramaturgy. (Pavis, 1998) Conflict raises new stories between individuals and object, and is part of everyday life. Drama comes from the Greek word 'dran' meaning 'action' 'or more literally: to do'. As design ventures toward generating textures to the narratives of use, it looks for ways to approach the design of the intangible. Having defined conflict as a core component of narrative, we now look closer at how conflict may create more dramatic objects and experiences.

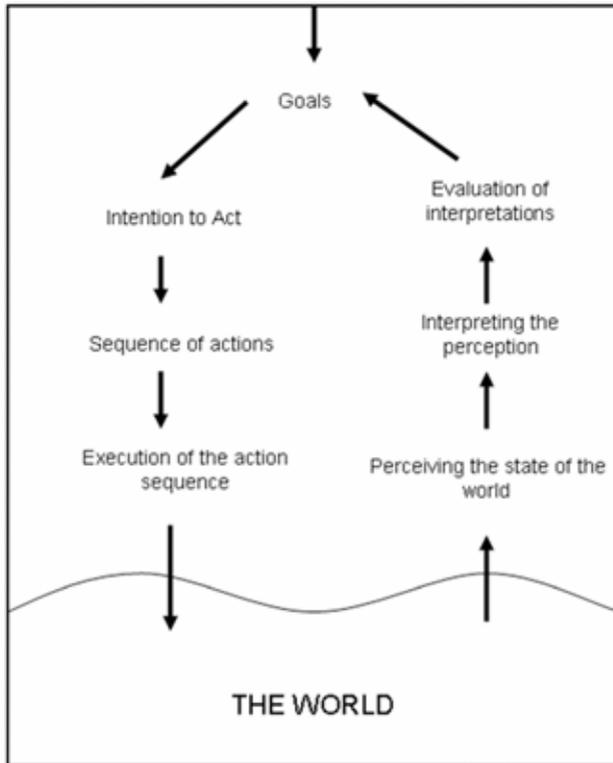


Figure 3: Seven Stages of Action by Donald Norman (1988)

“A dramatic action is not confined to the simple and undisturbed accomplishment of a specific aim; on the contrary, it rests entirely on collisions of circumstances, passions, and characters, and leads therefore to actions and then the reactions which in turn necessitate a resolution of the conflict and discord” (Hegel, 1832, p. 332 cited in Pavis, 1998, p. 75)

“There is no physical action divorced from some desire, some effort in some direction, some objective without ones feeling inwardly a justification for them” (Stanislavski, 1988, p. 42). In seeking ways to bring about new textures to experience, design looks toward the notion of generating conflict in developing dramatic experiences. This concept can potentially raise new stories in the experience of everyday and assist in the development of interactive products.

“An object is what gets in the way, a problem thrown in your path like a projectile. (Object comes from the Latin ‘obeiectum’, Greek problema)” (Flusser, 2001p.43) In terms of object use, it could be understood that all action is the result of overcoming some form of conflict; each has an intention which contributes to the purpose of achieving a goal. This theme is apparent through Donald Norman’s ‘Seven Stages of Action’ (Figure 3) which discusses the translation of a human goal through intention and into a specific action sequence. Norman (1988) explains the translation of a human goal through the gulfs of evaluation and execution. He discusses that a person with a goal, must need to specify the physical movements required to achieve this goal, therefore translating it into an intention, which in turn has to be made into an action sequence. (Norman, 1988)

This is a similar theoretical premise to Heidegger’s contrasting of two modes of being, ready to hand and present at hand, as the ways in which we encounter the world and act through it. (Dourish, 2001). Present-at-hand is the consideration of an object as a physical thing present to us. Ready-to-hand is that where the object is equipment, which can often be transparent in action, such that it becomes an extension of our body. (Dourish, 2001)

When an object is present at hand, an ‘object break down’ may



encourage reflection on the relationship with the tool. This potentially makes the object vivid in experiences. This breakdown shifts the object from 'ready to hand' to 'present at hand', therefore creating an opening to allowing people to be like people. Design in this case, is creating breakdowns or non normal ways of interacting to stimulate a move away from objects being ready at hand and toward the present at hand.

In terms of performance theory, there is a direct parallel with a model introduced by Constantine Stanislavski (1988) in relation to Method Acting. In performance theory, every action has a purpose, and these actions can be broken down into smaller components depending on the characters 'objectives'. The model that Stanislavski proposes for actors proposes ways to break down the intention of all actions into *Objectives*, *Units* and *Super-Objectives*.

“Super-Objective : A statement (agreed by director and actors) which represents a guiding principle governing the direction and meaning of the whole play.

Units : Sections of a scene which represent the individual actions of a character.

Objectives : The motivation which propels a character through individual units of action” (Stanislavski, 1988, p. 45)

This model of action breakdown may prove a useful tool in developing a wider understanding of the motivations which propel users through the dynamic actions of object use. A wider understanding of these motivations could potentially service the development of new action structures within the dramaturgical development of experience.



## METHODOLOGY

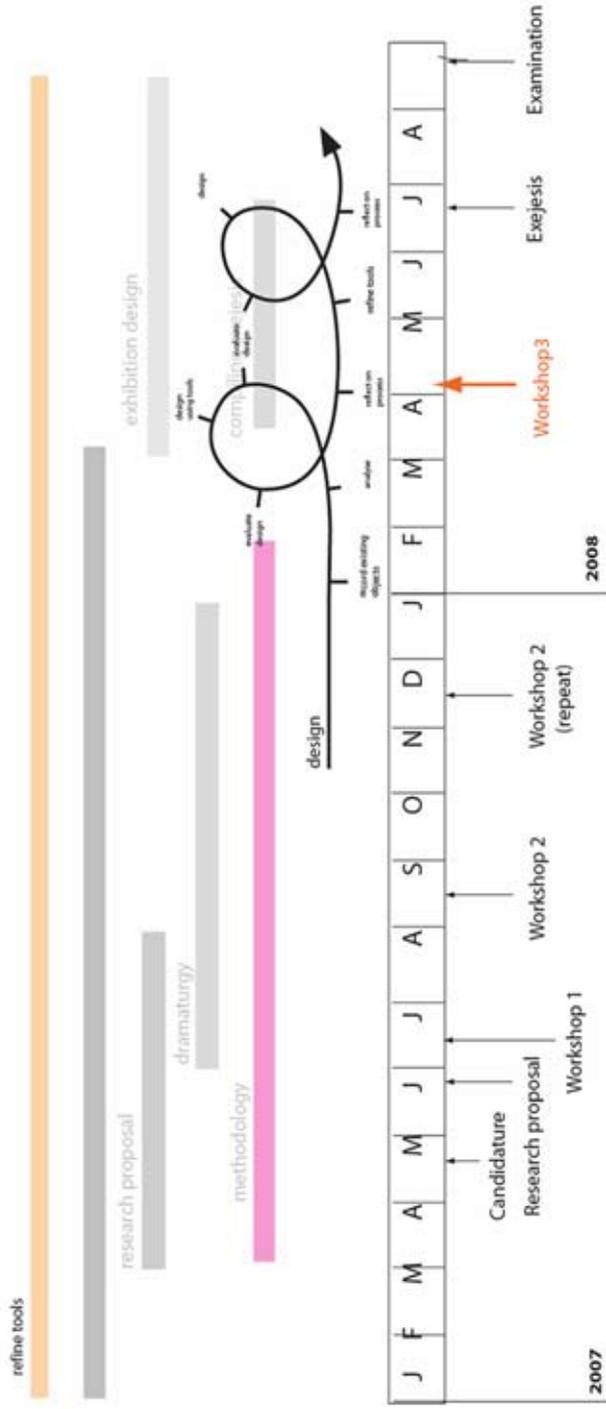
This project will consist of a two phase process whereby two design iterations will take place, allowing one to deepen understandings of the projects emergent developmental pictures. The first phase will deal with the analysis and re-design of the sugar bowl drawing on a tool from method acting. The second design iteration will be a continuation of the first design outcome, whereby new methods will be created in the service of generating further outcomes that address more complex facets of social interaction and experience. The project is not an epistemological model from dramaturgy; it is still in practice a design project, which is essentially building an experiment with a design method and intellectual framework, informed by dramaturgy.

This project will engage in the saturation and adaptation of dramaturgical knowledge for the purpose of analysis and creative production, and will utilise a dramaturgical mindset over instrumental appropriation of tools.

### Design Method

1. Research & Analysis Research of design theme and existing product evaluation
2. Concept generation. Using gestural actions as directions for the generation of concepts.
3. Concept development. Selecting and developing concepts into forms that can be realised through physical artifacts.
4. Concept refinement. Articulating the design of final artifact into producible forms that meet the aims of the design objectives.
5. Evaluation. The outcome of each design phase will be an effectively tested working prototype.

# Project Timeline



## Technique

- a. AV Recording will be the medium for capturing human engagement with objects. Direct observation of these situations will also take place
- b. Design explorations. Designed exploration will suggest products that may potentially generate meaning through object use, beyond optimal functionality.
- c. Sketch modelling. As well as 2D sketching, concepts will be developed and realised through 3D model making.

In adopting theatre perspectives through the first design phase, the method acting model of Stanislavski (1988) will be used in the breaking down and mapping out of the captured footage. This model will be adopted in the development of a visual tool for the analysis of objects and development of concepts. Dramaturgical principals by the likes of Aristotle's perspectives will influence the composure of the artifacts and the experiences that may unfold around them. Relating artifacts with the props of theatre may potentially assist the development of plot and narrative of experience. Through a second design phase, further developmental models will evolve to accommodate analysis and composure of wider, more complex narratives. Overall the project will look toward the frameworks in following these patterns of Convergence, Divergence, Iterations, and Reflections.



Figure 4: Traditional Sugarbowl

## PRACTICE

In exploring the relationship between dramaturgy and design; a two phase design process will develop ones practice in the application of theatre frameworks to design. The first phase of the project will engage in the conscious re-development of the traditional sugar bowl (Figure 4) in a typical café setting. Beginning with a performance based analysis of the existing object in context; design will gain insight into the development of objects as a means of composing human experiences.

### First Design Phase

#### *Sugar Bowl Analysis*

The scope of the initial product analysis dealt with capturing the interplay between the object and user whilst the object is being used in its core functions as a vessel for housing sugar. Upon observing humans interaction, can we can begin to see the human experiences which unfold around it. Video Cameras were positioned to be least intrusive, thus overcoming peoples tendency to perform upon being spotlighted by the camera. Repetition of camera presence and subtle capturing methods ensured this was avoided. Taking this into consideration I also made observations in similar events when the camera was not present.

#### *Mapping interactions*

In terms of performance theory, every action has a purpose, and these actions can be broken down into smaller components depending on characters' 'objectives'. The model that Stanislavski (1988) proposes for actors is a way to break down the intention of actions into Objectives, Units & Super-Objectives. This project led to the development of a visual form of this model, allowing the designer to visualise the specific action structures over narrative sequences. Brenda Laurel (2001) uses digital video as a medium in the development of 'Improvisational design'. This project reviewed AV footage through mapping the gestural units of the captured

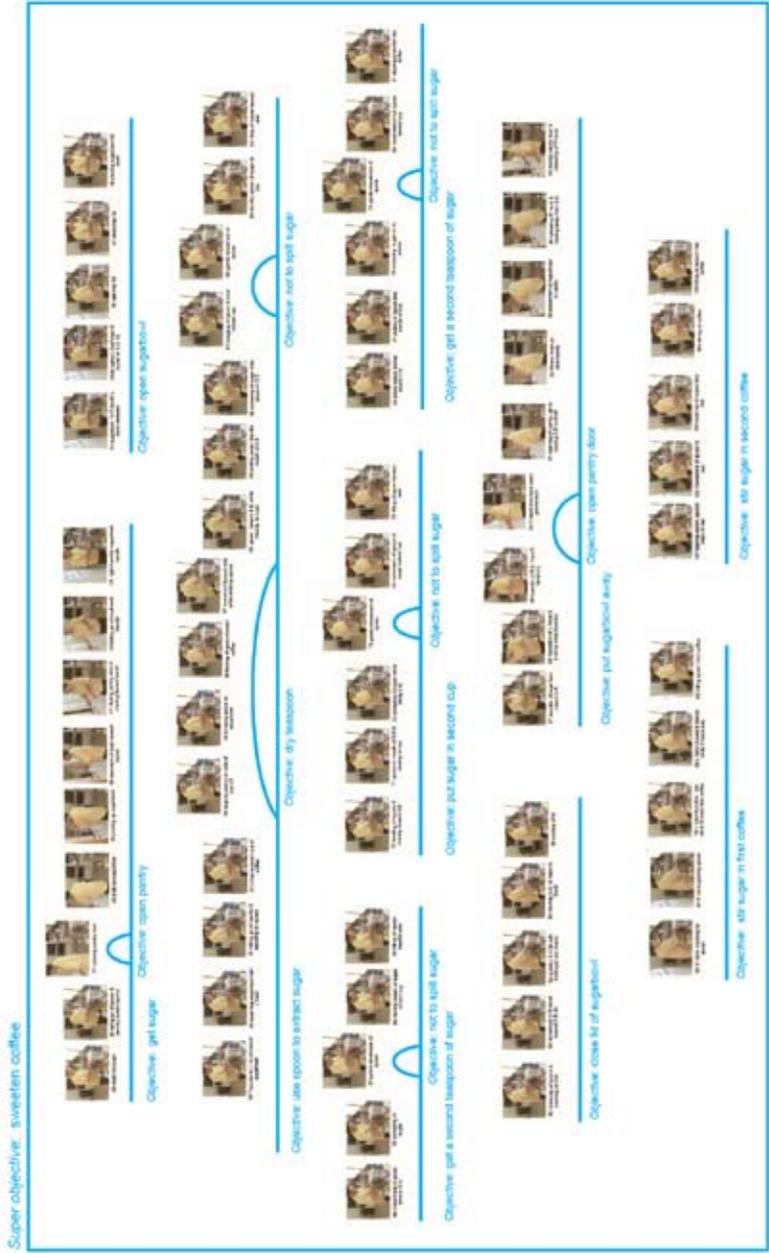


Figure 5: Narrative Breakdown

performance in terms of Stanislavski's breakdown model.

From the captured footage, sequences were first broken down into gestural units. To a reasonable extent, each micro action of using the sugar bowl was individually captured and labeled. These gestural units were then grouped into series of units that together go about achieving the objectives of the user. (Figure 5)

Each photo marks one gestural unit. The framing box maps the super-objective of the contained units being: 'to sweeten coffee'. This is the essential motivation for reaching for the sugar bowl in the first place. Within this lie seventeen objectives. Sketched arches within some of these objectives (such as 'objective: not to spill sugar') mark smaller goals which are overcome through the completion of the wider objectives. Overall mapping these objectives displays a specific narrative sequence of using the sugar bowl into what could be perceived as readable chunks, allowing one to observe the overall make-up of the narrative.

This tool was useful in breaking down the motivations of object users in constructed narratives and understanding the core functions of each gestural unit. Having developed a visual understanding of the motivations that inform user's actions, we can then use further dramaturgical understandings in an attempt to compose user actions as a means of achieving an enhanced user experience.

### *Contextual Research*

Sugar is a widely traded commodity. Researching the cultural, historical and social aspects of sugar allows one to draw an understanding of the potential meanings & narratives that consumers engage in through the use of sugar as an everyday commodity.

One intriguing discovery was the 'sugar loaf'. This was the traditional form in which refined sugar was exported from the Caribbean and eastern Brazil from the 17th to 19th centuries. The loaf stood as a tall conical shape from which pieces were broken off with special iron 'sugar-cutters'. Taking reference to shape and legacy, this



Sugar as a symbolic gift



Reifying of sugar



Dispensing



Unhealthy/ Medicinal commodity



Sugar as ubiquitous



Valorising sugar

Figure 6: Vessel Explorations

discovery would later on prove inspirational in the development of a designed outcome.

### *Vessel Exploration*

The purpose of this exercise was to explore sugar in the context of consumption. In this aspect of the design process I explored designed forms that come about through visualisation and embodiment of certain values. (Figure 6). This exercise was also valuable as part of design practice by allowing one to handle the subject material of sugar, exploring how it reacts in different spaces.

Commonly seen containment devices were re-appropriated into the context of housing sugar. The results displayed new layers of ambiguity between perceived form and appropriate use.

### *Concept Generation*

Interesting gestural moments, observed through the mapping of object interactions were used as directions to undertake design experiments. From the initial mapping of objectives and gestural units, four interesting gestural units were used as directions for generating a first iteration of concepts. These selections were: 'Opening Pantry Door', 'Opening of sugar bowl', 'scooping of sugar onto spoon', 'Gentle movement of spoon'.

From these four gestural units, the user's objective in each case is to overcome some form of conflict. In light of developing objects with more dramatic user engagements, this method of concept generation explored how forms which directly increase gestural conflict may lead to the development of more dramatic objects and experiences.

The core conflict of each unit was first isolated and the corresponding unit labeled. Under each unit, four concepts were generated that could potentially increase the gestural conflict. "Narrative has at its centre the sore point of a conflict (of values or between persons) in which the subject is led to transgress the values of his world" (Pavis, 1998 pg. 232). In doing this I aimed to achieve product concepts



that would potentially lead to development of dramatic narrative through use. Design tried to increase the object conflict through envisioning dramatic scenarios involving the sugar bowl and user, then developing object forms that would potentially allow them to take place. From twelve initial concepts, (Figure 7) two were selected as hosting greater potential in further developing layers of meaning and complexity.

The first concept 'Smash' (Figure 8, see page 31) is a traditional sugar bowl filled with sugar and the lid sealed permanently shut. This concept generates conflict; whereby no alternative way to access the sugar leaves one with the only option of destroying the bowl to get to the sugar. This concept challenges user values between the consumption of sugar and 'tragic' sacrifice of the sugar bowl. Similar to the values surrounding the design of the traditional piggybank, there is developed tension between a need/desire and the sacrifice of the artifact.

The second selected concept 'scoop' is a narrow necked sugar bowl. This concept generates conflict by requiring that the user manipulates the orientation of the object to be able to extract the sugar. The appropriation of this conflict essentially choreographs a scooping gesture which is inspired by extracting sweetness or honey from a beehive. While this design is not as dramatically potent as the 'smash-it' concept, it points toward the potential of designed object form in the choreography of subtle user action.

### *Artifact Composition*

In further developments of a sugar bowl, design would look closer at the potential of dramaturgy in embodying the values of these initial concepts through the composure of a new sugar experience.

Motivations propel users through units of action. Taking elements of each concept in conjunction with historical and cultural research findings, I sketched elements or textures to be rendered through the dynamic actions of the user. It is from here that an object would be designed to create conflicts to hopefully result in the enactment



Figure 8: Initial concepts, 'Smash' and 'Scoop'

of some user actions, creating these textures. This would trial the generation of product conflict as a useful device in the development of user motivations.

Inspired by the concept of destruction and extraction, the notion of Aristotle's Beginning, Middle and End, was used through the process of sketching out some of the feelings and potential dynamic actions that would potentially present themselves through the use of the new sugar bowl. The development of each phase will hope to form the structure of a new sugar experience (Figure 9).

Drawing inspiration from the sand castle, a concept was developed that could compose these 'actions' in the proposed sequence. Upon researching the methods of sugar-cube production, it was realised that by developing the object to be a forming mould for sugar could provide a new delivery method of this everyday commodity. The design was now moving toward a solid sugar mass, from which a users' desired quantity would be cut. Using 3D sketch modeling, drawing and C.A.D the object quickly evolved into what would become the first designed artifact.

In further development of presentational and practical aspect of the object, initial concepts were simplified and final versions of the object developed (Figure 9-10, see pages 33-34). Presented on an elevated base the new form embodies semantic reference to the historical sugar loaf. An accompanying set of spoons adds yet another layer of performance making for a 'tricky' yet satisfying interaction. Unintentionally taking similar form to that of a dentist mirror, the flat faced teaspoons were designed to try amplify difficulty in the act of transferring sugar from vessel to cup. Through transforming this usually simple gesture into one requiring increased concentration and fidelity from user, this development opened up the potential for users to 'master' the use of the product. The eventual mastering of the sugar transfer (mastering, defined as: 'without spilling sugar all over the table') aimed to provide users with a certain satisfaction upon accomplishment. These unpractical dimensions of the object would contribute in development of textured experiences.

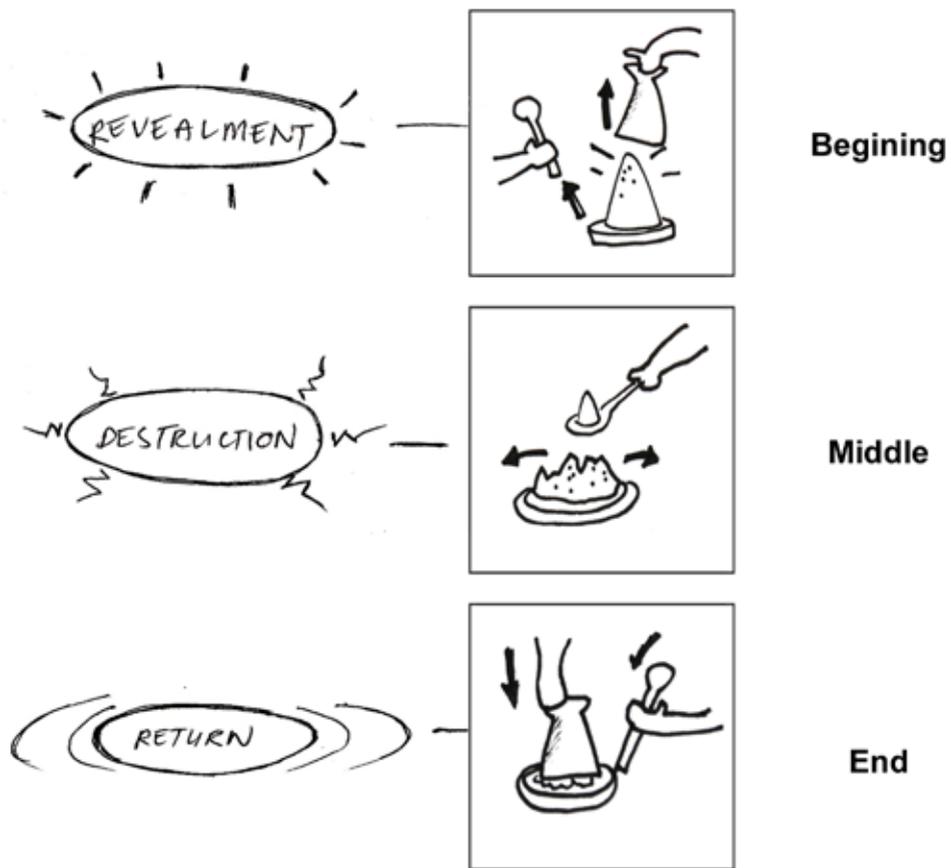


Figure 9: Composing Structure



Figure 10: Design development



Figure 11: Designed components



Figure 12: 'Mt. Sucre'



Figure 13: Analysis of designed sugarbowl

### *Design Outcome*

The design of 'Mt. Sucre' (Figure 12) has essentially gone beyond the redesign of a sugar bowl and toward a new object breed of a sugar molding set, designed to be used in a café setting. The design consists of a cone cavity lid, where sugar (white or brown) is mixed with a small amount of water, and dropped onto a base plate where three flat faced spoons reside.

Upon removal of the cone top, the sugar remains in its form, resembling that of the traditional sugarloaf. The flat spoons help transform what would usually be a scooping gesture into that of cutting and balancing. Upon destroying the sugar mound to use sugar, messy stories between the user and the object began to unfold. This destruction resembles the dramaturgical development of tragedy. Using the same methods for analysis as the original sugar bowl, the designed artifact was recorded and mapped in terms of units and objectives allowing a direct comparison between old and new. (Figure 13)

### *Design Reflection*

The Design raised new conflicts which were not pre-meditated, which led to new developments in actions and conversations in the setting it was placed. The taking of sugar, through transformation has developed to now be an act of division, rather than taking the extraction from a larger amount, the texture of the experience became a more playful and novel, conscious act. The user is now taking part in using the sugar bowl which potentially opens up possibilities for new interpretations e.g. where do certain people take it from? The sugar was received in a different manor, as if the users were taking sugar that was special, more of a prepared art. Norman (1988) talks about Japanese lunch box, describing the inherent and paradoxical relationship between the provision and acceptance of beauty, this therefore creating a tension between appreciating the object and consuming it.



Beyond analysing the direct use of 'Mt. Sucre', a startling development is the relatively labor intensive procedure for the initial sugar set up. The product is designed so that with each new table setting, the sugar is reformed to its original shape, requiring increased labor for those who work behind the café scenes.

It is inherent that design methods used in the first iteration have lead to the development of an object which has interesting effects on the texture of the experience. This opens an interesting space in which more research between performance and design can take place. The aim was now to refine the steps made in the design process, and apply these to the design of a second artifact. Engaging in a second design iteration would help pull together a body of knowledge which can aid the strategic design of new artifacts.

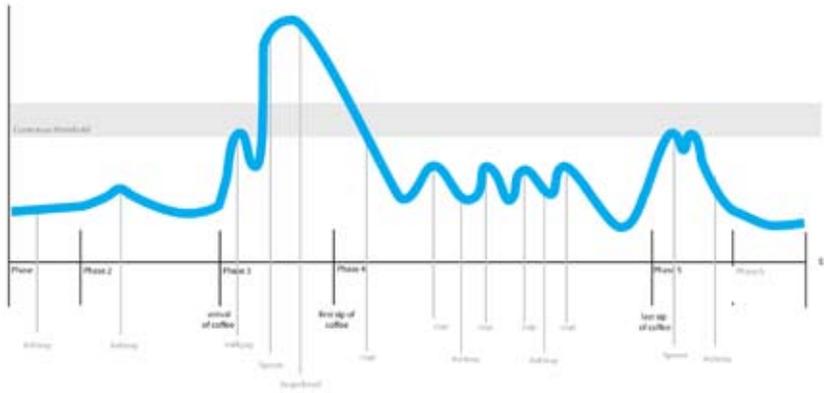


Figure 14: Narrative mapping

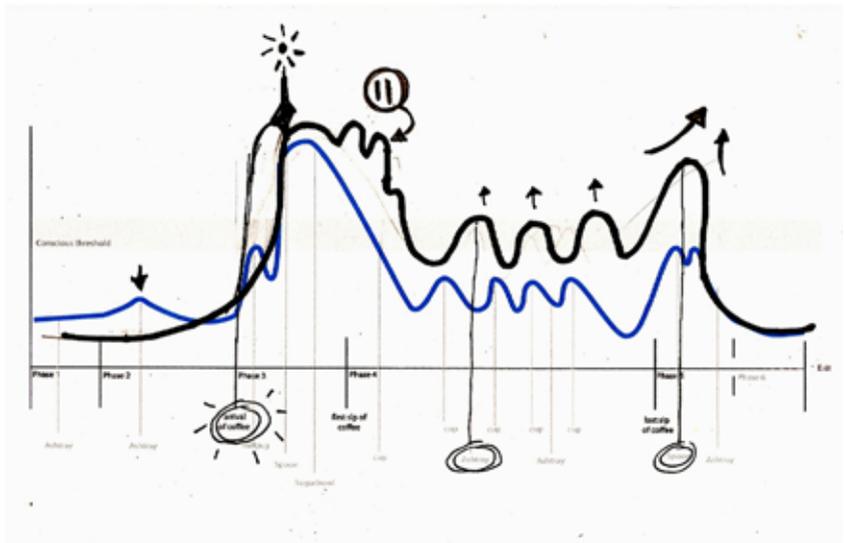


Figure 15: Narrative sketching

## Second Design Phase

As well as contributing the larger aesthetic of the project, the purpose of the second design phase is to build upon frameworks from the first design phase, through the design of a set of artifacts therefore generating more outcomes/outputs. In an attempt to expand and refine tools for development of drama in experiences, this iteration will look at the broader experience of two people sharing coffee in a typical café setting.

### *Mapping interactions*

The scope of this analysis phase was dealing with observing and analysing engagements, actions, and interactions that present themselves in the narrative of two people each drinking a long black, in a typical café setting. The analysis would observe the sequence of events that were taking place over the narrative, and map these against the intensity of user engagement. As well as to broaden observations and understandings of the subject narrative (in this case the design of a coffee set), creating diagrams allows one to shortcut the design work by visually mapping existing patterns and textures (Figures 14).

Upon review of captured AV footage, I began sketching the interactions that were taking place between the objects and users in the café scenario. The development was a basic line graph showing pattern of change, of a variable over time. The x axis reflects change in time, while the y axis identifies the interactivity between user and object. Mapping object interactivities would potentially reveal patterns of behavior indicating the dramatic texture of an experience. Doing this potentially opens up perception to a wider understanding of the performance, and provides a structured way of visualising how designed conflict may be appropriated through design of objects.

This mapping (Figure 15) compares the narrative of using the designed sugar bowl as part of a standard coffee set. It is essentially a developed form of mapping the internal structure or plot, of the experience. The solid blue line indicates object engagement over



Figure 16: Coffee & Cigarettes directed by  
Jim Jarmusch

time. A horizontal shaded section indicates the conscious threshold, in which below this line renders products ready-to-hand, and upon penetrating the grey zone become present-at-hand. On this graph, the objects which are presenting themselves at different times are labelled through vertical grey lines, thus allows one to see what object is being used at any one time.

The highest point on the table marks where the designed sugar bowl has played effect on user's conscious engagement with the object. The rippled space in the core of the narratives marks the casual drinking of the coffee. The raised texture toward the end of the narrative maps people playing with spoons when the coffee has gone. Overall this mapping begins to display an overall aesthetic of the plot.

### *Contextual Research*

Coffee has a relatively high cultural significant, and since its introduction to western culture in the sixteenth century, has become entwined as part of our everyday. From a western cultural standpoint, café's serve largely as those establishments where people arrange to meet with one another, sit and talk over hot drinks and food. Akin to the stage of theatre as a space for theatrical production, the café serves largely as a space in which social production takes place. From the coffeehouse, to the cafes of today, coffee, through its many forms remains a beverage at the centre of social interaction. Directed by Jim Jarmusch, the motion picture; *Coffee and Cigarettes* (2003) is a series of short vignettes exploring the consumption of coffee and cigarettes as a platform of social interaction.

In terms of the café setting, the consumption of coffee provides the 'super objective' (Stanislavski, 1988) and this with the objects, provide the props for social exchange to take place. It is around this form of social interaction that scenarios are built and stories between patrons played out. In aiming to design for the production of enhanced user experience, the object setup will be a key component in scenario building. From these perspectives, we can suppose the purpose of the second design phase in the social setting will be for



the grounds to present themselves. The role of design therefore is not to dictate conversation but to subtly suggest actions to make the interplay more vivid.

### *Concept Generation*

Insights gained from mapping user/object interactions, would now be used in the development of a café style coffee set. This design phase adopts a more flexible approach in developing products for new user experiences. Compared with the first design phase, this iteration looks more so toward the development of the internal structures of the experience, back-grounding the development of gestural conflict. The design will concentrate on the development of a coffee set specifically for the scenario of two people, in a café who each order a long black with a side of milk. Taking common values rendered through the design of the 'Mt. Sucre' sugar bowl, concept generation would concern itself with creating concepts that could play out these themes through an entire coffee set.

Initially, creating a sketch on top of the original mapping allowed me to imagine textures that may be rendered through the design of the entire set. This sketch was inspired by an intuitive response, aiming to develop a texture that would best deliver the 'Mt. Sucre' sugar bowl as part of the café narrative. This sketch served as a reflective benchmark throughout the design development of the coffee set.

Concept generation was conducted in two levels' labelled 'macro' and 'micro'. 'Macro' concepts would consider the presentation of the entire set of articles and would concentrate on the developing themes to dictate the overall tone of the set. The 'Micro' level of concept development would be object specific concepts, addressing ideas that relate to the specific articles of the set. Separating the concept generation into two phases provided me more control in handling the design of multiple products. The design of each object would consider the actions and interactions that unfold around them, as for each action contributes to the development of the wider experience.

### *Artifact Composure*



Figure 18: Exploring tray layout variations

A key aim of designing the coffee set was to generate a series of articles which deliver the designed 'Mt. Sucre' sugar bowl through coherent manor. Design was to add subtle aspects to the experience, thus contributing to the overall tone and delivery of the sugar bowl by developing objects which compliment its dramatic potential. The set was to be constructed of:

- 1 Tray
- The 'Mt. Sucre' sugar bowl
- 2 Long black cups
- 2 Milk jugs
- 2 Ashtrays
- 2 Spoons

Delivering articles to the users as a set suggested the design of a tray. Creating a tray as part of the set would suggest that the objects arrive together, and the layout of the articles in the set arrive to patrons in logical form. In extending the value generated in the first design phase concerning the presentation of sugar, this theme is now being played out through the presentation of the entire set.

Variations of tray layout were explored through sketch modeling, to try different layout configurations (Figure 18) Through this process evolved the idea of a elongated service tray, which divides the table in two. Presuming that the two people participating in the narrative are sitting opposite each other at the café table, this concept would deliver the articles in a row across the horizontal plane of the table creating an interstitial wall between the two patrons. This form addresses social dimensions, by provoking the breakdown of the wall, to lubricate social interaction.

Set in the centre of the tray (and essentially the centre of the table), a re-addressed variation of the 'Mt. Sucre' sugar bowl designed acting as the 'MacGuffen', advances the narrative, and experience of using the set. Incorporating the sugar mound into the tray, led to the removal of the base, and the re-placement of the spoons. Besides the tray, the sugar mound remains the one shared object of the set,

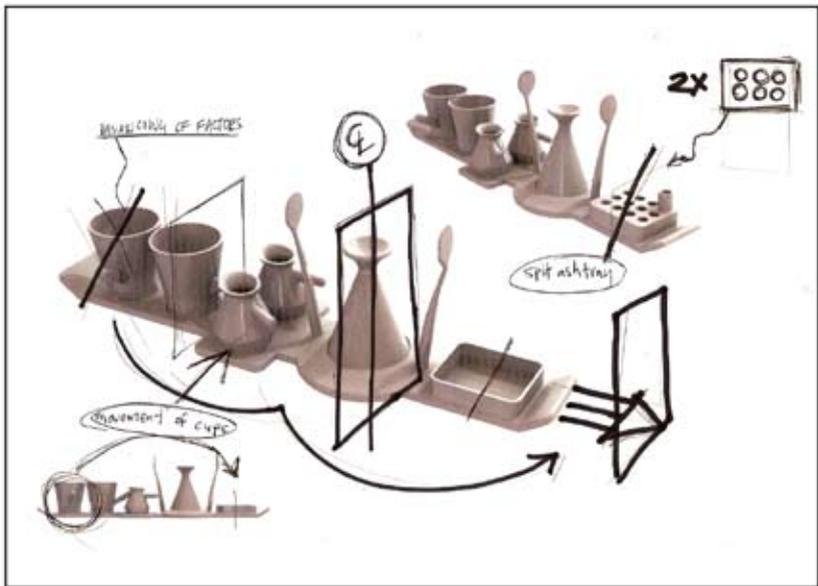
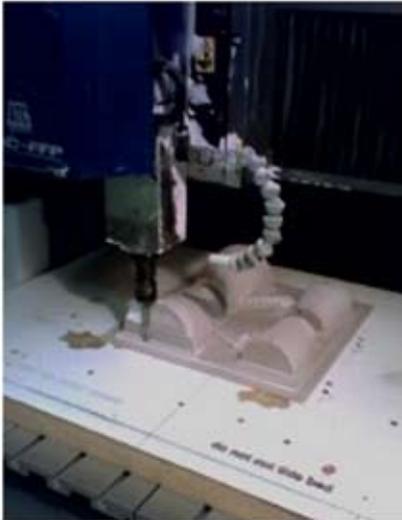


Figure 19: Development of coffee set

therefore remains the pivotal object in the development of social interaction.

Long black coffees are often ordered with a side of milk or hot water, therefore side jugs have been included in the design of this set. Elongated handles have been appropriated to the coffee cups and milk jugs alike. This aimed to provide a subtle augmentation in gestural interactivity, without compromising the drinking of the coffee.

Ashtrays were incorporated into the set, to provide for smoking patrons, and highlight the cultural significance of coffee and cigarettes. Used through the entirety of the narrative, the ashtray concept was a shallow-dish and lid, with a series of holes in which individual cigarettes butts get placed. The purpose of this feature is to provoke a pause through conflict, forcing a user decision on which hole they are to put the cigarette in. In replacing the standard medium café ashtray with two smaller trays, generates a 'his/hers' type effect, and potentially creates further ownership conflicts.

### *Design Outcome*

The outcome of this design iteration is a working prototype of the 'split together' coffee set (Figure 21). The coffee set is designed for a café setting of two people ordering long blacks. Each article of the ten piece set has been designed to contribute to the wider experience of having coffee. Upon delivery of coffee from the waiter, the set is delivered to the table on the tray, designed to be left with the users, dividing space and developing new levels of composure to the complex facets of a café experience.

While the final prototype was not constructed of exact materials, it fulfills its core function in displaying how inspirations from theatre theory may influence design decision making processes, resulting in products for more composed user experiences.

The 'split together' coffee set concept was tested between five groups of two, in the café setting. Over the space of a two week period,



Figure 20: Developed components

eight sittings took over which each pair were coordinated to meet at 'Monterey Coffee Lounge' café to take part in the use of the designed set. In coordinating with the café's barista, each sitting consisted of two long black coffees with milk served through the 'split together' tray set.

Through conducting eight separate café sittings (three of which I participated in) best efforts were taken in considering my presence as the 'observer' through the capturing and analysis of experience development. With a total of ten participants taking part in the product testing, a diverse range of feedback significantly contributed to insights gained through this second design phase. Observations and review of AV footage allows one to observe some common behavioral themes, apparent through each of the eight sittings.

The arrival of the set to the table in all cases, instantly directed attention toward it. Each pair was inclined to pass thoughts between each other while hastily engaging in tactile observation. The 'Mt. Sucre' was in most cases the first thing to be lifted off, perhaps due to the ambiguity of the form. It remains the object of most interest to users of the set. Although its attention seeking tendency is gracefully clouded, with users concerns now shared among the other articles.

Confusion arose in users not knowing whose cup was whose and their initial concerns with the handle form seemed to give over time. Milk Jugs, once used were left off the tray, while the spoons were usually returned to the tray after brief intervals of play. The ashtrays seemed to create confusion as to whether they are left on or removed from the tray, but in most cases the removal of the ashtrays proved having your own ash tray a novelty. In one case, the patrons ignored the second ashtray altogether. The ashtrays were not used in two cases due to the non-presence of smokers, and instead became finger attractors.

These common behaviors, among other narrative specific behaviors, render the designed set successful in aiding the development of a meaningful experience



Figure 21: 'Split Together'

A second proposed variation on this concept delivered in this document is a universal version of the 'split together' tray, whereby placement of cups and ashtray is less dictated. This concept allows the delivery of different combinations of articles on the tray. Given time frame, this attempt for design to accommodate wider narrative variation was developed only through C.A.D.

### *Design Reflection*

As one would naturally expect the design created some results that were not premeditated. The second iteration of this project was largely dramaturgy inspired in thinking about the wider plot of the experience.

The design has created a coffee set that incorporates the sugar bowl as part of the wider setting. Through the analysis of the designed coffee set, I found that the mapping of the gestural interactivity over time was not specifically useful as an analysis method. Through AV recorded object use and observation, it was apparent that the developed textures and new narratives that came from that design went beyond the scope of the initial mapping. From the observation of behavioral patterns emergent through the use of this designed set of articles, it becomes apparent that the designed product in generating new textures in the cafe experience.

The richer outcomes that the designed set had on the experience took place between development of social interaction and the discussion that arose from this, essentially rendering the design outcome successful.

Upon delivery of the coffee to the users table, conflict is generated through the users having to decide which coffee will be there's. The delivery of the ashtrays with the coffee cup suggests that users can smoke until the coffee arrives. People are now paying more attention to the objects more so than the coffee, and it is through this that conversation topics are getting directed toward the designs. In removing objects from the tray, users seemed as in they were suggesting some kind of ownership by bringing them to their side of the table. The whole quality of ownership enriched the texture of



the experience by making sharing an offer-able gesture. Collective reflections of users were that the experience of using the coffee set was generally more playful, with the objects absorbing some degree of conversation focus. Through the use of the set, most participants underwent some form of transformation through the adjustment of being to augmented context, each coming away with a reproducible story of the event.

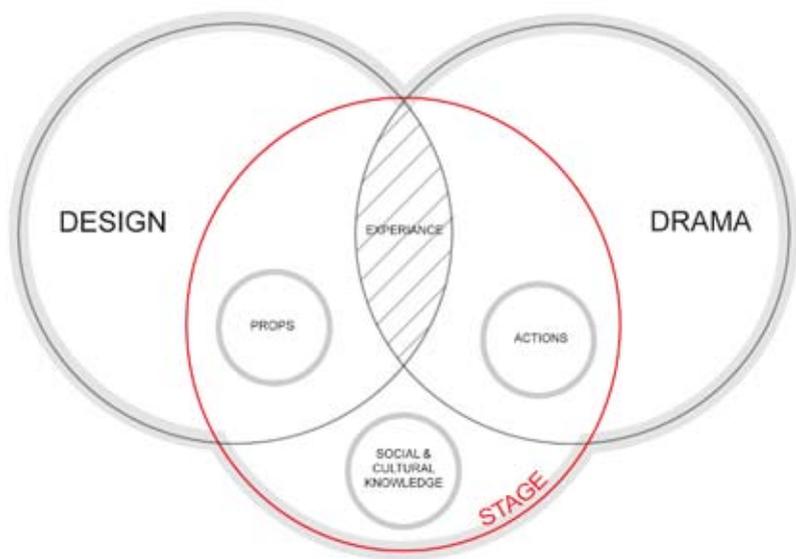


Figure 22: Design  
Dramaturgy Model

## PROJECT SUMMARY

The primary purpose of this research project was to explore how the art of dramaturgy may be used as a framework in the service of product design. The aim of adapting and incorporating dramaturgy into design was to explore and establish alternative ways to design beyond optimal functionality and toward artifacts that more ably support the drama of interpersonal communication in everyday scenarios. This led to the development of a family of artifacts which would act as a platform for more meaningful experiences

The principle challenge addressed by this project was in finding ways to adopt and implement appropriate techniques and perspectives of dramaturgy and theatre into product design. The challenge of interdisciplinary adaptation required a form of translation so that the ideas from one domain could be brought across to the other in a usable format. This transformation took a visual orientation, first as a mapping exercise and later as a distinct design methodology. These visualised design methods were developed and refined through the design and prototyping of a sugar bowl and coffee setting.

By testing with focus groups and individual users, I was able to qualify the achievements of this methodology in relation to the design objective, i.e. to develop an artifactual platform for enriched user experiences. By testing the objects in context, many new textures beyond those hypothesised became apparent. These user engagements with the designed objects resulted in the spontaneous development of new narratives between users and objects. The designs provoked playfulness and a general disregard for social convention. A recurring form in these user focused experiments were specific novel gestures that the artifacts afforded, which in turn played a pivotal role in the subjects narrative exchanges.

On reflection the project has been successful in deepening the understanding of dramatic theatre and its potential application from the perspective of product design. In attending to the research question, the project and its outcomes explore and illustrate ways that product design can appropriate ideas and techniques from theatre

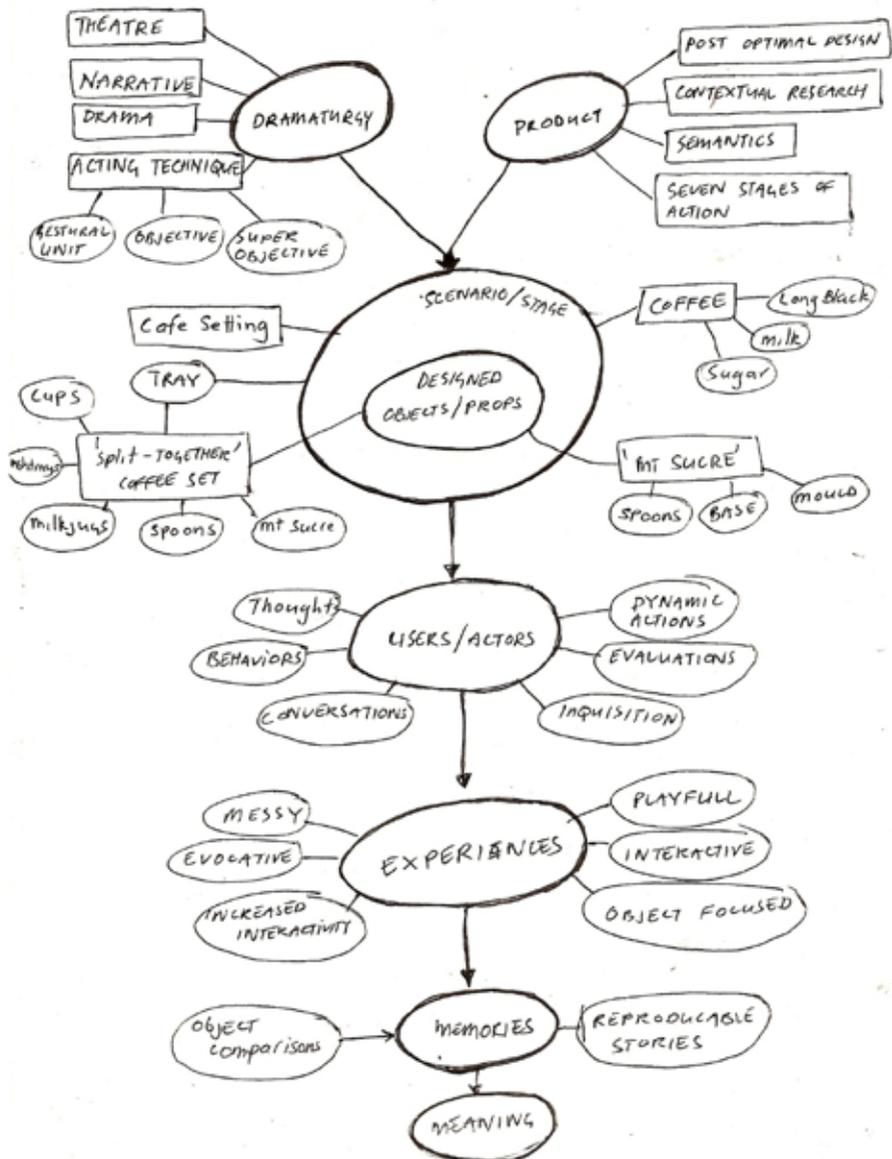


Figure 23: Project development map

in the service of encouraging meaningful experiences. Reflecting on the designed outputs, I conclude that theatre and its subsequent theories host a great deal of potential in the domain of product design and its engagement with meaningful user experiences.

Through this project I found that understanding the conflicts that antagonise the user are valuable tools in the development of embodied drama, suggesting that the object use does not have to be effortless to be valuable. Donald Norman (1998) proposes 'seven stages of action' to explain the translation of a human goal through sequential phases of execution. This project has drawn similarities between this model and Stanislavski's theory of method acting, with the overlap hinging on the idea that all human action is the result of greater intention. In harnessing this perspective the project has drawn from design and theatre concepts that provide relevant examples of how product designers may assimilate these perspectives into the design of everyday artifacts.

In concluding this project I have put forward the elements which have contributed to the development of 'Design Dramaturgy' through this project (Figure 22). As the dominant project outcome, this visual model illustrates the development of design met through a variety of contributing intellectual frameworks. With user experience in the centre, this diagram begins to illustrate how the interaction between differing intellectual frameworks can contribute to alternative coherent approaches to product design



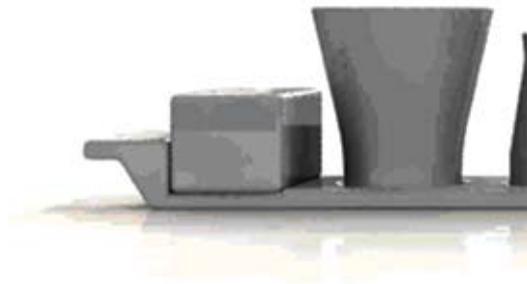
## Further research

The learning gained through reflection of this project makes one think about further research and developments that could build upon project outcomes. These insights propose further developments in theoretical frameworks, and the readdressing of the designed outcome.

Concepts relating to designed outcomes include supporting the further development of the wall concept and further play between the sharing and denying of sharing of artifacts. These concepts could potentially contribute in the production of more dramatic outcomes to the coffee experience, and explore limits to which augmentation can enhance user experience.

Further research in the theoretical fields may include the exploration of further forms of narrative composure beyond forms of traditional dramaturgy. Exploring further dramaturgical perspectives through the design of objects could include looking toward the potential of the Brechtian form of Theatre, and potentially Artaud's Theatre of Cruelty. Artaud's theatre perspectives, including the adornment of Balinese theatre potentially hosts potential in the development of performance aesthetic, while a Brechtian theatre form may pose potential in the conscious development of breakdowns between objects and users.

These propositions among others may pose useful in further research between the fields of product design and theatre, and may prove useful in the further development of meaningful user experiences.







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